



ALLIANCEBERNSTEIN®

FORM ADV PART 2A

INVESTMENT ADVISER DISCLOSURE STATEMENT
MARCH 31, 2020

AllianceBernstein L.P.

- + AB Broadly Syndicated Loan Manager LLC
- + AB Custom Alternative Solutions LLC
- + Private Credit Investors LLC
- + AllianceBernstein Holding L.P.
- + AllianceBernstein Corporation
- + Sanford C. Bernstein & Co., LLC
- + W.P. Stewart Asset Management Ltd.

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This brochure provides information about the qualifications and business practices of AllianceBernstein L.P., its publicly traded affiliate AllianceBernstein Holding L.P., its general partner AllianceBernstein Corporation and its affiliated registered advisers. The term "registered" refers to our legal status and does not imply a particular level of training. If you have any questions about the contents of this brochure, please contact us at ADVCompliance@alliancebernstein.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 the foregoing entities also is available on the SEC's website at www.adviserinfo.sec.gov.

March 2020

Dear Client,

We are pleased to provide you with our Investment Adviser Brochure ("Brochure"), which is also known as Part 2A of our firm's SEC Form ADV. It contains important information about our business practices as well as a description of potential conflicts of interest relating to our advisory business which could affect your account with us. This Brochure applies to the investment activities of AllianceBernstein L.P. and its various investment adviser affiliates and subsidiaries. For purposes of this Brochure, we collectively refer to these entities as "AB."

We are providing you with this material in accordance with Rule 204-3 of the Investment Advisers Act of 1940, which requires a registered investment adviser to provide a written disclosure statement upon entering into an advisory relationship. Future updates to this Brochure may be obtained by written request to AllianceBernstein L.P., Attn: Chief Compliance Officer, 1345 Avenue of the Americas, New York, New York, 10105.

This Brochure is intended for clients whose accounts are serviced (directly or indirectly) by AB. Clients of our Bernstein Private Wealth Management Services ("Bernstein Private Wealth Services") are also encouraged to review the supplemental literature about our private client services.

Thank you for choosing AB. If you have any questions about the information in this statement, please contact your AB client service representative.

Respectfully yours,

A handwritten signature in black ink, appearing to read "M. Manley", written in a cursive style.

Mark R. Manley
Chief Compliance Officer
Deputy General Counsel
AllianceBernstein L.P.

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SUMMARY OF MATERIAL CHANGES (ADV ITEM 2)

A summary of the material changes to this brochure since its last annual update on March 29, 2019 can be found in Appendix B.

A. AB'S INVESTMENT ADVISORY BUSINESS (ADV ITEM 4)

INTRODUCTION

AllianceBernstein L.P. ("AB") is a research-driven investment adviser that is global in scope and client-centered in its approach.

We believe research excellence is the key to better outcomes, so we have built research capabilities with exceptional breadth, depth and focus on innovation. In addition to creating a variety of investment services, we have developed separate service organizations to meet the distinct needs of private clients, mutual fund investors and the many types of institutional clients we serve in markets around the world.

HISTORY OF AB

AB traces its origins back more than 50 years.

One of our predecessor firms, Sanford C. Bernstein & Co., Inc., was founded in 1967 as an investment manager and broker-dealer for private clients. The other, Alliance Capital Management Corporation, was registered as an investment adviser in 1971 after the asset management department of Donaldson, Lufkin & Jenrette, Inc., merged with the investment advisory business of Moody's Investor Services, Inc.

In October 2000, Alliance Capital acquired Sanford C. Bernstein. Alliance Capital's expertise in growth equity and corporate fixed-income investing complemented Bernstein's expertise in value equity and tax-exempt fixed-income management. In 2006, Alliance Capital Management L.P. changed its name to AllianceBernstein L.P. On May 2, 2018, we announced that we will establish our corporate headquarters in Nashville, Tennessee, and are currently planning to relocate approximately 1,250 jobs to that office.

OWNERSHIP OF AB

In 1988, AB (then called Alliance Capital) conducted an initial public offering as a master limited partnership. The name of the publicly traded limited partnership is now AllianceBernstein Holding L.P., and the name of our general partner is AllianceBernstein Corporation. The publicly traded partnership units are listed on the New York Stock Exchange under the symbol "AB."

Up until recently, AXA, one of the world's largest financial services companies, was AB's majority shareholder. AXA had acquired a controlling interest in AB in 1990 through its acquisition of The Equitable Life Assurance Society of the United States, which had acquired AB in 1985. During 2017, AXA S.A. ("AXA") announced its intention to pursue the sale of a minority stake in Equitable Holdings, Inc. ("EQH"), the holding company for a diversified financial services organization, through an initial public offering ("IPO"). During the second quarter of 2018, EQH completed the IPO and, during subsequent secondary offerings AXA has further reduced its ownership interest in EQH. In 2019, AXA sold its entire remaining interest in EQH. However, EQH and its subsidiaries continue to own a controlling economic interest in AB.

In addition, a minority economic interest in AB was owned by the public through AllianceBernstein Holding L.P.

ASSETS UNDER MANAGEMENT

As of December 31, 2019, AB's public reported AUM totaled approximately \$623 billion¹. Of this amount, approximately \$583 billion in assets were managed for discretionary portfolios and approximately \$30 billion were managed on a non-discretionary basis.

OUR APPROACH TO INVESTING

The foundation of AB's approach to investing is our high-quality, in-depth research. We believe that our global team of research professionals allows us to achieve investment success for our clients.

Our global team of research professionals, whose disciplines include economic, fundamental equity, fixed income and quantitative research gives us a competitive advantage in achieving investment success for our clients. Within these research disciplines, we also have investment professionals focused on multi-asset, wealth management and alternative investment strategies.

In conducting security analysis, we utilize a broad spectrum of information, including without limitation financial publications, third-party research materials, annual reports, prospectuses, regulatory filings, company press releases, corporate rating services, inspections of corporate activities and meetings with management of various companies.

Our analysts create proprietary research to support our portfolio managers, who also may conduct their own research. Our portfolio managers then employ a range of strategies to implement the research-based advice we give to clients concerning their portfolios. The vast majority of AB's strategies involve our discretionary management of client portfolios.

Our chief investment strategies and services include:

- + **Fixed Income**, which offers actively managed multi-sector and single-sector fixed income strategies across the risk/return spectrum in every major market globally including taxable and tax-exempt securities.
- + **Passive Management**, which includes both index and enhanced index strategies.
- + **Value Equities**, an actively managed investment approach which generally targets stocks that are considered undervalued.
- + **Growth Equities**, an actively managed investment style which generally targets stocks with underappreciated growth potential.
- + **Multi Asset**, which draws on deep capital-markets expertise and a full range of risk/return sources as building blocks, combining research insights to create thoughtful, long-term investment solutions tailored to the needs of each client.
- + **Asset Allocation Services**, where we offer strategies specifically-tailored for our clients, such as customized target-date fund retirement services for defined contribution plan sponsors and our Dynamic Asset Allocation service, which is designed to mitigate the effects of extreme market volatility on a portfolio in order to deliver more consistent returns.

¹ AB's regulatory assets under management are approximately \$585 billion. Regulatory assets under management are based on the current assets under management plus any uncalled capital commitments and excludes certain items such as asset allocation advice without continuous and regular monitoring and reallocation.

