



Invesco Advisers, Inc.

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Firm Brochure (Part 2A of Form ADV)

This brochure provides information about the qualifications and business practices of Invesco Advisers, Inc. If you have any questions about the contents of this brochure, please contact Todd F. Kuehl, Chief Compliance Officer, at todd.kuehl@invesco.com. 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 Invesco Advisers, Inc. is available on the SECs website at www.adviserinfo.sec.gov. Invesco Advisers, Inc. is registered as an investment adviser with the SEC. Clients should note that an investment adviser’s registration with the SEC does not imply a certain level of skill or training.

March 30, 2022

Item 2 Material Changes

The date of the last annual amendment filing to the Firm Brochure was submitted on March 30, 2022. As part of our annual review, the Firm Brochure was revised to include a number of material changes since the last annual update filed March 31, 2021. The material changes include:

- **Item 8 Methods of Analysis, Investment Strategies and Risk of Loss** – This section has been amended to update the investment strategies and material risks disclosures.
 - **Item 9 Disciplinary Events** – This section has been amended to include a disciplinary matter settled between Invesco Ltd., the ultimate parent company of Invesco Advisers, Inc., and the Federal Financial Supervisory Authority (“BaFin”) on May 31, 2021.
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Item 4 Advisory Business

Firm Description

Invesco Advisers, Inc. (“Invesco Advisers”) (“the Firm”) (“We”) was founded in 1986 and is an investment adviser registered with the SEC. Investment advisory services are provided by investment professionals located in Atlanta, Austin, Boston, Dallas, Centennial, Downers Grove, Houston, Louisville, Newport Beach, New York City, Portland, Rochester, San Francisco, Seattle, Solana Beach and White Plains

As of December 31, 2021, Invesco Advisers manages approximately 804.9 billion in assets for approximately 29,716 clients, consisting of approximately 803.4 billion on a discretionary basis and the remaining 1.5 billion on a nondiscretionary basis.

Principal Owners

Invesco Group Services, Inc. is the sole owner of Invesco Advisers and Invesco Ltd. is its ultimate parent company. Invesco Ltd. is a publicly traded leading independent global investment management firm dedicated to helping investors worldwide achieve their financial objectives. Shares of Invesco Ltd. are listed on the New York Stock Exchange under the symbol "IVZ" and Invesco Ltd. is a constituent of the S&P 500[®].

Advisory Services

Invesco Advisers provides discretionary and nondiscretionary investment advisory services across a broad spectrum of investment strategies, sectors and asset classes to individuals, institutional and high net worth clients through separate accounts, wrap programs and U.S. registered investment companies, other commingled investment vehicles and other similar arrangements (together with registered investment companies, “Commingled Funds,” as detailed below). Invesco Advisers’ investment advisory services consist of investigating, identifying and evaluating investment opportunities, structuring, negotiating and making investments on behalf of its clients, managing and monitoring the performance of such investments and disposing of such investments.

Invesco Advisers provides advisory services in accordance with the applicable investment guidelines, including applicable restrictions on investing in certain securities, or types of securities or other financial instruments, that are customized by the client, or in accordance with the mandate selected by the client.

Investment teams may consider data and analysis on environmental, social and governance (ESG) considerations developed by Invesco Advisers or its affiliates, or a third party. While Invesco Advisers provides ESG data to its investment teams, any use of ESG considerations in an investment process or pursuit of an ESG focused investment strategy is determined by independent portfolio management teams, each of which may incorporate ESG considerations into its investment process or pursue its investment strategy in differing manners.

Each Commingled Fund for which Invesco Advisers provides advisory services is managed in accordance with its investment guidelines and restrictions and generally is not tailored to the individualized needs of any particular investor. An investment in a Commingled Fund does not, in and of itself, create an advisory relationship between the investors therein and an Adviser.

Invesco Investment Solutions, a business unit within Invesco Advisers Inc., is dedicated to designing and delivering multi-asset solutions that are focused on client outcomes by leveraging a comprehensive suite of investment capabilities from across Invesco. Drawing on its deep expertise in managing multi-asset and alternative investments, Invesco Investment Solutions partners with a broad range of institutional and retail

clients to advise on investment strategy in complex market environments and craft innovative solutions that are tailored to the client's desired outcomes and specific investment guidelines.

The capabilities of this team include:

- **Advisory Solutions:** evaluating, building and enhancing your asset allocation models and portfolio construction processes, including guidance on how fundamental active and factor-based solutions can play a role in portfolios.
- **Development and Implementation:** managing assets through an outcome-oriented product range including target risk funds, college savings portfolios and custom investment solutions.
- **Research and Portfolio Analytics:** providing thought leadership and customized engagements around asset allocation modeling.

Commingled Funds

Invesco Advisers provides investment management (as both adviser and sub-adviser) and administrative services (if applicable), to the following types of Commingled Funds (collectively, the "Funds"):

- open-end, closed-end and exchange-traded funds registered as investment companies under the Investment Company Act of 1940, as amended (the "1940 Act") (such funds, "Registered Funds");
- open-end and closed-end commingled vehicles excepted from registration pursuant to Sections 3(c)(7) & 3(c)(1) of the 1940 Act ("Private Funds");
- publicly registered real estate investment trusts not registered under the 1940 Act ("Public REITs");
- collective trust funds exempt from registration pursuant to Section 3(c)(11) of the 1940 Act ("Collective Trust Funds");
- registered and unregistered commingled vehicles organized outside of the United States; and
- closed-end commingled vehicles exclusively offered to employees of the Firm and other investment advisor entities under Invesco Ltd. ("Affiliates") pursuant to a 1940 Act exemptive order.

Separate Accounts

Invesco Advisers provides discretionary or nondiscretionary investment advice to institutional clients through separately managed accounts pursuant to the terms of individually negotiated investment management agreements. The investment objectives and guidelines applicable to separate accounts may be customized for separate account clients.

Wrap Programs

Invesco Advisers provides discretionary and nondiscretionary investment advisory services directly and indirectly to individuals or entities participating in separately managed account programs that we do not sponsor, also referred to as Wrap Programs ("Wrap Programs"). In a Wrap Program, Invesco Advisers will provide certain investment management services, and the financial intermediary sponsoring the Wrap Program ("Program Sponsor") will provide the client with other services such as determining the appropriate investment strategy for its client. The client's Wrap Program agreement with its Program Sponsor generally sets forth the services to be provided to the client by or on behalf of the Program Sponsor, which can include, among other things: (i) manager selection; (ii) trade execution, often without a transaction-specific commission or charge; (iii) custodial services; (iv) periodic monitoring of investment managers; and (v) performance reporting.

Wrap Programs for which Invesco Advisers provides certain advisory services include the following types:

1. Traditional wrap (“Traditional Wrap”): Invesco Advisers enters into a contract with the Program Sponsor, but does not have a contract with the client. Invesco Advisers makes investment decisions and places trades for client accounts.
2. Dual contract (“Dual Contract”): Invesco Advisers enters into a contract with the client and the client also has a separate contract with the Program Sponsor. In some cases, Invesco Advisers enters into a contract with an investment manager to act as a sub-adviser to its client accounts; the client has a separate contract with the investment manager, and the investment manager has an agreement with the Program Sponsor. In Dual Contract programs, Invesco Advisers provides investment advisory services to the client and places trades for client accounts.
3. Model-only (“Model-Only”): Invesco Advisers enters into a contract with the Program Sponsor but does not have a contract with the client. Invesco Advisers provides investment models to the Program Sponsor, and the Program Sponsor places trades for the client account based on some or all of the model recommendations.

Invesco Advisers is not responsible for, and does not attempt to determine, whether a Wrap Program is suitable or advisable for Wrap Program participants. Invesco Advisers may make available through Wrap Programs the same or similar strategies that are available to institutional clients or through Funds; however, not all of Invesco Advisers’ strategies are available through Wrap Programs and not every Invesco Adviser strategy that is available through a particular Wrap Program will be available through other Wrap Programs. Further, the manner in which Invesco Advisers executes a strategy through Wrap Programs may differ from how that same or a similar strategy is executed through another Wrap Program or for a Fund or institutional Client. For instance, the execution of a particular strategy in a Wrap Program may differ from the execution of the same or a similar strategy for a Fund or institutional Client due to the need to adhere to “reasonable restrictions” imposed by the Wrap Program Client or due to the use of affiliated no-fee registered investment companies or other affiliated commingled vehicles rather than individual securities. Accordingly, the performance of a strategy available through a Wrap Program may differ from the performance of the same or a similar strategy that is executed through another Wrap Program or for a Fund or institutional Client.

In most Wrap Programs, the Program Sponsor charges the client a comprehensive fee (the “wrap fee”), inclusive of the advisory fee charged by Invesco Advisers for investment advisory services and fees for other services being provided by the Program Sponsor. Therefore, Invesco Advisers receives a portion of the wrap fee in most Wrap Programs. Additional fees are incurred by Wrap Program clients in connection with certain trades placed by Invesco Advisers on behalf of such clients. Wrap Program clients should consider that, depending upon the wrap fee charged, the amount of trading activity, the value of custodial and other services provided and other factors, the wrap fee could exceed the aggregate costs of the services provided if they were to be obtained separately (although, in some cases, it is possible to obtain such services only through the program) and, with respect to brokerage, any transaction-based commissions paid by the account. *For information about Invesco Advisers’ trade rotation and brokerage policies in connection with Wrap Programs, please see Item 12 (Brokerage Practices).*

A client in a Wrap Program may restrict the purchase of certain securities for its account. A client may name either specific securities or a category (e.g., tobacco companies, gambling stocks or other restrictions by ESG mandates) that includes specified securities that may not be purchased for the account. The client or Program Sponsor is responsible for identifying any security or group of securities which may not be held in an account. If a client identifies a category of restricted securities without identifying the underlying companies of which the category is comprised or a source for identifying such underlying companies, Invesco Advisers may utilize outside service providers to identify the universe

of companies that will be considered in such a category. Such restrictions may adversely affect the account's performance and the account may not have the same performance as other accounts managed without similar restrictions in the same investment strategy. The change of the classification of a company, the grouping of an industry or the credit rating of a security may force Invesco Advisers to sell securities in a client's account at an inopportune time and possibly cause a taxable event to the client. The ability to restrict investments does not apply to the purchase policies of or underlying securities held by any mutual funds, exchange-traded funds (ETFs) or other Commingled Funds held in a Wrap Program account.

Wrap Program clients are urged to refer to the appropriate disclosure document and client agreement for more information about the Wrap Program, investment advisory services, fees and contract termination provisions.

The information in this Brochure is qualified in its entirety by the disclosure contained in the investment management agreements ("IMAs") and/or offering materials for the respective Funds or client accounts.

Item 5 Fees and Compensation

The fees described in this section are strictly for investment advisory services and do not include other fees, such as certain brokerage, custody fees or fees charged by other service providers retained by the clients' accounts. Invesco Advisers does not receive or participate in the sharing of custody fees or otherwise receive any benefit as a result of custodial arrangements entered into by its clients' accounts. Additional fees are incurred in connection with certain trades placed by Invesco Advisers on behalf of Wrap Program clients. *See Item 12 (Brokerage Practices) for further information.*

Invesco Advisers reserves the right to waive its investment advisory fee and such fees may be negotiable. Fee schedules vary depending on the strategy and size of account, among other factors, and may change. To the extent permitted under applicable law, Invesco Advisers charges performance fees, as well as asset-based fees. Please refer to Item 6 (Performance-Based Fees and Side-by-Side Management). Advisory Fee Schedules set forth below may not reflect the potential upper limit of fees earned by Invesco Advisers under a performance fee structure.

From time to time, Invesco Advisers acts as a sub-adviser to certain portfolios managed by another registered investment adviser and will share management fees with the adviser pursuant to the terms of the applicable sub-advisory agreement.

Investment Advisory Fee Schedules

The following sets forth a basic description of the standard advisory fee ranges for investment strategies offered by Invesco Advisers. Fees and other compensation are negotiated in certain circumstances, and arrangements with particular clients vary. Information on the fee arrangements for Separate Accounts, Commingled Funds, and Wrap Programs are noted further below:

| Investment Center | Fee Range | Sub-strategies/mandates |
|--------------------------------------|-----------|---|
| EQV International Equities (Austin) | 1-150bps | EQV Asia Pacific Equity EQV Emerging Markets All Cap EQV European Equity European Small Company EQV International Equity International Small Company |
| Global and International Equity (NY) | 1-150bps | OFI International Growth International Equity International Diversified International Small-Mid Cap Global Focus Global Equity Global Multi Cap Growth (Global Opportunities) |
| Emerging Markets Equity | 1-150bps | Emerging Markets Equity (Developing Markets) Emerging Markets Innovators |
| US Growth Equities (Houston) | 1-125bps | Global Consumer Trends Large Cap Growth Conservative Multi-Cap Growth Small Cap Core Small Cap Growth Sector (Technology) |
| US Discovery Growth Equities | | Capital Appreciation Discovery Mid Cap Growth Discovery Small Cap Growth Sector (Health Care) Invesco Select Growth ETF |
| US Core | 1-125bps | Large Cap Core Mid Cap Core Small Cap Core All Cap Core Dividend Growth Large Cap Core ESG ETF |
| US Value Equities | 1-100 bps | Deep Value Relative Value (Large- & Mid-cap Equity & Balanced) Dividend Value |

| | | |
|-------------------------|----------|--|
| | | Intrinsic Value (Small- & Mid-cap) Convertible Securities |
| Select Equity | 1-150bps | International Select Equity Emerging Markets Select Equity |
| Global Core Equity | 1-125bps | Global Core Equity |
| Global Liquidity | 1-100bps | Treasury Cash Management Government Cash Management Prime/Liquid Assets Cash Management Tax-Free Cash Management Ultrashort/Conservative Income |
| Global Debt | 1-100bps | Multi-Sector Income International Bond Emerging Markets Local Bond |
| Stable Value | 1-100bps | |
| Investment Grade Credit | 1-100bps | Core Bond Core Plus Bond Corporate Credit Equity Enhanced Fixed Income Long Duration Corporate Bond Short Term Bond |
| Municipals | 1-100bps | Short Term Municipal Limited Term Municipal Intermediate Term Municipal AMT-Free Municipal Income Municipal Income Short Duration High Yield High Yield Municipal Rochester Municipal Opportunities Limited Term California Municipal California Municipal Rochester Limited Term New York Municipal Rochester AMT-Free New York Municipal Invesco Rochester New York Municipals New Jersey Municipal Pennsylvania Municipal Environmental Focus Municipal |
| Structured Investments | 1-150bps | US Mortgage-Backed Agency Focused |

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|--|---------------|---|
| | | High Quality Variable Rate Bond US Mortgage-Backed Securities Real Estate Fixed Income Opportunity Opportunistic Mortgage Diversified Income U.S. High Quality Short Term Bond |
| Multi-Sector Credit | 1-60bps | Active Multi-Sector Credit |
| High Yield | 1-100bps | Global High Income High Yield Short Duration High Yield |
| Emerging Markets Debt | 1-100bps | |
| Investment Solutions | 0.01-150bps | Target Risk Target Date Global Multi-Asset Balanced Income Balanced (Equity, Fixed Income, Alternatives) Managed Volatility Capital Protection Multi-alternatives Institutional Indexing |
| Systematic and Factor Investing | | |
| Global Asset Allocation – Multi-Asset Suite | 1-150bps | Balanced-Risk Allocation Balanced-Risk Allocation 10% Balanced-Risk Allocation 12% Macro Allocation Global Asset Allocation Small Cap Index Plus |
| Global Asset Allocation – Commodities | 1-125bps | Balanced – Risk Commodities |
| Quantitative Strategies | 0.01 – 100bps | US Market Neutral Enhanced Index US Low Volatility Global Low Volatility |
| Fixed Income Factors | 0.01 – 100bps | Global Sovereign Bond Short Term Bond US Investment Grade Corporate Bond |

| | | |
|---|----------|---|
| | | Hard Currency EM Bond |
| Global and US Real Assets – Direct Real Estate | 1-150bps | US Core Equity Investments US Core Debt Investments US Core-Plus Equity Investments US Value-Add and Opportunistic Investments Income-Oriented Public, Non-Listed REIT Fund-of-Fund Mandates investing in Private Funds, Public REITs, Registered Investment Companies and/or Direct Real Estate |
| Global and US Real Assets-- Securities | 1-150bps | US Real Estate Securities Total Return Global Real Estate Securities Total Return Global Real Estate Securities Income-Oriented Global Infrastructure Securities Total Return Energy Infrastructure-Master Limited Partnerships Real Assets Securities Total Return Real Assets ESG ETF |

Other Fees and Expenses

In addition to the advisory fees paid to Invesco Advisers, clients are responsible for other charges which could include but not be limited to: (i) custodial and accounting charges; (ii) brokerage fees, commissions and related costs; (iii) interest expenses; (iv) taxes, duties and other governmental charges; (v) transfer and registration fees or similar expenses; (vi) costs associated with foreign exchange transactions; and (vii) costs, expenses and fees (including investment advisory and other fees charged by the investment advisers of funds in which a client's account is invested) associated with products or services that are necessary or incidental to such investments or accounts. Client accounts that invest in mutual funds, exchange-traded funds ("ETFs") or other funds, including Invesco Funds, will indirectly bear their proportionate share of the advisory fees and other operating expenses of such fund (to the extent consistent with applicable law and a client's contract) and will be subject to the risks associated with the portfolio investments of the underlying fund, unless Invesco Advisers agrees to an arrangement whereby such fees are waived. In certain circumstances, SMAs of ETFs/Funds may charge an advisory fee of between 1-30 basis points. In these scenarios, no waivers are applied to either the SMA or underlying funds. Instead, the fees are aggregated together. *For an additional discussion of brokerage and other transaction costs, please refer to Item 12 ("Brokerage Practices")*. Additional fees and expenses specific to various vehicles are summarized below.

Separate Accounts

Generally, fees for separate accounts are calculated as a percentage of assets under management based on the month-end market value. Fees are shown as annual percentages and are generally billed

on a quarterly basis. The table above sets forth the investment advisory fees for the first \$100 Million in assets under management for separate accounts by investment strategy. In certain cases, fees are negotiable. Please contact Invesco Advisers for details regarding additional breakpoints in the investment advisory fee for assets under management above \$100 Million.

Each direct real estate separate account arrangement is negotiated on a case-by-case basis. In the case of Invesco Advisers' direct real estate products, in addition to asset-based fees, fixed fees may also be charged on a transaction by transaction basis, based on the terms negotiated with each separate account client. Additionally, from time to time, direct real estate separate account arrangements will provide for the chargeback of certain expenses to the client (such as due diligence, travel, legal and accounting) related to potential investments allocated thereto, even if the transaction is not ultimately consummated (dead deal costs). Invesco Advisers may bill institutional clients for fees and expenses incurred or such institutional clients may agree to have fees deducted from their account.

Registered Funds and Public REITS

Registered Funds and real estate investment trusts with offerings registered under the Securities Act of 1933, as amended ("Public REITS") compensate Invesco Advisers for services in accordance with investment advisory agreements approved by the applicable Boards of Directors/Trustees (the "Board") of each Registered Fund or Public REIT. Advisory fees are calculated separately for each Registered Fund and Public REIT at a specified annual percentage of such Registered Fund's or Public REIT's average net assets or stockholders' equity as applicable. In certain instances, performance-based compensation can be earned by Invesco Advisers in accordance with the applicable investment advisory agreement. In addition to the advisory fees, clients bear other ongoing operating expenses including, but not limited to: (i) shareholder servicing fees; (ii) custodian fees; (iii) administration services fees; (iv) audit fees; (v) legal fees; (vi) registration and filing fees; (vii) costs associated with trustees; (viii) insurance fees and (ix) reports to shareholders. Please refer to the Prospectuses or Statements of Additional Information ("SAI") of the Registered Funds or Public REITs for a more detailed description of all applicable fees.

Private Funds (Direct Real Estate)

Direct real estate Private Funds may charge transaction-based fees and incentive fees, in addition to asset management fees. Based on an investor's eligible assets invested in certain real estate-related products managed by the Firm and its affiliates, certain direct real estate Private Fund investors will receive a discount on asset management fees. Further, Invesco Advisers will, from time to time, aggregate investment assets among investors advised by the same adviser or consultant, potentially affording those underlying investors a more beneficial fee rate than if they invested directly in the Private Fund on an individual basis. Further, certain investors may negotiate different fee structures which, in some cases, are more favorable to that investor than to other investors, as outlined in side letter agreements or the governing document(s) of parallel vehicles. Employees of Invesco Advisers or its affiliates investing in parallel vehicles to a Commingled Fund or other structures which are generally more favorable fee structures.

Private Funds provide for the reimbursement of certain operating costs in managing the Private Funds' real estate portfolios, along with certain offering/organizational costs, as outlined in the governing document(s) for a particular fund. The governing document(s) for these funds may also provide that, under certain circumstances where the Private Funds receive services from Invesco Advisers that would otherwise be performed for the funds by third parties, the funds will be responsible for reimbursing Invesco Advisers the cost of performing such services, so long as the reimbursements for such services do not exceed prevailing market rates. Finally, the Private Funds' governing document(s) generally provide that funds will bear "dead deal" costs and expenses (such as due diligence, travel,

legal and accounting) related to potential investments allocated thereto, even if the fund ultimately does not consummate the transaction.

Collective Trust Funds and Other Private Funds

Invesco Advisers receives a percentage of the management fee paid by investors to Invesco Trust Company for Invesco Advisers' services as sub-adviser to certain Collective Trust Funds .

For other Private Funds it manages outside of direct real estate, Invesco Advisers may charge transaction-based fees and incentive fees in addition to asset management fees, if permitted by governing documentation. Based on an investor's eligible assets invested in certain funds managed by the Firm and its affiliates, certain investors will receive a discount on asset management fees in these Private Funds. Further, certain investors may negotiate different fee structures which, in some cases, are more favorable to that investor than to other investors.

Certain of these Private Funds provide for the reimbursement of some or all operating expenses, including the organizational and offering costs (if applicable), as outlined in the fund's governing document(s) for a particular fund.

Wrap Programs

The fees received by Invesco Advisers for investment advice to Wrap Programs vary depending on the investment strategy selected and other factors, but generally fall within a range of 0.00% to 0.75% per annum of assets under management.

Where investment advisory services provided by Invesco Advisers are included in the wrap fee (generally Traditional Wrap Programs and Model-Only Programs), the Program Sponsor normally pays Invesco Advisers on a quarterly basis, either in arrears or in advance, as provided in the contract between Invesco Advisers and the Program Sponsor. In Dual Contract Wrap Programs, our fees are typically paid for directly by the client. The wrap fee received by Invesco Advisers may only be negotiated between Invesco Advisers and the Program Sponsor. Additional fees are incurred by Wrap Program clients in connection with certain trades placed by Invesco Advisers on behalf of such clients. Wrap Program clients should consider that, depending upon the wrap fee charged, the amount of trading activity, the value of custodial and other services provided and other factors, the wrap fee could exceed the aggregate costs of the services provided if they were to be obtained separately (although, in some cases, it is possible to obtain such services only through the program) and, with respect to brokerage, any transaction-based commissions paid by the account. *For information about Invesco Advisers' trade rotation and brokerage policies in connection with Wrap Programs, please see Item 12 (Brokerage Practices).*

Item 6 Performance-Based Fees and Side-by-Side Management

Side-by-Side Management

Invesco Advisers manages client accounts having a variety of investment objectives, policies, strategies, limitations, and restrictions. Invesco Advisers' affiliates likewise manage a variety of separate accounts, Wrap Programs, and commingled investment vehicles. "Side-by-side management" refers to our simultaneous management of multiple types of client accounts or investment products and raises certain conflicts of interest described immediately below. *For more information about other potential conflicts of interest, see Item 11 (Code of Ethics, Participation or Interest in Client Transactions and Personal Trading) and Item 12 (Brokerage Practices).*

Conflicts of Interest: Performance Based Fees in Side-by-Side Management

From time to time, Invesco Advisers will manage client accounts that are charged a performance-based fee and other client accounts that are charged a different type of fee, such as an asset-based fee, simultaneously. Invesco Advisers has a financial incentive to favor client accounts with performance-based fees because it will likely earn greater fees on such client accounts as compared to client accounts without performance-based fees. Thus, Invesco Advisers has an incentive to direct the best investment ideas and give better execution and brokerage commissions to client accounts that pay performance-based fees, and to allocate, aggregate or sequence trades in favor of such client accounts.

In managing client accounts with performance-based fees, Invesco Advisers may also have an incentive to choose investments with more risk and speculation than might otherwise be chosen for client accounts without performance-based fees.

It is possible that different account types are not permitted to participate in an investment opportunity at the same time due to certain governing regulations. The decision as to which client accounts may participate in an investment opportunity will factor in the suitability and strategy of the client accounts. A client account may be prevented from participating in an investment opportunity due to that opportunity being more appropriate for the primary strategy of another client account.

Side-by-side management gives rise to a variety of potential and actual conflicts of interest for Invesco Advisers, including its employees and supervised persons of the Firm. Invesco Advisers follows policies and procedures that are reasonably designed to treat clients fairly, help mitigate conflicts, and prevent any client or group of clients from being systematically favored or disadvantaged. For example, Invesco Advisers has investment allocation policies and procedures which are designed and implemented to provide fair and equitable treatment of relevant clients over time and to prevent these conflicts from influencing the allocation of investment opportunities among clients.

Item 7 Types of Clients

As discussed in Item 4 (“Advisory Business”), Invesco Advisers provides discretionary and nondiscretionary investment advisory services to individuals, institutional clients and high net worth individuals, registered investment companies, Public REITs and other Commingled Funds.

Account Minimums

Separate Accounts Generally

Separate accounts (Institutional Clients only) generally require a minimum investment of between \$50 and \$100 million depending on the investment strategy; however, Invesco Advisers may, in its sole discretion, accept smaller levels of investment in certain cases.

Direct Real Estate Separate Accounts and Private Funds

Direct real estate Private Funds and separate accounts managed with a direct real estate investment strategy generally require an investment of at least \$10 million and \$500 million, respectively; however, Invesco Advisers may, in its sole discretion, accept smaller levels of investment in certain cases. Public REITs establish account minimums, as applicable, as set forth in their prospectuses.

Wrap Programs

Wrap Program account investment minimums are determined by the applicable Program Sponsor. Invesco Advisers will generally accept accounts with assets under management ranging from \$50,000 to

\$200,000. This minimum investment requirement will vary depending on the selected investment strategy and the particular Wrap Program. The typical minimum investment for Dual Contract Wrap Programs is \$1 million.

Invesco Advisers reserves the right to decline business at its discretion.

Item 8 – Methods of Analysis, Investment Strategies and Risks of Loss

Investment Strategies

Invesco employs several methods of analysis and investment strategies in managing assets, each of which is discharged by discrete investment centers. These are each significant investment strategy is described in the table below.

| Investment Center | Summary of Philosophy and Process | Sub-strategies/mandates |
|--------------------------------------|---|---|
| EQV International Equities (Austin) | The Adviser’s EQV International Equities investment strategies employ a rigorous, bottom-up stock selection process that seeks to identify companies with sustainable earnings growth, efficient capital allocation, and attractive prices. | EQV Asia Pacific Equity EQV Emerging Markets All Cap EQV European Equity European Small Company EQV International Equity International Small Company |
| Global and International Equity (NY) | The Adviser’s Global and International Equity investment strategies, run by the NY-based team, invest in what they believe to be high quality businesses that are exposed to structural global growth trends. The team takes a generalist approach to research, seeking best ideas regardless of sector or country, and builds high conviction portfolios independent of any benchmark. | OFI International Growth International Equity International Diversified International Small-Mid Cap Global Focus Global Equity Global Multi Cap Growth (Global Opportunities) |
| Emerging Markets Equity | The Adviser’s Emerging Markets Equity Team seeks to invest in companies that benefit from structural growth tailwinds and deliver above-average long-term earnings and cash flow growth, profitability and have sustainable competitive advantages and options that manifest over time. The team employs a disciplined, bottom-up, research-intensive approach that is benchmark agnostic, with respect to region or country, sector or security. | Emerging Markets Equity (Developing Markets) Emerging Markets Innovators |
| US Growth Equities (Houston) | The Adviser’s US Growth Equities investment strategies utilize a rigorous, bottom-up stock selection process that seeks to maximize alpha through the selection of stocks, which offer attractive growth opportunities based on valuation | Global Consumer Trends Large Cap Growth Conservative Multi-Cap Growth Small Cap Core Small Cap Growth |

| Investment Center | Summary of Philosophy and Process | Sub-strategies/mandates |
|------------------------------|---|--|
| US Discovery Growth Equities | <p>and perceived quality. Specific to Conservative Multi-Cap Growth, the strategy excludes investments in companies whose primary business involves alcohol, tobacco or gambling.</p> <p>The Adviser’s US Discovery Growth Equities, run by the NY-based team, seeks to invest in premier growth companies that provide high sustained growth rates.</p> | <p>Sector (Technology)</p> <p>Capital Appreciation Discovery Mid Cap Growth Discovery Small Cap Growth Sector (Health Care)</p> <p>Invesco Select Growth ETF</p> |
| US Core | <p>The Adviser’s US Core team seeks to build a portfolio designed to outperform in most market environments. The team focuses on companies with sustainable competitive and/or superior execution that are also priced at reasonable valuations.</p> <p>The Large Cap Core ESG ETF strategy uses fundamental analysis to seek to identify companies with sustainable competitive advantages, strong management teams, high ESG standards, and reasonable valuation. The strategy seeks to achieve its investment objective by investing mainly in common stock of U.S. companies that meet the strategy’s ESG standards, as determined by a proprietary framework for evaluating each issuer based on ESG criteria that the portfolio managers have determined to be important in the investment selection process. The ESG methodology actively uses both proprietary and third party ESG indicators, as well as ESG exclusionary screens.</p> | <p>Large Cap Core Mid Cap Core Small Cap Core All Cap Core Dividend Growth</p> <p>Large Cap Core ESG ETF</p> |

| Investment Center | Summary of Philosophy and Process | Sub-strategies/mandates |
|-------------------|--|--|
| US Value Equities | <p>The Adviser’s US Value Equities strategies utilize several different methodologies, each predicated on a rigorous, bottom-up, value-oriented security selection process.</p> <p>The US Deep Value strategy is a contrarian approach to stock selection with a long-term investment time horizon of typically 5-7 years to take advantage of significant discrepancies between the current stock market price and the underlying intrinsic value of a company.</p> <p>The Relative Value and Managed Volatility strategies typically follow a balanced investing approach, focusing on capturing potential market upswings while mitigating risk through broad diversification across stocks, bonds and convertible securities. Within equities and convertible securities, these strategies will invest primarily in large, well-established, undervalued companies that are experiencing a positive change, or catalyst. The fixed income securities in which the Equity & Income and the Managed Volatility teams’ strategies may invest in include investments in government agencies, US Treasuries and investment grade corporate bonds, which acts as a capital buffer during market downturns and provide current income. The Managed Volatility strategy includes an overlay that seeks to cap volatility by selling short equity futures during periods of heightened volatility.</p> <p>The Dividend Value strategies typically employ a total return approach – emphasizing appreciation, income and preservation, with strong upside participation and better downside preservation over a full market cycle. The sustainability and growth of a company's dividend is critical to the Dividend Value research process.</p> <p>The Intrinsic Value strategy utilizes a traditional approach that seeks to create wealth by maintaining a long-term time horizon and investing primarily in US companies that are significantly undervalued on</p> | <p>Deep Value</p> <p>Relative Value (Large- & Mid-cap Equity & Balanced)</p> <p>Dividend Value</p> <p>Intrinsic Value (Small- & Mid-cap)</p> |

| Investment Center | Summary of Philosophy and Process | Sub-strategies/mandates |
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| | <p>an absolute basis. The philosophy is based on the idea that companies have a measurable intrinsic value, independent from the stock market, that is based on the future cash flows generated by the business and that market prices are more volatile than business values and investors regularly overreact to negative news.</p> <p>The Convertible Securities strategy seeks to construct a well-diversified portfolio with strong long-term performance and lowered risk, emphasizing well-managed companies with strong balance sheets, a clear business focus and competitive advantages, compared to peers. Factors such as the macro-economic environment and specific industry fundamentals are continuously monitored to target equity sensitivity in a portfolio. The strategy does not invest in common equity outside of conversion, does not hold non-convertible debt, synthetics convertibles or other derivative instruments.</p> | Convertible Securities |
| Select Equity | <p>The Adviser's Select Equity strategies invest in high-quality businesses, with strong management, at an attractive price. Stock selection and independent research is fundamentally driven, bottom-up, and emphasizes three factors: High-quality businesses that possess sustainable competitive advantages that provide opportunities for long-term growth, strong management teams that are strong capital allocators and efficient operators, and businesses that are believed to be attractively priced in relation to their intrinsic value. The team believes this philosophy will allow it to deliver high active share portfolios targeting significant outperformance over a market cycle.</p> <p>The portfolios are concentrated by business ideas that are weighted based on the team's conviction of their expected risk adjusted returns. While country and sector allocations are by-products of stock selection, the team mitigates risk by diversifying portfolio holdings into different businesses located in various regions around the globe.</p> | International Select Equity Emerging Markets Select Equity |
| Global Core Equity | The Adviser's Global Core Equity strategy seeks to invest in high quality companies whose competitive advantages provide opportunities for long-term | Global Core Equity |

| Investment Center | Summary of Philosophy and Process | Sub-strategies/mandates |
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| | <p>growth. The investment team look for companies run by strong management teams, and that are believed to be attractively priced in relation to their intrinsic value. The strategy is actively managed, concentrated and employs a long-term investment horizon.</p> | |
| Global Liquidity | <p>The Adviser’s Global Liquidity strategies provide high quality cash management and ultrashort fixed income solutions through a disciplined investment approach designed to maximize current income consistent with the preservation of capital and maintenance of liquidity.</p> | <p>Treasury Cash Management Government Cash Management Prime/Liquid Assets Cash Management Tax-Free Cash Management Ultrashort/Conservative Income</p> |
| Global Debt | <p>The Advisor’s Global Debt strategies are driven by top down global macro analysis, which determines the overall portfolio risk budget and the allocation of that risk budget across three levers: foreign currencies, interest rates and credit. Bottom up country analysis identifies what the Advisers believe to be favorable country-specific opportunities. Country views are then expressed directionally via one or a combination of the three levers, influenced by the attractiveness of their risk-reward profiles. The team believes that a robust investment process is based on a risk allocation framework, which is more efficient than forecasting returns. Finally, an investment horizon of 9-18 months allows the team to look through short-term noise while seeking to add value through both allocation and security selection.</p> | <p>Multi-Sector Income International Bond Emerging Markets Local Bond</p> |
| Stable Value | <p>The Adviser’s Stable Value strategy uses a unique approach to stable value construction that seeks to consistently achieve the following objectives: preservation of principal; book value liquidity for all participant withdrawals; and competitive returns that move in the general direction of interest rates. Portfolios are typically broadly diversified across fixed income sectors with a focus on high quality, securitized credit sectors like asset-backed securities, mortgage-backed securities and commercial mortgage backed securities.</p> | |
| Investment Grade Credit | <p>The Adviser’s Investment Grade strategies employ a structured and disciplined investment process to maintain consistency, but build in flexibility to adapt</p> | <p>Core Bond Core Plus Bond Corporate Credit</p> |

| Investment Center | Summary of Philosophy and Process | Sub-strategies/mandates |
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| | <p>to dynamic markets. The investment process integrates macroeconomic and credit analysis into a broad risk and asset allocation strategy and key themes to guide decision-making. The strategy caters to changing market environments by finding value in both benchmark and non-benchmark securities and targeting continuity of results.</p> | <p>Equity Enhanced Fixed Income Long Duration Corporate Bond Short Term Bond</p> |
| Municipals | <p>The Adviser’s Municipal Bond strategies managed based on the belief that creating long term value through comprehensive forward-looking research are the keys to providing clients with investment solutions that are both consistent and successful. Proprietary credit research and risk management are the foundations of the investment process, supported by an experienced team of investment professionals with expertise that spans the municipal investment universe. The team maintains an integrated, team-based investment process that combines the strength of its fundamental credit research staff with the market knowledge and investment experience of the portfolio managers. The position as a market leader in the municipal space allows the team to access preferred market opportunities that enhance the execution in daily transactions and deliver valuable market insights. This value-oriented combination of proprietary research and integrated risk controls allows the team to create highly diversified portfolios that seek to maximize risk-adjusted returns.</p> <p>The Adviser seeks to focus investments in municipal securities issued by issuers involved in projects or technologies with high potential positive environmental impact, as determined by the Adviser using its proprietary evaluation system, in areas such as land, water and energy conservation. Generally, the Adviser views projects or technologies with high potential positive environment impact to include opportunities likely to result in lower or net-zero emissions, environmental conservation, environmental rehabilitation, increased use or creation of renewable energy, increased</p> | <p>Short Term Municipal Limited Term Municipal Intermediate Term Municipal AMT-Free Municipal Income Municipal Income Short Duration High Yield High Yield Municipal Rochester Municipal Opportunities Limited Term California Municipal California Municipal Rochester Limited Term New York Municipal Rochester AMT-Free New York Municipal Invesco Rochester New York Municipals New Jersey Municipal Pennsylvania Municipal</p> <p>Environmental Focus Municipal</p> |

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| | sustainability, or other positive environmental outcomes. | |
| Structured Investments | <p>The Adviser’s Structured Investments strategies are founded upon collaboration within its comprehensive research platform through the integration of macro and credit research. Within this investment process, the team believes there are two particularly distinctive elements to its strategies and overall value proposition. The first is a rigorous primary portfolio design process based on proprietary risk-based techniques that establish clear exposure level targets for each client portfolio. These exposure levels are adaptable to changing market conditions and shifts in the risk cycle assessment. The second key element is alpha generation through individual top-down and bottom-up decisions.</p> | <p>US Mortgage-Backed Agency Focused High Quality Variable Rate Bond US Mortgage-Backed Securities Real Estate Fixed Income Opportunity Opportunistic Mortgage Diversified Income U.S. High Quality Short Term Bond</p> |
| Multi-Sector Credit | <p>The Adviser’s Multi-Sector Credit strategy takes a discretionary approach across core credit asset classes to pursue attractive strategic beta, tactical beta, and security selection alpha opportunities that can potentially enhance overall income and total return potential. The strategy applies a disciplined, research-intensive investment process that combines top-down and bottom-up analysis.</p> | Active Multi-Sector Credit |
| High Yield | <p>The Adviser’s High Yield strategies are constructed with a primary focus on risk management and a secondary focus on return potential to optimize risk-adjusted returns for clients. The team’s process is based on the ability to compare not just risk and return across analysts, but also industries and companies and is designed to guard against excessive risk-taking or extreme conservatism.</p> | <p>Global High Income High Yield Short Duration High Yield</p> |
| Emerging Markets Debt | <p>The Adviser’s Emerging Markets Debt strategy rests on three pillars:</p> <ul style="list-style-type: none"> • The belief that top-down, macro factors drive most asset returns. • The belief that rigorous bottom-up fundamental research uncovers opportunities in volatility and market dislocations. • The importance of having a comprehensive and structured approach for managing risk. | |
| Investment Solutions | <p>The Adviser’s Investment Solutions Team (IIS) combines strategic and tactical asset allocation with</p> | <p>Target Risk Target Date</p> |

| Investment Center | Summary of Philosophy and Process | Sub-strategies/mandates |
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| | <p>manager selection capabilities to deliver outcome-oriented solutions to clients. The team evaluates capabilities across various investment strategies and combines them in a way that's designed to meet specific client objectives. As an independent team that is not affiliated with a particular Invesco investment discipline, the IIS team has the flexibility to tap into a broad set of capabilities. The team utilizes strategic asset allocation and/or tactical asset allocation approaches to design and implement solutions across a wide range of vehicles for its clients.</p> | <p>Global Multi-Asset Balanced Income Balanced (Equity, Fixed Income, Alternatives) Managed Volatility Capital Protection Multi-alternatives Institutional Indexing</p> |
| <p>Global Asset Allocation – Multi-Asset Suite</p> | <p><u>Systematic and Factor Investing</u></p> <p>The Adviser's Global Asset Allocation ("GAA") team deploy several different multi-asset investment strategies.</p> <p>The philosophy for the Balanced-Risk Allocation strategy considers these tenets:</p> <ul style="list-style-type: none"> • The simple math of compound returns requires that investors limit downside risk while participating in positive return environments. • A focus on risk management, particularly on those periods where riskier assets, such as equities, do poorly. • Reducing overall risk with a focus on standard deviation results in a symmetric reduction in the upside and downside. The team believes it can create a portfolio that significantly reduces downside exposure while maintaining the majority of the upside potential. <p>The GAA team strives to achieve its investment philosophy in two ways within the Balanced-Risk Allocation strategy:</p> <ul style="list-style-type: none"> • The primary approach is to strategically balance the amount of risk exposure the portfolio has to diverse set of macro factor exposures. This should limit the impact of surprise outcomes on the portfolio. • Secondly, the team tactically shifts from a precise balance to each macro factor in | <p>Balanced-Risk Allocation Balanced-Risk Allocation 10% Balanced-Risk Allocation 12%</p> |

| Investment Center | Summary of Philosophy and Process | Sub-strategies/mandates |
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| Global Asset Allocation – Commodities | <p>order to emphasize those assets that are most likely to outperform cash.</p> <p>The philosophy for the Invesco Macro Allocation Strategy focuses on two key concepts:</p> <ul style="list-style-type: none"> • Over time, the risky assets included in the strategy are expected to generate a risk premium, or excess return to cash. • However, these assets behave differently during the unique phases of the economic cycle and earn this risk premium at different times. <p>The strategy uses long and short positions to capture positive performance in both rising and falling markets with zero to low correlation to market indices. The investment process for the Invesco Macro Allocation Strategy is completely quantitative. This helps ensure a consistent and disciplined process. The investment team first applies fundamental market concepts to identify both directional and relative investment opportunities. The team then accounts for volatility and correlation differences to set a risk-balanced core. In the final step of the process, portfolio construction, the team attempts to control the frequency, depth and duration of portfolio losses and rebalances the portfolio on a monthly basis.</p> | Macro Allocation |
| | <p>The Global Asset Allocation Strategy is a combination of 55% Invesco Balanced-Risk Allocation and 45% Invesco Macro Allocation Strategy.</p> | Global Asset Allocation |
| | <p>The Small Cap Index Plus strategy is 50% Macro Allocation Strategy and 50% Russell 2000. The objective is to generate a total return in excess of its benchmark. The strategy seeks to accomplish this by owning two types of assets: excess return-generating assets and benchmark-replicating assets.</p> | Small Cap Index Plus |
| | <p>The GAA's Balanced-Risk Commodities strategy takes an active approach to commodity investing due to some of the unique return sources available in the commodity markets. The investment strategy focuses on four key drivers of commodity returns: term structure weighting, equal risk contribution, optimal roll yield, and tactical allocation. The strategy does not seek to replicate</p> | Balanced-Risk Commodities |

| Investment Center | Summary of Philosophy and Process | Sub-strategies/mandates |
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| <p>Quantitative Strategies</p> <p>Fixed Income Factors</p> | <p>the performance of a benchmark index.</p> <p>The strategy is diversified across the commodity complexes, including, but not limited to, energy, agriculture, precious metals, and industrial metals. Specifically, the team selects the appropriate assets for the strategy, allocates them based on their proprietary risk management and portfolio construction techniques, and then applies an active positioning process to improve expected returns.</p> <p>The Adviser’s Quantitative Strategies translate fundamental and behavioral finance insights into portfolio selections through a systematic and structured process that is combined with rigorous risk controls. The team believes that financial markets are driven by exposures to fundamental factors as well as behavioral biases, which it seeks to exploit with its multi-factor-based model. The Quantitative Strategies model uses several factors to rank the attractiveness of individual securities. These factors are grouped into three concepts: momentum (both earnings and price), quality and value. Each of these concepts represents one fundamental and/or behavioral bias of the stock market.</p> <p>The Adviser’s Fixed Income Factor strategies utilizes a systematic, factor-based process with regards to security selection. The strategies seek outperformance relative to peers as well as the benchmark. The fixed income factor team scores the securities held in the benchmark based on their exposure to three factors: value, low volatility and carry.</p> | <p>US Market Neutral Enhanced Index US Low Volatility Global Low Volatility</p> <p>Global Sovereign Bond Short Term Bond US Investment Grade Corporate Bond Hard Currency EM Bond</p> |
| <p>Global and US Real Assets— Direct Real Estate</p> | <p>The Adviser’s Global and US Real Assets Direct Real Estate strategies have several methodologies and systems in place to manage risk and to ensure consistent application of the direct real estate investment philosophy and process through a house view. The house view combines the empirical and anecdotal evidence from multiple investment disciplines, including Strategic Analytics, Transactions, Transaction Analytics, Valuations, Portfolio Management, Real Estate Securities, Investment Management and Financing/Dispositions and sets forth where</p> | <p>US Core Equity Investments US Core Debt Investments US Core-Plus Equity Investments US Value-Add and Opportunistic Investments Income-Oriented Public,Non-Listed REIT Fund-of-Fund Mandates investing in Private Funds, Public REITs, Registered Investment Companies and/or Direct Real Estate</p> |

| Investment Center | Summary of Philosophy and Process | Sub-strategies/mandates |
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| | <p>management sees the best relative value from a property type allocation, market selection and asset attribute standpoint. Portfolio Management then incorporates the up-to-date house view into investment plans and is charged with implementation. Risk is managed throughout the acquisition/origination process through a series of checks and balances. Investment-specific risks evaluated by the team include (but are not limited to) financial, operational, tenant-related, environmental, structural, lease-related, title-related and legal. A transaction team is formed for every potential acquisition/origination consisting of members from each of the investment disciplines - Portfolio Management, Transactions, Transaction Analytics, Closing and Due Diligence, and Investment Management. Each member of the team evaluates each opportunity from the point of view of their expertise, providing for collaborative input on each opportunity. Unanimous consent is ultimately required from the applicable direct real estate investment committee for any acquisition/origination or disposition and each decision is made with input from the various investment disciplines.</p> | |
| <p>Global and US Real Assets-- Securities</p> | <p>The Adviser's Global and US Real Asset Securities strategies are based upon two fundamental principles: maximizing predictability and consistency of investment returns and minimizing risk through strict attention to portfolio design. The Adviser uses a systematic approach incorporating fundamental research and a bottom up stock selection process; though also incorporates macro-level risk controls for the potential effects of variables such as country/currency exposure, asset demand, construction trends and demographic trends, which may impact an individual company.</p> <p>The Adviser's SteelPath MLP strategy employs a fundamental approach to investing with an emphasis on business risk assessment and bottom-up analysis. On a macro level, the Advisers commodity price scenario analysis across medium and long-term horizons provides a framework for sub-sector allocation and investment selection. The Adviser</p> | <p>US Real Estate Securities Total Return Global Real Estate Securities Total Return Global Real Estate Securities Income-Oriented Global Infrastructure Securities Total Return Energy Infrastructure - Master Limited Partnerships Real Assets Securities Total Return</p> |

| Investment Center | Summary of Philosophy and Process | Sub-strategies/mandates |
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| | <p>seeks to perform fundamental, asset-level analysis to find companies with superior risk/reward potential across a range of commodity price scenarios. Furthermore, the Adviser intends to focus on total return through intentional portfolio construction, remaining cognizant of cross-sector exposures while attempting to mitigate unintentional commodity or factor bets when appropriate.</p> <p>The Advisor’s Real Assets strategies utilize a fundamental, bottom-up stock selection process that also incorporates sector and macro-level risk analysis including economic outlooks, inflation expectations, monetary & fiscal policy, and supply/demand among others to invest in a portfolio of real assets including real estate, infrastructure, natural resources and timber. The Advisor may also leverage proprietary and/or third party generated ESG factors, as well as ESG exclusionary screens to construct portfolios. The portfolio managers integrate both quantitative and qualitative ESG research in an effort to create a holistic perspective on a company’s ESG practices. The investment team considers each ESG pillar and investment opportunity separately. This analysis generally identifies those companies with functionally efficient assets with positive environmental credentials, operating as highest and best use with relatively positive local impact.</p> | <p>Real Assets ESG ETF</p> |

Risk Descriptions

There is no guarantee that Invesco Advisers will succeed in seeking to achieve each client accounts’ investment objective. Investing in securities involves risk of loss that clients should be prepared to bear. For example, an account may lose all or a substantial portion of its investments and investors must be prepared to bear the risk of a complete loss of their investments.

dOther material risks relating to the investment strategies and methods of analysis described above, and to the types of assets typically purchased by or for the Commingled Funds, include the risks set forth below. This section does not identify every possible risk associated with investing .Additionally, each investment center and the guidelines and strategies used by each investment center in managing a particular client account will determine the risks that apply.

Active Trading Risk. Active trading of portfolio securities may result in added expenses, a lower return and increased tax liability.

Affiliated Portfolio Risk. In managing the strategy, the Adviser will have authority to select and substitute underlying funds. The Adviser may be subject to potential conflicts of interest in selecting underlying funds because the fees paid to the Adviser or its affiliates by some underlying funds for advisory services are higher than the fees paid by other underlying funds. However, the Adviser monitors the investment process to seek to identify, address and resolve any potential issues.

Allocation Risk. The investment performance depends, in part, on how its assets are allocated among the underlying strategies or asset classes. Invesco Advisers' evaluations and assumptions regarding asset allocation do not assure profit or diversification and may cause the strategy to be invested (or not invested) in one or more asset classes or underlying strategies at an inopportune time, which could negatively affect the strategy's performance.

Asia Pacific Region Risk (ex-Japan). The level of development of the economies of countries in the Asia Pacific region varies greatly. Furthermore, the economies of countries in this region are largely intertwined, meaning that an economic recession experienced by one country in this region may adversely impact the economic performance of other countries in the region. Certain economies in the region may also be adversely affected by increased competition, high inflation rates and interest rates, rising unemployment, undeveloped financial services sectors, currency fluctuations or restrictions, political and social instability and increased economic volatility.

Asia Pacific Region Risk (including Japan). In addition to the risks listed in the above section, Asia Pacific Region Risk (ex-Japan), the strategy's Japanese investments may be adversely affected by protectionist trade policies, slow economic activity worldwide, dependence on exports and international trade, increasing competition from Asia's other low-cost emerging economies, political and social instability, regional and global conflicts and natural disasters, as well as by commodity markets fluctuations related to Japan's limited natural resource supply.

Bank Loan Risk. There are a number of risks associated with an investment in bank loans including credit risk, interest rate risk, liquidity risk and prepayment risk. Lack of an active trading market, restrictions on resale, irregular trading activity, wide bid/ask spreads and extended trade settlement periods may impair the strategy's ability to sell bank loans within its desired time frame or at an acceptable price and its ability to accurately value existing and prospective investments. Extended trade settlement periods may result in cash not being immediately available to the strategy. As a result, the strategy may have to sell other investments or engage in borrowing transactions to raise cash to meet its obligations. The risk of holding bank loans is also directly tied to the risk of insolvency or bankruptcy of the issuing banks. These risks could cause the strategy to lose income or principal on a particular investment, which in turn could affect the strategy's returns. The value of bank loans can be affected by and sensitive to changes in government regulation and to economic downturns in the United States and abroad. Bank loans generally are floating rate loans, which are subject to interest rate risk as the interest paid on the floating rate loans adjusts periodically based on changes in widely accepted reference rates.

Banking and Financial Services Industry Focus Risk. From time to time, an investment strategy may invest more than 25% of its assets in unsecured bank instruments, including but not limited to certificates of deposit and time deposits, or securities that may have guarantees or credit and liquidity enhancements provided by banks, insurance companies or other financial institutions. To the extent

the strategy focuses its investments in these instruments or securities, the strategy's performance will depend on the overall condition of those industries and the individual banks and financial institutions in which the strategy invests (directly or indirectly), the supply of short-term financing, changes in government regulation, changes in interest rates, and economic downturns in the United States and abroad.

Borrowing Risk. Borrowing money to buy securities exposes the strategy to leverage and will exaggerate the effect of any increase or decrease in the value of the strategy's portfolio securities. It may also require the strategy to liquidate positions when it may not be advantageous to do so to satisfy borrowing obligations. In addition, the strategy will incur interest expenses and other fees on borrowed money. There can be no assurance that the strategy's borrowing strategy will enhance and not reduce the strategy's returns.

Cash/Cash Equivalents Risk. In rising markets, holding cash or cash equivalents will negatively affect the strategy's performance relative to its benchmark.

Changing Fixed Income Market Conditions Risk. The current low interest rate environment was created in part by the Federal Reserve Board (FRB) and certain foreign central banks keeping the federal strategy and equivalent foreign rates near, at or below zero. Increases in the federal strategy and equivalent foreign rates may expose fixed income markets to heightened volatility and reduced liquidity for certain fixed income investments, particularly those with longer maturities. In addition, decreases in fixed income dealer market-making capacity may also potentially lead to heightened volatility and reduced liquidity in the fixed income markets. As a result, the value of the strategy's investments and share price may decline. Changes in central bank policies could also result in higher than normal shareholder redemptions, which could potentially increase portfolio turnover, which may result in increased brokerage costs and other transaction costs and taxes, and which may lower the strategy's actual return.

China Investment Risk. The Chinese economy is generally considered an emerging and volatile market. Although China has experienced a relatively stable political environment in recent years, there is no guarantee that such stability will be maintained in the future. Political, regulatory and diplomatic events, such as the U.S.-China "trade war" that intensified in 2018, could have an adverse effect on the Chinese or Hong Kong economies and on investments made in China.

Collateralized Loan Obligations ("CLOs") Risk. CLOs are subject to the risks of substantial losses due to actual defaults by underlying borrowers, which will be greater during periods of economic or financial stress. CLOs may also lose value due to collateral defaults and disappearance of subordinate tranches, market anticipation of defaults, and investor aversion to CLO securities as a class. The risks of CLOs will be greater if the investments in CLOs that hold loans of uncreditworthy borrowers or if the strategy holds subordinate tranches of the CLO that absorbs losses from the defaults before senior tranches. In addition, CLOs are subject to interest rate risk and credit risk.

Commodity-Linked Notes Risk. In addition to risks associated with the underlying commodities, investments in commodity-linked notes may be subject to risks such as non-payment of interest and loss of principal, counterparty risk, lack of a secondary market and risk of greater volatility than traditional equity and debt securities. The value of the commodity-linked notes may fluctuate

significantly due to volatility of the underlying investments to which they are linked. Additionally, certain commodity-linked notes employ “economic” leverage by requiring payment by the issuer of an amount that is a multiple of the price increase or decrease of the underlying commodity, commodity index, or other economic variable. Such economic leverage will increase the volatility of these commodity-linked notes and the strategy to the extent it invests in such notes.

Commodity Risk. Investment exposure to the commodities markets, including particular sectors of the commodities markets, may subject the strategy to greater volatility than investments in traditional securities, such as stocks and bonds. Volatility in the commodities markets may be caused by changes in overall market movements, taxation, domestic and foreign political and economic events and policies, war, acts of terrorism, changes in domestic or foreign interest rates and/or investor expectations concerning interest rates, domestic and foreign inflation rates, investment and trading activities of mutual strategy’s, hedge strategy’s and commodities strategy’s, and factors such as drought, floods, weather (e.g. drought or flooding, livestock, disease, embargoes, tariffs, changes in governmental regulation and other regulatory developments or supply and demand disruptions.) Investors should be willing to assume the risks of potentially significant fluctuations in the value of the strategy’s shares because it is linked to the performance of volatile commodities.

Consumer Discretionary Sector Risk. The strategy may concentrate its investments in securities of issuers in the consumer discretionary sector. Companies engaged in the consumer discretionary sector are affected by fluctuations in supply and demand, changes in consumer preferences and spending, political and economic conditions, commodity price volatility, changes in exchange rates, imposition of import controls, increased competition, depletion of resources and labor relations.

Contingent Convertible Securities. Contingent convertible securities (“CoCos”) have no stated maturity, fully discretionary coupons and are typically issued in the form of subordinated debt instruments. CoCos generally either convert into equity or have their principal written down upon the occurrence of certain triggering events linked to regulatory capital thresholds or regulatory actions relating to the issuer’s continued viability. As a result, an investment in CoCos is subject to the risk that coupon (i.e., interest) payments may be cancelled by the issuer or a regulatory authority in order to help the issuer absorb losses. An investment in CoCos is also subject to the risk that, in the event of the liquidation, dissolution or winding-up of an issuer prior to a trigger event, the investor’s rights and claims will generally rank junior to the claims of holders of the issuer’s other debt obligations. In addition, if CoCos held are converted into the issuer’s underlying equity securities following a trigger event, the holding may be further subordinated due to the conversion from a debt to equity instrument. Further, the value of an investment in CoCos is unpredictable and will be influenced by many factors and risks, including interest rate risk, credit risk, market risk, liquidity risk and valuation risk.

Convertible Securities Risk. The market values of convertible securities are affected by market interest rates, the risk of actual issuer default on interest or principal payments and the value of the underlying common stock into which the convertible security may be converted. Additionally, a convertible security is subject to the same types of market and issuer risks as apply to the underlying common stock. In addition, certain convertible securities are subject to involuntary conversions and may undergo principal write-downs upon the occurrence of certain triggering events, and, as a result, are subject to an increased risk of loss. Convertible securities may be rated below investment grade.

Correlation Risk. Certain investment strategies seek to balance risk across certain asset classes and, within each asset class, across different countries and investments. However, from time to time, the asset class, selected country or investment may become correlated in a way not anticipated by Invesco Advisers, causing risks and loss unbalanced and even magnified.

Credit Linked Notes Risk. Risks of credit linked notes include those risks associated with the underlying reference obligation including but not limited to market risk, interest rate risk, credit risk, default risk and, in some cases, foreign currency risk. An investor in a credit linked note bears counterparty risk or the risk that the issuer of the credit linked note will default or become bankrupt and not make timely payment of principal and interest of the structured security. Credit linked notes may be less liquid than other investments and therefore, harder to dispose of at the desired time and price. In addition, credit linked notes may be leveraged and may produce disproportionate losses to the strategy as a result of small changes in the value of the underlying reference obligation.

Credit Risk/Defaulted Securities Risk. The credit quality of a security or instrument may deteriorate and impair the liquidity of the security or instrument and decrease its value. Additionally, some investments may have less credit risk than others. For example, debt of issuers with poor credit offer higher yields and more credit risk than debt of issuers with more secure credit and higher ratings.

Defaulted securities pose a greater risk that principal will not be repaid than non-defaulted securities. Defaulted securities and any securities received in an exchange for such securities may be subject to restrictions on resale.

Cyber Security Risk. Invesco Advisers and its service providers may be prone to operational and information security risks resulting from cyber-attacks. Cyber-attacks include, among other behaviors, stealing or corrupting data maintained online or digitally, denial of service attacks on websites, the unauthorized release of confidential information or various other forms of cyber security breaches. Cyber-attacks affecting Invesco Advisers, or its service providers may adversely impact client accounts. For instance, cyber-attacks may interfere with the processing of investor transactions, impact the ability to calculate, the value of securities and/or the account cause the release of private shareholder information or confidential business information, impede trading, subject Invesco Advisers and/or an advisory account to regulatory fines or financial losses and/or cause reputational damage. Similar types of cyber security risks are also present for issuers of securities in which a client account may invest, which could result in material adverse consequences for such issuers and may cause an account's investment in such companies to lose value. While Invesco Advisers has risk management systems to prevent such cyber-attacks, there are inherent limitations in such plans and systems including the possibility that certain risks have not been identified. Furthermore, Invesco Advisers cannot control the cyber security plans and systems put in place by service providers to client accounts and issuers in which the account invests. Similar types of operational and technology risks are also present for the companies in which the strategies invest, which could have material adverse consequences for such companies, and may cause the strategies' investments to lose value. In addition, Invesco Advisers may incur substantial costs related to the investigation of the origin and scope of a cybersecurity incident, increasing and upgrading cybersecurity, protections including its administrative, technical, organizational and physical controls, acts of identify theft, unauthorized use or loss of proprietary information, adverse investor reaction, increased insurance premiums or difficulties obtaining insurance coverage, or litigation, regulatory actions or other legal risks.

Debt Securities Risk. The prices of debt securities held by a strategy will be affected by changes in interest rates, the creditworthiness of the issuer and other factors. An increase in prevailing interest

rates typically causes the value of existing debt securities to fall and often has a greater impact on longer-duration debt securities and higher quality debt securities. The strategy could lose money on investments in debt securities if the issuer or borrower fails to meet its obligations to make interest payments and/or to repay principal in a timely manner. Changes in an issuer's financial strength, the market's perception of such strength or in the credit rating of the issuer or the security may affect the value of debt securities. The Adviser's credit analysis may fail to anticipate such changes, which could result in buying a debt security at an inopportune time or failing to sell a debt security in advance of a price decline or other credit event.

Depository Receipts Risk. Investing in depository receipts involves the same risks as direct investments in foreign securities. In addition, the underlying issuers of certain depository receipts are under no obligation to distribute shareholder communications or pass through any voting rights with respect to the deposited securities to the holders of such receipts. The strategy may therefore receive less timely information or have less control than if it invested directly in the foreign issuer.

Derivatives Risk. The value of a derivative instrument or similar instruments (such as options, futures, or swaps) depends largely on (and is derived from) the value of an underlying security, currency, commodity, interest rate, index or other asset (each referred to as an underlying asset). In addition to risks relating to the underlying assets, the use of derivatives may include other, possibly greater, risks, including the failure of a counterparty to fulfill its contractual obligations, leverage and liquidity risks. Derivatives create leverage risk as a result of an adverse change in the value of the underlying asset, causing the strategy to sustain a loss that is substantially greater than the amount invested in the derivative. This may subject the strategy to more volatile returns and higher risk of loss. Derivative instruments may also be less liquid than more traditional investments and the strategy may be unable to sell or close out its derivative positions at a desirable time or price. This risk may be more acute under adverse market conditions, during which the strategy may be most in need of liquidating its derivative positions. Derivatives may also be harder to value, less tax efficient and subject to changing government regulation that could impact the strategy's ability to use certain derivatives or their cost. Also, derivatives used for hedging or to gain or limit exposure to a particular market segment may not provide the expected benefits, particularly during adverse market conditions.

Distressed Debt Risk. – Invesco Advisers invests in securities and other obligations and assets of companies in special situations involving financial or business distress, including companies involved in bankruptcy or other reorganization and liquidation proceedings. Such investments involve a substantial degree of risk. There is no assurance that Invesco Advisers will correctly evaluate the value of the assets collateralizing an investment or the prospects for a successful reorganization or similar action in respect of any company. In any reorganization or liquidation proceeding, Invesco Advisers may lose its entire investment, be required to accept cash or securities or assets with a value less than their original investment and/or be required to accept payment over an extended period of time.

Dividend Paying Security Risk. Securities that pay high dividends as a group can fall out of favor with the market, causing such companies to underperform companies that do not pay high dividends. With respect to Commingled Funds that invest in other funds or track an index, changes in the dividend policies of the companies in an underlying fund's index and the capital resources available for such companies' dividend payments may affect an underlying fund.

Dollar Roll Transactions Risk. Dollar roll transactions occur in connection with TBA transactions and involve the risk that the market value of the securities the strategy is required to purchase may decline below the agreed upon purchase price of those securities. Dollar roll transactions add a form of leverage to the strategy's portfolio, which may make the strategy's returns more volatile and increase the risk of loss. The strategy's portfolio turnover may also increase, which could result in increased brokerage costs and other transaction costs and taxes, and lower the strategy's actual return.

Emerging Markets Securities Risk. Emerging markets (also referred to as developing markets) are generally subject to greater market volatility, political, social and economic instability, uncertain trading markets and more governmental limitations on foreign investment than more developed markets. Emerging markets are more likely to experience hyperinflation and currency devaluations. In addition, companies operating in emerging markets may be subject to lower trading volume and greater price fluctuations than companies in more developed markets. Securities law and the enforcement of systems of taxation in many emerging market countries may change quickly and unpredictably. In addition, investments in emerging markets securities may also be subject to additional transaction costs, delays in settlement procedures, and lack of timely information.