- + **Alternative Investments**, which offer strategies distinct from our flagship long-only services. These services generally are only available to clients who meet certain legal requirements and include proprietary real estate equity and debt funds and hedge funds of funds, amongst others. Hedge funds that AB manages employ multi-asset, multi-sector, and long/short strategies, among others.
- + **Select US Equities**, which utilizes bottom-up fundamental analysis to identify equity investment opportunities. It is available in long-only and long-short formats, and is not constrained by market capitalization, style, or sector.
- + **Concentrated Growth Equities**, which utilizes an appraisal methodology to identify large- and mid-capitalization companies with attractive long-term earnings growth and invests in a relatively small number of stocks.
- + **Global Core Equities**, which seeks long-term growth of capital by investing in a portfolio of equity securities of issuers from markets around the world, including issuers in developed countries as well as emerging market countries. The Portfolio does not seek to have an investment bias towards any investment style, economic sector, country or company size.
- + **Real Estate Services**, which include actively managed investments in the shares of real estate investment trusts as well as investments in actual real estate assets and mortgages related to those assets.
- + **Middle Market Lending**, which includes primary-issue middle market credit opportunities that are directly sourced and privately negotiated. Middle Market Lending emphasizes secured lending by focusing on first lien, unitranche and second lien loans, while considering mezzanine, structured preferred stock and noncontrol equity coinvestment opportunities. Middle Market Lending is guided by a valuation-based investment philosophy and it follows a disciplined investment process (See AB Private Credit Investors LLC Form ADV Brochure).
- + **Broadly Syndicated Loan Management**, which primarily serves as the collateral manager to issuers of collateralized loan obligations (including short-term and long-term warehouse credit or repurchase agreement facilities entered into to finance the preliminary accumulation and “ramp-up” of assets comprising the initial asset pool, as well as other warehouse, repurchase or other credit facilities and/or special purpose vehicles, all of which are collectively referred to herein as “CLOs”).

These strategies are available in different forms and vehicles, including separately managed accounts, mutual funds or public funds registered in jurisdictions outside of the United States. However, some strategies are offered through private investment vehicles that are available only to investors who meet certain legal criteria.

Certain strategies are made available through delivery of investment models to clients and/or institutional advisors (“Model Clients”) who may offer substantially similar services to their clients. These investment recommendations may be provided to multiple Model Clients at a similar time, but the client’s implementation of the recommendations made in the model will generally be made at some point after they have been implemented by AB’s discretionary accounts. The delay in model implementation for Model Clients may result in AB discretionary and other non-discretionary accounts obtaining better execution for their

transactions than the accounts of Model Clients. Further, the fees paid by Model Clients will generally increase to the extent such clients require customization from AB’s standard investment models.

Our investment services can focus on a single investment approach—such as Growth Equities, Value Equities, or Fixed Income high yield investing—or a blend of those approaches. The objectives and restrictions within individual strategies normally are driven by market capitalization (e.g., large-, mid- and small-cap equities), term (e.g., long-, intermediate- and short-duration debt securities), geographic location criteria (e.g., US, international, global and emerging markets), and client guidelines. In late 2011, AB committed to adopt and implement the U.N. Principles for Responsible Investment in its active investment strategies.

As noted in Section E, our strategies and services may invest in derivatives when the relevant investment guidelines allow. In 2013, AB registered with the U.S. Commodity Futures Trading Commission as a Commodity Pool Operator and Commodity Trading Advisor to comply with changes in certain Commission regulations.

The research created by our investment analysts is not offered for sale or distribution to the public. We may provide some non-discretionary clients with access to some of this research information and access to these research professionals. Compensation for this information is included as part of the non-discretionary advisory fee. Additionally, our investment teams may use external research professionals within certain investment disciplines to augment AB’s internal investment decision making process.

Certain discretionary clients, who are themselves investment managers, may be granted access to our research analysts and other investment professionals and may attend analyst and other meetings where investments are discussed. Any information divulged will be general, rather than client-specific. When appropriate, these clients are deemed associated persons of AB and subject to our Code of Business Conduct and Ethics.

The current Portfolio Manager and a research associate of the AB Concentrated Engagement Fund (currently an incubated fund), also serve as a research analyst and associate for our affiliated broker-dealer, Sanford C. Bernstein & Co., LLC (“Bernstein LLC”).

For each of these arrangements, we assess how the information may be used within the client’s own investment process. We take steps to ensure that sharing such information does not create any negative impact to our discretionary clients (e.g., front-running trades). Specifically, we have implemented procedures to resolve material potential conflicts in favor of AB’s discretionary clients. These include delaying the release of information to these clients and barring their access to sources of other information.

BERNSTEIN PRIVATE WEALTH SERVICES

Our Bernstein Private Wealth Services comprise investment services to high-net-worth individuals, trusts and estates, charitable foundations, partnerships, private and family corporations, and other entities traditionally considered to be “private clients.”

Bernstein Private Wealth Services offers a complete range of investment services which are designed to preserve and grow wealth. Through this unit, AB may customize a private client portfolio that suits any type of investment goal, income needs, tax situation or tolerance for risk.

While it tailors advice to the unique circumstances of our private clients, Bernstein Private Wealth Services uses a number of the centrally managed strategies identified above as the building blocks for portfolio diversification. These strategies are designed to provide clients with exposure to equities, bonds, real estate investment trusts, short-duration investing, and/or alternative investments such as hedge funds.

A number of these services are available as separately managed accounts, with certain minimum investment requirements. Others are available through the Sanford C. Bernstein Fund, Inc. and AB funds, offered by prospectus, or hedge funds and other private investment vehicles, which are only available to clients who meet certain legal requirements. Supplemental literature about these services—including Bernstein's Investment Management Services and Policies booklet—is available through Bernstein Private Wealth Services' financial advisors.

Actively managed portfolios are at the core of Bernstein's investment philosophy and remain its recommended approach in most cases. However, passively managed investments, including exchange traded funds, are also available to Bernstein clients who wish to invest in them. Bernstein believes that an actively managed portfolio can be best suited to achieve investment outperformance over time, despite the higher fees paid for actively managed services. Nevertheless, passive investments may outperform actively managed investments at certain times.

The diversified portfolio created for each client of Bernstein Private Wealth Services is intended to maximize after-tax investment returns, in light of the client's individual investment goals, income requirements, risk tolerance, tax situation and other relevant factors.

Most of the private clients serviced by our firm's Bernstein Private Wealth Services invest through an all-inclusive fee program partially serviced by our wholly-owned broker-dealer subsidiary, Bernstein LLC. Under the terms of this program, AB provides investment management and ancillary services to clients, while Bernstein LLC provides order execution for equity securities, custody and related services. Participants individually appoint AB and Bernstein, LLC, to perform their respective services.

RETAIL MANAGED ACCOUNT PROGRAMS

We offer separately managed account programs (also known as "wrap fee" or "SMA" programs) to individual investors through platforms sponsored by intermediaries. There are several different forms of SMA programs and several differences between how AB manages SMA accounts compared to other discretionary accounts. Unlike most of our client relationships, SMA clients do not pay a fee directly to AB and have limited direct contact with AB investment professionals. SMA clients generally maintain asset levels far below the minimum account sizes for our Private Client and Institutional services.

AB is often selected as an SMA manager by the client with the assistance of the program sponsor. The sponsor typically is a broker-dealer that has its own relationship with the client. The selection of AB to manage the individual SMA is generally based upon the compatibility of our investment philosophy with the client's investment objectives and level of risk tolerance. In a typical SMA program, AB develops the overall portfolio strategy and implements it in each client portfolio. Implementation generally is done through the automated systems supplied by AB, but automated systems may also be supplied by the intermediary sponsoring the SMA program. With the exception of certain fixed income trades, all portfolio transactions normally are executed through the intermediary. Please see Section I for more

information about the selection of brokers for SMA clients and the associated fees and expenses.

Some program sponsors offer an SMA program in which AB provides a model portfolio of stocks, bonds, or a combination of both, chosen to achieve a specific objective for the SMA sponsor and its client. The model is communicated to the intermediary sponsoring the SMA program, and the intermediary is responsible for executing securities trades to establish and maintain the portfolio according to our model.