Energy Infrastructure MLPs Risk. In addition to the energy sector risks discussed above, energy infrastructure MLPs are subject to a variety of industry specific risk factors, including reduced volumes of energy commodities available for transporting, processing, storing or distributing; changes in energy commodity prices; a sustained reduced demand for crude oil, natural gas and refined petroleum products; depletion of the natural gas reserves or other commodities if not replaced; extreme weather and environmental hazards; rising or volatile interest rates which could drive investors into other investment opportunities; In addition, taxes, government regulation, international politics, price and supply fluctuations, volatile interest rates and energy conservation may cause difficulties for energy infrastructure MLPs.

Energy Sector Risk. Changes in worldwide energy prices, exploration and production spending, government regulation, world events, economic conditions, exchange rates, transportation and storage costs and labor relations can affect companies in the energy sector. In addition, these companies are at an increased risk of civil liability and environmental damage claims, and may be subject to the risk of loss from terrorism and natural disasters.

Environmental, Social and Governance (ESG) Considerations Risk. ESG considerations that may be assessed as part of the investment process or credit research process may vary across types of eligible investments and issuers, and not every ESG factor may be identified or evaluated for every investment. Strategies that use ESG factors to exclude certain investments for non-financial reasons may forego some market opportunities available to other strategies that do not use these criteria. There is no guarantee that the Adviser will successfully implement and make investments in issuers that creates positive ESG impact while enhancing long-term shareholder value and achieving financial returns. Strategies will not be solely based on ESG considerations, and therefore the issuers in which a strategy invests may not be considered ESG-focused companies. The incorporation of ESG factors may affect exposure to certain companies or industries and may not work as intended. A strategy may underperform other strategies that do not assess an issuer's ESG factors or that use a different methodology to identify and/or incorporate ESG factors. Information used to evaluate such factors may not be readily available, complete or accurate, and may vary across providers and issuers as ESG is

not a uniformly defined characteristic. ESG-related practices differ by region, industry and issue and are evolving accordingly, and an issuer's ESG-related practices or the Adviser's assessment of such practices may change over time. There is no guarantee that the evaluation of ESG considerations will be additive to performance.

Equity Securities Risk. MLP common units and other equity securities can be affected by macroeconomic and other factors affecting the stock market in general, expectations of interest rates, investor sentiment towards MLPs or the energy sector, changes in a particular issuer's financial condition, or unfavorable or unanticipated poor performance of a particular issuer (in the case of MLPs, generally measured in terms of distributable cash flow). Prices of common units of individual MLPs and other equity securities also can be affected by fundamentals unique to the partnership or company, including earnings power and coverage ratios.

ETF Industry Concentration Risk. In following its methodology, an ETF's underlying index may, from time to time, be concentrated to a significant degree in securities of a single industry or sector. Likewise, an underlying fund may also concentrate its investments to the same extent. This may subject an underlying fund to more risks than if it were diversified broadly over numerous industries or sectors. Such industry-based risks, any of which may adversely affect the companies in which an underlying fund invests, may include, but are not limited to: general economic conditions or cyclical market patterns that could negatively affect supply and demand in a particular industry; competition for resources, adverse labor relations, political or world events; obsolescence of technologies; and increased competition or new product introductions that may affect the profitability or viability of companies in an industry. At times, such industry or sector may also be out of favor and underperform other industries or the market as a whole.

ETNs Risk. ETNs are subject to credit risk, counterparty risk, and the risk that the value of the ETN may drop due to a downgrade in the issuer's credit rating. The value of an ETN may also be influenced by time to maturity, level of supply and demand, volatility and lack of liquidity in the underlying market, changes in the applicable interest rates, and economic, legal, political, or geographic events that affect the referenced underlying market or assets. An underlying strategy will bear its proportionate share of any fees and expenses borne by an ETN in which it invests. For certain ETNs, there may be restrictions on an underlying strategy's right to redeem its investment in an ETN, which is meant to be held until maturity.

Exchange-Traded Strategies Risk. In addition to the risks associated with the underlying assets held by the exchange-traded strategy, investments in exchange-traded strategies are subject to the following additional risks: (1) an exchange-traded strategy's shares may trade above or below its NAV; (2) an active trading market for the exchange-traded strategy's shares may not develop or be maintained; (3) trading an exchange-traded strategy's shares may be halted by the listing exchange; (4) a passively managed exchange-traded strategy may not track the performance of the reference asset; and (5) a passively managed exchange-traded strategy may hold troubled securities. Investment in exchange-traded strategy's may involve duplication of management fees and certain other expenses, as the strategy indirectly bears its proportionate share of any expenses paid by the exchange-traded strategy's in which it invests. Further, certain exchange-traded strategy's in which the strategy may invest are leveraged, which may result in economic leverage, permitting the strategy to gain exposure that is greater than would be the case in an unlevered instrument and potentially resulting in greater volatility.

Financial Services Sector Risk. The strategy may be susceptible to adverse economic or regulatory occurrences affecting the financial services sector. Financial services companies are subject to extensive government regulation and are disproportionately affected by unstable interest rates, each of which could adversely affect the profitability of such companies. Financial services companies may also have concentrated portfolios, which make them especially vulnerable to unstable economic conditions.

Floating Rate Obligations/Inverse Floating Rate Obligations Risk. The price of inverse floating rate obligations (inverse floaters) is expected to decline when interest rates rise, and generally will decline further than the price of a bond with a similar maturity. The price of inverse floaters is typically more volatile than the price of bonds with similar maturities. These risks can be particularly high if leverage is used in the formula that determines the interest payable by the inverse floater, which may make the strategy's returns more volatile and increase the risk of loss. Additionally, these securities may lose some or all of their principal and, in some cases, the strategy could lose money in excess of its investment.

Foreign Credit Exposure Risk. U.S. dollar-denominated securities carrying foreign credit exposure may be affected by unfavorable political, tax, economic or governmental developments that could affect payments of principal and interest.

Foreign Government Debt Risk. Investments in foreign government debt securities (sometimes referred to as sovereign debt securities) involve certain risks in addition to those relating to foreign securities or debt securities generally. The issuer of the debt or the governmental authorities that control the repayment of the debt may be unable or unwilling to repay principal or interest when due in accordance with the terms of such debt, and the strategy may have limited recourse in the event of a default against the defaulting government. Without the approval of debt holders, some governmental debtors have in the past been able to reschedule or restructure their debt payments or declare moratoria on payments.

Foreign Securities and Credit Exposure Risk. U.S. dollar-denominated securities carrying foreign credit exposure may be affected by unfavorable political, economic or governmental developments that could affect payments of principal and interest. Furthermore, the strategy's foreign investments may be adversely affected by political and social instability, changes in economic or taxation policies, difficulty in enforcing obligations, decreased liquidity or increased volatility. Foreign investments also involve the risk of the possible seizure, nationalization or expropriation of the issuer or foreign deposits (in which the strategy could lose its entire investments in a certain market) and the possible adoption of foreign governmental restrictions such as exchange controls.

Unless the strategy has hedged such risk, a foreign securities risk may also involve the risk of negative foreign currency rate fluctuations, causing the value of securities denominated in such foreign currency (or other instruments through which the strategy has exposure to foreign currencies) to decline in value. Currency exchange rates may fluctuate significantly over short periods of time. Currency hedging strategies, if used, are not always successful.

Fund of Funds Risk. The strategy's performance depends on that of the underlying funds in which it invests and it is subject to the risks associated with investments in the underlying funds. The strategy will indirectly pay a proportional share of the fees and expenses of the underlying funds in which it invests. There are risks that the strategy will vary from its target weightings (if any) in the underlying

funds, that the underlying funds will not achieve their investment objectives, that the underlying funds' performance may be lower than their represented asset classes, and that the strategy may withdraw its investments in an underlying fund at a disadvantageous time. Underlying funds that are not affiliated with the Adviser may change their portfolio managers, investment objectives, investment strategies, policies or practices without the approval of the Adviser.

Geographic Focus Risk. The strategy may from time to time invest a substantial amount of its assets in securities of issuers located in a single country or a limited number of countries. Adverse economic, political or social conditions in those countries may, therefore, have a significant negative impact on the strategy's investment performance.

Geopolitical Risk. The strategy is subject to the risk that geopolitical events will disrupt securities markets and adversely affect global economies and markets. Due to the increasing interdependence among global economies and markets, conditions in one country, market, or region might adversely impact markets, issuers and/or foreign exchange rates in other countries, including the U.S. War, terrorism, global health crises and pandemics, and other geopolitical events have led, and in the future may lead, to increased market volatility and may have adverse short- or long-term effects on U.S. and world economies and markets generally. Recent military action by Russia in Ukraine could adversely affect global energy and financial markets and therefore could affect the value of an account's investments, including beyond such account's direct exposure to Russian issuers or nearby geographic regions. The extent and duration of the military action, sanctions and resulting market disruptions are impossible to predict and could be substantial.

Growth Investing Risk. Growth stocks tend to be more expensive relative to the issuing company's earnings or assets compared with other types of stock. As a result, they tend to be more sensitive to changes in, or investors' expectations of, the issuing company's earnings and can be more volatile.

Health Care Sector Risk. The health care sector is subject to significant government regulations, such as government health care programs, increases or decreases in the cost of medical products and services, and competitive forces that could negatively impact a health care company's profitability. The health care sector may also be affected by government health care programs.

High Yield Debt Securities (Junk Bond) Risk. Investments in high yield debt securities ("junk bonds") and other lower-rated securities may subject the strategy to substantial risk of loss. These securities are considered to be speculative with respect to the issuer's ability to pay interest and principal when due, are more susceptible to default or decline in market value and volatile prices and are less liquid than investment grade debt securities.

Index-Related Risk. Index strategies are managed passively and, therefore, an adverse performance of a particular security may not necessarily eliminate the security from the portfolio. Ordinarily, Invesco Advisers will not sell the strategy's portfolio securities except to reflect additions or deletions of the securities that comprise the Index, or as may be necessary to raise cash to pay strategy shareholders who sell strategy shares. As such, the strategy will be negatively affected by declines in the securities represented by the Index. Also, there is no guarantee that Invesco Advisers will be able to correlate the strategy's performance with that of the Index.

Inflation-Indexed Securities Risk. The values of inflation-indexed securities generally fluctuate in response to changes in real interest rates, and the strategy's income from its investments in these securities is likely to fluctuate considerably more than the income distributions of its investments in more traditional fixed-income securities.

Infrastructure-Related Companies Risk. Infrastructure-related companies are subject to a variety of risk factors, including costs associated with environmental, governmental and other regulations, high interest costs for capital construction programs, high leverage, the effects of economic slowdowns, surplus capacity, increased competition, fluctuations of fuel prices, the effects of energy conservation policies, unfavorable tax laws or accounting policies, environmental damage, difficulty in raising capital, increased susceptibility to terrorist acts or political actions, and general changes in market sentiment towards infrastructure assets.

Initial Public Offering (IPO) Risk. The prices of IPO securities often fluctuate more than prices of securities of companies with longer trading histories and sometimes experience significant price drops shortly after their initial issuance. In addition, companies offering securities in IPOs may have less experienced management or limited operating histories.

Interest Rate Risk. Changes in interest rates may affect operating results by impacting the interest received on floating rate interest bearing investments, the financing costs of debt, and any interest rate swaps that may be utilized for hedging purposes. Borrower default rates may also be affected, which may have a negative impact on the strategy's performance. In a low or negative interest rate environment, debt instruments may trade at negative yields, which means the purchaser of the instrument may receive at maturity less than the total amount invested. In addition, in a negative interest rate environment, if a bank charges negative interest, instead of receiving interest on deposits, a depositor must pay the bank fees to keep money with the bank. Negative or very low interest rates could magnify the risks associated with changes in interest rates. In general, changing interest rates, including rates that fall below zero, could have unpredictable effects on markets and may expose fixed-income and related markets to heightened volatility.

Investing in European Union Risk. Investments in certain countries in the European Union are susceptible to high economic risks associated with high levels of debt, such as investments in sovereign debt of Greece, Italy and Spain. Efforts of the member states to further unify their economic and monetary policies may increase the potential for the downward movement of one-member state's market to cause a similar effect on other member states' markets. Separately, the European Union faces issues involving its membership, structure, procedures and policies. There is considerable uncertainty about the potential consequences of the United Kingdom (the "UK") withdrawing from the European Union, how negotiations of trade agreements will proceed, and how the financial markets will react. As this process unfolds, markets may be further disrupted. Given the size and importance of the UK's economy, uncertainty about its legal, political and economic relationship with the remaining member states of the European Union may continue to be a source of instability. The exit of the UK or other member states from the European Union will likely result in increased volatility, illiquidity and potentially lower economic growth in the affected markets, which will adversely affect the strategy's investments.

Investing in Greater China Risk. Investments in companies located or operating in Greater China involve risks of greater government control over the economy; political, legal and regulatory uncertainty; nationalization, expropriation, or confiscation of property; difficulty in obtaining information necessary for investigations into and/or litigation against Chinese companies, as well as in obtaining and/or enforcing judgments; limited legal remedies for shareholders; alteration or discontinuation of economic reforms; military conflicts, either internal or with other countries; inflation, currency fluctuations and fluctuations in inflation and interest rates that may have negative effects on the economy and securities markets of Greater China; and Greater China's dependency on the economies of other Asian countries, many of which are developing countries. The inability of the Public Company Accounting Oversight Board to inspect audit work papers and practices of PCAOB-registered accounting firms in China with respect to their audit work of U.S. reporting companies may impose significant additional risks associated with investments in China.

Investments in Chinese companies may be made through a special structure known as a variable interest entity ("VIE") that is designed to provide foreign investors with exposure to Chinese companies. Investments in VIEs may pose additional risks because the investment does not represent equity ownership in the operating company. Recently, the Chinese government provided new guidance to and placed restrictions on China-based companies raising capital offshore, including through VIEs, and investors face uncertainty about future actions by the Chinese government that could significantly affect the operating company's financial performance and the enforceability of the contractual arrangements underlying the VIE structure.

Investment Companies Risk. Investing in other investment companies could result in the duplication of certain fees, including management and administrative fees, and may expose the strategy to the risks of owning the underlying investments that the other investment company holds.

Issuer Risk. The value of a security may decline for a number of reasons which directly relate to the issuer, such as management performance, financial leverage, and reduced demand for the issuer's products or services.

Leverage Risk. Certain transactions and investment strategies may give rise to leverage, including, but not limited to: borrowing, dollar rolls, reverse repurchase agreements, loans of portfolio securities and the use of when-issued, delayed-delivery or forward-commitment transactions. The use of certain derivatives may also increase leveraging risk and adverse changes in the value or level of the underlying asset, rate, or index may result in a loss substantially greater than the amount paid for the derivative. The use of leverage may exaggerate any increase or decrease in the net asset value (NAV), causing an investment's price to be more volatile. The use of leverage may increase expenses and increase the impact of other risks. In the case of Commingled Funds, the use of leverage may cause a fund to liquidate portfolio positions in disadvantageous times to satisfy its borrowing obligations, resulting in increased volatility of returns. Leverage, including borrowing, may cause a strategy to be more volatile than if the strategy had not been leveraged.

Limited Number of Holdings Risk. Because the strategy may hold a more limited number of securities than other strategies with a similar investment strategy, a change in the value of these securities could significantly affect the value of your investment in the strategy.

Liquidity Risk. The strategy may be unable to sell illiquid investments at the time or price it desires and, as a result, could lose its entire investment in such investments. Liquid securities can become illiquid during periods of market stress. If a significant amount of the strategy's securities become illiquid, the strategy may not be able to timely pay redemption proceeds and may need to sell securities at significantly reduced prices.

London Interbank Offered Rate (LIBOR) Risk: The U.K. Financial Conduct Authority has announced that it intends to stop persuading or compelling banks to submit LIBOR rates after 2021, and it remains unclear whether LIBOR will continue to exist after that date and, if so, in what form. Actions by regulators have resulted in the establishment of alternative reference rates to LIBOR in many major currencies. The Federal Reserve Board, based on the recommendations of the New York Federal Reserve's Alternative Reference Rate Committee (comprised of major derivative market participants and their regulators), has begun publishing a Secured Overnight Funding Rate ("SOFR") that is intended to replace U.S. dollar LIBOR. Proposals for alternative reference rates for other currencies have also been announced or have already begun publication. On November 30, 2020, the administrator of LIBOR announced a delay in the phase out of a majority of the U.S. dollar LIBOR publications until June 30, 2023, with the remainder of LIBOR publications to still end at the end of 2021. Discontinuance of LIBOR and adoption/implementation of alternative rates pose a number of risks, including among others whether any substitute rate will experience the market participation and liquidity necessary to provide a workable substitute for LIBOR; the effect on parties' existing contractual arrangements, hedging transactions, and investment strategies generally from a conversion from LIBOR to alternative rates; the effect on a Portfolio's existing investments (including, for example, fixed-income investments; senior loans; CLOs and CDOs; and derivatives transactions), including the possibility that some of those investments may terminate or their terms may be adjusted to the disadvantage of the Portfolio; and the risk of general market disruption during the period of the conversion. It is difficult to predict at this time the likely impact of the transition away from LIBOR on a Portfolio.

Management Risk. The strategy is actively managed and depends heavily on Invesco Advisers' analyses of markets, interest rates or the attractiveness, relative values, liquidity, or potential appreciation of particular investments made for the strategy's portfolio. The strategy could experience losses if these judgments prove to be incorrect. Additionally, legislative, regulatory, or tax developments may adversely affect management of the strategy and, therefore, the ability of the strategy to achieve its investment objective.

Market Risk. The market values of the strategy's investments, and therefore, the value of its shares, will go up or down, sometimes rapidly or unpredictably in response to factors such as global economic conditions, particular sectors or governments, or prospects of individual companies. Market risk may affect a single issuer, industry or section of the economy or it may affect the market as a whole. For example, individual stock prices tend to go up and down more dramatically than those of certain other types of investments, such as bonds. During a general downturn in the financial markets, multiple asset classes may decline in value. When markets perform well, there can be no assurance that specific investments held by the strategy will rise in value.

Medium- and Lower-Grade Municipal Securities Risk. Medium- and lower-grade municipal securities generally involve more volatility and greater risks, including credit, market, liquidity and management risks, than higher-grade securities. These securities may be affected by changes to taxation, politics, legislation, economic conditions, and interest rates. Furthermore, many issuers of medium- and lower-grade securities choose not to have a rating assigned to their obligations. As such, the strategy's portfolio may consist of a higher portion of unrated securities than an investment company investing solely in higher-grade securities. Unrated securities may not be as attractive to as many buyers as are

rated securities, which may have the effect of limiting the strategy's ability to sell such securities at their fair value.

MLP Regulatory Risk. MLPs currently receive relatively favorable regulatory treatment. However, they could be adversely affected by changes in the regulatory environment. Most MLPs' assets are regulated by federal and state governments in facets such as pricing and expansion. Such regulation may change over time. Also, many state and federal environmental laws provide for civil as well as regulatory remediation, for operational accidents such as product spills, thus adding to the potential exposure an MLP faces.

MLP Risk. The MLP strategy invests principally in securities of MLPs, which are subject to the following risks: (a) *Limited Partner Risk.* An MLP is a public limited partnership or limited liability company taxed as a partnership under the Code. Although the characteristics of MLPs closely resemble a traditional limited partnership, a major difference is that MLPs may trade on a public exchange or in the over-the-counter market. The risks of investing in an MLP are similar to those of investing in a partnership, including more flexible governance structures, which could result in less protection for investors than investments in a corporation. Investors in an MLP normally would not be liable for the debts of the MLP beyond the amount that the investor has contributed but investors may not be shielded to the same extent that a shareholder of a corporation would be. In certain circumstances, creditors of an MLP would have the right to seek return of capital distributed to a limited partner, which the right would continue after an investor sold its investment in the ML. (b) *Liquidity Risk.* The ability to trade on a public exchange or in the over-the-counter market provides a certain amount of liquidity not found in many limited partnership investments. However, MLP interests may be less liquid than conventional publicly traded securities and, therefore, more difficult to trade at desirable times and/or prices. (c) *Interest Rate Risk.* Where MLP distributions may be reduced by fees and other expenses incurred by the MLP and may not provide attractive returns during periods of interest rate volatility. (d) *General Partner Risk.* The holder of the general partner or managing member interest can be liable in certain circumstances for amounts greater than the amount of the holder's investment in the general partner or managing member.

MLP Tax Risk. MLPs do not pay U.S. federal income tax at the partnership level. Rather, each partner is allocated a share of the partnership's income, gains, losses, deductions and expenses. A change in current tax law, or a change in the underlying business mix of a given MLP, could result in an MLP being treated as a corporation for U.S. federal income tax purposes, which would result in such MLP being required to pay U.S. federal income tax on its taxable income. The classification of an MLP as a corporation for U.S. federal income tax purposes would have the effect of reducing the amount of cash available for distribution by the MLP. Thus, if any of the MLPs owned by Invesco Advisers were treated as a corporation for U.S. federal income tax purposes, it could result in a reduction of the value of a client's portfolio and lower income.

Tax-exempt investors are subject to federal income tax on their allocable share of unrelated business taxable income ("UBTI") generated by an investment holding. UBTI includes income arising from investments in entities that are treated as "flow-through" entities for U.S. federal income tax purposes and that hold operating assets. Because Invesco Advisers will invest in MLPs that will earn income from operating businesses, Invesco Advisers' investments will generate UBTI. Foreign persons are generally taxed on income that is effectively connected with the conduct of a U.S. trade or business by

the foreign person or, if the foreign person is a qualified resident of a country with which the United States has an income tax treaty, such income is also attributable to a permanent establishment maintained by such foreign person in the United States (“ECI”). A foreign investor’s share of the income and gain from its investments in MLPs that are engaged in U.S. trade or businesses and have U.S. permanent establishments will constitute ECI.

Each foreign investor will be required to file U.S. tax returns and pay U.S. federal income tax on its allocable share of the ECI. In addition, foreign investors will be viewed as being engaged in a trade or business in the United States and as maintaining a permanent establishment in the United States. As a result, certain other income of a foreign investor could be treated as ECI as a result of such foreign investor’s investment.

Money Market Fund Risk. Because the share price of the strategy will fluctuate, when you sell your shares they may be worth more or less than what you originally paid for them and you may lose money by investing in the strategy. The fund may impose a fee upon the sale of your shares or may temporarily suspend your ability to sell shares if the strategy’s liquidity falls below required minimums because of market conditions or other factors. The fund’s sponsor has no legal obligation to provide financial support to the strategy, and you should not rely on or expect that the sponsor will enter into support agreements or take other actions to provide financial support to the strategy at any time. The credit quality of the fund’s holdings can change rapidly in certain markets, and the default of a single holding could have an adverse impact on the fund’s share price. The fund’s share price can also be negatively affected during periods of high redemption pressures, illiquid markets and/or significant market volatility. Furthermore, amendments to money market fund regulations could impact the fund’s operations and possibly negatively impact its return.

Mortgage- and Asset-Backed Securities Risk. Mortgage- and asset-backed securities, including collateralized debt obligations and collateralized mortgage obligations, are subject to prepayment or call risk, which is the risk that a borrower’s payments may be received earlier or later than expected due to changes in prepayment rates on underlying loans. This could result in the strategy reinvesting these early payments at lower interest rates, thereby reducing the strategy’s income. Mortgage- and asset-backed securities also are subject to extension risk, which is the risk that an unexpected rise in interest rates could reduce the rate of prepayments, causing the price of the mortgage- and asset-backed securities and the strategy’s share price to fall. An unexpectedly high rate of defaults on the mortgages held by a mortgage pool may adversely affect the value of mortgage-backed securities and could result in losses to the strategy. The strategy may invest in mortgage pools that include subprime mortgages, which are loans made to borrowers with weakened credit histories or with lower capacity to make timely payments on their mortgages. Privately issued mortgage-related securities are not subject to the same underwriting requirements as those with government or government-sponsored entity guarantee and, therefore, mortgage loans underlying privately issued mortgage-related securities may have less favorable collateral, credit risk or other underwriting characteristics, and wider variances in interest rate, term, size, purpose and borrower characteristics.

Municipal Issuer Focus Risk. The municipal issuers in which an underlying strategy invests may be located in the same geographic area or may pay their interest obligations from revenue of similar projects, such as hospitals, airports, utility systems and housing finance agencies. This may make an underlying strategy’s investments more susceptible to similar social, economic, political or regulatory

occurrences, causing an underlying strategy to be further at risk of experiencing a drop in its share price than if an underlying strategy had been more diversified across issuers that did not have similar characteristics.

Municipal Securities Risk. The risk of a municipal obligation generally depends on the financial and credit status of the issuer. Constitutional amendments, legislative enactments, executive orders, administrative regulations, voter initiatives, and the issuer's regional economic conditions may affect the municipal security's value, interest payments, repayment of principal and the strategy's ability to sell the security. Failure of a municipal security issuer to comply with applicable tax requirements may make income paid thereon taxable, resulting in a decline in the security's value. In addition, there could be changes in applicable tax laws or tax treatments that reduce or eliminate the current federal income tax exemption on municipal securities or otherwise adversely affect the current federal or state tax status of municipal securities.

Natural Disaster/Epidemic Risk. Natural or environmental disasters, such as earthquakes, fires, floods, hurricanes, tsunamis and other severe weather-related phenomena generally, and widespread disease, including pandemics and epidemics, have been and can be highly disruptive to economies and markets, adversely impacting individual companies, sectors, industries, markets, currencies, interest and inflation rates, credit ratings, investor sentiment, and other factors affecting the value of the strategy's investments. Given the increasing interdependence among global economies and markets, conditions in one country, market, or region are increasingly likely to adversely affect markets, issuers, and/or foreign exchange rates in other countries, including the U.S. These disruptions could prevent Invesco Advisers from executing advantageous investment decisions in a timely manner and negatively impact its ability to achieve its client investment objectives. Any such event(s) could have a significant adverse impact on the value and risk profile of client accounts.

- *Coronavirus and Public Health Emergencies* - There continues to be ongoing outbreaks of the highly contagious coronavirus referred to as covid-19 ("Covid-19"). The outbreak of COVID-19 has resulted in numerous deaths, adversely impacted global commercial activity and contributed to significant volatility in certain equity and debt markets. Measures taken by national and regional governments, states, districts and municipalities, as well as the general uncertainty surrounding the dangers and impact of COVID-19, are creating significant disruption in supply chains and economic activity. As COVID-19 continues to spread, the potential impacts, including a global, regional or other economic recession, are increasingly uncertain and difficult to assess.

Any public health emergency, including any outbreak of COVID-19, SARS, H1N1/09 flu, avian flu, other coronavirus, ebola or other existing or new epidemic diseases, or the threat thereof, could have a significant impact on Invesco Advisers and its client accounts. The extent of the impact of COVID-19 or any other public health emergency on the operational and financial performance of Invesco Advisers' client accounts will depend on many factors, including the duration and scope of such public health emergency, the extent of any related travel advisories and restrictions implemented, the impact of such public health emergency on overall supply and demand, goods and services, investor liquidity, consumer confidence and levels of economic activity and the extent of its disruption to important global, regional and local supply chains and economic markets, all of which are highly uncertain and cannot be predicted. The effects of a public health emergency may materially and adversely impact the value and performance of the investments held in any client accounts as well as the ability of Invesco Advisers to source, manage and divest investments and achieve the investment objectives of its clients, all of which could result in significant losses to such clients. In addition, the operations of Invesco Advisers

and/or its affiliates may be significantly impacted, or even halted, either temporarily or on a long-term basis, as a result of government quarantine and curfew measures, voluntary and precautionary restrictions on travel or meetings and other factors related to a public health emergency, including its potential adverse impact on the health of any such entity's personnel. The full effects, duration and costs of COVID-19 are impossible to predict, and the circumstances surrounding the COVID-19 will continue to evolve.

Non-Correlation Risk. The return of an underlying strategy's preferred equity segment may not match the return of the underlying index for a number of reasons. For example, an underlying strategy incurs operating expenses not applicable to the underlying index, and incurs costs in buying and selling securities, especially when rebalancing securities holdings to reflect changes in the index. In addition, the performance of the preferred equity segment and the underlying index may vary due to asset valuation differences and differences between the preferred equity segment and the index resulting from legal restrictions, costs or liquidity constraints.

Non-Diversification Risk. The strategy is non-diversified and can invest a greater portion of its assets in the obligations or securities of a small number of issuers or any single issuer than a diversified strategy can. A change in the value of one or a few issuers' securities will therefore affect the value of the strategy more than would occur in a diversified strategy. The strategy can also invest a greater percentage of its assets in any one particular investment strategy than if it was diversified, thereby increasing the risk of loss.

Operational Risk. Invesco Advisers, its service providers, and other market participants increasingly depend on complex information technology and communications systems to conduct business functions. These systems are subject to a number of different threats or risks that could adversely affect Invesco Advisers or an investment strategy, despite the efforts of Invesco Advisers and its service providers to adopt technologies, processes, and practices intended to mitigate these risks. Power or communications outages, cyber-attacks, acts of god, information technology equipment malfunctions, operational errors, and inaccuracies within software or data processing systems may also disrupt business operations or impact critical data. Market events also may trigger a volume of transactions that overloads current information technology and communication systems and processes, impacting the ability of Invesco Advisers to conduct its operations.

Participation Notes Risk. Investments in participation notes involve the same risks associated with a direct investment in the underlying security, currency or market they seek to replicate, and, in addition, subject the strategy to the creditworthiness of the bank or broker-dealer that issued the participation notes.

Preferred Securities Risk. Preferred securities are subject to issuer-specific and market risks applicable generally to equity securities. Preferred securities also may be subordinated to bonds or other debt instruments, subjecting them to a greater risk of non-payment, may be less liquid than many other securities, such as common stocks, and generally offer no voting rights with respect to the issuer.

Prepayment Risk. Many types of debt instruments are subject to prepayment and extension risk. Prepayment risk is the risk that the issuer of a debt instrument will pay back the principal earlier than expected. This may occur when interest rates decline. Prepayment may expose the strategy to a lower

rate of return upon reinvestment of principal. Also, if a debt instrument subject to prepayment has been purchased at a premium, the value of the premium would be lost in the event of prepayment.

Private Equity and Debt Investments Risk. Private equity and debt investments involve a high degree of business and financial risk and can result in substantial or complete losses. Some portfolio companies in which the strategy may invest may be operating at a loss or with substantial variations in operating results from period to period and may need substantial additional capital to support expansion or to achieve or maintain competitive positions. Such companies may face intense competition, including competition from companies with much greater financial resources, much more extensive development, production, marketing and service capabilities and a much larger number of qualified managerial and technical personnel. Additionally, privately held companies are not subject to Securities and Exchange Commission reporting requirements, are not required to maintain their accounting records in accordance with generally accepted accounting principles, and are not required to maintain effective internal controls over financial reporting. As a result, timely or accurate information may at times not be readily available about the business, financial condition and results of operations of the privately held companies in which the strategy invests. Private debt investments also are subject to interest rate risk, credit risk and duration risk.

Private Investments in Public Equity (PIPES) Risk. Shares in PIPEs generally are not registered with the Securities and Exchange Commission until after a certain time period from the date the private sale is completed. As with investments in other types of restricted securities, such an investment may be illiquid. The strategy's ability to dispose of securities acquired in PIPE transactions may depend on the registration of such securities for resale or on the ability to sell such securities through an exempt transaction. Any number of factors may prevent or delay a proposed registration. There is no guarantee, however, that an active trading market for the securities will exist at the time of disposition of the securities, and the lack of such a market could hurt the market value of these investments.

Public REITS Risk. Investments in Public REITS will be subject to risks generally attributable to the ownership of real property and real estate related securities (see *Real Estate Investment Risk and REIT/ Real Estate Risk*). Qualification as a REIT involves the application of highly technical and complex Code provisions for which only a limited number of judicial or administrative interpretations exist. Various compliance requirements could be failed and could jeopardize REIT status. If a Public REIT does not qualify to be taxed as a REIT, it would be subject to tax as a regular corporation and could face a substantial tax liability.

For publicly-registered non-listed REITS, there is no public trading market for shares of their common stock and repurchase of shares by such products will likely be the only way to dispose of shares. Further, for such products, there are restrictions on transfer of investor interests under their organizational documents. In addition, publicly-registered non-listed REITs may have difficulty identifying and purchasing suitable investments on attractive terms and there could be a delay between the time they receive capital and the time such capital is deployed. There is no guarantee that distributions will be made by a non-listed REIT. If distributions are made, they might be from sources other than cash flow from operations, including without limitation, the sale of or repayments of assets, borrowings, or offering proceeds. There are no limits on the amounts it may pay from such sources. The purchase price and repurchase price for shares of common stock will generally be based on the prior month's NAV and will not be based on any public trading market. While independent valuations of properties will be conducted quarterly, the valuation is inherently subjective. The NAV may not accurately reflect the actual price at which its properties could be liquidated on any given day.

Quantitative Models Risk. Quantitative models may be highly reliant on the gathering, cleaning, culling and analysis of large amounts of data from third parties and other external sources. Any errors or

imperfections in the factors, or the data on which measurements of those factors are based, could adversely affect the use of the quantitative models. The factors used in models may not identify securities that perform well in the future, and the securities selected may perform differently from the market as a whole or from their expected performance.

Real Estate Development Risks. The strategy may involve investment of a limited amount of capital in select types of real estate developments, which are subject to additional risks. Such risks include, without limitation, risks relating to the availability and timely receipt of zoning and other regulatory approvals, the cost and timely completion of construction (including risks beyond the control of the Invesco Advisers, such as weather or labor conditions or material shortages), and the availability of both construction and permanent financing on favorable terms. These risks could result in substantial unanticipated delays or expenses and, under certain circumstances, could prevent completion of development activities once undertaken, any of which could have an adverse effect on the investment. Properties under development or properties acquired for development may receive little or no cash flow from the date of acquisition through the date of completion of development and may continue to experience operating deficits after the date of completion. In addition, market conditions may change during the course of development that makes such development less attractive than at the time it was commenced.

Real Estate Diversification Risk. There is no assurance as to the degree of diversification that will be achieved for direct real estate strategies, either by geographic region, asset size or property type. As a consequence, the aggregate return of such strategies may be adversely affected compared to other strategies that are more diversified. In particular, although such strategies are generally subject to a diversity limitation on individual property types, client accounts are not always required to be diversified with respect to property sectors and can invest a substantial portion of assets in different property types that fall within a single sector. For example, such strategies could invest primarily in the residential sector, which includes both single-family rentals and multi-family properties. Concentration in a sector increases client exposure to adverse real estate or capital market conditions applicable to a particular sector. In addition, if a direct real estate strategy makes an investment in a single transaction with the intent of refinancing or selling a portion of the investment, there is a risk that the account will be unable to successfully complete such a financing or sale. This could lead to increased risk as a result of the client having an unintended long-term investment and reduced diversification.

Real Estate Investment Risk. Real property investments are subject to varying degrees of risk. Real estate values are affected by a number of factors, including, but not limited to, (i) changes in the general economic climate (such as changes in interest rates), (ii) local conditions (such as an oversupply of space or a reduction in demand for space), (iii) the quality and philosophy of management, (iv) competition (such as competition based on rental rates), (v) attractiveness and location of the properties, (vi) financial condition of tenants, buyers and sellers of properties, (vii) quality of maintenance, insurance and management services and (viii) changes in operating costs. Real estate values are also affected by factors such as government regulations (including those governing usage, improvements, zoning and taxes), interest rate levels, the availability of financing and potential liability under changing environmental and other laws. Investments in existing entities (e.g., buying out a distressed partner) could also create risks of successor liability.

REIT/Real Estate Risk. Investments in real estate related instruments may be affected by economic, legal, cultural, environmental or technological factors that affect property values, rents or occupancies of real estate related to the strategy's holdings. Shares of real estate related companies, which tend to be small- and mid-cap companies, may be more volatile and less liquid.

Repurchase Agreement Risk. If the seller of a repurchase agreement defaults or otherwise does not fulfill its obligations, the Strategy may incur delays and losses arising from selling the underlying securities, enforcing its rights, or declining collateral value.

Restricted Securities. Restricted securities cannot be sold without being registered under the Securities Act of 1933, (the "33 Act") as amended, unless they are sold pursuant to an exemption from registration (such as Rules 144 or 144A). These securities may be sold in private placement transactions between issuers and their purchasers and may be neither listed on an exchange nor traded in other established markets. Many times, these securities are subject to legal or contractual restrictions on resale. As a result of the absence of a public trading market, the prices of these securities may be more volatile, less liquid and more difficult to value than publicly traded securities. The price realized from the sale of these securities could be less than the amount originally paid or less than their fair value if they are resold in privately negotiated transactions. In addition, these securities may not be subject to disclosure and other investment protection requirements that are afforded to publicly traded securities. Certain investments may include investment in smaller, less seasoned issuers, which may involve greater risk.

Reverse Repurchase Agreement Risk. If the risk that the market value of securities to be repurchased declines below the repurchase price, or the other party defaults on its obligation, an underlying strategy may be delayed or prevented from completing the transaction. In the event the buyer of securities under a reverse repurchase agreement files for bankruptcy or becomes insolvent, an underlying strategy's use of the proceeds from the sale of the securities may be restricted. When an underlying strategy engages in reverse repurchase agreements, changes in the value of an underlying strategy's investments will have a larger effect on its share price than if it did not engage in these transactions due to the effect of leverage, which will make an underlying strategy's returns more volatile and increase the risk of loss. Additionally, interest expenses related to reverse repurchase agreements could exceed the rate of return on other investments held by an underlying strategy, thereby reducing returns to shareholders.

Risks of Investments in Real Estate-Related Operating Companies. Investments in real estate-related operating companies by the Firm's direct real estate business, such as property managers which may source or service the assets of a Client, could be made from time to time if deemed appropriate. Any investment in such operating companies may not be profitable at the time of investment (or ever) and a Client may not be able to recover any proceeds from the investment. Further, in certain cases, a Client acquisition of an operating company may result in the Client maintaining control of the operating company resulting in additional liability risk and may require more intense oversight than other real estate investments.

Risks of Purchasing A Shares in Chinese Companies. Substantial liquidity risks exist in the A share market for Chinese companies. Chinese A shares may therefore be subject to the strategy's limitation on investing in illiquid securities and are also subject to regulations regarding minimum and maximum investment quotas and repatriation restrictions for both principal invested and profits earned.

Risks of Subordinated Debt. Perpetual subordinated debt is a type of hybrid instrument that has no maturity date for the return of principal and does not need to be redeemed by the issuer. These investments typically have lower credit ratings and lower priority than other obligations of an issuer during bankruptcy, presenting a greater risk for nonpayment. This risk increases as the priority of the obligation becomes lower. Payments on these securities may be subordinated to all existing and future liabilities and obligations of subsidiaries and associated companies of an issuer. Additionally, some perpetual subordinated debt does not restrict the ability of an issuer's subsidiaries to incur further unsecured indebtedness.

Sampling Risk. An index strategy's use of a representative sampling approach will result in its holding a smaller number of securities than are in its underlying index and in the underlying strategy holding securities not included in its underlying index. As a result, an adverse development respecting an issuer of securities held by the underlying strategy could result in a greater decline in the underlying strategy's NAV than would be the case if all of the securities in its underlying index were held. An underlying strategy's use of a representative sampling approach may also include the risk that it may not track the return of its underlying index as well as it would have if the underlying strategy held all of the securities in its underlying index

Sector Focus Risk. A strategy may from time to time invest a significant amount of its assets (i.e. over 25%) in one market sector or group of related industries. In this event, the strategy's performance will depend to a greater extent on the overall condition of the sector or group of industries and there is increased risk that the strategy will lose significant value if conditions adversely affect that sector or group of industries.

Securities Lending Risk. Securities lending involves a risk of loss because the borrower may fail to return the securities in a timely manner or at all, which may force the strategy to sell the collateral and purchase a replacement security in the market at a disadvantageous time. Any cash received as collateral will be invested in an affiliated money market strategy and the strategy will bear any loss on the investment of cash collateral.

Short Position Risk. Because the strategy's potential loss on a short position arises from increases in the value of the asset sold short, the strategy will incur a loss on a short position, which theoretically may be unlimited if the price of the asset sold short increases from the short sale price. The counterparty to a short position or other market factors may prevent the strategy from closing out a short position at a desirable time or price and may reduce or eliminate any gain or result in a loss. In a rising market, the strategy's short positions will cause the strategy to underperform the overall market and its peers that do not engage in shorting. If the strategy holds both long and short positions, and both positions decline simultaneously, the short positions will not provide any buffer (hedge) from declines in value of the strategy's long positions. Certain types of short positions involve leverage, which may exaggerate any losses, potentially more than the actual cost of the investment, and will increase the volatility of the strategy's returns.

Single Family Residential Risk. Investments in the single family residential sector primarily will be made through investments in, and/or joint ventures with, certain institutions that invest, both directly and indirectly, in single-family properties in targeted U.S. markets. Investments in single family homes are subject to many of the same risks associated with investments in real property. In particular, a downturn or slowdown in the rental demand for single-family housing, including seasonal fluctuations in demand,

or as caused by adverse economic, regulatory or environmental conditions in local markets or in the national and economic markets more generally may negatively impact the value of single-family investments. There is also significant competition (i) for the acquisition of single-family properties in many target markets, which may limit strategic opportunities and increase the cost to acquire properties and (ii) in the leasing market for quality tenants, which may limit the ability to rent single-family homes or at all. The purchase of bulk portfolios may also present certain problems, since certain properties may not fit the target investment criteria or not be available for interior inspection prior to sale, which may cause the operating partner to exceed timing and budgeting estimates due to the need to either sell the property(ies) or exceed estimated renovation costs. The success of single family investments is also highly dependent on the operating partners, or on the operating partners and other third-party service providers of the investments (including property managers, independent contractors and trade professionals hired to manage, develop or renovate the properties). There can be no assurance that such third-party managers or joint venture partners will be able to operate the real estate investments successfully. Additionally, the Firm operates multiple investment centers which could affect the availability of, and opportunity to secure, single family residential investments for clients. Accordingly, the Firm's various business units may not always be successful in securing certain single family residential investments within a client's investment objectives and strategies. Over time, the various investment centers of the Firm may have access to and source single family residential investment opportunities that are more profitable to certain clients than others.

Small- and Mid-Capitalization Risks. Small- and mid-capitalization companies tend to be more vulnerable to changing market conditions, may have little or no operating history or track record of success, and may have more limited product lines and markets, less experienced management and fewer financial resources than larger companies. These companies' securities may be more volatile and less liquid than those of more established companies, and their returns may vary, sometimes significantly, from the overall securities market.

Subsidiary Risk. By investing in a subsidiary, the strategy is indirectly exposed to risks associated with the subsidiary's investments. A subsidiary is not registered under the 1940 Act, and, except as otherwise noted in this prospectus, is not subject to the investor protections of the 1940 Act. Changes in the laws of the United States and/or the Cayman Islands, under which the strategy and the subsidiary, respectively, are organized, could result in the inability of the strategy and/or the subsidiary to operate as described in the strategy's offering documents, and could negatively affect the strategy and its shareholders.

TBA Transactions Risk. TBA transactions involve the risk of loss if the securities received are less favorable than what was anticipated by the strategy when entering into the TBA transaction, or if the counterparty fails to deliver the securities.

Technology Sector Risk. Technology companies are subject to intense competition, rapid obsolescence of their products, issues with obtaining financing or regulatory approvals, product incompatibility, changing consumer preferences, high required corporate capital expenditure for research and development or infrastructure and development of new products, each of which make the prices of securities issued by these companies more volatile.

Unique Economic and Political Risks of Investing in Greater China. Investments in companies located or operating in Greater China involve risks not associated with investments in Western nations, such as nationalization, expropriation, or confiscation of property; difficulty in obtaining and/or enforcing

judgments; alteration or discontinuation of economic reforms; military conflicts, either internal or with other countries; inflation, currency fluctuations and fluctuations in inflation and interest rates that may have negative effects on the economy and securities markets of Greater China; and Greater China's dependency on the economies of other Asian countries, many of which are developing countries. Events in any one country within Greater China may impact the other countries in the region or Greater China as a whole. Certain securities issued by companies located or operating in Greater China, such as China A shares, are subject to trading restrictions, quota limitations and less market liquidity. Additionally, developing countries, such as those in Greater China, may subject the strategy's investments to a number of tax rules, and the application of many of those rules may be uncertain. Moreover, China has implemented a number of tax reforms in recent years and may amend or revise its existing tax laws and/or procedures in the future, possibly with retroactive effect. Changes in applicable Chinese tax law could reduce the after-tax profits of the strategy, directly or indirectly, including by reducing the after-tax profits of companies in China in which the strategy invests. Uncertainties in Chinese tax rules could result in unexpected tax liabilities for the strategy.

Unrated Securities Risk. The Adviser may internally assign ratings to securities that are not rated by any nationally recognized statistical rating organization, after assessing their credit quality and other factors, in categories similar to those of nationally recognized statistical rating organizations. The Adviser's rating does not constitute a guarantee of the credit quality. In addition, some unrated securities may not have an active trading market or may trade less actively than rated securities, which means that the strategy might have difficulty selling them promptly at an acceptable price.

Unseasoned Issuer Risk. Investments in unseasoned companies or companies with special circumstances often involve much greater risks than are inherent in other types of investments and securities of such companies may be more likely to experience fluctuations in price. In addition, investments made in anticipation of future events may, if the events are delayed or never achieved, cause stock prices to fall.

U.S. Government Obligations Risk. Obligations of U.S. Government agencies and authorities receive varying levels of support and may not be backed by the full faith and credit of the U.S. Government, which could affect the strategy's ability to recover should they default. No assurance can be given that the U.S. Government will provide financial support to its agencies and authorities if it is not obligated by law to do so.

Valuation Risk. Financial information related to securities of non-U.S. issuers may be less reliable than information related to securities of U.S. issuers, which may make it difficult to obtain a current price for a non-U.S. security held by an underlying strategy. In certain circumstances, market quotations may not be readily available for some underlying strategy securities, and those securities may be fair valued. The value established for a security through fair valuation may be different from what would be produced if the security had been valued using market quotations.

Underlying strategy securities that are valued using techniques other than market quotations, including "fair valued" securities, may be subject to greater fluctuation in their value from one day to the next than would be the case if market quotations were used. In addition, there is no assurance that an underlying strategy could sell a portfolio security for the value established for it at any time, and it is possible that an underlying strategy would incur a loss because a security is sold at a discount to its established value.

Real estate and real estate-related assets and loans secured by or unsecured and related to real estate assets generally cannot be marked to an established trading value. An appraisal or internal valuation for these assets is only an estimate of value and is not a precise measure of realizable value.

The exercise of discretion in valuation by Invesco Advisers gives rise to conflicts of interest. Valuations (including, for instance, determination of when an investment should be written down or written off) impact Invesco Advisers' track record and the performance allocation in certain strategies is calculated based, in part, on these valuations and such valuations affect the amount and timing of performance fees and calculation of advisory fees.

Valuation Time Risk. An underlying exchange-traded strategy may invest in securities of foreign issuers and, because foreign exchanges may be open on days when an underlying strategy does not price its shares, the value of the non-U.S. securities in an underlying strategy's portfolio may change on days when investors are not able to purchase or sell an underlying strategy's shares. As a result, trading spreads and the resulting premium or discount on an underlying strategy's shares may widen, and, therefore, increase the difference between the market price of an underlying strategy's shares and the NAV of such shares.

Value Investing Style Risk. A value investing style subjects the strategy to the risk that the valuations never improve or that the returns on value equity securities are less than returns on other styles of investing or the overall stock market.

Variable-Rate Demand Note Risk. The absence of an active secondary market for certain variable and floating rate notes could make it difficult to dispose of these instruments, which could result in a loss.

Volatility Management Risk. Invesco Advisers' strategy for managing portfolio volatility may not produce the desired result and there can be no guarantee that the strategy will maintain its target volatility level. Additionally, maintenance of the target volatility level will not ensure that the strategy will deliver competitive returns. The use of derivatives in connection with the strategy's managed volatility strategy may expose the strategy to losses (some of which may be sudden) that it would not have otherwise been exposed to if it had only invested directly in equity and/or fixed income securities. Efforts to manage the strategy's volatility could limit the strategy's gains in rising markets and may expose the strategy to costs to which it would otherwise not have been exposed. Invesco Advisers' uses a combination of proprietary and third-party systems and risk models to help it estimate the strategy's expected volatility, which may perform differently than expected and may negatively affect performance and the ability of the strategy to maintain its volatility at or below its target maximum annual volatility level.

Warrants Risk. Warrants may be significantly less valuable or worthless on their expiration date and may also be postponed or terminated early, resulting in a partial or total loss. Warrants may also be illiquid.

Yield Risk. The strategy's yield will vary as the short-term securities in its portfolio mature or are sold and the proceeds are reinvested in other securities. When interest rates are very low, the strategy's expenses could absorb all or a portion of the strategy's income and yield. Additionally, inflation may outpace and diminish investment returns over time.

Zero Coupon or Pay-in-Kind Securities Risk. The value, interest rates, and liquidity of non-cash paying instruments, such as zero coupon and pay-in-kind securities, are subject to greater fluctuation than other types of securities. The higher yields and interest rates on pay-in-kind securities reflect the payment deferral and increased credit risk associated with such instruments and that such investments may represent a higher credit risk than loans that periodically pay interest.

Item 9 Disciplinary Events

Regulatory Action Alleging Market Timing

On August 30, 2005, the West Virginia Office of the State Auditor Securities Commission (“WVASC”) issued its Summary Order to Cease and Desist and Notice of Right to Hearing to AIM Advisors, Inc. (“Invesco Aim”) (now known as Invesco Advisers) and Aim Distributors, Inc. (“ADI”) (now known as Invesco Distributors, Inc.). The WVASC claimed that Invesco Aim and ADI violated the West Virginia securities laws. The WVASC ordered Invesco Aim and ADI to cease any further violations and seeks to impose monetary sanctions, including restitution to affected investors, disgorgement of fees, reimbursement of investigatory, administrative and legal costs and an “administrative assessment” to be determined by the Commissioner of the WVASC. We believe this matter is indefinitely suspended.

Affiliate Disciplinary Information:

On May 31, 2021, Invesco Ltd., the ultimate parent company of Invesco Advisers, agreed to a settlement with the Federal Financial Supervisory Authority (“BaFin”) in the amount of 260,000 Euros (approximately \$309,595 USD) for a matter related to ownership filings with the German regulator in relation to German listed companies. BaFin alleged Invesco Ltd. and AIM international mutual funds failed to submit voting rights notifications to BaFin and issuers by the required deadline. BaFin issued a Notice of Hearing on July 30, 2020 to Invesco Ltd. alleging that violations of the voting rights requirements occurred on 26 occasions related to the voting rights notifications of Invesco Ltd. and on 28 occasions relating to the voting rights notifications of AIM international mutual funds between 05/2019 and 10/2019. Invesco Ltd. paid the administrative fine on June 30, 2021.

On August 24, 2016, without admitting or denying the findings, WL Ross & Co. LLC (“WL Ross”), an SEC registered affiliate of Invesco Advisers, consented to the entry of an order to cease and desist from committing or causing any violations and any future violations of Sections 206(2) and 206(4) of the Investment Advisers Act of 1940 (“Advisers Act”) and Rule 206(4)-8 thereunder and agreed to pay a civil monetary penalty of \$2.3 million to the SEC. According to the order, WL Ross failed to adequately disclose its fee allocation practices to certain private equity funds it advised (the “WLR Funds”) and their investors and that ambiguous language in its private equity funds’ limited partnership agreements resulted in certain WLR Funds paying higher management fees between 2001 and 2011. The order also states that in determining to accept the settlement offer, the SEC considered remedial acts promptly undertaken by WL Ross and cooperation afforded to the SEC staff, including WL Ross’ self-reporting of the transaction fee allocation issue to the SEC staff, WL Ross’ voluntary determination to revise its fee allocation methodology, and WL Ross’ voluntary reimbursement, with interest, of \$11,873,571 in management fee credits resulting from its retroactive application of the revised allocation methodology to the inception of the WLR Funds.

On June 6, 2012, the Securities and Exchange Commission (“SEC”) entered a settled order instituting administrative cease-and-desist proceedings against OppenheimerFunds, Inc. (“OFI”), an SEC registered affiliate of Invesco Advisers and OppenheimerFunds Distributor, Inc. (“OFDI”), an affiliated broker-dealer of Invesco Advisers, resolving an investigation into the 2008 performance of Champion Income Fund and Core Bond Fund. OFI and OFDI neither admitted nor denied the allegations set forth in the SEC Order. As set forth in the Order, the SEC found that the January 2008 prospectus for

Champion Income Fund did not adequately disclose its practice of assuming substantial economic leverage through the use of total return swaps tied to AAA- rated commercial mortgage-backed securities, and that in November 2008 OFI made misleading statements about the ability of Champion Income Fund and Core Bond Fund to recoup losses incurred as a result of unprecedented volatility in the credit markets. OFI and OFDI were censured and ordered to cease and desist from violations of applicable laws and regulations. The SEC also ordered OFI to pay disgorgement of certain management fees charged to Champion Income Fund and Core Bond Fund, prejudgment interest and a civil money penalty in an aggregate amount of approximately \$35.4 million. In entering into the settlement, the SEC considered the cooperation it received from OFI and OFDI and remedial acts promptly undertaken by them.

Item 10 Other Financial Industry Activities and Affiliations

Financial Industry Activities

Invesco Advisers is registered as an investment adviser with the SEC and as a commodity pool operator and a commodity trading advisor with the Commodity Futures Trading Commission and is a member of the National Futures Association.

Invesco Advisers also has business arrangements with affiliated entities which are registered as: broker-dealers, investment companies, investment advisers, commodity pool operators, commodity trading advisors, a trust company, and an entity that sponsors and syndicates limited partnerships. In some cases, these business arrangements create a potential conflict of interest, or the appearance of a conflict of interest, between Invesco Advisers and its client. Many U.S. and non-U.S. laws aim to limit these conflicts of interests. At Invesco Advisers, we have policies and procedures designed to comply with these laws. *For more information about other potential conflicts of interest, see Item 11 (Code of Ethics, Participation or Interest in Client Transactions and Personal Trading).*

In May 2019, Invesco Ltd. completed its acquisition of OFI's investment management business from Massachusetts Mutual Life Insurance Company ("MassMutual"). In connection with this transaction, Invesco Ltd. entered into a shareholder agreement (the "Shareholder Agreement") with MassMutual pursuant to which MassMutual will have a relationship with Invesco that is material to its advisory business. The Shareholder Agreement provides for the addition of one director selected by MassMutual to Invesco Ltd.'s board of directors (the "Invesco Board"). Invesco Ltd. will continue to include MassMutual's designee in its slate of Invesco Board nominees, and will continue to recommend such nominee, and will otherwise use reasonable best efforts to solicit the vote of Invesco Ltd.'s shareholders to elect to the Invesco Board the slate of nominees which includes the designee of MassMutual. MassMutual's board designation right will continue as long as it and its controlled affiliates beneficially own at least (i) 10% of the issued and outstanding common shares of Invesco Ltd. (the "Common Stock") or (ii) 5% of the issued and outstanding shares of Common Stock and \$2 billion in aggregate liquidation preference of the 5.900% fixed rate non-cumulative perpetual series A preference shares (the "Preferred Stock"). So long as MassMutual retains the right to designate a nominee to the Invesco Board, subject to certain exceptions, Invesco Ltd. will not be permitted to increase the total number of directors comprising the Invesco Board to more than twelve persons without the prior approval of MassMutual's designee. The Shareholder Agreement requires that as long as MassMutual has the right to designate a nominee to the Invesco Board, and subject to certain exceptions, MassMutual and its controlled affiliates must vote their shares of Common Stock as recommended by the Invesco Board on all matters relating to (i) the election of directors, (ii) matters approved or recommended by the Compensation Committee of the Invesco Board, and (iii) any change of control transaction that the Invesco Board (so long as it includes MassMutual's designee) has unanimously recommended in favor of or against, as applicable. Additionally, with certain exceptions, as long as MassMutual and its controlled affiliates beneficially own at least 20% of the issued and outstanding

Common Stock, it will be required to vote on all matters as recommended by the Invesco Board. The Shareholder Agreement provides MassMutual with certain customary minority rights, including that as long as MassMutual has the right to designate a nominee to the Invesco Board, Invesco Ltd. may not, without MassMutual's prior written approval, among other things: change its capital structure in a manner reasonably likely to result in a two-level (or greater) corporate ratings downgrade; amend its organizational documents in a manner that would adversely affect MassMutual's rights compared to Invesco Ltd.'s shareholders generally; subject to certain exceptions, become party to acquisitions of any person or business involving the issuance of Invesco Ltd.'s capital stock constituting more than 10% of the total voting power of Invesco Ltd.'s capital stock issued and outstanding immediately after completion of such acquisition; or adopt a shareholder rights plan. Subject to certain exceptions specified in the Shareholder Agreement, MassMutual is generally prohibited from transferring any of its shares of Preferred Stock until May 24, 2024. The Shareholder Agreement also contains customary standstill provisions, including that as long as MassMutual has the right to designate a nominee to the Invesco Board, it may not, without Invesco Ltd.'s consent, acquire additional shares that would cause its and its controlled affiliates to beneficially own Common Stock representing more than 22.5% (or 24.5% in certain circumstances) of the total voting power of the issued and outstanding shares of Common Stock, and that MassMutual may not, among other matters, propose any merger or similar transaction with Invesco Ltd. or solicit proxies or take other actions to seek to control or influence the management or policies of Invesco Ltd. The Shareholder Agreement also contains customary registration rights requiring Invesco Ltd. to register the offer and sale of Common Stock and Preferred Stock issued pursuant to the transaction agreements. While Invesco Ltd.'s relationship with MassMutual may give rise to potential conflicts of interests, Invesco Advisers has policies and procedures in place to address and mitigate any conflicts of interests that may arise as a result of this ownership structure.

Broker – Dealer and Transfer Agency Affiliations

Invesco Capital Markets, Inc. ("ICMI") and Invesco Distributors, Inc. ("IDI") are wholly owned subsidiaries of Invesco Advisers. ICMI and IDI are registered broker-dealers with the SEC under the Securities Exchange Act of 1934, as amended ("34 Act") and are members of the Financial Industry Regulatory Authority ("FINRA"), the Municipal Securities Rulemaking Board ("MSRB") and the Securities Investor Protection Corporation ("SIPC").

Invesco Advisers utilizes ICMI to facilitate certain equity trades on behalf of Registered Funds, other client accounts and certain accounts of the Firm's investment adviser affiliates. These trades are then sent to another firm for execution and clearing services. *For additional information, please refer to Item 12 (Brokerage Practices).*

ICMI is also the sponsor and principal underwriter for Invesco unit investment trusts ("UITs"). A UIT generally holds a fixed portfolio of securities and is not actively managed. ICMI creates the UITs and other firms sell them to their clients. ICMI has in place a Selected Dealer Agreement with its affiliated broker/dealer, IDI. IDI serves as the selling agent for the UITs, providing other broker/dealers with product information. ICMI does not solicit the sale of UITs to retail investors.

IDI's activities include, but are not limited to: (i) principal underwriter and distributor for certain affiliated Registered Funds and for certain affiliated unregistered money market funds; (ii) distributor of certain municipal fund securities (529 Plans) managed by Invesco Advisers; (iii) distributor of units for certain investment portfolios of the Invesco Capital Management LLC ETF Trusts on an agency basis; (iv) selling agent for Invesco's UITs; (v) distributing collective trusts; and (vi) placement agent for private placements, and (vii) dealer manager for certain affiliated Public REITs.

Certain management persons of Invesco Advisers are registered representatives of IDI and ICMI and Associated Persons with the National Futures Association.

Invesco Investment Services, Inc. ("IIS") is a registered transfer agent that acts as transfer agent for the Registered Funds advised by the Firm. IIS receives fees for its provision of transfer agency services to certain Invesco Funds.

Adviser and Sub-Adviser Arrangements

Invesco Advisers has entered into various adviser/sub-adviser arrangements with the following related investment advisers. For more complete information regarding these related persons, please refer to filings made with the SEC by them:

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| • Invesco Asset Management Deutschland, GMBH | File No. 801-67712 |
| • Invesco Asset Management (India) PVT. LTD. | File No. 801-108727 |
| • Invesco Asset Management (Japan) Limited | File No. 801-52601 |
| • Invesco Asset Management Limited | File No. 801-50197 |
| • Invesco Canada Ltd. | File No. 801-62166 |
| • Invesco Capital Management LLC | File No. 801-61851 |
| • Invesco Hong Kong Limited | File No. 801-47856 |
| • Invesco Managed Accounts, LLC | File No. 801-61716 |
| • Invesco Real Estate Management S.A.R.L. | File No. 801-112251 |
| • Invesco Senior Secured Management, Inc. | File No. 801-38119 |
| • OppenheimerFunds, Inc. | File No. 801-8253 |
| • WL Ross & Co. LLC | File No. 801-67779 |

The following other registered investment adviser subsidiaries of Invesco Ltd. may from time to time have other arrangements not specified in this filing. For more complete information regarding these related persons, please refer to filings made with the SEC by the following related persons:

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| • Intelliflo Advisers, Inc. | File No. 801-70734 |
| • Invesco Global Real Estate Asia Pacific, Inc. | File No. 801-74650 |
| • Invesco Investment Advisers LLC | File No. 801-1669 |
| • Invesco Loan Manager, LLC | File No. 801-118817 |
| • Invesco Private Capital, Inc. | File No. 801-45224 |
| • IRE (Cayman) Limited | File No. 802-74648 |

Invesco Advisers may, in its discretion, so long as consistent with applicable law:

- delegate any of our discretionary investment, advisory or other rights, powers, functions and obligations to any affiliate or subsidiary that is also under the control of Invesco Ltd. In these circumstances, Invesco Advisers remains fully responsible for the account from a legal and contractual perspective. No additional fees are charged for the affiliates' services except as set forth in the IMA.; and
- employ any affiliate or subsidiary that is also under the control of Invesco Ltd., its agents or third parties to perform any administrative or ancillary services required to enable us to perform our services, without further notification to or consent of a client, and any such delegation shall be revocable by Invesco Advisers.

Invesco Advisers also provides discretionary or nondiscretionary investment advisory services to Program Sponsors or other financial intermediary clients utilizing its affiliated digital advice platform

(sometimes referred to as a “robo-adviser”), Intelliflo Advisers, Inc. (“Intelliflo”). In such circumstances, a Program Sponsor or other financial intermediary utilizing Intelliflo will enter into a separate agreement with Intelliflo relating to the use of the robo-technology, and another agreement with Invesco Advisers relating to the investment advisory services provided. Invesco Advisers may or may not receive a fee for its nondiscretionary investment advisory services to Program Sponsors or other financial intermediary clients utilizing Intelliflo.

Invesco Trust Company

Invesco Trust Company, a Texas state trust company, is a wholly owned, indirect subsidiary of Invesco Ltd. that serves as trustee and investment manager to the Collective Trust Funds. Invesco Trust Company also serves as custodian for IRA accounts invested in Invesco Funds. Invesco Advisers serves as an investment sub-adviser for certain Collective Trust Funds managed by Invesco Trust Company. In this role, Invesco Trust Company pays Invesco Advisers sub-advisory fees out of its management fees.

Partnerships and Other Legal Entities

From time to time, Invesco Advisers and its related persons will advise clients to invest in limited partnerships (“LPs”) or investment-related LLCs where another related person of the Firm is an adviser. Invesco Advisers has related persons that are SEC-registered investment advisers and are either general partners in LPs or are managers of investment-related LLCs. These related persons often provide services other than advice (including, but not limited to, administration, organizing and managing business affairs, executing and reconciling trades, preparing financial statements and providing audit support, preparing tax related schedules or documents, and sales and investor relations support, diligence and valuation services), in some cases for a fee separate and apart from an advisory fee.

Affiliated Funds

From time to time and subject to applicable law, Invesco Advisers will invest discretionary client accounts, including the Registered Funds, in other funds managed by Invesco Advisers or its affiliates with the consent of the client (which in certain instances may be obtained through disclosure in the IMA or a Fund’s offering documents).