AB monitors, evaluates, and adjusts investments in response to changing economic conditions or the shifting value of portfolio holdings. Changes to an SMA model portfolio are based on AB's investment research and the experience and judgment of the investment team responsible for the model. We communicate portfolio adjustments to the appropriate intermediary at times that are both scheduled and unscheduled. The sponsoring intermediary determines what trades to enter for each individual client, and when, as a result of changes in the model. In contrast, trades for discretionary accounts opened directly with AB are handled by our trading professionals and may be executed before model updates are communicated to the sponsoring intermediaries.

Clients may terminate AB as their manager in an SMA program at any time. Termination procedures and information regarding the refund of prepaid fees for each program are described in the SMA sponsor's brochure.

CLIENT INVESTMENT GUIDELINES

Each investment service or strategy offered by AB is defined by its own portfolio construction parameters and investment guidelines developed by the firm. These guidelines are described in various marketing and other materials provided to clients, as well as in direct discussions with clients.

Further, each investment advisory contract between AB and a client details the manner in which we are required to manage that client's portfolio, including the selected strategy, legal and regulatory restrictions, and client-specific guidelines and restrictions.

Certain clients have additional guidelines or restrictions imposed on their portfolios by law or regulations. This includes the Employee Retirement Income Security Act of 1974 ("ERISA"), the Investment Company Act of 1940, the Internal Revenue Code, or other local or state laws. Clients with separately managed accounts may impose additional investment guidelines and limitations on our discretion. These can include guidelines designed to reduce risk (such as not permitting leverage), single stock or sector restrictions, or socially-responsible restrictions (such as no investments in a company domiciled in a rogue country). The client is required to inform us in writing of these guidelines and restrictions, and only written guidelines (or modifications) are acceptable.

Clients with separately managed accounts who wish to restrict certain issuers from their portfolios generally are required to provide AB with a specific list of proscribed issuers, which are then coded in the relevant portfolio management or trading system. Clients are responsible for updating this list of restricted names. If a client seeks to have industry-related restrictions, we may use pre-defined issuer lists generated by third parties.

As an investment advisor to SMA programs, AB accommodates reasonable restrictions imposed by the client on the management of the

account, subject to the limitations and considerations set forth above. In order to effectively and efficiently manage certain industry-related restrictions, AB may use pre-defined issuer lists generated by third parties, if available. AB may also use a list of proscribed issuers that is provided by the client.

Prior to opening an account that can accept client-specific restrictions, personnel (including portfolio management and legal staff) review a client's proposed investment guidelines. Once guidelines are finalized and approved, they are recorded in our trade compliance systems.

We decline to accept investment guidelines submitted by clients that we determine, in our judgment, to be unduly restrictive in light of portfolio objectives. Clients that subscribe to an AB service and then impose limitations or restrictions on the investment strategy or process should understand that their investment returns will differ from other clients in that service, in some cases materially. AB declines to enter into an investment advisory relationship with any prospective client whose investment objectives may be considered incompatible with AB's basic investment philosophy or strategies, or where the prospective client seeks to impose unduly restrictive investment guidelines on AB.

Proposed guidelines for new commingled vehicle accounts are reviewed by these personnel as well; those guidelines will apply to the vehicle's portfolio, and normally cannot be influenced by investor-specific guidelines.

B. FEES AND COMPENSATION (ADV ITEM 5)

AB is generally compensated on the basis of fees calculated as a percentage of a client's assets under management. In certain instances, however, AB is compensated under performance-based fee arrangements in compliance with SEC Rule 205-3 under the Investment Advisers Act of 1940. Compensation for employee benefit plans is subject to applicable regulations and opinions of the Department of Labor under ERISA. AB may also, on occasion, be compensated through fixed-fee arrangements.

INSTITUTIONAL FEE ARRANGEMENTS

Fees that are calculated as a percentage of assets under management are generally charged quarterly based upon the amount of assets under management at the beginning or the end of the quarter, or the average over the quarter or preceding quarter, as agreed with the client. In the event a client terminates its advisory contract with AB during a quarterly period, the fee for that period is prorated based on the number of days or months during the period in which AB performed services. The client is also entitled to a pro rata refund of the portion of the quarterly fee, when paid in advance, for the remaining balance of the quarter.

The minimum account sizes for most institutional accounts are set forth in Section D.

Institutional fees may be modified in certain circumstances including where an account exceeds a certain market value or is expected to grow rapidly; where a relationship already exists with a client; or where the client retains AB to provide services with respect to several investment mandates. AB's standard fee rates are set forth in Section P. However, the fees charged to clients may be negotiated in certain circumstances depending on a number of factors including, but not limited to: the type of client; the complexity of the client's situation; the composition of the client's account; the potential for additional account deposits; the nature, longevity and size of the overall client relationship;

the total amount of assets under management for the client; and other business considerations.

In a number of institutional strategies, clients have the option of having their management fees billed to them on a quarterly basis, or having such fees deducted quarterly from their account.

In addition to the fee schedules in Appendix A, there are specialized investment strategies with individualized fee arrangements in place as well as historical fee schedules with longstanding clients that may differ from those applicable to new client relationships. AB has negotiated modified fee schedules with certain investment consulting firms whose clients have resulting in revenues of at least \$3,000,000.00.

AB has various performance-based fee arrangements available for interested clients. The most common performance-based fee arrangement includes a reduced asset-based fee, which is billed quarterly, and an annual performance-based fee, which is calculated as a percentage of the account's outperformance relative to an agreed upon performance benchmark over a specified period of time. Performance-based fees are negotiated in advance with the client.

PRIVATE CLIENT FEE ARRANGEMENTS

Our Bernstein Private Wealth Services is the sponsor of an all-inclusive fee program which is partially serviced by our wholly-owned broker-dealer subsidiary, Bernstein LLC. This fee generally is deducted from our client accounts at Bernstein LLC on a quarterly basis.

SMA PROGRAM FEES

The SMA programs described above generally provide for an all-inclusive fee, which covers investment management, trade execution, reports of activity, asset allocation, custodial services and the recommendation and monitoring of investment managers.

As an investment adviser to SMA programs, we receive as compensation a portion of the total managed account program fee paid to the sponsor by the client. This typically ranges from 0.25% to 0.90% annually, depending upon the program sponsor, type of account (i.e., equity, balanced or fixed income), the level of support services provided by AB or sponsor, and the size of the client's assets in the specific program.

OTHER FEE ARRANGEMENTS

AB also offers the following investment products and advisory services for which special fee arrangements apply:

If assets in a client's account are invested in a registered investment company managed by AB, such assets are subject to the management fee associated with the investment company. That fee may also include charges for administration and accounting services charged to the registered investment company. Therefore, the investor in a registered investment company may incur a higher total management fee if the investment company's fee rate exceeds the rate the client would otherwise pay for the management of its assets.

Some institutional and private clients of AB invest a portion of their discretionary account's assets in shares issued by a registered investment company. When that occurs, the client is not charged both an advisory fee on the discretionary assets and a management fee associated with the investment company. Assets invested in a registered investment company for which AB serves as adviser are excluded from the client's assets upon which their advisory fee is calculated. Clients are also credited for shareholder servicing fees associated with the investment company(ies). Clients may pay other costs and expenses.

The investment advisory fees charged to the registered investment companies for which AB serves as adviser are disclosed in the prospectuses of such investment companies although in some cases fee waivers may be in effect.

We also serve as an investment adviser to various funds, trusts and products which have a variety of fee structures. The fee structures for those pooled vehicles are set forth in the relevant offering and subscription documents.