Third-Party Trading Platforms

Invesco Advisers owns 4.9% of the voting securities of Luminex Trading & Analytics LLC (“Luminex”), a joint venture with other asset managers. The Luminex trading platform is designed to serve as an alternative trading system that allows institutional investors to trade large blocks of shares. From time to time, Invesco Advisers will execute trades for the Invesco Funds and other advisory clients through the Luminex trading platform. Invesco Advisers does not receive any compensation from Luminex for the execution of any client trades. However, at some point Invesco Advisers may receive dividends from Luminex for such period of time until Invesco Advisers has recouped its initial investment in Luminex. Invesco has a senior employee who serves as a member of Luminex’s Board of Directors and another senior employee who is a member of the Audit Committee. The selection of Luminex for trade execution creates an appearance of a conflict of interest.

Invesco Inc., an affiliate of Invesco Advisers, is an investor in Aequitas Innovations Inc. (“Aequitas”), owning 2.15% on an “as converted” basis. Aequitas is the parent company of NEO Exchange Inc. (the “Aequitas NEO Exchange”), a Canadian stock exchange. An affiliate of Invesco Advisers may execute trades for the Invesco Funds and other advisory clients through the Aequitas NEO Exchange via the use of the Global Trading Desk.

Affiliated Index Provider

Invesco Indexing LLC (“Invesco Indexing”), an affiliate of Invesco Advisers, develops indices (each, an “Invesco Index”) that are used by client accounts advised by Invesco Advisers and/or used by Commingled Funds purchased and sold by Invesco Advisers on behalf of its clients. Invesco Indexing determines the composition and relative weightings of the securities in each Invesco Index. In order to manage potential conflicts of interest, Invesco Advisers and Invesco Indexing have policies and procedures designed to prevent the undue influence of Invesco Advisers in the operation of any index developed and administered by Invesco Indexing. Among other matters, these policies and procedures provide for information barriers to restrict the sharing of confidential information (for example, from portfolio management and trading). Where Invesco Indexing is the index provider for client accounts advised by Invesco Advisers, Invesco Advisers will in certain instances pay licensing fees to Invesco Indexing for the use of an Invesco Index when consistent with applicable law. *For information concerning index-related risks, please see Item 8 (Methods of Analysis, Investment Strategies and Risk of Loss).*

Securities Lending

Invesco Advisers may serve as a securities lending agent to the registered mutual funds and other client accounts. In this capacity, Invesco Advisers may have an incentive to increase or decrease the amount of securities on loan, lend particular securities, delay or forgo calling securities on loans, or lend securities to less creditworthy borrowers, in order to (i) generate additional fees for Invesco Advisers and its affiliates; and (ii) may have an incentive to allocate loans to clients that would provide more fees to Invesco Advisers. Invesco seeks to mitigate these potential conflicts of interest by utilizing a methodology designed to provide its securities lending clients with equal lending opportunities over time and in accordance with policies, procedures and contractual obligations.

Item 11 Code of Ethics, Participation or Interest in Client Transactions and Personal Trading

Invesco Advisers and its affiliates (collectively “Invesco”) have implemented firm wide policies and procedures, such as the Global Code of Conduct, Global Privacy, Global Insider Trading Policy, Gifts and Entertainment (aka Inducement Policies), Global Anti-Bribery and Anti-Corruption, all of which are designed to prevent and address conflicts of interest. These policies and procedures reflect the fiduciary principles that govern the conduct of Invesco Advisers and its employees, some of those policies and procedures are listed below.

Code of Conduct

Invesco operates in highly regulated and complex global environment. The Global Code of Conduct Policy (the “COC Policy”) provides Invesco Advisers and their employees with a clear statement of our ethical and cultural standards. First and foremost, Invesco serves our clients as fiduciaries. The COC Policy outlines Invesco’s key principles, reporting and compliance with the COC Policy, and is meant to supplement Invesco’s broader global compliance policies.

No less than annually employees are required to certify to the COC Policy and they are expected to abide both the letter and the spirit of the COC Policy.

Code of Ethics and Personal Trading

Invesco has adopted a written Code of Ethics and Personal Trading Policy (the “Code”) pursuant to Rule 204A-1 under the Advisers Act and Rule 17j-1 under the 1940 Act. In conforming with those rules,

the Code contains provisions for personal trading and reporting requirements that are designed to address and prevent potential conflicts of interest.

The Code applies to all Invesco employees and their immediate family members, who must pre-clear their personal securities transactions, report and certify to their holdings on a periodic basis. All employees are required to maintain personal accounts with an approved broker-dealer. The Code also includes additional pre-clearance provisions and restrictions for Investment Persons, whom may have incentive to favor products for which they may have a personal interest.

The Code also imposes restrictions on personal securities transactions, such as profiting from short-term trades, instituting blackout periods, restricting certain investment activities, such as participation in IPOs or limited offerings and insider trading.

Invesco also maintains and monitors a restricted list which is designed to avoid potential conflicts of interest or the appearance of an undue influence in the selection of investments.

Invesco has also established a violation and escalation procedure with respect to the Code, which outlines what remedial actions should be taken in response to a violation, which includes, but is not limited to, imposing sanctions, such as suspension, demotion or disgorgement of profits.

The Code is available to clients or prospective clients upon request.

Material Non-Public Information/Insider Trading

Invesco adopted a Global Insider Trading Policy, which was designed to detect and prevent Covered Persons (i.e., Directors, Officers, Employees including temporary employees, consultants and independent contractors) who may acquire confidential or material, non-public information pertaining to an issuer that may prevent or prohibit Invesco from providing investment advice to client accounts with respect to such issuer irrespective of a client account's investment objectives or guidelines. Covered Persons are prohibited from trading, either personally or on behalf of others on material non-public information or communicating material non-public information to others in violation of the law. Under this policy, there are restrictions that apply to certain transactions in Invesco's securities (e.g., short-sales or publicly traded options), and there are exemptions specific to certain transactions under Invesco sponsored plans (e.g., stock awards or direct stock purchases, ESPP, 401k and Dividend Reinvestment Plan). In connection with certain activities of Invesco, covered persons may acquire confidential or material non-public information or be restricted from initiating transactions in certain securities. Invesco will not be free to act upon any such information. Due to these restrictions, Invesco may not be able to initiate a transaction that it otherwise might have initiated and may not be able to sell an investment that it otherwise might have sold.

Outside Business Activities

All Invesco employees are subject to the Global Outside Business Activities policy which requires employees to obtain approval before engaging in any outside activity so Invesco has the opportunity to consider whether the activity creates an actual or potential conflict of interest.

Political Contributions

The Global Political Contributions Policy (the "PC Policy") was established to comply with applicable U.S. federal, state and local regulations. Under the PC Policy, Invesco and its employees are prohibited from making or soliciting political contributions or engaging in political activities for the purpose of procuring and retaining business with U.S. government entities. Non-U.S. nationals are prohibited, as a matter of law, from making contributions to political candidates in U.S. federal, state and local elections. The PC Policy applies to all Invesco employees, the employee's spouse and

dependent children under the age of 26 who live at home and are eligible to vote in U.S. elections. All political contributions must be pre-cleared prior to making *any* political contribution, and employees are prohibited from making any political contributions on behalf of an Invesco Adviser or any of its affiliates.

Gifts and Entertainment

Invesco has adopted the U.S. Gifts and Entertainment Policy that is designed to (i) restrict and limit the giving or receiving of gifts, entertainment, or meals by personnel, and (ii) along with the Code, address or avoid any potential or actual conflicts of interest between personal interests of such personnel and clients. Occasionally, personnel participate in entertainment opportunities that are for legitimate business purposes, subject to the restrictions and limitations set forth in the U.S. Gifts and Entertainment Policy, and the Code.

Conflicts of Interest

Invesco Advisers and its related entities engage in a broad range of activities, including investment activities for their own account and for the account of other investment funds, and provide transaction-related, investment advisory, management and other services to funds and operating companies. In the ordinary course of conducting its activities, the interests of a client will, from time to time, conflict with the interests of Invesco Advisers, other clients, or their respective affiliates. Certain of these conflicts of interest, as well a description of how these conflicts are addressed can be found below.

The material conflicts of interest encountered by a client include those discussed below, although the discussion below does not necessarily describe all of the conflicts that may be faced by a client. Other conflicts may be disclosed throughout this brochure and the brochure should be read in its entirety for other conflicts. Our policies and procedures are intended to identify these and other potential conflicts and to assure that in all instances client interests come first.

Portfolio Manager Conflicts of Interest

Portfolio managers managing multiple accounts are subject to the following actual or apparent conflicts of interest:

- The management of multiple accounts can result in a portfolio manager devoting unequal time and attention to the management of each account. Invesco seeks to manage such competing interests by having portfolio managers focus on a particular investment discipline. Generally, the portfolio manager will use the same investment model for a given investment discipline with respect to Wrap Program accounts managed by Invesco Advisers, non-Invesco Funds and those Funds for which he/she is also responsible. Therefore, Wrap Program and other client accounts following the same investment strategy typically hold the same or similar securities.
- A portfolio manager could identify a limited investment opportunity that would be suitable for some but not all advisory accounts they manage. Invesco Advisers, and the Funds, have adopted procedures for allocating portfolio transactions across multiple accounts to mitigate these conflicts. See *“Trade Allocation” below for further information.*

Inconsistent Investment Positions and Strategies, and Timing of Competing Transactions

From time to time, Invesco Advisers and its affiliates will buy, sell or hold securities in the same investment products as it or related persons have some financial interest, including ownership. In addition, Invesco Advisers and other affiliates may buy, sell or hold the same securities that they may have recommended to clients while also advising the opposite investment decision for one or more other clients. These positions and actions may result in an adverse impact or in some instances may benefit one or more affected clients, including clients that are our affiliates. For example, a long/short position in two client accounts simultaneously can result in a loss to one client based on a decision to

take a gain in the other. Taking concurrent conflicting positions in certain derivative instruments can likewise result in a loss to one client and a gain to another.

Invesco Advisers will also face conflicts of interest when the Firm holds significant positions in illiquid securities in side-by-side accounts. In a similar manner, transactions or investments by one or more clients could cause a dilution or otherwise disadvantage the values, prices or investment strategies of another client.

Under certain circumstances, a client will invest in a transaction in which one or more other clients are expected to participate or already have made or will seek to make, an investment. Such clients (or groups of clients) will have conflicting interests and objectives in connection with such investments, including with respect to views on the operations or activities of the issuer involved, the targeted returns from the investment and the timeframe for, and method of exiting the investment.

Invesco Advisers makes allocation determinations based solely on its expectation at the time such investments are made, however investments and their characteristics may change and there can be no assurance that an investment may prove to have been more suitable for another Client in hindsight.

Certain clients of Invesco Advisers and its affiliates invest in bank debt and securities of companies in which other clients hold securities, including equity securities. In the event that such investments are made by a client account, the interests of such client account could be in conflict with the interest of such other client account particularly in circumstances where the underlying company is facing financial distress. The involvement of such persons at both the equity and debt levels could inhibit strategic information exchanges among fellow creditors.

Principal Transactions

From time to time, Invesco Advisers recommends, to the extent permitted by law, that clients buy an asset from, or sell an asset to, Invesco Advisers or one of its affiliates. These transactions are commonly referred to as “principal transactions.” Invesco Advisers has established certain policies and procedures to comply with the requirements of the Advisers Act as they relate to principal transactions. Consistent with requirements under Section 206 of the Advisers Act and other applicable law, before settlement of any such transaction, clients will be provided with material information regarding the trade and will be asked to provide their consent. In the case of Private Fund clients, this consent may be provided in any manner consistent with the governing document(s) of the Private Fund, which may permit consent to be provided by such fund’s limited partner advisory committee or similar body. Invesco Advisers does not engage in any principal transactions with clients that are registered funds or pension plans subject to the Employee Retirement Income Security Act of 1974, as amended (“ERISA”).

Investment of Invesco Advisers’ and its Affiliates’ Capital in Investments Held by Clients or Clients Themselves

From time to time, Invesco Advisers and/or its affiliates will invest their own capital in securities or commingled investment vehicles in which clients also have investments. Although Invesco generally invests only in liquid instruments including, but not limited to, U.S. Treasury securities and corporate debt obligations, Invesco may invest in any asset class. For example, Invesco Advisers and/or its affiliates may be a limited partner or act as the general partner (or in similar capacities) and/or own a percentage of the commingled investment vehicle alongside a client’s investment in such commingled investment vehicle. In addition Invesco Advisers and/or its affiliates from time to time invest in clients themselves. In such cases, Invesco and/or its affiliates generally do not pay management fees.

In these cases, Invesco Advisers or an affiliate will also receive a portion of the profits. Invesco Advisers may also, in appropriate circumstances and consistent with the client’s investment objectives and

applicable law, recommend to clients' investment products in which the Firm or a related party has an established financial interest. Invesco Advisers has an incentive to allocate investments to these types of affiliated client accounts in order to generate additional fees for Invesco Advisers or its affiliates.

Investment in and Offerings of Affiliated Products

From time to time, Invesco Advisers will either invest client assets in affiliated products or propose investment models which include affiliated products to clients. In certain cases, Invesco Advisers has an incentive to allocate investments to such affiliated products both to increase scale of a product and to generate additional fees for Invesco Advisers or its affiliates. This is particularly applicable to clients of Invesco Investment Solutions.

Fund Co-Investment

If Invesco Advisers determines that a co-investment partner makes sense for a particular Fund investment, subject to Fund offering materials, Invesco Advisers will from time to time make such investment opportunity available to third parties, including other clients of Invesco Advisers and its affiliates, third-party sponsors and other investors. Such co-investors may or may not pay management, performance, or other fees to Invesco Advisers or its affiliates with respect to such investment and could receive a different allocation of expenses.

Employee Co-investment Program and Other Employee Personal Investments

From time to time, Invesco Advisers employees, officers or directors may be offered the opportunity to participate in a co-investment program alongside a client account.

Invesco Advisers employees, officers or directors may also purchase securities in non-public transactions outside the context of co-investment programs. Thereafter, Invesco Advisers and/or any other Invesco affiliate may recommend the purchase of publicly issued securities of the same issuers for their clients. In this event, the Invesco Advisers employee, who made a personal investment in a non-public transaction of such issuer, will not participate in the consideration of whether Invesco clients should invest in that issuer's securities. Such consideration will be subject to independent review by the Firm's investment personnel having no personal investment in the issuer.

From time to time, certain employees of Invesco Advisers and/or any other Invesco affiliates may invest in securities held by or deemed suitable for our clients if prior approval is obtained from the Compliance Department. Notwithstanding the foregoing, no prior approval is required of Invesco Advisers employees to invest in other types of investments, including but not limited to, U.S. government securities, money market instruments, variable insurance products, currencies, commodities, open-end mutual funds and Unaffiliated ETFs. A "de minimis exemption" under the Code is available to employees if certain requirements have been met. Further, the blackout period restrictions shall not apply to purchases and sales of a Covered Security that comply with certain specifications (e.g., large market capitalization) as may be determined from time to time by the Compliance Department.

Trading for certain employee or client accounts (Funds, or in some cases, specific Funds and/or Wrap Programs only) may be restricted due to certain relationships with an actual or potential investee company. Invesco Advisers maintains and monitors a restricted list for such situations which is designed to avoid potential conflicts of interest or the appearance of an undue influence in the selection of investments.

Information Possessed or Provided by Adviser

Availability of Proprietary Information

In connection with Invesco Advisers' activities, certain persons within Invesco Advisers will receive information regarding proposed investment activities for Invesco Advisers that is not generally available

to the public. Also, Invesco Advisers has access to certain fundamental analyses, research and proprietary technical models developed internally or by other members of Invesco Ltd., its affiliates, and certain third parties and their respective personnel. There will be no obligation on the part of Invesco Advisers to make available for use by a client, or to effect transactions on behalf of a client on the basis of any such information, strategies, analyses, or models known to them or developed in connection with their own proprietary or other activities. Similarly, one or more clients will have, as a result of receiving client reports or otherwise, access to information regarding Invesco Advisers' transactions or views that are not available to other clients and may act on such information through accounts managed by persons other than Invesco Advisers.

Material, Non-Public Information

Invesco Advisers will from time to time receive material, non-public information, which if disclosed may affect an investor's decision to buy, sell or hold a security. Under applicable law, employees of Invesco Advisers are generally prohibited from disclosing or using such information for their own personal benefit or for the benefit of any other person, regardless of whether that person is a client. Accordingly, should an employee of Invesco Advisers obtain material, non-public information with respect to an issuer, he or she is generally prohibited from communicating that information to, or using that information for the benefit of Invesco clients. Holdings of securities or other instruments of an issuer by Invesco Advisers or its affiliates may affect the ability of Invesco clients to buy, sell or hold investments and such issuer. Invesco Advisers has no obligation or responsibility to disclose the information to, or use such information for the benefit of, any person (including Invesco clients) even if requested by Invesco Advisers or its affiliates and even if failure to do so would be detrimental to the interests of that person.

Transfers/Cross Trades between Accounts

In certain circumstances, Invesco Advisers will determine that it is appropriate to sell securities or other investments held by one client account it advises to another client account it advises (a "cross trade"). A cross trade will occur only when such transaction complies with applicable rules and regulations and is consistent with the investment policies and objectives of each account. Invesco Advisers will recommend such cross trades only when it believes that such a transaction would be in the best interests of both accounts participating in the transaction and would be executed at a price determined to be fair under the circumstances. Further, in the case of real estate assets, Invesco Advisers will apply these principles and will generally seek a third-party independent valuation of any real estate asset proposed to be sold in a real estate cross transaction between two client accounts. Transfers between accounts do not generate brokerage commissions for either account, but could result in customary transaction fees such as custodial fees, transfer fees, taxes or other related expenses. When any of the accounts involved in a cross trade is a Registered Fund, Invesco Advisers must comply with procedures adopted under Rule 17a-7 under the 1940 Act. Cross trades for accounts subject to ERISA are made in accordance with applicable U.S. Department of Labor ("DOL") regulations and relevant exemptions.

Direct Real Estate Conflicts of Interest

Investments by the Firm's direct real estate business in a real estate-related operating company could potentially create conflicts of interest. Such conflicts could impact how the Firm determines the scope of services to be provided by the operating company to the Firm or its clients and the terms of any such engagement. The Firm could be incentivized to direct work for its clients and affiliates towards such operating companies due to the compensation received from or other interest in the investment. Further, such an investment could create conflicts of interest with respect to investment opportunities sourced by such operating company appropriate for investment by clients. In addition, the Firm may be conflicted in determining whether adequate services were provided by the operating company and whether to impose any penalties available for failure to do so. The Firm intends to seek to mitigate such

conflicts through adherence to its established investment, allocation and asset management processes. Depending on the facts and circumstances, client governing documents may require that a conflict caused by such a scenario be disclosed to and/or consented to by the client.

Other Potential Conflicts of Interest

Invesco Advisers and the Funds will generally engage common legal counsel and other advisers in a particular transaction, including a transaction in which there are conflicts of interest. Members of the law firms engaged to represent the Funds may be investors in a Fund and may also represent one or more portfolio companies or investors in a Fund. In the event of a significant dispute or divergence of interest between Funds, Invesco Advisers and/or its affiliates, the parties may engage separate counsel in the sole discretion of Invesco Advisers and its affiliates, and in litigation and other circumstances separate representation may be required.

Invesco Advisers and its personnel have in the past and will, from time to time in the future, receive certain intangible and/or other benefits and/or perquisites arising or resulting from their activities on behalf of a Fund, including benefits and other discounts provided from service providers. For example, airline travel or hotel stays incurred as Fund expenses could result in “miles” or “points” or credit in loyalty/status programs to Invesco Advisers and/or its personnel, and such rewards and/or amounts will exclusively benefit Invesco Advisers and/or such personnel and will not otherwise shared with such Fund, its investors and/or the portfolio companies.

Our Approach to Potential Conflicts

Various parts of the Brochure address potential conflicts of interest based on the Adviser’s business. Therefore, Invesco takes steps to mitigate, or at least disclose, potential conflicts when they arise. Conflicts are generally mitigated through written policies and procedures that are developed to protect the interest of our clients. Each Invesco Adviser and/or its affiliate, handles these conflicts by complying with the applicable laws, rules and regulations and internal policies and procedures. In addition, each Invesco Adviser and/or its affiliate reviews its policies and procedures on an ongoing basis to evaluate their effectiveness.

Item 12 Brokerage Practices

Selection of Brokers

As a general rule, Invesco Advisers receives discretionary (or nondiscretionary) investment authority from its clients at the outset of an advisory relationship. Subject to the terms of the applicable IMAs, Invesco Advisers’ authority often includes the ability to select brokers and dealers (“Brokers”) through which to execute transactions on behalf of its clients, and to negotiate the commission rates at which transactions are effected. In making decisions as to which securities or instruments are to be bought or sold and the amounts thereof, Invesco Advisers is guided by the investment mandate selected by the client and any client-imposed guidelines or restrictions.

Purchase and sale orders for equity securities (including convertible securities and options and futures contracts on equity securities) are executed by Invesco’s Global Trading Desk under the general supervision of the Head of Global Trading. Each of the regional trading desks that comprise the Global Trading Desk operates under the trading policies and procedures of the Invesco entity that manages it. There are no material differences between the trading policies and procedures of the trading desks.

Purchase and sale orders for fixed income securities are primarily executed by the Global Trading Desk under the general supervision of the Global Head of Fixed Income and Currency Trading. Fixed Income

and Cash Management portfolio managers and analysts may also execute purchase and sale orders for certain fixed income securities under the general supervision of the various investment team heads.

Invesco Advisers will use an affiliated broker, ICMI, to execute trades for certain clients. Invesco will only use ICMI in circumstances where Invesco Advisers has received client consent to send trades to ICMI and has determined that use of ICMI complies with Invesco Advisers' best execution obligations. Transactions executed by ICMI on behalf of Registered Fund clients are effected in accordance with Rule 17e-1 under the 1940 Act and applicable procedures approved by the Board of the Invesco Funds or Board of other Registered Funds sub-advised by Invesco Advisers. Transactions on behalf of Invesco Capital Management LLC's clients or certain European and Canadian clients advised by affiliates of Invesco Advisers may also be executed through ICMI subject to applicable law.

Invesco Advisers will act in good faith and with due diligence in the selection, use and monitoring of its affiliates, subsidiaries and agents in connection with its brokerage and trading policies and practices. The following policies apply to all client accounts managed by Invesco Advisers, unless otherwise noted. Certain policies, however, either do not apply to or are different for Wrap Program accounts because certain trades for these accounts are executed through the sponsoring broker designated by the Program Sponsor (the "Sponsoring Broker"). *For information regarding trading for Wrap Programs see "Wrap and Model-Based Program Trading" below.*

Best Execution

Invesco Advisers selects Brokers based on their ability to provide the best execution reasonably available under the circumstances (which may or may not result in paying the lowest available brokerage commission or spread). Best execution is the process of executing securities transactions for clients in such a manner that the client's total cost or proceeds (as applicable) in the relevant transaction is the most favorable under the circumstances, while taking into consideration all factors that Invesco Advisers deems relevant.

In seeking best execution and negotiating commission rates, the commission cost is one factor we consider. Other factors include, but are not limited to, price, quality, speed, efficiency, confidentiality, familiarity with potential purchasers or sellers, the ability or willingness of a Broker to clear and settle transactions effected by other Brokers, research or brokerage services provided (if permissible), reliability of brokerage services, execution capability, a Broker's financial responsibility, the difficulty of effectuating specific transactions, and any other relevant logistical or processing considerations. Invesco Advisers also analyzes which services best assist it in fulfilling its overall investment responsibilities to its clients. Invesco Advisers weighs all such factors in selecting Brokers that will deliver best execution in the long-term and are in the best interests of our clients. Invesco Advisers periodically and systematically evaluates the execution performance of Brokers executing client transactions.

Determination of Commission Rates

Purchases and sales will be effected by Brokers either on an agency basis or on a principal basis. Negotiated commissions will be paid in connection with purchases and sales effected by Brokers on an agency basis or on a principal basis when the Broker acts as a "riskless principal". Commissions are not paid in connection with purchases and sales when the Broker will be compensated in the form of mark-ups or mark downs embedded in the transaction. Commissions are also not paid in connection with purchases of underwritten issues, which include a fee or concession paid by the issuer (not by client accounts) to the underwriter(s). Purchases of money market instruments may be made directly from issuers without the payment of commissions.

Invesco Advisers believes that the interests of its client accounts are best served by brokerage policies that provide for the payment of a fair commission to Brokers rather than merely requiring the payment of the lowest possible commission rates. Invesco Advisers considers that the commission charged on a particular transaction is generally a relatively small part of the total cost of the transaction, and, therefore, a larger commission can be offset by a more favorable execution quality or price on any particular transaction. In addition, Invesco Advisers believes that a Broker's willingness to undertake a difficult and possibly unprofitable transaction will depend on the overall profitability of such Broker's transactions for Invesco Advisers' client accounts. A commission which is higher than usual may also be appropriate if the Broker has brought to Invesco Advisers an unusually favorable trading opportunity.

Wrap Programs do not typically incur commissions on transactions in individual securities. See *"Wrap and Model-Based Program Trading"* below for more information.

These factors, as well as the commission rates generally charged by Brokers and the aggregate amount of commissions generated in the past and likely to be generated in the future, will be considered when determining the reasonableness of a particular commission. Due to these considerations, the commission actually paid by a client account on any particular transaction will not always be the lowest available. Invesco Advisers regularly monitors commission rates in the industry to help determine the reasonableness of commissions to be charged to its client accounts.

If Invesco Advisers believes that a commission would be either unreasonably high or unreasonably low based upon relevant factors, including difficulty of executing the transaction or the value of research or brokerage services received, Invesco Advisers may agree to a lower or higher commission rate, as appropriate, with the relevant Broker. These adjustments are permitted if Invesco Advisers has made a good faith determination that the commission is reasonable in relation to the value of the research or brokerage services provided by the Broker.

Research and Other Soft Dollar Benefits

From time to time, Invesco Advisers will acquire statistical data, research or other information or services ("research or brokerage services") from Brokers, which may include ICMI, in return for executing, on behalf of client accounts, trades with those Brokers that generate commissions. The asset management industry uses the term soft dollars to refer to this industry practice. Invesco Advisers will engage in soft dollar transactions for those client accounts in which we have the discretion to select the Brokers (and in the case of ICMI, an affiliated Broker) and when not prohibited by applicable law. Invesco Advisers receives a benefit in these transactions because it does not have to produce or pay for research or brokerage services when it uses the commission dollars generated from these client accounts to pay for them. Invesco Advisers' receipt of research or brokerage services pursuant to these soft dollar arrangements will not reduce the advisory fees payable by clients.

Section 28(e) of the 34 Act and related SEC guidance ("Section 28(e)") requires that the adviser make a good faith determination that the amount of commissions paid was reasonable in relation to the value of the research or brokerage services provided by the Broker, viewed in terms of either that particular transaction or the adviser's overall responsibility to all of its discretionary accounts. To the extent that the execution services and prices offered by more than one Broker are comparable, Invesco Advisers will effect transactions with Brokers that furnish research or brokerage services we believe will be beneficial to client accounts.

Invesco Advisers faces a potential conflict of interest with its duty to seek best execution when it uses client transactions to generate soft dollars that can be used to pay for research or brokerage services (“soft dollar research or brokerage services”). We may have an incentive to select Brokers based on our interest in receiving soft dollar research or brokerage services, rather than on client accounts’ interests in receiving most favorable execution. This conflict exists because Invesco Advisers is able to acquire and use a soft dollar research or brokerage service in managing client accounts without paying cash (“hard dollars”) for it, which in turn reduces our expenses. Invesco Advisers will therefore “pay up” for certain trades (e.g., pay a higher commission to execute a trade than the lowest available negotiated commission) using a portion of a Broker’s brokerage commission (i.e., soft dollars) for brokerage or research services in accordance with Section 28(e).

Invesco Advisers attempts to reduce or eliminate this potential conflict of interest by directing client trades for soft dollar research or brokerage services only if we conclude in good faith that the Broker supplying each such service is capable of providing best execution. As noted above, the best net price, while significant, is merely one of a number of factors Invesco Advisers considers when determining whether a particular Broker is capable of providing best execution.

Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU, as implemented by the European Union (“EU”) member states and as applicable in the United Kingdom under retained EU law and amended by The Markets in Financial Instruments (Amendment) (EU Exit) Regulations 2018 (and relevant pursuant legislation) (“MiFID II”) provides that investment advisers registered in the EU or otherwise contractually required to comply with MiFID II will only be permitted to receive investment research provided by third parties if certain requirements are met. With respect to trades executed by Invesco Advisers through the Global Trading Desk for Invesco affiliates subject to MiFID II or for client accounts subject to MiFID II, such trades cannot incur soft dollar commissions.

Cross-Subsidization

Under Section 28(e), Invesco Advisers is not required to use a soft dollar research or brokerage service in managing those accounts which generated the soft dollars used to acquire it. Therefore, these client accounts will not always benefit directly from the soft dollar research or brokerage services received in return for a brokerage commission paid by such accounts. In effect, these accounts are cross-subsidizing management of other accounts that do benefit directly from the soft dollar research or brokerage service.

Types of Soft Dollar Research or Brokerage Services

Invesco Advisers acquires two types of soft dollar research products and services: (i) “proprietary” research products and services created by the Broker executing the transaction and (ii) “third party” research products and services that are provided by third party firms. These research products and services are paid for using soft dollars through one of two methods: full-service trading or commission sharing agreements (“CSAs”).

In a full-service trading arrangement, the Broker itself provides proprietary research products and services to Invesco Advisers, and commissions paid to the Broker are retained by it to pay for both trade execution and the proprietary research products and services provided by it. In a CSA arrangement with a Broker, a portion of the commission paid to the Broker is made available by the Broker to Invesco Advisers to pay a third party for third party research products and services.

In addition to traditional research reports, recommendations and similar materials, research products and services can also include, but are not limited to: meetings with company management, seminars or conferences on eligible topics, analyst meetings, database services, quotation/trading/news systems, economic data/forecasting tools, quantitative/technical analysis, fundamental/industry analysis and other specialized services.

Invesco may also acquire brokerage services that are eligible under 28(e) which may include trading software used to route orders to market centers, software that provides algorithmic trading strategies and other qualified brokerage services.

Invesco Advisers will in some instances receive certain “mixed-use” services, a portion of the cost of which is eligible under Section 28(e) for payment with soft dollars and a portion which is not. In these instances, Invesco Advisers allocates the services between Section 28(e) eligible and ineligible portions, and the ineligible portion will be paid in hard dollars by Invesco Advisers, rather than through commissions paid to the Broker.

As a result of any of the above factors, a client may pay a higher commission than is available from other brokers for trade execution.

Directed Brokerage

On occasion, a client will direct in writing either that Invesco Advisers effect transactions in the client's account through a particular Broker or Brokers or that we pay a particular commission rate in effecting transactions. In these cases where the client directs brokerage, trades for that client in a particular security will typically be placed separately from, rather than aggregated with, other client accounts, and will typically occur after trading for those other client accounts has been completed. If a client directs us to use a specific Broker, it may lose any discounts that Invesco Advisers negotiates on aggregated transactions, it may pay higher transaction costs or brokerage commissions, and Invesco Advisers may be unable to achieve the most favorable execution. Having separate transactions with respect to a security could temporarily affect the market price of the security or the execution of the transaction, or both, to the possible detriment of any of the account(s) involved in the trade. In the case of a client that is not an ERISA account, Invesco Advisers will attempt to honor such directed brokerage requests only when it can do so consistent with the policy of obtaining best execution. In the case of an ERISA account, Invesco Advisers will honor such request only when it can do so consistent with the policy of obtaining best execution and the client certifies to Invesco Advisers that all services provided by the particular Broker to the client are for the exclusive benefit of the participants in the ERISA plan. Additionally, Invesco Advisers will not accept client directed brokerage instructions that exceed more than 30% of a client's quarterly commissions with the exception of Wrap Program accounts.

Invesco Advisers does not enter into any directed brokerage arrangements for the promotion or sale of Invesco Fund shares. Invesco Advisers will not seek to recapture any commissions, fees, brokerage or similar payments paid by client accounts on portfolio transactions (other than as required by law) unless a client specifically directs that we seek such recapture for the benefit of that client's account.