PORTFOLIO MANAGER COMPENSATION

The Adviser's compensation program for portfolio managers is designed to align with clients' interests, emphasizing each portfolio manager's ability to generate long-term investment success for the Adviser's clients, including the Funds. The Adviser also strives to ensure that compensation is competitive and effective in attracting and retaining the highest caliber employees.

Portfolio managers receive a base salary, incentive compensation and contributions to AB's 401(k) plan. The incentive portion of total compensation is determined by quantitative and qualitative factors. In some cases, portfolio managers to certain of our alternative products receive a portion of the performance fees earned on the alternative products they manage.

C. PERFORMANCE FEES AND SIDE-BY-SIDE MANAGEMENT (ADV ITEM 6)

POTENTIAL CONFLICTS FROM ADVISING DIFFERENT CLIENTS

AB provides investment management advice to a variety of different clients including mutual funds sponsored by ourselves and our affiliates, special portfolios on a sub-advisory basis, institutional accounts, ERISA accounts, private investment funds (such as hedge funds and private equity funds), and high-net-worth individuals.

Certain types of clients, investment strategies and fee arrangements may create potential conflicts of interest for AB. For example, our employees or affiliates may have an economic interest in some of the accounts that we manage. We may also recommend to clients securities in which a related person has established an interest independent of AB. Some accounts pay performance fees to AB, and some are allowed to sell securities short that are held long in other client accounts. The beneficial owners of some accounts may have the ability to influence the placement of additional assets with AB. Some investment professionals at AB manage accounts with these potential conflicts on a "side by side" basis with accounts that do not have such characteristics. These investment professionals may have an incentive to favor "conflicted" accounts over other accounts. Variations in performance compensation structures among clients may create an incentive for AB to direct the best investment ideas to, or to allocate or sequence trades in favor of, clients that pay or allocate performance compensation or clients that pay a greater level of performance compensation than other clients.

STEPS TO TREAT CLIENTS FAIRLY

We are conscious of these potential conflicts. When we are providing fiduciary services, the goal of our policies and procedures is to act in good faith and to treat all client accounts in a fair and equitable manner over time, regardless of their strategy, fee arrangements or the influence of their owners or beneficiaries. These policies include those addressing the fair allocation of investment opportunities across client

accounts, the best execution of all client transactions, and the voting of proxies, among others.

AB has adopted various written policies to address the fair allocation of investment opportunities for different investment categories (e.g., equities, fixed income, private securities, etc.). Generally, all of the policies utilize the following approach (as applicable) to help ensure that each client receives fair and equitable treatment in the investment process:

- + **Equal Treatment.** All accounts managed on a fiduciary basis are treated equally for purposes of allocating investment opportunities. No account subject to any of the conflicts discussed above receives preferential treatment.
- + **Equal Dissemination.** Investment ideas and/or research analyst recommendations are widely disseminated among all appropriate investment professionals responsible for selecting investments to ensure that the accounts for all portfolio management groups have an equal opportunity to act on the information.
- + **Identifying Accounts for Participation.** The decision of which accounts should participate in an investment opportunity, and in what amount, is based on the type of security or other asset, the present or desired structure of the various portfolios and the nature of the account's goals. Other factors include risk tolerance, tax status, permitted investment techniques, level of un-invested capital, variance to target weight/duration and, for fixed-income accounts, the size of the account and settlement and other practical considerations. As a result, the price limits and percentage of assets under management for an order may vary for different accounts. Portfolio information systems, portfolio reports and quality control reports permit us to consider these factors as appropriate. In all cases, these factors are applied on an objective and consistent basis without regard to any conflict of interest.
- + **Aggregation of Client Interests.** Portfolio managers are required to submit orders for all of the participating accounts for which they are responsible at the same time, subject to certain pre-defined exceptions. Generally, all orders in the same security are aggregated in each trading system to facilitate best execution and to reduce overall trading costs. We may not require orders in the same security from different managers to be aggregated where one manager's investment strategy requires rapid trade execution, provided we believe that disaggregation will not materially impact other client orders.
- + **Priority of Orders.** When the liquidity in a market is not sufficient to fill all client orders, we may give priority to certain orders over others. This prioritization is based on objective factors driving the order. Under such circumstances, we aggregate orders by these factors and subject each aggregated order to the trade allocation algorithms discussed below. The factors used, in order of priority, are (1) correction of guideline breaches; (2) avoidance of guideline breaches; (3) investing significant new funding and completing tax strategy implementations; (4) investing in services that focus on specific financial instruments or market sectors, (5) avoidance of tracking error on the service/product level; and (6) portfolio rebalancing and optimization.
- + **Trade Rotation.** Separate orders with the same priority may be traded using a rotation process that is fair and objective.

- + **Allocation.** Executions for aggregated orders with the same executing broker are combined to determine one average price. The shares are then allocated to participating accounts using automated algorithms designed to achieve a fair, equitable and objective distribution of the shares over time. When investment opportunities are too limited to be fully implemented for all accounts, these algorithms consider various factors, including minimizing custodian fees from multiple executions for a single account and avoiding small allocations that would be either below minimum sizes for the marketplace or uneconomical in light of fixed settlement costs.
- + **Deviations from the Standard Methodologies.** Under certain circumstances the allocation algorithms may not produce results consistent with the Portfolio manager's requirements. In such a case, an alternative allocation method may be used, which must achieve a fair, equitable and objective distribution of the shares.

As a result of the procedures noted above, it is not unusual to have multiple aggregated orders and differing priorities for the same security at the same time. In such cases, certain client accounts may pay or get a higher or lower price for the same security than orders for other clients. Additionally, our policies address the following special situations:

- + **Initial Public Offerings.** IPOs are only allocated to accounts when the issuer meets the investment objectives of participating accounts. Shares may be first distributed internally by investment service or strategy with allocation preference to services or products that are more directly aligned with the particular IPO offering and then allocated on a pro-rata basis to participating accounts within their respective service or strategy. Due to securities law restrictions or client imposed restrictions, not all accounts can participate in IPOs.
- + **Secondary Offerings.** These shares are allocated using our standard methodologies taking into account situations in which securities are allocated by the issuer or underwriter based on a client's existing holdings.
- + **Long vs. Short Positions.** When our trading desk is handling short sell orders at the same time as long liquidation orders, the desk uses its discretion to execute the orders in a manner that limits the market impact to both.

In addition, when trades for SMA programs are directed to the SMA sponsors, a trade rotation process is implemented between SMA programs and institutional accounts and among the different SMA sponsors. This process could result in accounts receiving different prices for the same security. When an SMA sponsor comes up in the rotation, we generally do not trade for institutional accounts or accounts of other SMA sponsors.

There can be other exceptions to the process described above. For example, when our investment professionals decide to sell a security regardless of tax considerations, both taxable and tax-exempt accounts are eligible for sale simultaneously. In situations where tax gains influence the sale, securities in the tax-exempt accounts may be placed for sale first, as additional time is needed to consider the tax implications for each taxable account. Conversely, when tax losses influence the sale, we may prioritize taxable clients first, as the loss has a specific impact in a given year. In any event, the prioritization process is applied consistently and objectively over time.

In certain circumstances, position limits due to regulatory or other issuer-related facts may preclude us from making all investment opportunities available to all services and products. We may limit the opportunities to those services or products based upon our judgment, after considering all relevant facts.

We also reserve our right to exclude certain investment services from our aggregation and allocation procedures for regulatory considerations or where exclusion is in the best interests of our clients as a whole. Where we offer a service that invests in securities that are unique (such as our venture capital fund) fair allocation is less of a concern, since our other clients will not be competing for investment opportunities with that service. Similarly, certain traders at our firm process a significant volume of derivatives orders on a non-discretionary basis for AXA and its insurance company subsidiaries. Since these orders are unrelated to any discretionary investment service we offer to clients, they are normally not aggregated with other derivative orders.