If a client directs Invesco Advisers to use one or more specific Brokers to execute transactions for its account, it is such client's responsibility to ensure the following:

- all services provided by the designated Brokers will inure solely to the benefit of the client's account and any beneficiaries of the account, and are proper and permissible expenses of the account, and may properly be provided in consideration for brokerage commissions or other remuneration paid to the designated Brokers;

- use of the designated Brokers in the manner directed is in the best interests of the client's account and any beneficiaries of the account, taking into consideration the services provided by the designated Brokers;
- the client's directions will not conflict with any obligations persons acting for the client's account may have to the account, its beneficiaries or any third parties, including any fiduciary obligations persons acting for the account may have to obtain the most favorable price and execution for the account and its beneficiaries;
- persons acting for the client's account have the requisite power and authority to provide directions on behalf of the account and have obtained all consents, approvals or authorizations from any beneficiaries of the account and third parties that may be required under applicable law or instruments governing the account;
- consideration of information concerning the designated Brokers' execution capabilities and pricing or other information the client considers relevant;
- that the designated Brokers are capable of providing best execution of transactions for the client's account; and
- that the rates for commissions, commission equivalents, mark-ups, markdowns and other fees that apply to the client's account are appropriate and reasonable, for all transactions in the client's account, in relation to the value of broker-dealer services received by or made available to the client.

Aggregation of Orders

Invesco Advisers will aggregate or "bunch" orders for the purchase or sale of equity securities for client accounts and for managed accounts of various Invesco affiliates in accordance with its Equity Order Aggregation/Allocation Procedures. When an Invesco affiliate executes an equity securities transaction on behalf of an Invesco Advisers' client account, the Equity Order Aggregation/Allocation Procedures of the affiliate are applicable.

Invesco Advisers will seek to aggregate open orders in the same equity security, same side (i.e., each being for a purchase or sale), and same trading instructions for all client accounts participating in purchase or sale transactions of that security (except for those client accounts subject to trading restrictions, such as a directed brokerage instruction).

In those countries where account orders cannot be aggregated, Invesco Advisers will execute trades in accordance with the legal practice of the relevant jurisdiction. To the extent that Invesco Advisers is permitted, we will include the orders for accounts subject to trading restrictions with the aggregated orders for discretionary accounts. If Invesco Advisers is not permitted to aggregate restricted accounts with the discretionary accounts, we will execute and allocate transactions among the restricted accounts in a manner we deem fair and equitable, which will typically occur after the execution of the orders for the discretionary accounts has been completed. In certain instances, available sellers or buyers of a particular equity security will be limited to one or a small number of Brokers. In these instances, client accounts subject to trading restrictions that limit the use of particular Brokers may be precluded from participating in a particular trade. Invesco Advisers will not aggregate program trade orders with other orders if this action would disrupt the program trade; instead, program trade orders will be executed independently.

In placing certain client account orders, Invesco Advisers may request that a portion of a transaction be “stepped-out” to another Broker (the “step-in Broker”), which in turn clears and settles its portion of the trade. In this case, the step-in Broker may receive a commission for those services. Invesco Advisers may initiate step-out transactions on its own or when directed by the client or, in the case of the Invesco Funds, by the Board.

When the Global Trading Desk receives a subsequent order in the same security, same side, and with the same trading instructions as an existing order, it will allocate the executed shares to the accounts in the original order on a pro rata basis based on order size. Then, it will aggregate the remaining unexecuted portion of the original order, if any, with the subsequent order to be executed as one order going forward.

The execution price of securities purchased or sold in aggregated transactions will be the same for each participating account. Brokerage commissions incurred in connection with such transactions executed on an agency basis will be at the same rate for each participating account, subject to two exceptions: (i) Wrap Program accounts prepay brokerage commissions; thus, these client accounts typically do not pay additional commissions when their trades are “stepped-out” to the Sponsoring Broker (See *“Wrap and Model-Based Program Trading”* below for more information) and (ii) the commission per share paid by client accounts can differ as a result of applicable regulatory requirements with respect to restrictions on the use of soft dollars to pay for research or brokerage services. Client accounts that are subject to MiFID II or that are managed by an Invesco Affiliate that is subject to MiFID II will pay only an execution commission rate.

For fixed income securities, the trader will normally aggregate orders based on availability, including orders for new issues, if the trader determines it is desirable to aggregate the orders for such securities for more than one client account. To the extent possible, the trader will include the orders for Funds, Wrap Program accounts and other accounts with trading restrictions with the aggregated order. In certain instances, available sellers or buyers of a particular fixed income security may be limited to one or a small number of Brokers. In these instances, the client accounts with trading restrictions that limit the use of particular Brokers may be precluded from participating in particular transactions.

Trade Allocation

Invesco Advisers has a fiduciary duty to treat all clients fairly and equitably, but certain investment allocation decisions among client accounts can be more or less advantageous to any one client or group of clients than to others due to various considerations, including client investment guidelines, the type and availability of an investment opportunity, the nature of client investment mandates, the timing of client account establishment or termination, contractual obligations, legal or regulatory requirements or restrictions (including investor eligibility requirements imposed by applicable securities laws) and other considerations.

Allocation of trades will typically be pro rata to participating client accounts based on order size. If there is an insufficient supply or demand for an equity security, including convertible securities, such that orders cannot be completed in full (a “partial fill”), Invesco Advisers will typically allocate the orders for the purchase or sale of the security to participating client accounts on a pro rata basis based on order size. For international orders, as well as fixed income orders, where there is a minimum round lot requirement, Invesco Advisers will attempt to round the pro rata allocation to the nearest round lot. This allocation policy does not apply to initial public offerings which are addressed separately in *“Equity IPO Allocation”* below.

However, certain allocations may, to the extent consistent with Invesco Advisers’ fiduciary obligations, deviate from pro-rata among clients to address legal, tax, regulatory, fiduciary, risk management and

other considerations. For example, Invesco Advisers will generally allocate investment opportunities among client accounts based on the nature of the investment opportunity and its assessment of the appropriateness of that opportunity for client accounts, taking into consideration the various risk characteristics associated with the investment opportunity and the relative risk and investment profiles of client accounts. In some cases, it will not be possible to, or Invesco Advisers may determine in its discretion not to, allocate an investment to all client accounts within a particular investment strategy or similar investment strategies due to limited availability of the investment, account size requirements, investment size requirements, legal or regulatory requirements (including those applicable if a client account is a Registered Fund) or restrictions on the particular investment, imposed by the issuer or otherwise, and Invesco Advisers may not include the opportunity in certain client accounts or may substitute another investment with similar characteristics or may seek to acquire the position at a later time and different price. The considerations in determining not to allocate a particular investment to a client account or group of accounts and to substitute an alternate investment for that client account or group of accounts can include: the type and availability of the investment being considered; security, issuer or industry-specific risks; actual or expected security liquidity; available cash in a particular client account; current or expected holdings concentrations; investment size; minimum and maximum holding requirements; commitments of a particular client account; and exposures and dispersion from other accounts. As a result, a client account may not participate in all investments that fall within its strategy. There can be no assurance that the application of the trade allocation policies and considerations set forth above will result in a client account participating in all investment opportunities that fall within its investment objectives.

In respect of real estate investments which are indivisible, Invesco Advisers generally allocates such opportunities on a rotational basis subject to certain exceptions in its allocation policies and procedures with respect to: clearly defined and agreed-upon strategic and/or geographically-focused assemblage strategies; a priority for value-add opportunities to its closed-end Invesco Real Estate Fund Series; and a priority for real estate-related debt origination for Invesco Real Estate's discretionary debt fund(s).

Municipal bond trades may be allocated non-pro-rata based on the following allocation process:

1. High-yield Funds and other client accounts receive priority on high-yield issuances.
2. State-specific Funds and other client accounts have priority on double tax-exempt, specific state opportunities.
3. Funds and other client accounts that have an environmental, social or governance (ESG) component to their investment strategies have priority on ESG opportunities that fit their specific mandate.
4. The remaining trade allocation will be based on credit, maturity restrictions, duration targets, leverage needs, cash considerations (both current and forward looking), and existing credit exposures.
5. Funds or other client accounts pursuing Conservative Income, Limited Maturity and Intermediate Maturity strategies receive priority on shorter maturities.
6. Other allocations will be pro-rata unless they result in de minimis positions (e.g. allocations should result in a round lot for Wrap Program accounts or block size for Funds).

Non-pro-rata allocations must always be made in a manner that Invesco Advisers determines to be fair and equitable for all client accounts. There are circumstances in which a non-pro-rata allocation is inappropriate. Such circumstances include allocations that are designed or intended to

disproportionately benefit (i) higher fee or performance fee client accounts, (ii) client accounts with significant levels of Invesco investment, (iii) client accounts whose performance affects an investment professional's compensation to a greater extent than other accounts, or (iv) accounts of clients who are considering contracting with Invesco for additional mandates. Invesco Advisers will not make allocation decisions on the basis of such factors or other factors that are not consistent with its fiduciary duty to all clients.

Equity IPO Allocation

Invesco Advisers' IPO Committee ("IPOC") is responsible for ensuring compliance with the provisions of Invesco Advisers' Equity IPO Procedures. With respect to an equity IPO transaction, Invesco Advisers will aggregate indications of interest for all client accounts desiring to subscribe for the securities to be issued in that IPO. The price per share of securities purchased in an IPO transaction will be the same for each client account. When all orders for a particular IPO cannot be filled completely (because the transaction is oversubscribed), the IPOC will review each client account indicating an interest in the IPO for eligibility based on the following:

- *Market capitalization/liquidity suitability:* The IPOC will consider the liquidity of the issue and whether the market capitalization of the issuer is within the particular client account's primary market cap range;
- *Sector/style suitability:* The IPOC will limit the participation of a sector or regional focused client account to IPOs within its primary sectors or geographic regions, and will consider whether the valuation characteristics of the issuer are in line with the client account's typical holdings; and
- *Manager commitment:* The IPOC will consider evidence of the client account's portfolio managers' commitment to, and strong interest in, the particular issuer, including whether the portfolio managers have indicated an interest in acquiring the security in the secondary market and whether the client account already owns securities issued by the issuer or by companies comparable to the issuer.

If the IPOC deems that a client account indicating an interest in an IPO is ineligible to participate in that IPO based upon the foregoing criteria, it will be excluded from participating in that IPO. Additionally, the following client accounts are not eligible to participate in an IPO:

- Traditional Wrap Program accounts or Model-Only Wrap Program accounts;
- Incubator Funds (Funds that are not marketed to the public);
- Launch Funds (Funds that have opened within the last twelve months and have not achieved \$10 million in assets); and
- Funds that have less than \$10 million in assets or more than 10% of their assets represented by Invesco seed money.

Dual Contract Wrap Program accounts may participate in IPOs when determined to be eligible by the IPOC.

With respect to an IPO transaction, if the full amount of all orders for all eligible client accounts cannot be filled completely, the securities received will be allocated on a pro rata basis based on order size. Client accounts pursuing substantially identical investment objectives and strategies generally will participate in IPOs in amounts reasonably proportionate to each other. In circumstances where both Invesco Advisers' equity and fixed income investment teams want to participate in a new issue of convertible securities, the indication of interest for the offering will be aggregated and the securities received will generally be allocated to participating client accounts pro rata based on order size.

For new issuances of fixed income securities, orders will normally be aggregated based on availability if the relevant trader determines it is desirable to aggregate such orders for more than one client account.

New issue holdings may be sold on the same day of their acquisition, or shortly thereafter. Sales may be made immediately upon the occurrence of any event the portfolio managers believe justifies such sale.

Brokerage Policy Determination

Invesco Advisers has a Global Trading department, with trading professionals located in multiple geographic locations, and also has a Global Trading Oversight Committee (“GTOC”). The GTOC oversees the firm’s equity and fixed income brokerage policies and procedures. These policies and procedures are reviewed and approved annually by the Board of the Invesco Funds. Material changes to such policies and procedures are made only with prior approval by the Invesco Funds Board. Unless directed by the Board or requested in writing by a client account, Invesco Advisers will not enter into any binding commitments with a Broker as to the amount of brokerage transactions to be allocated to that Broker or as to the commission rates at which any transactions with that Broker will be effected.

Trade Error Policy

Trade errors and other operational mistakes occasionally occur in connection with Invesco Advisers’ management of client accounts. Invesco Advisers will generally reimburse all losses suffered by a client as a result of a trade error caused by Invesco Advisers. Consequently, a client will be in the same position as if the trade error did not occur. All gains realized by a client account as a result of a trade error caused by Invesco Advisers remain in the account. Losses arising from a trade error occurring across multiple Wrap Program client accounts are aggregated by Invesco at the Program Sponsor level and reimbursed by Invesco to the Program Sponsor, who is responsible for allocating such amount to the individual accounts. All trade errors are reported to Invesco Advisers’ Compliance Department and Chief Compliance Officer for review upon discovery.

Wrap Program Account Trading

With respect to Wrap Program accounts, Invesco Advisers typically has trading discretion with respect to Traditional Wrap and Dual Contract Wrap Program accounts. However, Invesco Advisers does not have trading discretion for certain other Wrap Program accounts, including where (i) the Program Sponsor has imposed a trading restriction (including a directed brokerage instruction), (ii) the Program Sponsor does not allow aggregation of its Wrap Program accounts or directs that all transactions be executed through the applicable Sponsoring Broker or (iii) Invesco Advisers does not have discretion to make specific investment decisions (such as Model-Only Wrap Program accounts (collectively, “Non-Discretionary Wrap Program Accounts”).

With respect to Wrap Program accounts for which Invesco Advisers has trading discretion, trades motivated by client subscription or redemption activity are typically directed to the Sponsoring Broker for execution because the associated wrap fee generally covers the cost of brokerage commissions and other transaction fees on transactions effected through the Sponsoring Broker. Conversely, trades motivated by portfolio changes may be aggregated with the orders of other Invesco Advisers’ client accounts in accordance with the procedures described above in “*Aggregation of Orders*”. Such trades are typically “traded away” from Sponsoring Brokers because Invesco Advisers seeks to: (i) obtain best execution from its extensive approved broker list; (ii) minimize price disparity among client accounts; and (iii) contain information leakage with respect to its investment strategies. The use of a Sponsoring Broker to execute trades will not always result in best execution. Accordingly, Invesco Advisers will often choose to trade away from the Sponsoring Broker. Following execution, such trades are generally “stepped-out” to the Sponsoring Broker, which in turn clears and settles that portion of the trade for the

Wrap Program client accounts. Additional fees may be incurred by Wrap Program clients in connection with these trades placed by Invesco Advisers on behalf of such clients. Additional brokerage costs are reflected in the net purchase or sale price shown on the trade confirmation clients receive for the particular trade but are not disclosed separately in the trade confirmation.

Wrap Program fees typically assume a consistent amount of trading activity, and therefore, under particular circumstances, a prolonged period of inactivity in a client account can result in the client account paying a wrap fee that is higher than if commissions were paid separately for each transaction. A client who participates in a Wrap Program should consider that, depending on the level of the wrap fee charged by the Program Sponsor, the amount of portfolio activity in the client's account, the value of the custodial and other services which are provided under the arrangement, and other factors, the wrap fee may or may not exceed the aggregate cost of such services if they were provided separately.

Trade Aggregation for Wrap Program Accounts

Wrap Program Accounts With Trading Discretion

When Wrap Program account orders are aggregated with other discretionary client account orders and then "stepped-out" to the Sponsoring Broker for clearing and settlement, the executing Broker will generally waive the portion of its commission applicable to the Wrap Program orders because these accounts have prepaid commissions as part of the associated wrap fee; by contrast, other client accounts in the aggregated order will incur an explicit commission charge on such trade. However, in certain circumstances, Wrap Program accounts may incur commissions or markup/markdowns, paid to the executing Broker, which are in addition to their prepaid commissions/wrap fees paid to the Program Sponsor. Examples include: (i) when a security is thinly traded and requires the executing Broker's full service execution capability to source liquidity and (ii) Wrap Program account orders for American Depository Receipts ("ADRs"), which require conversion from or to local shares, that are aggregated with other discretionary client account orders for execution (discussed below under "*International Equity Trading Options for Wrap Programs*"). These commissions or mark-ups/markdowns are netted into the price received for a security and will not be reflected as individual items on the client account's trade confirmation. These fees are in addition to the Wrap Program fee charged by the Program Sponsor.

In the event that there is no corresponding order for non-Wrap Program account clients, Invesco Advisers may choose to aggregate solely Wrap Program orders for execution, when permissible and reasonably believed to be in the best interest of the participating Wrap Program client accounts. The Wrap Program orders are then "stepped-out" to the applicable Sponsoring Broker for clearing and settlement. If an aggregated trade consists solely of Wrap Program accounts, then any commissions, markup/mark downs or additional transaction costs associated with the trade will be booked at execution-only rates.

Wrap Program Accounts Without Trading Discretion

With respect to Non-Discretionary Wrap Program Accounts, Invesco will typically execute an order for all accounts eligible for aggregation first, and then will use a fair and equitable randomized rotation process, as described below, to effectuate the order for the Non-Discretionary Wrap Program Accounts.

However, Invesco Advisers will provide portfolio transaction instructions or model portfolio allocations for Non-Discretionary Wrap Program Accounts to the applicable Program Sponsor or Sponsoring Broker concurrently with trading for its discretionary client accounts that permit trade aggregation if we believe that the instruction will not have significant market impact or otherwise materially affect

execution for those discretionary client accounts (e.g., when the instruction represents a low percentage of the average daily trading volume of the particular security).

Additionally, with respect to Model-Only Wrap Program accounts for which (i) Invesco Advisers does not have the discretion to make specific investment decisions and (ii) the model portfolios consist only of registered investment companies and cash, Invesco Advisers will provide portfolio transaction instructions or model portfolio allocations to the applicable Program Sponsor concurrently with trading for its discretionary client accounts.

Except as noted in the immediately preceding two paragraphs, trading for Non-Discretionary Wrap Program Accounts will occur after trading for other Invesco Advisers' client accounts has been completed. Invesco Advisers uses a randomly generated rotation schedule (a "randomizer") to generate a trade rotation order for Non-Discretionary Wrap Program Accounts. Invesco Advisers will deliver investment recommendations or trade instructions to each Program Sponsor/Sponsoring Broker sequentially in the order of the randomized schedule generated by the randomizer. Invesco Advisers will proceed to the next Program Sponsor/Sponsoring Broker in the randomized schedule once delivery of investment recommendations or trade instructions to the prior Program Sponsor/Sponsoring Broker is complete. Depending on a client account's relative place in the rotation for any given transaction, and other factors including price movements and variations in trade execution, the performance of the account may differ from, and be better or worse than, the performance of other accounts following the same investment strategy; however, Invesco Advisers believes the trade rotation policy treats all Non-Discretionary Wrap Program Accounts fairly and equitably over time. Randomizer rotation schedule logs are reviewed by Invesco Advisers' Compliance department on a quarterly basis to ensure that each Non-Discretionary Wrap Program Account receives fair and equitable treatment.

International Equity Trading Options for Wrap Program Accounts

With respect to exposure to international equities, Wrap Program accounts will typically hold only ADRs or common stock listed on a U.S. exchange and will not hold local shares. When Invesco Advisers executes an order for ADRs for Wrap Program accounts, we will typically execute those trades in one of the following manners:

- If the Global Trading Desk believes there is sufficient liquidity in the U.S. ADR market, the order will be executed in the ADR market. The Global Trading Desk has discretion to trade the order as an aggregated order or in a randomizer based upon Invesco Advisers' responsibility to seek best execution. In these transactions, Wrap Program clients may incur additional Broker mark-ups or mark-downs and/or other fees and transaction costs. These fees would be in addition to the Wrap Program fee charged by the Program Sponsor.
- If the Global Trading Desk believes there is insufficient liquidity in the U.S. ADR market to execute the order, the executing Broker will first execute the securities in the corresponding local market and will subsequently convert those securities into ADRs (or vice versa). In these transactions, Wrap Program clients may incur additional Broker mark-ups or mark-downs and/or other fees and transaction costs (such as ADR construction/deconstruction fees). These fees are in addition to the Wrap Program fee charged by the Program Sponsor.

Item 13 Review of Accounts

Separate Accounts

Clients receive periodic reports containing information regarding their account. These reports may provide performance, sector classifications, yield, income, portfolio composition and value, and purchases and sales. Additional reports may be provided on a periodic or non-routine basis upon the written request of the client.

Commingled Funds

Registered Funds

Registered Fund accounts are subject to both compliance and investment policy reviews. Registered Funds for which Invesco Advisers provides investment advisory services are monitored through the Firm's trading systems. The various systems have rules programmed into them by the Compliance Department and are monitored through daily exception reports and workflow monitoring.

The CIOs or Head of Investments and the Portfolio Oversight teams analyze the performance and risk profile, and review portfolio strategies and construction of the various investment portfolios Invesco Advisers manages. These teams focus on investment management issues and are responsible for conducting a proactive review of the strategies and construction of investment portfolios.

Portfolio Managers certify on a periodic basis that the Registered Fund's trades were made in accordance with the Fund's prospectus and SAI. Additionally, Investment Risk, Lead Portfolio Managers, Portfolio Managers and Analysts monitor these accounts on a regular basis. The Board of each Invesco Fund receives monthly and quarterly reports which include information regarding the Invesco Fund's investment activities, performance and commission allocations during recent periods. At least semi-annually, the Board and shareholders of each Invesco Fund receive complete financial statements of the Invesco Fund, including a schedule of the Invesco Fund's investments.

Private Funds and Public REITs

Direct real estate Private Funds generally distribute annual audited financial statements to all fund investors. In addition, more frequent financial reporting is delivered to investors in accordance with the terms of the Private Funds governing document(s). Public REITs are subject to ongoing reporting under the '33 Act and the '34 Act.

Wrap Programs

Wrap program clients receive reports periodically from the Program Sponsor.

Accounts of clients that participate in Wrap Programs are generally reviewed at least weekly to compare the weight of the stocks in each account to the target model portfolio. This review is conducted by the separately managed accounts trading team in Operations.

Wrap account management can require additional Portfolio Managers and operations personnel to provide daily, monthly and quarterly reviews regarding specific client account requirements. These team members and Compliance work to assure that individual accounts comply with contractual guidelines and restrictions. They monitor individual account composition and performance in comparison to models and arrange for efficient investment/liquidation when cash deposits and disbursements are made. Frequency of reviews and account review loads vary depending on the type of investment activity. Major changes in market conditions may also trigger ad hoc reviews.

Item 14 Client Referrals and Other Compensation

From time to time, Invesco Advisers will effect transactions with Brokers that furnish non-research services that Invesco Advisers believes will be beneficial.

Registered Funds and/or Invesco Advisers will also pay various fees to broker-dealers and other financial intermediaries that provide distribution and other services related to such funds, including but not limited to distribution and servicing fees payable in connection with plans adopted pursuant to Rule 12b-1 under the 1940 Act, upfront commissions on sales of certain classes of the Registered Funds, administrative, recordkeeping, sub-accounting and/or networking fees, marketing support payments and payments in support of training and educational seminars sponsored by such financial intermediaries.

Certain other registered investment adviser subsidiaries of Invesco Ltd. will from time to time receive additional compensation from non-clients, and Invesco Advisers will also compensate employees or employees of affiliates from time to time in connection with the sale of the Firm's products. For more complete information, please refer to the filings made with the SEC by those related persons.

With respect to Wrap Programs, Invesco Advisers receives fees from the Program Sponsor for all services rendered by Invesco Advisers to Wrap Program clients. The Firm might be considered to receive cash compensation from a non-client in connection with giving advice to Wrap Program clients. Similarly, in certain cases where Invesco Advisers serves as a sub-adviser, the Firm may receive advisory fees from the primary investment manager (the Program Sponsor) rather than directly from the investment advisory client.

Payment for Client Referrals

Invesco Advisers normally does not pay fees to persons for client referrals; however, if in the event such fees are paid, Invesco Advisers will be responsible for the payment of these fees rather than the client. These fees typically involve the Firm paying a portion of its investment management fee to the referring party (the "Solicitor"). Invesco Advisers will not charge the referred client a higher fee in order to compensate for the fee it pays to the solicitor. To the extent required by law, Invesco Advisers requires the Solicitor to enter into a written agreement with us. Under this written agreement, the Solicitor would be obligated to provide the prospective client with a separate disclosure document before an account is opened for such prospective client.

Item 15 Custody

Invesco Advisers does not serve in a custodian role for Registered Funds or any other client accounts. However, Invesco Advisers may be deemed to have custody of client assets, requiring it to comply with the requirements of Rule 206(4)-2 under the Advisers Act ("Custody Rule") for clients other than Registered Funds. For clients that qualify for the audit exemption, Invesco Advisers, Inc. maintains client assets with a qualified custodian and distributes audited financial statements outlined by the time period mandated by the Custody rule. The qualified custodians send account statements directly to the client or their independent representatives at least quarterly for those clients that do not avail themselves of the audit exemption. Clients should carefully review the statements received from the custodian with those they receive directly from Invesco Advisers. With respect to those clients that do not qualify for the audit exemption, Invesco Advisers will notify clients of each custodian's name and address when a custodial account is opened or when changes occur and an annual surprise cash examination will be performed.

Item 16 Investment Discretion

Invesco Advisers has discretionary authority, subject to the restrictions and limitations (if any) that have been imposed by clients or specified in the governing document(s) of Commingled Funds, to invest client portfolios, including amounts to be bought and sold, Brokers to use, bid/ask spreads or commission rates that will be charged. Contract restrictions might include limited concentrations, diversification criteria, liquidity requirements, maximum rates of turnover, specific asset allocations, prohibitions on investing in an issuer, class or sector and direction to use specific Brokers.

Certain other registered investment adviser subsidiaries of the Invesco Parent will, from time to time, have other arrangements not specified herein.

Item 17 Voting Client Securities

Invesco Ltd (“Invesco”), the ultimate parent company of Invesco, has adopted a global policy statement on global corporate governance and proxy voting (the “Invesco Global Proxy Policy” or “Policy”). The Policy, which Invesco believes describes policies and procedures reasonably designed to ensure that proxies are voted in the best interests of its clients, is intended to help Invesco’s clients understand its commitment to responsible investing and proxy voting, as well as the good governance principles that inform Invesco’s approach to engagement and voting at shareholder meetings.

The Policy sets forth the framework of Invesco’s corporate governance approach, broad philosophy and guiding principles that inform the proxy voting practices of Invesco’s investment teams around the world. Invesco’s good governance principles, governance structure and processes are designed to ensure that proxy votes are cast in accordance with clients’ best interests, including Invesco Funds and their shareholders.

Invesco views proxy voting as an integral part of its investment management responsibilities. The proxy voting process at Invesco focuses on protecting clients’ rights and promoting governance structures and practices that reinforce the accountability of corporate management and boards of directors to shareholders. The voting decision lies with Invesco’s portfolio managers and analysts with input and support from its Global ESG team and Proxy Operations functions. Invesco’s proprietary proxy voting platform (“PROXYintel”) facilitates implementation of voting decisions and rationales across global investment teams.

A copy of the Invesco Global Proxy Policy is available on Invesco’s web site: <https://www.invesco.com/corporate/about-us/esg>. Invesco makes available its proxy voting records publicly in compliance with regulatory requirements and industry best practices in accordance with the US Securities and Exchange Commission regulations, Invesco will file a record of all proxy voting activity for the prior 12 months ending June 30th for each U.S. registered fund. That filing is made on or before August 31st of each year and available on Invesco’s web site: <https://www.invesco.com/corporate/about-us/esg>. Clients can obtain the policy by calling Invesco’s Client Services department at 1-800-959-4246.

Applicability of Policy

Invesco may be granted by its clients the authority to vote the proxies of securities held in client portfolios. Invesco’s investment teams vote proxies on behalf of Invesco-sponsored funds and both fund and non-fund advisory clients that have explicitly granted Invesco authority in writing to vote proxies on their behalf. In the case of institutional or sub-advised clients, Invesco will vote the proxies in accordance with the Policy unless the client agreement specifies that the client retains the right to vote or has designated a named fiduciary to direct voting.

In certain Wrap Programs, Invesco Advisers will not be delegated the responsibility to vote proxies held by the Wrap Program accounts and, instead, the Program Sponsor or another service provider will generally vote such proxies. Clients in these Wrap Programs should contact the Program Sponsor for a copy of the Program Sponsor's proxy voting policies.

Global Proxy Voting Operational Procedures

Invesco's global proxy voting operational procedures are in place to implement the provisions of this Policy (the "Procedures"). At Invesco, proxy voting is conducted by its investment teams through PROXYintel. Invesco's investment teams globally are supported by Invesco's centralized team of ESG professionals and proxy voting specialists. Invesco's Global ESG team oversees the proxy policy, operational procedures, inputs to analysis and research and leads the Global Invesco Proxy Advisory Committee ("Global IPAC"). Invesco's global proxy services team is responsible for operational implementation including vote execution oversight.

Invesco aims to vote all proxies where we have been granted voting authority in accordance with the Policy as implemented by the Procedures. Invesco's portfolio managers and analysts review voting items based on their individual merits and retain full discretion on vote execution conducted through our proprietary proxy voting platform. Invesco may supplement its internal research with information from independent third-parties, such as proxy advisory firms.

Proprietary Proxy Voting Platform

Invesco's proprietary proxy voting platform is supported by a dedicated team of internal proxy specialists. PROXYintel streamlines the proxy voting process by providing Invesco's investment teams globally with direct access to meeting information and proxies, external proxy research and ESG ratings, as well as related functions, such as management of conflicts of interest issues, significant votes, global reporting and record-keeping capabilities. Managing these processes internally, as opposed to relying on third parties, is designed to provide Invesco greater quality control, oversight and independence in the proxy administration process.

Historical proxy voting information is stored to build institutional knowledge across the Invesco complex with respect to individual companies and proxy issues. Certain investment teams also use PROXYintel to access third-party proxy research and ESG ratings.

Invesco's proprietary systems facilitate internal control and oversight of the voting process. Invesco may choose to leverage this capability to automatically vote proxies based on its internally developed custom voting guidelines and in circumstances where Majority Voting applies.

Global Invesco Proxy Advisory Committee

Guided by its philosophy that investment teams should manage proxy voting, Invesco has created the Global IPAC. The Global IPAC is an investments-driven committee comprised of representatives from various investment management teams globally, Invesco's Global Head of ESG and chaired by its Global Proxy Governance and Voting Manager. The Global IPAC provides a forum for investment teams to monitor, understand and discuss key proxy issues and voting trends within the Invesco complex, to assist Invesco in meeting regulatory obligations, to review votes not aligned with our good governance principles and to consider conflicts of interest in the proxy voting process, all in accordance with this Policy.

In fulfilling its responsibilities, the Global IPAC meets as necessary, but no less than semi-annually, and has the following responsibilities and functions: (i) acts as a key liaison between the Global ESG team and local proxy voting practices to ensure compliance with this Policy; (ii) provides insight on

market trends as it relates to stewardship practices; (iii) monitors proxy votes that present potential conflicts of interest; (iv) the Conflict of Interest sub-committee will make voting decisions on submissions made by portfolio managers on conflict of interest issues to override the Policy; and (v) reviews and provides input, at least annually, on this Policy and related internal procedures and recommends any changes to the Policy based on, but not limited to, Invesco's experience, evolving industry practices, or developments in applicable laws or regulations.

In addition to the Global IPAC, for some clients, third parties (e.g., U.S. fund boards) provide oversight of the proxy voting process.

Market and Operational Limitations

In the great majority of instances, Invesco will vote proxies. However, in certain circumstances, Invesco may refrain from voting where the economic or other opportunity costs of voting exceeds any benefit to clients. Moreover, ERISA fiduciaries, in voting proxies or exercising other shareholder rights, must not subordinate the economic interests of plan participants and beneficiaries to unrelated objectives. These matters are left to the discretion of the relevant portfolio manager. Such circumstances could include, for example:

- In some countries the exercise of voting rights imposes temporary transfer restrictions on the related securities ("share blocking"). Invesco generally refrains from voting proxies in share blocking countries unless Invesco determines that the benefit to the client(s) of voting a specific proxy outweighs the client's temporary inability to sell the security.
- Some companies require a representative to attend meetings in person to vote a proxy, additional documentation or the disclosure of beneficial owner details to vote. Invesco may determine that the costs of sending a representative, signing a power-of-attorney or submitting additional disclosures outweigh the benefit of voting a particular proxy.
- Invesco may not receive proxy materials from the relevant fund or client custodian with sufficient time and information to make an informed independent voting decision.
- Invesco held shares on the record date but has sold them prior to the meeting date.

In some non-U.S. jurisdictions, although Invesco uses reasonable efforts to vote a proxy, proxies may not be accepted or may be rejected due to changes in the agenda for a shareholder meeting for which Invesco does not have sufficient notice, due to a proxy voting service not being offered by the custodian in the local market or due to operational issues experienced by third-parties involved in the process or by the issuer or sub-custodian. In addition, despite the best efforts of Invesco and its proxy voting agent, there may be instances where our votes may not be received or properly tabulated by an issuer or the issuer's agent.

Securities Lending

Invesco's funds may participate in a securities lending program with affiliated and unaffiliated lending agents. In circumstances where shares are on loan, the voting rights of those shares are transferred to the borrower. If the security in question is on loan as part of a securities lending program, Invesco may determine that the benefit to the client of voting a particular proxy outweighs the benefits of securities lending. In those instances, Invesco may determine to recall securities that are on loan prior to the meeting record date, so that we will be entitled to vote those shares. There may be instances where Invesco may be unable to recall shares or may choose not to recall shares. The relevant portfolio manager will make these determinations.

Conflicts of Interest

There may be occasions where voting proxies may present a perceived or actual conflict of interest between Invesco, as investment manager, and one or more of Invesco's clients or vendors.

Firm-Level Conflicts of Interest

A conflict of interest may exist if Invesco has a material business relationship with either the company soliciting a proxy or a third party that has a material interest in the outcome of a proxy vote or that is actively lobbying for a particular outcome of a proxy vote. Such relationships may include, among others, a client relationship, serving as a vendor whose products / services are material or significant to Invesco, serving as a distributor of Invesco's products, a significant research provider or broker to Invesco.

Invesco identifies potential conflicts of interest based on a variety of factors, including but not limited to the materiality of the relationship between the issuer or its affiliates to Invesco.

Material firm-level conflicts of interests are identified by individuals and groups within Invesco globally based on criteria established by the global proxy services team. These criteria are monitored and updated periodically by the global proxy services team so as to seek to ensure an updated view is available when conducting conflicts checks. Operating procedures and associated governance are designed to seek to ensure conflicts of interest are appropriately considered ahead of voting proxies. The Global IPAC Conflict of Interest Sub-committee maintains oversight of the process. Companies identified as conflicted will be voted in line with the good governance principles as implemented by Invesco's internally developed voting guidelines. To the extent a portfolio manager disagrees with the Policy, Invesco's processes and procedures seek to ensure justification and rationales are fully documented and presented to the Global IPAC Conflict of Interest Sub-committee for approval by a majority vote.

As an additional safeguard, persons from Invesco's marketing, distribution and other customer-facing functions may not serve on the Global IPAC. For the avoidance of doubt, Invesco may not consider Invesco Ltd.'s pecuniary interest when voting proxies on behalf of clients. To avoid any appearance of a conflict of interest, Invesco will not vote proxies issued by Invesco Ltd. that may be held in client accounts.

Personal Conflicts of Interest

A conflict also may exist where an Invesco employee has a known personal or business relationship with other proponents of proxy proposals, participants in proxy contests, corporate directors, or candidates for directorships. Under Invesco's Global Code of Conduct, Invesco entities and individuals must act in the best interests of clients and must avoid any situation that gives rise to an actual or perceived conflict of interest.

All Invesco personnel with proxy voting responsibilities are required to report any known personal or business conflicts of interest regarding proxy issues with which they are involved. In such instances, the individual(s) with the conflict will be excluded from the decision-making process relating to such issues.

Voting Fund of Funds

There may be conflicts that can arise from Invesco voting on matters when shares of Invesco-sponsored funds are held by other Invesco funds or entities. The scenarios below set out how Invesco votes in these instances.

- In the United States, as required by law, proportional voting applies.

- Shares of an Invesco-sponsored fund held by other Invesco funds will be voted in the same proportion as the votes of external shareholders of the underlying fund, where required by law.
- Shares of an unaffiliated registered fund held by one or more Invesco funds will be voted in the same proportion as the votes of external shareholders of the underlying fund where the thresholds are met as required by federal securities law or any exemption therefrom.
- To the extent proportional voting is required by law, but not operationally possible, Invesco will not vote the shares.
- For US fund of funds where proportional voting is not required by law, Invesco will still apply proportional voting. In the event this is not operationally possible, Invesco will vote in line with our internally developed voting guidelines.
- For non-US fund of funds Invesco will vote in line with our above-mentioned firm-level conflicts of interest process unless local policies are in place.

Use of Advisory Services

Invesco may supplement its internal research with information from independent third-parties, such as proxy advisory firms to assist us in assessing the corporate governance of investee companies. Globally, Invesco leverages research from Institutional Shareholder Services Inc. (“ISS”) and Glass Lewis (“GL”). Invesco generally retains full and independent discretion with respect to proxy voting decisions.

ISS and GL both provide research reports, including vote recommendations, to Invesco and its portfolio managers and analysts. Invesco retains ISS to provide written analysis and recommendations based on Invesco’s internally developed custom voting guidelines. Updates to previously issued proxy research reports may be provided to incorporate newly available information or additional disclosure provided by the issuer regarding a matter to be voted on, or to correct factual errors that may result in the issuance of revised proxy vote recommendations. Invesco’s global proxy services team may periodically monitor for these research alerts issued by ISS and GL that are shared with our investment teams. Invesco will generally endeavor to consider such information where such information is considered material, provided it is delivered in a timely manner ahead of the vote deadline.

Invesco also retains ISS to assist in the implementation of certain proxy voting-related functions, including, but not limited to, operational and reporting services. These administrative services include receipt of proxy ballots, vote execution through PROXYintel and vote disclosure in Canada, the UK and Europe to meet regulatory reporting obligations.

As part of its fiduciary obligation to clients, Invesco performs extensive initial and ongoing due diligence on the proxy advisory firms it engages globally. This includes reviews of information regarding the capabilities of their research staff, methodologies for formulating voting recommendations, the adequacy and quality of personnel and technology, as applicable, and internal controls, policies and procedures, including those relating to possible conflicts of interest.

The proxy advisory firms Invesco engages globally complete an annual due diligence questionnaire submitted by Invesco, and Invesco conducts annual due diligence meetings in part to discuss their responses to the questionnaire. In addition, Invesco monitors and communicates with these firms and monitors their compliance with Invesco's performance and policy standards. ISS and GL disclose conflicts to Invesco through a review of their policies, procedures and practices regarding potential conflicts of interests (including inherent internal conflicts) as well as disclosure of the work ISS and GL perform for corporate issuers and the payments they receive from such issuers. As part of our annual policy development process, Invesco engages with external proxy and governance experts to understand market trends and developments and to weigh in on the development of these policies at these firms, where appropriate. These meetings provide Invesco with an opportunity to assess the firms' capabilities, conflicts of interest and service levels, as well as provide investment professionals with direct insight into the advisory firms' stances on key governance and proxy topics and their policy framework/methodologies.

Invesco completes a review of the System and Organizational Controls ("SOC") Reports for each proxy advisory firm to ensure the related controls operated effectively to provide reasonable assurance.

In addition to ISS and GL, Invesco may use regional third-party research providers to access regionally specific research.

Review of Policy

The Global IPAC and Invesco's Global ESG team, global proxy services team, compliance and legal teams annually communicate and review the Policy and its internally developed custom voting guidelines to seek to ensure that they remain consistent with clients' best interests, regulatory requirements, investment team considerations, governance trends and industry best practices. At least annually, this Policy and Invesco's internally developed voting guidelines are reviewed by various groups within Invesco to ensure that they remain consistent with Invesco's views on best practice in corporate governance and long-term investment stewardship.

Invesco's Good Governance Principles

Invesco's good governance principles outline its views on best practice in corporate governance and long-term investment stewardship. These principles have been developed by Invesco's global investment teams in collaboration with the Global ESG team. The broad philosophy and guiding principles in this section inform Invesco's approach to long-term investment stewardship and proxy voting. These principles are not intended to be exhaustive or prescriptive.

Invesco's portfolio managers and analysts retain full discretion on vote execution in the context of our good governance principles and internally developed custom voting guidelines, except where otherwise specified in the Policy. The final voting decisions may consider the unique circumstances affecting companies, regional best practices and any dialogue we have had with company management. As a result, different portfolio management teams may vote differently on particular votes for the same company. To the extent a portfolio manager chooses to vote a proxy in a way that is not aligned with the good governance principles, such manager's rationales are fully documented.

The principles apply to operating companies. Invesco applies a separate approach to open-end and closed-end investment companies and unit investment trusts. Where appropriate, these guidelines are supplemented by additional internal guidance that considers regional variations in best practices, disclosure and region-specific voting items.

Invesco's good governance principles may be reviewed in Invesco's Global Proxy Voting Policy, a copy of which is available on Invesco's web site: <https://www.invesco.com/corporate/about-us/esg>.

Class Actions

Occasionally, securities held in the accounts of clients will be the subject of class action lawsuits.

Funds

Invesco Advisers directly or through its delegates (which may include, without limitation, personnel of an affiliate, a law firm, custodian or other claim filing service), uses good faith efforts to file proofs of claim on behalf of Funds in class action lawsuit settlements or judgments and regulatory recovery funds pending in the U.S. involving issuers of securities presently or formerly held in the Funds' portfolios, or related parties of such issuers, of which the Adviser learns and for which the Funds are eligible during each Fund's existence ("Claim Service"). Invesco Advisers has complete discretion to determine, on a case-by-case basis, whether to file proofs of claim and any other required documentation for the Funds in any opt-in actions of which the Adviser becomes aware of.

Separate Accounts and Wrap Programs

With respect to Separate Account clients and Wrap Programs, unless otherwise specifically agreed, Invesco Advisers shall not be required, or be liable for any failure to, but may, without undertaking any obligation to do so, (i) provide the Claim Service, (ii) file proofs of claim in Foreign Actions, and/or (iii) file any required documentation in any opt-in Actions, as described above.

Privacy Policy

Invesco Advisers recognizes the importance of respecting the privacy of our clients and is committed to safeguarding against the unauthorized disclosure of, or access to, the nonpublic personal client information we acquire. Invesco Advisers collects nonpublic personal information about you from applications or other forms you complete and from your transactions with us, or our affiliates. Invesco Advisers does not disclose information about you, or our former customers, to our affiliates or to service providers or other third parties except on the limited basis permitted by law.

Item 18 Financial Information

Item 18 is not applicable because Invesco Advisers does not require or solicit prepayment of more than \$1,200 in fees per client six months or more in advance.

Item 19 Requirements for State-Registered Advisors

Item 19 is not applicable because Invesco Advisers is not a state registered adviser. Invesco Advisers is federally registered with the SEC.



Rev. March 5, 2020

FACTS

WHAT DOES INVESCO DO WITH YOUR PERSONAL INFORMATION? *

Why?

Financial companies choose how they share your personal information. Federal law gives consumers the right to limit some but not all sharing. Federal law also requires us to tell you how we collect, share, and protect your personal information. Please read this notice carefully to understand what we do.

What?

The types of personal information we collect and share depend on the product or service you have with us. This information can include:

- Social Security number and income
- Transaction history and investment experience
- Investment experience and assets

When you are *no longer* our customer, we continue to share information about you according to our policies.

How?

All financial companies need to share customers' personal information to run their everyday business. In the section below, we list the reasons financial companies can share their customers' personal information; the reasons Invesco chooses to share; and whether you can limit this sharing.

| Reasons we can share your personal information | Does Invesco share? | Can you limit this sharing? |
|---|---------------------|-----------------------------|
| For our everyday business purposes— such as to process your transactions, maintain your account(s), respond to court orders and legal investigations, or report to credit bureaus | Yes | No |
| For our marketing purposes— to offer our products and services to you | No | We do not share |
| For joint marketing with other financial companies | No | We do not share |
| For our affiliates' everyday business purposes— information about your transactions and experiences | No | We do not share |
| For our affiliates' everyday business purposes— information about your credit worthiness | No | We do not share |
| For our affiliates to market to you | No | We do not share |
| For non-affiliates to market to you | No | We do not share |

Questions?

Call 1-800-959-4246 (toll free).

* This privacy notice applies to individuals who obtain or have obtained a financial product or service from the Invesco family of companies. For a complete list of Invesco entities, please see the section titled "Who is providing this notice" on page 2.

| Who we are | |
|--|--|
| Who is providing this notice? | Invesco Advisers, Inc., Invesco Private Capital, Inc., Invesco Senior Secured Management, Inc., WL Ross & Co. LLC, Invesco Distributors, Inc., Invesco Managed Accounts, LLC, and the Invesco family of mutual funds. |
| What we do | |
| How does Invesco protect my personal information? | To protect your personal information from unauthorized access and use, we use security measures that comply with federal law. These measures include computer safeguards and secured files and buildings. |
| How does Invesco collect my personal information? | <p>We collect your personal information, for example, when you</p> <ul style="list-style-type: none"> ▪ Open an account or give us your contact information ▪ Make deposits or withdrawals from your account or give us your income information ▪ Make a wire transfer <p>We also collect your personal information from others, such as credit bureaus, affiliates or other companies.</p> |
| Why can't I limit all sharing? | <p>Federal law gives you the right to limit only</p> <ul style="list-style-type: none"> ▪ Sharing for affiliates' everyday business purposes—information about your creditworthiness ▪ Affiliates from using your information to market to you ▪ Sharing for nonaffiliates to market to you |
| Definitions | |
| Affiliates | <p>Companies related by common ownership or control. They can be financial and nonfinancial companies.</p> <p><i>Invesco does not share with our affiliates so that they can market to you.</i></p> |
| Nonaffiliates | <p>Companies not related by common ownership or control. They can be financial and nonfinancial companies.</p> <p><i>Invesco does not share with non-affiliates so that they can market to you.</i></p> |
| Joint marketing | <p>A formal agreement between nonaffiliated financial companies that together market financial products or services to you.</p> <p><i>Invesco doesn't jointly market.</i></p> |



Invesco Advisers, Inc.
1555 Peachtree St. N.E.
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- Place their clients' interest ahead of their own
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- Act with integrity
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Clas G. Olsson**Educational Background and Business Experience:**

- Year of Birth: 1965
- BBA – The University of Texas at Austin
- Mr. Olsson joined Invesco in 1994 and is currently serving as the Chief Investment Officer of the Invesco International Growth Equity team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

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- Mr. Olsson is supervised by Kevin Cronin, Head of Equity Investments for Invesco. Mr. Cronin may be reached at (404) 439-4567 or via email at kevin.cronin@invesco.com.

Steve Cao**Educational Background and Business Experience:**

- Year of Birth: 1960
- BS, English – Tianjin Foreign Languages Institute, 1985
- MBA – Texas A&M, 1990
Chartered Financial Analyst
Certified Public Accountant
- Mr. Cao joined Invesco in 1997 and is currently serving as a Senior Portfolio Manager for the Invesco International Growth Equity team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

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- Mr. Cao is supervised by Clas G. Olsson, Chief Investment Officer of the Invesco International Growth Equity team. Mr. Olsson may be reached at (512) 424-3572 or via email at clas.olsson@invesco.com.

Brently J. Bates**Educational Background and Business Experience:**

- Year of Birth: 1973
- BBA – Texas A&M University, 1995
Chartered Financial Analyst
Certified Public Accountant
- Mr. Bates joined Invesco in 1996 and is currently serving as a Sr. Portfolio Manager for the Invesco International Growth Equity team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

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- Mr. Bates is supervised by Clas Olsson, Chief Investment Officer of the International Growth Equity team for Invesco. Mr. Olsson may be reached at (512) 424-3572 or via email at clas.olsson@invesco.com.

Mark B. Jason**Educational Background and Business Experience:**

- Year of Birth: 1970
- BS, Finance and Real Estate – California State University at Northridge, 1993
Chartered Financial Analyst
- Mr. Jason joined Invesco in 2001 and is currently serving as a Senior Portfolio Manager for the Invesco International Growth Equity team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

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- Mr. Jason is supervised by Clas G. Olsson, Chief Investment Officer for the Invesco International Growth Equity team. Mr. Olsson may be reached at (512) 424-3572 or via email at clas.olsson@invesco.com.

Richard E. Nield**Educational Background and Business Experience:**

- Year of Birth: 1972
- Bachelor of Commerce, Finance and International Business – McGill University (Canada), 1995
Chartered Financial Analyst
- Mr. Nield joined Invesco in 2000 and is currently serving as a Senior Portfolio Manager for the Invesco International Growth Equity team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

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- Mr. Nield is supervised by Clas G. Olsson, Chief Investment Officer for the Invesco International Growth Equity team. Mr. Olsson may be reached at (512) 424-3572 or via email at clas.olsson@invesco.com.

Borge D. Endresen**Educational Background and Business Experience:**

- Year of Birth: 1969
- BS – University of Oregon, 1993
MBA – University of Texas at Austin, 1999
Chartered Financial Analyst
- Mr. Endresen joined Invesco in 1998 and is currently serving as a Senior Portfolio Manager for the Invesco International Growth Equity team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

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- Mr. Endresen is supervised by Clas G. Olsson, Chief Investment Officer for the Invesco International Growth Equity team. Mr. Olsson may be reached at (512) 424-3572 or via email at clas.olsson@invesco.com.

Mark McDonnell**Educational Background and Business Experience:**

- Year of Birth: 1981
- BBA – University of Texas, 2004
Chartered Financial Analyst
- Mr. McDonnell joined Invesco in 2003 and is currently serving as Portfolio Manager for the Invesco International Growth Equity team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

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- Mr. McDonnell is supervised by Richard Nield, Senior Portfolio Manager for the Invesco International Growth Equity team. Mr. Nield may be reached at (512) 424-3571 or via email at richard.nield@invesco.com.

Michael Shaman

Educational Background and Business Experience:

- Year of Birth: 1977
- BS, Finance – Ithaca College, 1999
MBA – Cornell University, 2008
- Mr. Shaman joined Invesco in 2012 and is currently serving as Portfolio Manager for the Invesco International Growth Equity team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

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- Mr. Shaman is supervised by Mark Jason, Senior Portfolio Manager for the Invesco International Growth Equity team. Mr. Jason may be reached at (713) 214-1685 or via email at mark.jason@invesco.com



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Chartered Alternative Investment Analyst

The Chartered Alternative Investment Analyst (CAIA) is a professional designation for alternative investment professionals offered by the CAIA Association. The CAIA designation is an internationally recognized chartered program that consists of a two-tier exam process. In order to receive the designation, individuals must pass two levels of curriculum that include topics ranging from qualitative analysis, trading theories of alternative investments, to indexation and benchmarking.

The Level I exam is composed of 200 multiple-choice questions, which measure candidates' knowledge of the CAIA Level I curriculum. The Level I curriculum introduces candidates to alternative asset classes and discusses potential benefits of allocating to actively managed investment strategies. Candidates are asked to distinguish among various alternative investment strategies and products and to understand the difference between alternative investments and traditional products. Specific knowledge areas include: professional standards and ethics, alpha drivers and beta drivers, real estate, hedge funds, commodities and managed futures, private equity, and credit derivatives. The Level II exam is composed of 100 multiple-choice questions and three sets of constructed-response (essay-type) questions, which measure candidates' knowledge of the CAIA Level II curriculum.

The Level II curriculum builds on candidates' understanding of various asset classes and focuses on specific trading strategies, asset allocation in a multi-asset framework, and various methods for accessing alternative asset classes. Through the Level II curriculum, candidates gain deeper understanding of risk management techniques and tools as well as various structured products. Specific knowledge areas include: professional standards and ethics; private equity; commodities and managed futures; real assets; hedge funds; structured products; asset allocation and portfolio management; risk and risk management; manager selection, due diligence, and regulation; and research issues and current topics.

To learn more about the CAIA charter, visit <https://caia.org/>.

Duy K. Nguyen**Educational Background and Business Experience:**

- Year of Birth: 1970
- BBA – University of Texas at Austin, 1993
MS, Finance – University of Houston, 2004
MS, Applied Economics – John Hopkins University 2019
Chartered Financial Analyst
Chartered Alternative Investment Analyst
- Mr. Nguyen joined Invesco in 2000 and is currently serving as the Chief Investment Officer for the Invesco Investment Solutions team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

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- Mr. Nguyen is supervised by Gary Wendler, Head of Global Investment Solutions, Products Strategy and Risk. Mr. Wendler may be reached at (713) 214-1701 or via email at gary.wendler@invesco.com.

Alessio de Longis

Educational Background and Business Experience:

- Year of Birth: 1978
- MSc, Financial Economics and Econometrics – University of Essex, 2004
MA & BA, Economics and Financial Markets – University of Rome Tor Vergata, Laurea, 2002
Chartered Financial Analyst
- Mr. de Longis joined Invesco in 2019 when the firm combined with OppenheimerFunds and is currently serving as a Senior Portfolio Manager, Head of GTAA Solutions for the Invesco Investment Solutions team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

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- Mr. de Longis is supervised by Duy Nguyen, Chief Investment Officer for the Invesco Investment Solutions team. Mr. Nguyen may be reached at (713) 214-1650 or via email at duy.nguyen@invesco.com.

Jacob M. Borbidge**Educational Background and Business Experience:**

- Year of Birth: 1980
- BS, Mechanical Engineering – Lehigh University, 2002
MS, Finance – University of Houston, 2005
Chartered Financial Analyst
Chartered Alternative Investment Analyst
- Mr. Borbidge joined Invesco in 2004 and is currently serving as a Senior Portfolio Manager, Head of Investment Research for the Invesco Investment Solutions team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

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- Mr. Borbidge is supervised by Duy Nguyen, Chief Investment Officer for the Invesco Investment Solutions team. Mr. Nguyen may be reached at (713) 214-1650 or via email at duy.nguyen@invesco.com.

Jeffrey Bennett**Educational Background and Business Experience:**

- Year of Birth: 1976
- BS, Chemical Engineering – UCLA, 1998
MBA – University of Chicago, 2003
Chartered Financial Analyst
- Mr. Bennett joined Invesco in 2019 when the firm combined with OppenheimerFunds and is currently serving as a Senior Portfolio Manager and Head of Manager Selection for the Invesco Investment Solutions team. Prior to joining Invesco, Mr. Bennett served as a Managing Director at AllianceBernstein.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

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- Mr. Bennett is supervised by Duy Nguyen, Chief Investment Officer for the Invesco Investment Solutions team. Mr. Nguyen may be reached at (713) 214-1650 or via email at duy.nguyen@invesco.com.



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Scott Dennis

Educational Background and Business Experience:

- Year of Birth: 1959
- BBA, Finance – University of Texas at Austin, 1981
- Mr. Dennis joined Invesco in 1992 and is currently serving as Chief Executive Officer for Private Markets.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

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- Mr. Dennis is supervised by Greg McGreevey, Senior Managing Director, Investments for Invesco. Mr. McGreevey may be reached at (404) 479-2932 or via email at greg.mcgreevey@invesco.com

Darin Turner

Educational Background and Business Experience:

- Year of Birth: 1979
- BBA – Baylor University, 2002
MS – University of Texas at Arlington, 2004
MBA – Southern Methodist University, 2007
- Mr. Turner joined Invesco in 2005 and is currently serving as a Managing Director, Senior Portfolio Manager of Listed Real Assets for the Invesco Global Real Estate team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

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- Mr. Turner is supervised by Joe Rodriguez, Managing Director, Chief Investment Officer of Listed Real Assets for the Invesco Global Real Estate team. Mr. Rodriguez may be reached at (972) 715-7422 or via email at joe.rodriquez@invesco.com.

PingYing Wang

Educational Background and Business Experience:

- Year of Birth: 1972
- BA, International Finance – People’s University of China, 1993
PhD, Finance – University of Texas at Dallas, 1998
Chartered Financial Analyst
- Ms. Wang joined Invesco in 1998 and is currently serving as a Managing Director, Senior Portfolio Manager of Listed Real Assets for the Invesco Global Real Estate team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

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- Ms. Wang is supervised by Darin Turner, Managing Director, Senior Portfolio Manager of Listed Real Assets of the Invesco Global Real Estate team. Mr. Turner may be reached at (972) 715-7468 or via email at darin.turner@invesco.com

Stuart Cartner

Educational Background and Business Experience:

- Year of Birth: 1960
- BS, Finance and Management – Indiana University
MBA, Finance and Marketing – Northwestern University
- Mr. Cartner joined Invesco in 2019 when the firm combined with OppenheimerFunds and is currently serving as a Managing Director, Senior Portfolio Manager for the Invesco Global Real Estate team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

- The respective Chief Investment Officers, or equivalent roles, are responsible for the investment professionals' adherence to their mandates. The objective of their oversight role is to understand the investment philosophy and process; confirm consistency of investment decisions with investment philosophy and process; and understand performance in light of current market conditions. They are supported in this role by the Invesco Investment Risk group and/or local risk teams which provide oversight reports on the funds advised by Invesco on a quarterly basis. Investment professionals typically spend a minimal amount of time servicing clients. Clients typically interact with Sales professionals and Client Portfolio Managers. Additionally, presentations and other client materials are subject to oversight by the Invesco Compliance Communication department.
- Mr. Cartner is supervised by Joe V. Rodriguez, Jr., Managing Director, Chief Investment Officer of Listed Real Assets for the Invesco Global Real Estate team. Mr. Rodriguez may be reached at (972) 715-7422 or via email at joe.rodriquez@invesco.com.

Mark D. Blackburn**Educational Background and Business Experience:**

- Year of Birth: 1961
- BS, Accounting – Louisiana State University, 1983
MBA – Southern Methodist University, 1987
Chartered Financial Analyst
Certified Public Accountant
- Mr. Blackburn joined Invesco in 1998 and is currently serving as a Managing Director, Senior Portfolio Manager for the Invesco Global Real Estate team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

- The respective Chief Investment Officers, or equivalent roles, are responsible for the investment professionals' adherence to their mandates. The objective of their oversight role is to understand the investment philosophy and process; confirm consistency of investment decisions with investment philosophy and process; and understand performance in light of current market conditions. They are supported in this role by the Invesco Investment Risk group and/or local risk teams which provide oversight reports on the funds advised by Invesco on a quarterly basis. Investment professionals typically spend a minimal amount of time servicing clients. Clients typically interact with Sales professionals and Client Portfolio Managers. Additionally, presentations and other client materials are subject to oversight by the Invesco Compliance Communication department.
- Mr. Blackburn is supervised by Joe V. Rodriguez, Jr., Managing Director, Chief Investment Officer of Listed Real Assets for the Invesco Global Real Estate team. Mr. Rodriguez may be reached at (972) 715-7422 or via email at joe.rodriquez@invesco.com.

Robert Coble**Educational Background and Business Experience:**

- Year of Birth: 1971
- BS – Florida State University, 1996
- JD – University of Florida, 1999
- MBA – New York University, 2005
- Mr. Coble joined Invesco in 2019 when the firm combined with OppenheimerFunds and is currently serving as a Senior Director, Portfolio Manager for the Invesco Global Real Estate team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

- The respective Chief Investment Officers, or equivalent roles, are responsible for the investment professionals' adherence to their mandates. The objective of their oversight role is to understand the investment philosophy and process; confirm consistency of investment decisions with investment philosophy and process; and understand performance in light of current market conditions. They are supported in this role by the Invesco Investment Risk group and/or local risk teams which provide oversight reports on the funds advised by Invesco on a quarterly basis. Investment professionals typically spend a minimal amount of time servicing clients. Clients typically interact with Sales professionals and Client Portfolio Managers. Additionally, presentations and other client materials are subject to oversight by the Invesco Compliance Communication department.
- Mr. Coble is supervised by Brian Watson, Managing Director, Senior Portfolio Manager for the Invesco Global Real Estate team. Mr. Watson may be reached at (214) 740-6051 or via email at Brian.Watson@invesco.com.

Jim Pfertner**Educational Background and Business Experience:**

- Year of Birth: 1978
- BA, Economics – University of Texas at Austin, 2001
MBA – Southern Methodist University, 2007
- Mr. Pfertner joined Invesco in 2013 and is currently serving as a Director, Associate Portfolio Manager of Real Estate Securities for the Invesco Global Real Estate team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

- The respective Chief Investment Officers, or equivalent roles, are responsible for the investment professionals' adherence to their mandates. The objective of their oversight role is to understand the investment philosophy and process; confirm consistency of investment decisions with investment philosophy and process; and understand performance in light of current market conditions. They are supported in this role by the Invesco Investment Risk group and/or local risk teams which provide oversight reports on the funds advised by Invesco on a quarterly basis. Investment professionals typically spend a minimal amount of time servicing clients. Clients typically interact with Sales professionals and Client Portfolio Managers. Additionally, presentations and other client materials are subject to oversight by the Invesco Compliance Communication department.
- Mr. Pfertner is supervised by Darin Turner, Managing Director, Senior Portfolio Manager of Real Estate Securities for the Invesco Global Real Estate team. Mr. Turner may be reached at (972) 715-7468 or via email at darin.turner@invesco.com.

Brian Watson**Educational Background and Business Experience:**

- Year of Birth: 1973
- BBA – University of Texas at Austin, 1996
MBA – University of Texas at Austin, 2002
Chartered Financial Analyst
- Mr. Watson joined Invesco in 2019 when the firm combined with OppenheimerFunds and is currently serving as a Managing Director, Senior Portfolio Manager for the Invesco Global Real team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

- The respective Chief Investment Officers, or equivalent roles, are responsible for the investment professionals' adherence to their mandates. The objective of their oversight role is to understand the investment philosophy and process; confirm consistency of investment decisions with investment philosophy and process; and understand performance in light of current market conditions. They are supported in this role by the Invesco Investment Risk group and/or local risk teams which provide oversight reports on the funds advised by Invesco on a quarterly basis. Investment professionals typically spend a minimal amount of time servicing clients. Clients typically interact with Sales professionals and Client Portfolio Managers. Additionally, presentations and other client materials are subject to oversight by the Invesco Compliance Communication department.
- Mr. Watson is supervised by Stuart Cartner, Managing Director, Senior Portfolio Manager for the Invesco Global Real Estate team. Mr. Cartner may be reached at (214) 740-6050 or via email at Stuart.Cartner@invesco.com.

Grant Jackson

Educational Background and Business Experience:

- Year of Birth: 1977
- BS, Mechanical Engineering – University of Texas, 2000
MBA – Southern Methodist University, 2005
Chartered Financial Analyst
- Mr. Jackson joined Invesco in 2005 and is currently serving as Senior Director, Senior Portfolio Manager of Real Estate Securities for the Invesco Global Real Estate team. Prior to joining Invesco, Mr. Grant served as Management Consulting with PricewaterhouseCoopers.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

- The respective Chief Investment Officers, or equivalent roles, are responsible for the investment professionals' adherence to their mandates. The objective of their oversight role is to understand the investment philosophy and process; confirm consistency of investment decisions with investment philosophy and process; and understand performance in light of current market conditions. They are supported in this role by the Invesco Investment Risk group and/or local risk teams which provide oversight reports on the funds advised by Invesco on a quarterly basis. Investment professionals typically spend a minimal amount of time servicing clients. Clients typically interact with Sales professionals and Client Portfolio Managers. Additionally, presentations and other client materials are subject to oversight by the Invesco Compliance Communication department.
- Mr. Jackson is supervised by Darin Turner, Managing Director, Senior Portfolio Manager of Real Estate Securities for the Invesco Global Real Estate team. Mr. Turner may be reached at (972) 715-7468 or via email at darin.turner@invesco.com.

Chip McKinley

Educational Background and Business Experience:

- Year of Birth: 1969
BBA– Southern Methodist University, 1992
MBA – Cornell University, Johnson Graduate School of Management, 2003
- Mr. McKinley joined Invesco in 2022 and is currently serving as a Senior Portfolio Manager of Listed Real Assets for the Invesco Global Real Estate team. Prior to joining Invesco, Mr. McKinley served as a Portfolio Manager of Listed Equity Investments for Cohen and Steers Capital Management and Saepio Capital Management.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

- The respective Chief Investment Officers, or equivalent roles, are responsible for the investment professionals' adherence to their mandates. The objective of their oversight role is to understand the investment philosophy and process; confirm consistency of investment decisions with investment philosophy and process; and understand performance in light of current market conditions. They are supported in this role by the Invesco Investment Risk group and/or local risk teams which provide oversight reports on the funds advised by Invesco on a quarterly basis. Investment professionals typically spend a minimal amount of time servicing clients. Clients typically interact with Sales professionals and Client Portfolio Managers. Additionally, presentations and other client materials are subject to oversight by the Invesco Compliance Communication department.
- Mr. McKinley is supervised by Darin Turner, Managing Director, Senior Portfolio Manager of Listed Real Assets for the Invesco Global Real Estate team. Mr. Turner may be reached at (972) 715-7468 or via email at darin.turner@invesco.com.