D. TYPES OF AB CLIENTS (ADV ITEM 7)

AB offers investment services to clients for a fee through operations in the United States and numerous other countries. We provide investment advice to investment companies, pension and profit sharing plans, banks and thrift institutions, trusts, estates, government agencies, charitable organizations, individuals, corporations and other business entities.

Our investment advisory products and services are offered to clients through three relationship channels—Institutional Services, Private Client Services and Retail Services.

CLIENTS OF INSTITUTIONAL SERVICES

Our institutional client base includes unaffiliated corporate and public employee pension funds, endowment funds, domestic and foreign institutions and governments, including sovereign wealth funds. We also provide investment services to certain of our affiliates (EQH and its subsidiaries), as well as certain sub-advisory relationships with unaffiliated sponsors of various other investment products.

Client relationships of \$25 million or more generally are serviced by Institutional Services. Direct client relationships of less than \$25 million are generally serviced through our Bernstein Private Wealth Services channel, discussed below. Nevertheless, AB has established various minimum account sizes, depending primarily on the particular investment style. AB generally does not require its clients to maintain a minimum investment in order to continue the advisory relationship. However, AB does reserve the right to terminate an account based on its size if the account has decreased due to significant withdrawals.

AB may, in its discretion, accept institutional accounts with assets less than \$25 million where, for example, an additional investment to meet the minimum is expected, a relationship already exists with a client, or the relationship is to be handled through an SMA program sponsored by a third-party intermediary. Our services to institutional clients are offered through a wide variety of structures, including separately-managed accounts, sub-advisory relationships, mutual funds, structured products, collective investment trusts, and other investment vehicles.

Under certain circumstances, managed accounts may be formed as a "fund-of-one," which may be organized as domestic or offshore (non-U.S.) companies, limited partnerships, limited liability companies, corporate trusts or other legal entities, as determined appropriate.

CLIENTS OF BERNSTEIN PRIVATE WEALTH SERVICES

As noted above, clients of Bernstein Private Wealth Services may invest through separately managed accounts, mutual funds, hedge funds (including hedge funds available through our Alternative Investment Strategies hedge fund of funds service discussed elsewhere in this brochure) and other investment vehicles suitable for qualified purchasers.

Generally, the minimum amount to open a private client relationship through Bernstein Private Wealth Services is \$1,000,000. The minimum initial investment in Alternative Investment Strategies by otherwise qualified purchasers is \$500,000.

Our private clients are serviced by financial advisors based in various cities. These advisors do not manage account assets, but work with private clients and their tax, legal and other advisors to assist them in determining a suitable asset allocation based on financial need and risk tolerance.

CLIENTS OF RETAIL SERVICES

We provide investment management and related services to a wide variety of individual retail investors, both in the US and internationally, through retail mutual funds sponsored by AB (these funds also have institutional share classes); through mutual fund sub-advisory relationships; through Separately-Managed Account Programs; and via other investment vehicles ("Retail Products and Services").

Our Retail Products and Services are designed to provide disciplined, research-based investments that contribute to a well-diversified investment portfolio. We distribute these products and services through financial intermediaries, including broker-dealers, insurance sales representatives, banks, registered investment advisers and financial planners.

Our Retail Products and Services include open-end and closed-end funds that are either (i) registered as investment companies under the Investment Company Act and generally not offered to non-United States persons, or (ii) not registered under the Investment Company Act and generally not offered to United States persons. They provide a broad range of investment options, including local and global growth equities, value equities, blend strategies and fixed income securities.

As discussed above, our Retail Products and Services also include Separately-Managed Account Programs, which are sponsored by financial intermediaries and generally charge an all-inclusive fee covering investment management, trade execution, asset allocation and custodial and administrative services. We also provide distribution, shareholder servicing, and administrative services for our Retail Products and Services.

Our US Funds, which include retail funds, our variable products series fund (a component of an insurance product) and the retail share classes of the Sanford C. Bernstein Funds (principally Private Client Services products), currently offer over 100 different portfolios to US investors.

Our Non-US Funds are distributed internationally by local financial intermediaries to non-US investors in most major international markets by means of distribution agreements.

AllianceBernstein Investments serves as the principal underwriter and distributor of the US Funds. AllianceBernstein Investments employs sales representatives who devote their time exclusively to promoting the sale of US Funds and certain other Retail Products

and Services offered by financial intermediaries. AllianceBernstein (Luxembourg) S.A., a Luxembourg management company and one of our wholly-owned subsidiaries, generally serves as the distributor for the Non-US Funds. Bernstein LLC serves as distributor for the private client classes of the Sanford C. Bernstein Funds.

CLIENTS OF SMA PROGRAMS

The minimum initial SMA size is \$100,000, which may be waived from time to time by AB in its sole discretion. In an effort to achieve the target characteristics and security weights established for the portfolio, we require that equity SMA portfolios maintain a minimum balance of \$50,000 and balanced SMA portfolios maintain a minimum balance of \$80,000. We may reimburse certain SMA sponsors for business, marketing and product seminar expenses they incur. Fees for seminar support and similar services are paid out of AB's own resources. Since only investment advisors that agree to reimburse the SMA sponsor for a portion of these fees will be selected to participate in the program, the SMA sponsor may have an incentive to select AB for participation in the program.

E. METHODS OF ANALYSIS, STRATEGIES AND RISK OF LOSS (ADV ITEM 8)

OUR INVESTMENT STRATEGIES

As noted above, our investment analysts create proprietary research to support our portfolio managers, who also can conduct their own research. Our portfolio management professionals then implement our discretionary investment strategies.

Our investment professionals have experience researching and investing in all types of securities and asset classes, including common and preferred stocks, warrants and convertible securities, government and corporate fixed-income securities, commodities, currencies, real estate-related assets and inflation-protected securities. Some of our portfolios invest in "long" trades only, while others engage in both "long" and "short" trades. We also have deep experience analyzing and investing in other financial instruments, including derivatives such as options, futures, forwards, or swap transactions.

Our professionals employ a range of investment strategies to implement the advice we give to clients including: long-term purchases, short-term purchases, trading, short sales, margin transactions, option strategies including writing covered options, uncovered options and spread strategies, and taking advantage of price differentials between two or more securities (arbitrage). Quantitative analytics are also utilized in some of our investment activities, to assist in the selection of securities or the management of investment risk.

Investment decisions in the strategies that we manage regularly affect more than one client account. Therefore, it is often necessary for us to acquire or dispose of the same securities for more than one client account at the same time. Our policies are designed to ensure that information relevant to investment decisions is disseminated fairly and investment opportunities are allocated equitably among different client accounts over time. Trades in the same securities for all relevant clients are aggregated whenever appropriate and executed as a "block" by the brokers or counterparties we select. Our policies and procedures also set trade allocation standards appropriate to each investment discipline.

As part of our Alternative Investment Strategies hedge fund of funds platform, and in certain other services, AB invests client assets

in services managed by other investment advisers. AB evaluates these third-party advisers prior to investing, to the best of our ability. However, those advisers are not subject to our trade allocation policies or our other compliance policies and procedures. Whenever a third-party investment adviser is responsible for managing assets in a product sponsored by AB, we disclose that to the investors in that product.

THE RISKS OF INVESTING

As with any investment, there is no guarantee that your AB portfolio will achieve its investment objective. You could lose money by investing in our services, and you alone will bear such losses.

The value of your investment in an AB service may be affected by one or more of the following risks, any of which could cause the portfolio's return, the price of the portfolio's shares or the portfolio's yield to fluctuate:

- + **Market Risk.** The value of your portfolio's assets will fluctuate as the stock, commodity or bond market fluctuates. The value of your investments may decline, sometimes rapidly and unpredictably, simply because of economic changes or other events that affect large portions of the market. In addition, the prices of a portfolio's can be highly volatile. Price movements of assets, including commodities, are influenced by, among other things, interest rates, general economic conditions, the condition of financial markets, developments or trends in any particular industry, the financial condition of the issuers of such assets, changing supply and demand relationships, programs and policies of governments, and national and international political and economic events and policies.
- + **Management Risk.** Your portfolio is subject to management risk because it is actively managed by our investment professionals, who may have responsibilities for more than one strategy. We apply our investment techniques and risk analyses in making investment decisions for your portfolio, but there is no guarantee that these techniques and our judgments will produce the intended results.
- + **Quantitative Tools Risk.** Some of our investment techniques incorporate, or rely upon, quantitative models. There is no guarantee that these models will generate accurate forecasts, reduce risks or otherwise produce the intended results. We have adopted a Model Governance Policy, and take steps under that policy to review the accuracy of our model's design and output. We do not consider imperfections in tool output to be errors where we have satisfied the Model Governance Policy's requirements.
- + **Interest Rate Risk.** Changes in interest rates will affect the value of your portfolio's investments in fixed-income securities. When interest rates rise, the value of investments in fixed-income securities tends to fall and this decrease in value may not be offset by higher income from new investments. Interest rate risk is generally greater for fixed-income securities with longer maturities or durations. In certain jurisdictions, investing in cash or assets yielding negative interest rates might be unavoidable without taking significant credit risk.
- + **Credit and Counterparty Risk.** An issuer or guarantor of a fixed-income security, or the counterparty to a derivatives or other contract, may be unable or unwilling to make timely payments of interest or principal, or to otherwise honor its obligations. The issuer or guarantor may default causing a loss of the full principal amount of a security. The degree of risk for a particular security may be reflected in its credit rating. There is the possibility that the credit rating of a fixed-income security may be downgraded after purchase, which may adversely affect the value of the security. Investments in fixed-income securities with lower ratings tend to have a higher probability that an issuer will default or fail to meet its payment obligations.
- + **Allocation Risk.** The allocation of investments among different global asset classes may have a significant effect on your portfolio's value, when one of these asset classes is performing more poorly than others. As both the direct investments and derivative positions will be periodically adjusted to reflect our view of market and economic conditions, there will be transaction costs which may be, over time, significant. In addition, there is a risk that certain asset allocation decisions may not achieve the desired results and, as a result, your portfolio may incur significant losses.
- + **Foreign (Non-US) Risk.** Your portfolio's investments in securities of non-US issuers may involve more risk than those of US issuers. These securities may fluctuate more widely in price and may be less liquid due to adverse market, economic, political, regulatory, or other factors.
- + **Currency Risk.** Fluctuations in currency exchange rates may negatively affect the value of your portfolio's investments or reduce its returns.
- + **Derivatives Risk.** The guidelines for a number of our strategies allow us to use derivatives to create market exposure. Derivatives may be illiquid, difficult to price, and leveraged so that small changes may produce disproportionate losses for your portfolio, and may be subject to counterparty risk to a greater degree than more traditional investments. Because of their complex nature, some derivatives may not perform as intended. As a result, your portfolio may not realize the anticipated benefits from a derivative it holds or it may realize losses. Derivative transactions may create investment leverage, which may increase your portfolio's volatility and may require your portfolio to liquidate portfolio securities when it may not be advantageous to do so. Further, a transaction used to hedge to reduce or eliminate losses associated with your portfolio holding or particular market to which your portfolio has exposure, can also reduce or eliminate gains. Increased volatility in a particular security could vary the degree of correlation between the price movements of the hedging instrument and its underlying security. There can be no assurance that your portfolio's hedging transaction will be effective. Hedging techniques involve costs, which could be significant whether or not the hedging strategy is successful. Hedging transactions, to the extent they are implemented, will not necessarily be completely effective in insulating portfolios from currency or other risks.
- + **Capitalization Risk.** Investments in small- and mid-capitalization companies may be more volatile than investments in large-cap companies. Investments in small-cap companies may have additional risks because these companies have limited product lines, markets or financial resources.
- + **Liquidity Risk.** Liquidity risk exists when particular investments are difficult to purchase or sell, possibly preventing us from selling out of such illiquid securities at an advantageous price, or forcing us to sell such illiquid securities at a disadvantageous price.

Derivatives and securities involving substantial market and credit risk also tend to involve greater liquidity risk. Liquidity risk can arise from the need to post unusually large amounts of cash collateral to counterparties of derivatives trades, or if sizeable client redemption activity in commingled vehicles that we manage forces the sale of securities to meet unexpected liquidity requirements.

- + **Investment Company and Exchange Traded Fund Risk.** Some of our strategies allow for investments in investment companies (also known as mutual funds) and exchange traded funds (“ETF”). An investment in an investment company or ETF involves substantially the same risks as investing directly in the underlying securities. An investment company or ETF may not achieve its investment objective or execute its investment strategy effectively, which may adversely affect your portfolio’s performance. Your portfolio must pay its pro rata portion of an investment company’s or ETF’s fees and expenses. Shares of a closed-end investment company or ETF may trade at a premium or discount to the net asset value of its portfolio securities.
- + **Real Estate Related Securities Risk.** Investing in real estate related securities includes, among others, the following risks: possible declines in the value of real estate; risks related to general and local economic conditions, including increases in the rate of inflation; possible lack of availability of mortgage funds; overbuilding; extending vacancies of properties; increases in competition, property taxes and operating expenses; changes in zoning laws; costs resulting from clean-up of, and liability to third parties for damages resulting from environmental problems; casualty or condemnation losses; uninsured damages from floods, earth quakes or other natural disasters; limitations on and variations in rents; and changes in interest rates. Investing in Real Estate Investment Trusts (“REITs”) involves certain unique risks in addition to those risks associated with investing in the real estate industry in general. REITs are dependent upon management skills, are not diversified, and are subject to heavy cash flow dependency, default by borrowers and self-liquidation.
- + **Business Continuity and Cybersecurity Risk.** We have adopted a business continuation strategy to maintain critical functions in the event of a partial or total building outage affecting our offices or a technical problem affecting applications, data centers or networks. The recovery strategies are designed to limit the impact on clients from any business interruption or disaster. Nevertheless, our ability to conduct business may be curtailed by a disruption in the infrastructure that supports our operations and the regions in which our offices are located. In addition, our asset management activities may be adversely impacted if certain service providers to AB or our clients fail to perform. In addition, with the increased use of technologies such as the Internet to conduct business, your portfolio could be susceptible to operational, information security and related risks. In general, cyber incidents can result from deliberate attacks or unintentional events. Cyber security failures or breaches by a third party service provider and the issuers of securities in which the portfolio invests, have the ability to cause disruptions and impact business operations, potentially resulting in financial losses, the inability to transact business, and violations of applicable privacy and other laws.
- + **Multiple Portfolio Manager Risk.** Certain clients may employ multiple underlying investment advisers, each of which trades

independently of others. There can be no assurance that the use of multiple investment advisers will not effectively result in losses by certain investment advisors offsetting any profits achieved by others. Such offsetting could result in significant reduction in the client’s assets, as incentive fees may be allocable to the investment advisor that recognized profits irrespective of the offsetting losses.

- + **Manager Selection Risk.** For alternatives, multi-asset and other strategies, we sometimes select external managers or sub-advisers. While we perform investment and operational due diligence on these managers during the selection process, there is no guarantee that these managers will achieve their investment objectives.