Invesco Advisers, Inc.
1555 Peachtree St. N.E.
Atlanta, GA 30309

March 31, 2022

Form ADV Part 2B Brochure Supplement

This brochure supplement provides information about the supervised persons of Invesco Advisers, Inc. which supplements Part 2A Firm Brochure of Form ADV. You should have received a copy of that brochure. Please contact Todd F. Kuehl at (404) 439-3321 if you did not receive Invesco Advisers, Inc.'s brochure or if you have any questions about the contents of this supplement.

The information in this brochure has not been approved or verified by the United States Securities and Exchange Commission, or by any state securities authority. Additional information about Invesco Advisers, Inc. is available on the SEC's website at www.adviserinfo.sec.gov

Professional Certifications

Some Invesco Advisers, Inc. employees have earned certifications and credentials that are required to be explained in further detail.

Chartered Financial Analyst

Chartered Financial Analyst (CFA) charter is a globally respected, graduate-level investment credential established in 1962 and awarded by CFA Institute – the largest global association of investment professionals.

To earn the CFA charter, candidates must: 1) pass three sequential, six-hour examinations; 2) have at least four years of qualified professional investment experience; 3) join CFA institute as members; and 4) commit to abide by, and annually reaffirm, their adherence to the CFA Institute Code of Ethics and Standards of Professional Conduct.

High Ethical Standards

The CFA Institute Code of Ethics and Standards of Professional Conduct, enforced through an active professional conduct program, require CFA charterholders to:

- Place their clients' interest ahead of their own
- Maintain independence and objectivity
- Act with integrity
- Maintain and improve their professional competence
- Disclose conflicts of interest and legal matters

Additionally, regulatory bodies in 19 countries recognize the CFA charter as a proxy for meeting certain licensing requirements, and more than 125 colleges and universities around the world have incorporated a majority of the CFA Program curriculum into their own finance courses.

Comprehensive and Current Knowledge

The CFA Program curriculum provides a comprehensive framework of knowledge for investment decision making and is firmly grounded in the knowledge and skills used every day in the investment profession. The three levels of the CFA Program test a proficiency with a wide range of fundamental and advanced investment topics, including ethical and professional standards, fixed-income and equity analysis, alternative and derivative instruments, economics, financial reporting standards, portfolio management, and wealth planning.

The CFA Program curriculum is updated every year by experts from around the world to ensure that candidates learn the most relevant and

practical new tools, ideas, and investment and wealth management skills to reflect the dynamic and complex nature of the profession.

To learn more about the CFA charter, visit www.cfainstitute.org

Certified Public Accountant

The Certified Public Accountant (CPA) designation can be obtained by successfully completing the Uniform Certified Public Accountant examination which is set by the American Institute of Certified Public accountants and administered by the National Association of State of Boards of Accountancy.

The licensing and certification requirements are imposed separately by each state's laws and therefore vary from state to state. Most states require at least a bachelor's degree to be eligible to become a CPA. Additionally, some states may require relevant work experience for the CPA certificate and others may waive this requirement if a candidate possesses a higher academic qualification compared to the state's requirement to appear for the Uniform CPA exam.

Chartered Mutual Fund Counselor

The Chartered Mutual Fund Counselor (CMFC) designation is awarded by the College of Financial Planning, a regionally accredited institution of higher learning with more than 37 years of financial services education expertise.

To earn the CMFC designation, candidates must 1) complete a yearlong course of study encompassing all aspects of mutual funds and their uses as investment vehicles; 2) pass an end-of-course exam that tests their ability to synthesize complex concepts and apply theoretical concepts to real-life situations; 3) apply for authorization to use the designation; and 4) commit to abide by, and reaffirm every two years, their adherence to the College of Financial Planning's Standards of Professional Conduct, Self-Disclosure Requirements, and Terms and Conditions.

Kevin C. Holt**Educational Background and Business Experience:**

- Year of Birth: 1967
- BBA, Finance – The University of Iowa
MBA, Finance/Accounting – The University of Chicago
Chartered Financial Analyst
- Mr. Holt joined Invesco in 1999 and is currently serving as Chief Investment Officer for the Invesco U.S. Value Equities team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

- The respective Chief Investment Officers, or equivalent roles, are responsible for the investment professionals' adherence to their mandates. The objective of their oversight role is to understand the investment philosophy and process; confirm consistency of investment decisions with investment philosophy and process; and understand performance in light of current market conditions. They are supported in this role by the Invesco Global Performance Measurement & Risk group and/or local risk teams which provide oversight reports on the funds advised by Invesco on a quarterly basis. Investment professionals typically spend a minimal amount of time servicing clients. Clients typically interact with Sales professionals and Client Portfolio Managers. Additionally, presentations and other client materials are subject to oversight by the Invesco Compliance Communication department.
- Mr. Holt is supervised by Kevin Cronin, Head of Equity Investments for Invesco. Mr. Cronin may be reached at (404) 439-4567 or via email at kevin.cronin@invesco.com.

Jonathan P. Edwards**Educational Background and Business Experience:**

- Year of Birth: 1971
- BS, Economics – Texas A&M University, 1993
MBA – University of Texas at Austin, 2001
Chartered Financial Analyst
- Mr. Edwards joined Invesco in 2000 and is currently serving as a Senior Portfolio Manager for the Invesco U.S. Value Equities team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

- The respective Chief Investment Officers, or equivalent roles, are responsible for the investment professionals' adherence to their mandates. The objective of their oversight role is to understand the investment philosophy and process; confirm consistency of investment decisions with investment philosophy and process; and understand performance in light of current market conditions. They are supported in this role by the Invesco Investment Risk group and/or local risk teams which provide oversight reports on the funds advised by Invesco on a quarterly basis. Investment professionals typically spend a minimal amount of time servicing clients. Clients typically interact with Sales professionals and Client Portfolio Managers. Additionally, presentations and other client materials are subject to oversight by the Invesco Compliance Communication department.
- Mr. Edwards is supervised by Kevin Holt, Chief Investment Officer for the Invesco U.S. Value Equities team. Mr. Holt may be reached at (713) 214-5401 or via email at kevin.holt@invesco.com.

Jonathan D. Mueller**Educational Background and Business Experience:**

- Year of Birth: 1973
- BBA, Accounting – Texas Christian University, 1996
MBA, Finance – University of Texas at Austin, 2001
Chartered Financial Analyst
Certified Public Accountant
- Mr. Mueller joined Invesco in 2001 and is currently serving as a Portfolio Manager for the Invesco U.S. Value Equities team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

- The respective Chief Investment Officers, or equivalent roles, are responsible for the investment professionals' adherence to their mandates. The objective of their oversight role is to understand the investment philosophy and process; confirm consistency of investment decisions with investment philosophy and process; and understand performance in light of current market conditions. They are supported in this role by the Invesco Investment Risk group and/or local risk teams which provide oversight reports on the funds advised by Invesco on a quarterly basis. Investment professionals typically spend a minimal amount of time servicing clients. Clients typically interact with Sales professionals and Client Portfolio Managers. Additionally, presentations and other client materials are subject to oversight by the Invesco Compliance Communication department.
- Mr. Mueller is supervised by Jonathan Edwards, Senior Portfolio Manager for the Invesco U.S. Value Equities team. Mr. Edwards may be reached at (713) 214-1935 or via email at jonathan.edwards@invesco.com.

Ellen Gold**Educational Background and Business Experience:**

- Year of Birth: 1964
- BBA – George Washington University, 1986
MBA – Stern School of Business at New York University, 1995
- Ms. Gold joined Invesco in 1986 and is currently serving as a Senior Portfolio Manager for the Invesco U.S. Value Equities team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

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- Ms. Gold is supervised by Kevin Holt, Chief Investment Officer for the Invesco U.S. Value Equities team. Mr. Holt may be reached at (713) 214-5401 or via email at kevin.holt@invesco.com.

Devin E. Armstrong**Educational Background and Business Experience:**

- Year of Birth: 1974
- BS, Finance – University of Illinois, 1997
BS, Psychology – University of Illinois, 1997
MBA – Columbia Business School, 2004
Chartered Financial Analyst
- Mr. Armstrong joined Invesco in 2004 and is currently serving as a Senior Portfolio Manager/Co-Lead for the Invesco U.S. Value Equities team. Prior to joining Invesco, Mr. Armstrong served as an Executive Director/Portfolio Manager with Morgan Stanley.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

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- Mr. Armstrong is supervised by Kevin C. Holt, Chief Investment Officer for the Invesco U.S. Value Equities team. Mr. Holt may be reached at (713) 214-5401 or via email at kevin.holt@invesco.com.

Sergio Marcheli

Educational Background and Business Experience:

- Year of Birth: 1975
- BBA, Finance – University of Houston
MBA, Finance – University of St. Thomas
- Mr. Sergio Marcheli joined Invesco in 1995 and is currently serving as a Co-Lead Senior Client Portfolio Manager, Value Equities for the Invesco U.S. Value Equities team.

Disciplinary Information:

- None

Other Business Activities:

- A registered representative of Invesco Distributors, Inc., an Invesco affiliated broker-dealer registered with FINRA.

Additional Compensation:

- None

Supervision:

- The respective Chief Investment Officers, or equivalent roles, are responsible for the investment professionals' adherence to their mandates. The objective of their oversight role is to understand the investment philosophy and process; confirm consistency of investment decisions with investment philosophy and process; and understand performance in light of current market conditions. They are supported in this role by the Invesco Investment Risk group and/or local risk teams which provide oversight reports on the funds advised by Invesco on a quarterly basis. Investment professionals typically spend a minimal amount of time servicing clients. Clients typically interact with Sales professionals and Client Portfolio Managers. Additionally, presentations and other client materials are subject to oversight by the Invesco Compliance Communication department.
- Mr. Marcheli is supervised by Benjamin A. Stewart, Head of Business Strategy, Equities for Invesco. Mr. Stewart may be reached at (212) 323-0594 or via email at benjamin.stewart@invesco.com.

Brian J. Jurkash**Educational Background and Business Experience:**

- Year of Birth: 1977
- BBA, Finance – Stephen F. Austin State University, 1999
MBA, Finance – University of Houston, 2005
- Mr. Jurkash joined Invesco in 2000 and is currently serving as a Senior Portfolio Manager/Co-Lead for the Invesco U.S. Value Equities team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

- The respective Chief Investment Officers, or equivalent roles, are responsible for the investment professionals' adherence to their mandates. The objective of their oversight role is to understand the investment philosophy and process; confirm consistency of investment decisions with investment philosophy and process; and understand performance in light of current market conditions. They are supported in this role by the Invesco Investment Risk group and/or local risk teams which provide oversight reports on the funds advised by Invesco on a quarterly basis. Investment professionals typically spend a minimal amount of time servicing clients. Clients typically interact with Sales professionals and Client Portfolio Managers. Additionally, presentations and other client materials are subject to oversight by the Invesco Compliance Communication department.
- Mr. Jurkash is supervised by Kevin C. Holt, Chief Investment Officer for the Invesco U.S. Value Equities team. Mr. Holt may be reached at (713) 214-5401 or via email at kevin.holt@invesco.com.

Jay Warwick

Educational Background and Business Experience:

- Year of Birth: 1970
- BBA – Stephen F Austin State University, 1993
MBA, Finance – University of Houston, 2002
Chartered Mutual Fund Counselor
- Mr. Warwick joined Invesco in 2002 and is currently serving as a Senior Client Portfolio Manager, Value Equities for the Invesco U.S. Value Equities team.

Disciplinary Information:

- None

Other Business Activities:

- A registered representative of Invesco Distributors, Inc., an Invesco affiliated broker-dealer registered with FINRA.

Additional Compensation:

- None

Supervision:

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- Mr. Warwick is supervised by Sergio Marcheli, Co-Lead Senior Client Portfolio Manager, Value Equities for Invesco. Mr. Marcheli may be reached at (713) 214-5407 or via email at sergio.marcheli@invesco.com

Christopher M. McMeans**Educational Background and Business Experience:**

- Year of Birth: 1976
- BA, Economics – University of Texas at Austin, 1998
MBA – University of Houston, 2006
Chartered Financial Analyst
- Mr. McMeans joined Invesco in 2008 and is currently serving as a Portfolio Manager for the Invesco U.S. Value Equities team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

- The respective Chief Investment Officers, or equivalent roles, are responsible for the investment professionals' adherence to their mandates. The objective of their oversight role is to understand the investment philosophy and process; confirm consistency of investment decisions with investment philosophy and process; and understand performance in light of current market conditions. They are supported in this role by the Invesco Investment Risk group and/or local risk teams which provide oversight reports on the funds advised by Invesco on a quarterly basis. Investment professionals typically spend a minimal amount of time servicing clients. Clients typically interact with Sales professionals and Client Portfolio Managers. Additionally, presentations and other client materials are subject to oversight by the Invesco Compliance Communication department.
- Mr. McMeans is supervised by Peter Santoro, Senior Portfolio Manager for the Invesco U.S. Value Equities team. Mr. Santoro may be reached at (617) 345-8312 or via email at peter.santoro@invesco.com.

Umang Khetan

Educational Background and Business Experience:

- Year of Birth: 1982
- BA, Finance – University of California at Los Angeles, 2004
MBA – Columbia Business School, 2012
Chartered Financial Analyst
- Mr. Khetan joined Invesco in 2011 and is currently serving as a Portfolio Manager for the Invesco U.S. Value Equities team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

- The respective Chief Investment Officers, or equivalent roles, are responsible for the investment professionals' adherence to their mandates. The objective of their oversight role is to understand the investment philosophy and process; confirm consistency of investment decisions with investment philosophy and process; and understand performance in light of current market conditions. They are supported in this role by the Invesco Investment Risk group and/or local risk teams which provide oversight reports on the funds advised by Invesco on a quarterly basis. Investment professionals typically spend a minimal amount of time servicing clients. Clients typically interact with Sales professionals and Client Portfolio Managers. Additionally, presentations and other client materials are subject to oversight by the Invesco Compliance Communication department.
- Mr. Khetan is supervised by Kevin C. Holt, Chief Investment Officer for the Invesco U.S. Value Equities team. Mr. Holt may be reached at (713) 214-5401 or via email at kevin.holt@invesco.com.

Matt Titus**Educational Background and Business Experience:**

- Year of Birth: 1979
- BA, Accounting and Economics – Luther College, 2001
MBA – Ohio State University, 2004
Chartered Financial Analyst
- Mr. Titus joined Invesco in 2016 and is currently serving as a Senior Portfolio Manager/Co-lead for the Invesco U.S. Value Equities team. Prior to joining Invesco, Mr. Titus served as a Portfolio Manager at American Century.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

- The respective Chief Investment Officers, or equivalent roles, are responsible for the investment professionals' adherence to their mandates. The objective of their oversight role is to understand the investment philosophy and process; confirm consistency of investment decisions with investment philosophy and process; and understand performance in light of current market conditions. They are supported in this role by the Invesco Global Performance Measurement & Risk group and/or local risk teams which provide oversight reports on the funds advised by Invesco on a quarterly basis. Investment professionals typically spend a minimal amount of time servicing clients. Clients typically interact with Sales professionals and Client Portfolio Managers. Additionally, presentations and other client materials are subject to oversight by the Invesco Compliance Communication department.
- Mr. Titus is supervised by Kevin C. Holt, Chief Investment Officer for the Invesco U.S. Value Equities team. Mr. Holt may be reached at (713) 214-5401 or via email at kevin.holt@invesco.com.

Caroline Le Feuvre**Educational Background and Business Experience:**

- Year of Birth: 1983
- BS, Commerce – University of Virginia, McIntire School of Commerce, 2006
MBA – Stanford University, Graduate School of Business, 2012
- Ms. Le Feuvre joined Invesco in 2014 and is currently serving as a Portfolio Manager for the Invesco U.S. Value Equities team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

- The respective Chief Investment Officers, or equivalent roles, are responsible for the investment professionals' adherence to their mandates. The objective of their oversight role is to understand the investment philosophy and process; confirm consistency of investment decisions with investment philosophy and process; and understand performance in light of current market conditions. They are supported in this role by the Invesco Investment Risk group and/or local risk teams which provide oversight reports on the funds advised by Invesco on a quarterly basis. Investment professionals typically spend a minimal amount of time servicing clients. Clients typically interact with Sales professionals and Client Portfolio Managers. Additionally, presentations and other client materials are subject to oversight by the Invesco Compliance Communication department.
- Ms. Le Feuvre is supervised by Peter Santoro, Senior Portfolio Manager for the Invesco U.S. Value Equities team. Mr. Santoro may be reached at (617) 345-8312 or via email at peter.santoro@invesco.com.

Ramez Nashed

Educational Background and Business Experience:

- Year of Birth: 1970
- BS, Finance – New Jersey City University
MBA, Finance – Seton Hall University
- Mr. Nashed joined Invesco in 1995 and is currently serving as a Portfolio Manager for the Invesco U.S. Value Equities team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

- The respective Chief Investment Officers, or equivalent roles, are responsible for the investment professionals' adherence to their mandates. The objective of their oversight role is to understand the investment philosophy and process; confirm consistency of investment decisions with investment philosophy and process; and understand performance in light of current market conditions. They are supported in this role by the Invesco Investment Risk group and/or local risk teams which provide oversight reports on the funds advised by Invesco on a quarterly basis. Investment professionals typically spend a minimal amount of time servicing clients. Clients typically interact with Sales professionals and Client Portfolio Managers. Additionally, presentations and other client materials are subject to oversight by the Invesco Compliance Communication department.
- Mr. Nashed is supervised by Ellen Gold, Senior Portfolio Manager for the Invesco U.S. Value Equities team. Ms. Gold may be reached at (212) 652-4244 or via email at ellen.gold@invesco.com.

Peter Santoro**Educational Background and Business Experience:**

- Year of Birth: 1972
- BA, History – Amherst College, 1994
Chartered Financial Analyst
- Mr. Santoro joined Invesco in 2021 and is currently serving as a Senior Portfolio Manager for the Invesco U.S. Value Equities team. Prior to joining Invesco, Mr. Santoro served as a Senior Portfolio Manager at Columbia Threadneedle Investments.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

- The respective Chief Investment Officers, or equivalent roles, are responsible for the investment professionals' adherence to their mandates. The objective of their oversight role is to understand the investment philosophy and process; confirm consistency of investment decisions with investment philosophy and process; and understand performance in light of current market conditions. They are supported in this role by the Invesco Global Performance Measurement & Risk group and/or local risk teams which provide oversight reports on the funds advised by Invesco on a quarterly basis. Investment professionals typically spend a minimal amount of time servicing clients. Clients typically interact with Sales professionals and Client Portfolio Managers. Additionally, presentations and other client materials are subject to oversight by the Invesco Compliance Communication department.
- Mr. Santoro is supervised by Kevin C. Holt, Chief Investment Officer for the Invesco U.S. Value Equities team. Mr. Holt may be reached at (713) 214-5401 or via email at kevin.holt@invesco.com.

Craig Leopold

Educational Background and Business Experience:

- Year of Birth: 1965
- BBA, – Adelphi University, 1989
MBA, – Fordham University, 1993
Chartered Financial Analyst
- Mr. Leopold joined Invesco in 2022 and is currently serving as Portfolio Manager for the Invesco U.S. Value Equities team. Prior to joining Invesco, Mr. Leopold served as a Portfolio Manager at Rockefeller Capital Management and Threadneedle Investments.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

- The respective Chief Investment Officers, or equivalent roles, are responsible for the investment professionals' adherence to their mandates. The objective of their oversight role is to understand the investment philosophy and process; confirm consistency of investment decisions with investment philosophy and process; and understand performance in light of current market conditions. They are supported in this role by the Invesco Global Performance Measurement & Risk group and/or local risk teams which provide oversight reports on the funds advised by Invesco on a quarterly basis. Investment professionals typically spend a minimal amount of time servicing clients. Clients typically interact with Sales professionals and Client Portfolio Managers. Additionally, presentations and other client materials are subject to oversight by the Invesco Compliance Communication department.
- Mr. Leopold is supervised by Kevin Cronin, Head of Equity Investments for Invesco. Mr. Cronin may be reached at (404) 439-4567 or via email at kevin.cronin@invesco.com.



Invesco Advisers, Inc.
1555 Peachtree St. N.E.
Atlanta, GA 30309

March 31, 2022

Form ADV Part 2B Brochure Supplement

This brochure supplement provides information about the supervised persons of Invesco Advisers, Inc. which supplements Part 2A Firm Brochure of Form ADV. You should have received a copy of that brochure. Please contact Todd F. Kuehl at (404) 439-3321 if you did not receive Invesco Advisers, Inc.'s brochure or if you have any questions about the contents of this supplement.

The information in this brochure has not been approved or verified by the United States Securities and Exchange Commission, or by any state securities authority. Additional information about Invesco Advisers, Inc. is available on the SEC's website at www.adviserinfo.sec.gov

Professional Certifications

Some Invesco Advisers, Inc. employees have earned certifications and credentials that are required to be explained in further detail.

Chartered Financial Analyst

Chartered Financial Analyst (CFA) charter is a globally respected, graduate-level investment credential established in 1962 and awarded by CFA Institute – the largest global association of investment professionals.

To earn the CFA charter, candidates must: 1) pass three sequential, six-hour examinations; 2) have at least four years of qualified professional investment experience; 3) join CFA institute as members; and 4) commit to abide by, and annually reaffirm, their adherence to the CFA Institute Code of Ethics and Standards of Professional Conduct.

High Ethical Standards

The CFA Institute Code of Ethics and Standards of Professional Conduct, enforced through an active professional conduct program, require CFA charterholders to:

- Place their clients' interest ahead of their own
- Maintain independence and objectivity
- Act with integrity
- Maintain and improve their professional competence
- Disclose conflicts of interest and legal matters

Additionally, regulatory bodies in 19 countries recognize the CFA charter as a proxy for meeting certain licensing requirements, and more than 125 colleges and universities around the world have incorporated a majority of the CFA Program curriculum into their own finance courses.

Comprehensive and Current Knowledge

The CFA Program curriculum provides a comprehensive framework of knowledge for investment decision making and is firmly grounded in the knowledge and skills used every day in the investment profession. The three levels of the CFA Program test a proficiency with a wide range of fundamental and advanced investment topics, including ethical and professional standards, fixed-income and equity analysis, alternative and derivative instruments, economics, financial reporting standards, portfolio management, and wealth planning.

The CFA Program curriculum is updated every year by experts from around the world to ensure that candidates learn the most relevant and

practical new tools, ideas, and investment and wealth management skills to reflect the dynamic and complex nature of the profession.

To learn more about the CFA charter, visit www.cfainstitute.org

Certified Public Accountant

The Certified Public Accountant (CPA) designation can be obtained by successfully completing the Uniform Certified Public Accountant examination which is set by the American Institute of Certified Public accountants and administered by the National Association of State of Boards of Accountancy.

The licensing and certification requirements are imposed separately by each state's laws and therefore vary from state to state. Most states require at least a bachelor's degree to be eligible to become a CPA. Additionally, some states may require relevant work experience for the CPA certificate and others may waive this requirement if a candidate possesses a higher academic qualification compared to the state's requirement to appear for the Uniform CPA exam.

Ronald Zibelli

Educational Background and Business Experience:

- Year of Birth: 1959
- BS, Finance – Lehigh University, 1981
Chartered Financial Analyst
- Mr. Zibelli joined Invesco in 2019 when the firm combined with OppenheimerFunds and is currently serving as the Chief Investment Officer for the Invesco Growth Equities team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

- The respective Chief Investment Officers, or equivalent roles, are responsible for the investment professionals' adherence to their mandates. The objective of their oversight role is to understand the investment philosophy and process; confirm consistency of investment decisions with investment philosophy and process; and understand performance in light of current market conditions. They are supported in this role by the Invesco Investment Risk group and/or local risk teams which provide oversight reports on the funds advised by Invesco on a quarterly basis. Investment professionals typically spend a minimal amount of time servicing clients. Clients typically interact with Sales professionals and Client Portfolio Managers. Additionally, presentations and other client materials are subject to oversight by the Invesco Compliance Communication department.
- Mr. Zibelli is supervised by Kevin Cronin, Head of Equity Investments for Invesco. Mr. Cronin may be reached at (404)439-4567 or via email at kevin.cronin@invesco.com.

Davis Paddock**Educational Background and Business Experience:**

- Year of Birth: 1971
- BA – The University of Texas at Austin, 1994
MBA – The University of Texas at Austin, 2001
Chartered Financial Analyst
- Mr. Paddock joined Invesco in 2000 and is currently serving as a Portfolio Manager for the Invesco U.S. Growth Equities team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

- The respective Chief Investment Officers, or equivalent roles, are responsible for the investment professionals' adherence to their mandates. The objective of their oversight role is to understand the investment philosophy and process; confirm consistency of investment decisions with investment philosophy and process; and understand performance in light of current market conditions. They are supported in this role by the Invesco Investment Risk group and/or local risk teams which provide oversight reports on the funds advised by Invesco on a quarterly basis. Investment professionals typically spend a minimal amount of time servicing clients. Clients typically interact with Sales professionals and Client Portfolio Managers. Additionally, presentations and other client materials are subject to oversight by the Invesco Compliance Communication department.
- Mr. Paddock is supervised by Juan R. Hartsfield, Senior Portfolio Manager for the Invesco U.S. Growth Equities team. Mr. Hartsfield may be reached at (713) 214-1164 or via email at juan.hartsfield@invesco.com.

Juan R. Hartsfield**Educational Background and Business Experience:**

- Year of Birth: 1971
- BS, Petroleum Engineering – University of Texas at Austin, 1994
MBA – University of Michigan, 1999
Chartered Financial Analyst
- Mr. Hartsfield joined Invesco in 2004 and is currently serving as a Senior Portfolio Manager for the Invesco Growth Equities team. Prior to joining Invesco, Mr. Hartsfield served as an Analyst/Portfolio Manager for JPMorgan Asset Management.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

- The respective Chief Investment Officers, or equivalent roles, are responsible for the investment professionals' adherence to their mandates. The objective of their oversight role is to understand the investment philosophy and process; confirm consistency of investment decisions with investment philosophy and process; and understand performance in light of current market conditions. They are supported in this role by the Invesco Investment Risk group and/or local risk teams which provide oversight reports on the funds advised by Invesco on a quarterly basis. Investment professionals typically spend a minimal amount of time servicing clients. Clients typically interact with Sales professionals and Client Portfolio Managers. Additionally, presentations and other client materials are subject to oversight by the Invesco Compliance Communication department.
- Mr. Hartsfield is supervised by Ronald Zibelli, Chief Investment Officer for the Invesco Growth Equities team. Mr. Zibelli may be reached at (212) 323-5163 or via email at ronald.zibelli@invesco.com.

Clay Manley

Educational Background and Business Experience:

- Year of Birth: 1972
- BA – Vanderbilt University, 1995
MBA – Emory University, 2001
Chartered Financial Analyst
- Mr. Manley joined Invesco in 2000 and is currently serving as a Portfolio Manager for the Invesco U.S. Growth Equities team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

- The respective Chief Investment Officers, or equivalent roles, are responsible for the investment professionals' adherence to their mandates. The objective of their oversight role is to understand the investment philosophy and process; confirm consistency of investment decisions with investment philosophy and process; and understand performance in light of current market conditions. They are supported in this role by the Invesco Investment Risk group and/or local risk teams which provide oversight reports on the funds advised by Invesco on a quarterly basis. Investment professionals typically spend a minimal amount of time servicing clients. Clients typically interact with Sales professionals and Client Portfolio Managers. Additionally, presentations and other client materials are subject to oversight by the Invesco Compliance Communication department.
- Mr. Manley is supervised by Juan R. Hartsfield, Sr. Portfolio Manager for the Invesco U.S. Growth Equities team. Mr. Hartsfield may be reached at (713) 214-1164 or via email at juan.hartsfield@invesco.com.

Janet Luby**Educational Background and Business Experience:**

- Year of Birth: 1963
- BBA, Finance – Texas A&M University, 1985
Chartered Financial Analyst
Certified Public Accountant
- Ms. Luby joined Invesco in 1987 and is currently serving as a Portfolio Manager for the Invesco Growth Equities team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

- The respective Chief Investment Officers, or equivalent roles, are responsible for the investment professionals' adherence to their mandates. The objective of their oversight role is to understand the investment philosophy and process; confirm consistency of investment decisions with investment philosophy and process; and understand performance in light of current market conditions. They are supported in this role by the Invesco Investment Risk group and/or local risk teams which provide oversight reports on the funds advised by Invesco on a quarterly basis. Investment professionals typically spend a minimal amount of time servicing clients. Clients typically interact with Sales professionals and Client Portfolio Managers. Additionally, presentations and other client materials are subject to oversight by the Invesco Compliance Communication department.
- Ms. Luby is supervised by Erik Voss, Senior Portfolio Manager for the Invesco Growth Equities team. Mr. Voss may be reached at (713) 214-2273 or via email at erik.voss@invesco.com.

Ido Cohen

Educational Background and Business Experience:

- Year of Birth: 1975
- BS, Economics – The Wharton School of the University of Pennsylvania, 1997
- Mr. Cohen joined Invesco in 2010 and is currently serving as a Senior Portfolio Manager for the Invesco Growth Equities team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

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- Mr. Cohen is supervised by Erik Voss, Senior Portfolio Manager for the Invesco Growth Equities team. Mr. Voss may be reached at (713) 214-2273 or via email at erik.voss@invesco.com.

Justin Livengood

Educational Background and Business Experience:

- Year of Birth: 1974
- BSBA – Georgetown University, 1996
MBA – Harvard University, 2002
Chartered Financial Analyst
- Mr. Livengood joined Invesco in 2019 when the firm combined with OppenheimerFunds and is currently serving as a Senior Portfolio Manager for the Invesco Growth Equities team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

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- Mr. Livengood is supervised by Ronald Zibelli, Chief Investment Officer for the Invesco Growth Equities team. Mr. Zibelli may be reached at (212) 323-5163 or via email at Ronald.Zibelli@invesco.com.

Justin Sander**Educational Background and Business Experience:**

- Year of Birth: 1980
- BBA, Finance – Texas State University
MBA – University of Texas at Austin
Chartered Financial Analyst
- Mr. Sander joined Invesco in 2013 and is currently serving as a Portfolio Manager for the Invesco U.S. Growth Equities team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

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- Mr. Sander is supervised by Juan R. Hartsfield, Sr. Portfolio Manager for the Invesco U.S. Growth Equities team. Mr. Hartsfield may be reached at (713) 214-1164 or via email at juan.hartsfield@invesco.com.

Erik J. Voss**Educational Background and Business Experience:**

- Year of Birth: 1967
- BS, Mathematics – University of Wisconsin, 1989
MS, Finance – University of Wisconsin, 1993
Chartered Financial Analyst
- Mr. Voss joined Invesco in 2010 and currently serving as a Senior Portfolio Manager for the Invesco Growth Equities team. Prior to joining Invesco, Mr. Voss served as Portfolio Manager for J&W Seligman/Ameriprise.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

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- Mr. Voss is supervised by Ronald Zibelli, Chief Investment Officer for the Invesco Growth Equities team. Mr. Zibelli may be reached at (212) 323-5163 or via email at ronald.zibelli@invesco.com.

Asutosh Shah

Educational Background and Business Experience:

- Year of Birth: 1969
- BA – Syracuse University, 1991
MBA – NYU, 1996
Chartered Financial Analyst
Certified Public Accountant
- Mr. Shah joined Invesco in 2019 when the firm combined with OppenheimerFunds and is currently serving as a Senior Portfolio Manager for the Invesco Growth Equities team.

Disciplinary Information:

- None

Other Business Activities:

- None

Additional Compensation:

- None

Supervision:

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- Mr. Shah is supervised by Ronald Zibelli, Chief Investment Officer for the Invesco Growth Equities team. Mr. Zibelli may be reached at (212) 323-5163 or via email at Ronald.Zibelli@invesco.com.