In addition to performance risk, AB and its employees may have a variety of relationships with the managers we select. Our selection of external managers or sub-advisers is not based upon those relationships. Rather, AB selects managers according to a process that is fair and objective without consideration of those relationships. In certain investment strategies, AB may be given the option to select itself or an external manager as a manager of client assets. In those situations, we may have an incentive to select our self as manager to receive additional management fees. As discussed above, AB selects managers according to a process that is fair and objective without considering additional fees.
- + **Participatory Note Risk.** AB may from time to time invest in participatory notes (commonly referred to as “P-Notes”) on behalf of clients. P-Notes are a type of derivative instrument that seeks to replicate the returns of investing directly in an issuer. These notes are used to gain exposure to underlying equity securities in foreign markets where direct investments are restricted. In other words, we may use P-Notes to gain access to investments in markets where it is difficult for our clients to acquire local registration for the purchase and sale of local securities. An example of such a market is India. Investing in P-Notes involves multiple risks. The investment risk on a P-Note includes the same risks associated with a direct investment in the shares of the companies the notes seek to replicate and there can be no assurance that the transaction price of P-Notes will equal the underlying value of the companies or securities markets that they seek to replicate due to transaction costs and other expenses. P-Notes are also subject to counterparty risk since the notes constitute general unsecured contractual obligations of the issuing financial institutions and there is a risk that the issuer of the P-Note will default on its obligations under the note. Investing in P-Notes may involve certain regulatory risks, including, but not limited to, the fact that a foreign government may determine to close the P-Note market entirely or restrict access to the market by certain investors.
- + **Corporate Relocation Risk:** The uncertainty created by the relocation of the corporate headquarters from the New York metropolitan area to Nashville, Tennessee, could have a significant adverse effect on AB’s ability to motivate and retain current employees. Further significant managerial and operational challenges could arise, such as ineffective transfer of institutional knowledge from current employees to newly-hired employees, if AB experiences significantly greater attrition among current employees than the firm anticipates in connection with the relocation and/or if the firm encounters more difficulty than expected in hiring qualified employees to help staff our Nashville headquarters.

Please note that there are many other circumstances not described here that could adversely affect your investment and prevent your portfolio from reaching its objective.

Specifically, clients of Bernstein Private Wealth Services should review the service and risk descriptions set forth in that unit's *Investment Management Services and Policies* manual. Similarly, investors in the shares of the Sanford C. Bernstein Fund, Inc. or mutual funds sponsored by AB should review the prospectus used to offer those shares.

Similarly, the objectives and risks of privately placed pooled vehicles we sponsor are detailed in the offering memoranda and subscription documents related to each of those vehicles, which are listed in AllianceBernstein L.P.'s Form ADV Part 1.

The corporate relocation risks that include possible managerial and operational challenges as well as the costs of employee relocation, severance, recruitment, and overlapping compensation and occupancy costs could affect the adjusted net income.

F. DISCIPLINARY INFORMATION (ADV ITEM 9)

All aspects of AB's business are subject to various federal and state laws and regulations, and to laws in various foreign countries. Accordingly, from time to time, regulators contact AB seeking information concerning the firm and its business activities. From time to time, AB may also be a party to civil lawsuits.

Currently, there are no material regulatory enforcement proceedings pending against AB or any of the other registrants covered by this brochure. A summary of past material regulatory proceedings involving AB, all of which have been resolved, is set forth here:

On January 17, 2014, the firm and three employees entered a Stipulation and Consent Agreement with the Florida Office of Financial Regulation to resolve similar allegations that, due to administrative oversight by the firm, certain employees had not been registered with Florida as associated persons of an investment adviser. Under the Consent Agreement, AllianceBernstein L.P. paid administrative fines totaling \$51,675 on behalf of itself and the employees, disposing of the matter.

On March 22, 2013, AllianceBernstein L.P. entered into a Stipulation and Consent Order with the Colorado Division of Securities to resolve an administrative proceeding alleging that AB, in error, approved an employee to act as an investment adviser representative in the state before the Division had issued a license to the employee. The firm agreed to review its relevant controls and to pay a fine to the Division in the amount of \$20,232.36. The Consent Order disposed of the matter.

In 2004, the SEC indicated publicly that it was considering enforcement action in connection with the payment of compensation connected to the distribution of mutual funds, the disclosure of such compensation, and the practice of considering mutual fund sales in the direction of brokerage commissions from fund portfolio transactions. The SEC and the Financial Industry Regulatory Authority issued subpoenas to our firm and others in connection with this matter. We cooperated fully with their inquiry. On June 8, 2005, it was announced that the firm's mutual fund distributor had paid \$4 million to settle the inquiry, without admitting or denying liability, resolving both investigations.

In 2003, regulatory authorities including the SEC and the Office of the New York State Attorney General ("NYAG"), investigated practices in the mutual fund industry identified as "market timing" and "late trading"

of mutual fund shares. Our firm was contacted by these regulators and cooperated with their investigation.

On December 18, 2003, the firm reached terms with the SEC to resolve allegations of market timing. The SEC order reflecting the agreement found that the firm maintained relationships with investors who were permitted to engage in market timing trades in certain domestic mutual funds sponsored by the firm in return for or in connection with making investments (which were not actively traded) in other firm products, including hedge funds and mutual funds, for which our firm received advisory fees. Our firm concurrently reached an agreement in principle to resolve the NYAG's inquiry, which was subject to final, definitive documentation. That document, called an Assurance of Discontinuance, was dated September 1, 2004.

Under both the SEC Order and the NYAG agreement, the firm established a \$250 million fund to compensate fund shareholders for the adverse effect of market timing. The Agreement with the NYAG also required a 20% weighted average reduction in fees charged to US open-end mutual funds sponsored by our firm, for a minimum of five years. The terms of the agreements also required the formation of certain compliance and ethics committees and the election of independent chairman to mutual fund boards. Those undertakings have been honored by the firm. In November 2007, we resolved a similar proceeding brought by the West Virginia Securities Commission that was based on the same allegations contained in the SEC Order. On June 10, 2016, the SEC ordered the final distribution of the fund to compensate fund shareholders related to the market timing settlement.

G. OTHER FINANCIAL INDUSTRY AFFILIATIONS (ADV ITEM 10)

Neither AB nor its executive officers are actively engaged in any business other than providing investment advice. Our controlling shareholder, and our broker-dealer affiliates, are involved in other financial services businesses. Those entities, as well as our investment advisory affiliates, are identified here.

As noted above, AXA, a société anonyme organized under the laws of France. AXA is the holding company for an international group of insurance and related financial services companies engaged in the financial protection and wealth management businesses. AXA's operations are geographically diverse, with major operations in Europe, North America and the Asia/Pacific regions and, to a lesser extent, in other regions including the Middle East, Africa, and Latin America. AXA has five operating business segments: life and savings, property and casualty, international insurance, asset management, and banking. In 2019, AXA (including its subsidiaries and affiliates) was our single largest asset management client.

OUR MAJORITY SHAREHOLDER

As controlling shareholder, EQH has the ability to influence AB's business. However, when conducting our investment activities, we allocate investment opportunities to all of our clients in a particular strategy in the same way, including EQH. Further, as a matter of policy and practice, we do not collaborate with EQH on any investment decisions, and we do not involve EQH personnel in any of our research processes. We also are financially independent of EQH.

OUR AFFILIATED BROKERS

AllianceBernstein Investments, Inc. (“ABI”)

1345 Avenue of the Americas, New York, NY 10105

ABI is a registered broker-dealer under the Exchange Act and serves as the principal underwriter and distributor of the US registered investment companies sponsored and managed by AB.

Sanford C. Bernstein & Co., LLC (“Bernstein LLC”)

1345 Avenue of the Americas, New York, NY 10105

Bernstein LLC is a registered broker-dealer under the Exchange Act and registered investment adviser under the Investment Advisers Act. Bernstein LLC is also registered with the Ontario Securities Commission as an Exempt Market Dealer, Portfolio Manager, Investment Fund Manager and Commodity Trading Manager, and with other Canadian provincial securities commissions. Bernstein LLC regularly provides brokerage, custody and margin services for the clients in Bernstein Private Wealth Services of AB. Bernstein LLC also may provide brokerage services for other clients of AB. Pursuant to the terms of its advisory agreements with its clients, Bernstein LLC may delegate any and all of its responsibilities under such agreements to AB. Accordingly, the disclosures in this brochure apply equally to AllianceBernstein L.P. and Bernstein LLC (Bernstein LLC also may provide research, which conveys investment advice, directly to its institutional brokerage clients.).

Bernstein LLC is also registered with the Commodity Futures Trading Commission as commodity trading adviser, and a commodity pool operator. Bernstein LLC also serves as the principal underwriter of Sanford C. Bernstein Fund, Inc. and the Sanford C. Bernstein Fund II, Inc. which are investment companies registered under the Investment Company Act. Bernstein LLC has selling agreements with various limited partnerships/hedge funds managed by AB.

Sanford C. Bernstein Limited (“Bernstein Limited”)

50 Berkeley Street, London, WIJ 8AJ, UK

Bernstein Limited is a broker-dealer regulated by the United Kingdom's Financial Conduct Authority (“FCA”), and is registered with the Ontario Securities Commission as an International Dealer. Bernstein Limited may provide brokerage services to AB's clients.

Autonomous Research LLP (“Autonomous”)

50 Berkeley Street, London, WIJ 8AJ, UK

Autonomous is a broker-dealer regulated by the United Kingdom's Financial Conduct Authority (“FCA”). Autonomous may provide brokerage services to AB's clients.

Sanford C. Bernstein (Hong Kong) Limited (“Bernstein Hong Kong”)

39th Floor, One Island East, Taikoo Place, 18 Westland Road, Quarry Bay, Hong Kong

Bernstein Hong Kong is licensed and regulated in Hong Kong by the Securities and Futures Commission. It is incorporated in Hong Kong with limited liability.

Sanford C. Bernstein (Canada) Limited (“Bernstein Canada”)

Brookfield Place, 161 Bay Street, 27th Floor, Toronto, Ontario M5J 2S1, Canada

Bernstein Canada is a Dealer Member regulated by the Ontario Securities Commission (“OSC”) and Investment Industry Regulatory Organization of Canada (“IIROC”).

A number of AB employees are registered representatives of Bernstein LLC, Bernstein Limited, Bernstein Hong Kong, Bernstein Canada or ABI.

OUR ADVISORY AFFILIATES

Direct and indirect wholly-owned subsidiaries which are related to AB's advisory business include the following:

AB Bernstein Israel Ltd.

Rothschild Boulevard 22, Suite 1119, Tel Aviv, Israel 6688218

AB Israel is formed under the laws of Israel. AB Israel is not registered with the SEC as an investment adviser, but may provide referrals, advice or research to AB for use with AB's U.S. and non-U.S. clients as a “participating affiliate” in accordance with applicable SEC no-action guidance. Certain services may be performed for AB Israel by AB employees who are also employees of AB Israel or through delegation or other arrangements.

As a participating affiliate, AB Israel may perform specific advisory services for AB consistent with the powers, authority and mandates of AB's clients. The employees of AB Israel designated to act for AB are subject to certain AB policies and procedures as well as supervision and periodic monitoring by AB. AB Israel agrees to make available certain of its employees to provide investment advisory services to AB's clients through AB, to keep certain books and records in accordance with the Advisers Act and to submit the designated personnel to requests for information or testimony before SEC representatives.

AB Private Credit Investors LLC

1345 Avenue of the Americas, New York, NY 10105

AB Private Credit Investors LLC is an investment advisor that is primarily focused on providing flexible private debt solutions to middle market companies, targeting the primary issue market and sourcing and structuring investments in a broad spectrum of credit instruments.

AllianceBernstein Investor Services, Inc. (“ABIS”)

8000 IH 10 West, 4th floor, San Antonio, TX 78230

ABIS is a registered transfer agent under the Exchange Act and provides accounting and shareholder servicing assistance to the registered investment companies sponsored and managed by AB.

AllianceBernstein Trust Company, LLC (“ABTC”)

1345 Avenue of the Americas, New York, NY 10105

ABTC is a non-depository trust company chartered under New Hampshire law.

AllianceBernstein Limited (“ABL”)

50 Berkeley Street, London, WIJ 8HA, UK

ABL is an investment manager and is regulated by the FCA.

AllianceBernstein (Luxembourg) S.A.

18 rue Eugene Ruppert, L-2453 Luxembourg

AllianceBernstein (Luxembourg) S.A. is a management company (société anonyme) and is the transfer agent and registrar of the AB's Luxembourg-based funds.

AllianceBernstein (Singapore) Limited

One Raffles Quay, #27-11, South Tower, Singapore City 048583

AllianceBernstein (Singapore) Limited is a holder of a capital markets services license issued by the Monetary Authority of Singapore to conduct regulated activities in fund management.

AllianceBernstein Canada, Inc.

Brookfield Place, 161 Bay Street-27th Floor, Canada Trust Tower, Toronto, ON, M5J 2S1, Canada

AllianceBernstein Canada, Inc. is registered with the Ontario Securities Commission as a Limited Market Dealer, Investment Counsel and Portfolio Manager.

AllianceBernstein Japan Ltd.

Hibiya Parkfront 14F, 2-1-6 Uchisaiwai-cho, Chiyoda-ku, Tokyo 100-0011, Japan

AllianceBernstein Japan Ltd. is registered with Japan's Financial Services Agency as a Discretionary Investment Advisor.

AllianceBernstein Hong Kong Limited

39th Floor, One Island East, Taikoo Place, 18 Westland Road, Quarry Bay, Hong Kong

AllianceBernstein Hong Kong Limited is the Hong Kong representative of AB's Luxembourg-registered family of investment funds, and an investment manager. It is registered with the Securities and Futures Commission for local distribution in Hong Kong.

AllianceBernstein Australia Limited

Aurora Place, Level 32, 88 Phillip Street, Sydney NSW 2000

AllianceBernstein Australia Limited is registered with the Australian Securities & Investments Commission as an investment manager.

AllianceBernstein Investments Taiwan Limited

Taipei 101 Tower, 81F/81F-1, 7 Xin Yi Road, SEC. 5, Taipei 110, Taiwan

AllianceBernstein Investments Taiwan Limited is registered with the Taiwan Securities & Investments Commission as an investment manager.

AllianceBernstein Administradora de Carteiras (Brasil) Ltda.

Av. Presidente Juscelino, Kubitschek, 1726-20 Andar, Sao Paulo, Brasil 04543-000

AllianceBernstein Administradora de Carteiras (Brasil) Ltda. is a holder of an asset management license issued by the Comissao de Valores Mobiliarios.

AllianceBernstein Asset Management (Korea) Ltd.

Seoul Finance Center, 14th Floor, 136, Sejong-daero, Jung-gu, Seoul 04520, South Korea

AllianceBernstein Asset Management (Korea) Ltd. is a holder of an asset management, investment advisory and discretionary investment management license issued by the Financial Supervisory Commission to conduct regulated activities in asset management and investment advice.

CPH Capital Fondsmaglerselskab A/S ("CPH Capital")

Lautrupsgade 7, 6 Sal; 2100 Copenhagen, Denmark

CPH Capital is a global core equity investment manager that provides global equity strategies for institutional and retail clients.

AB Custom Alternative Solutions LLC

1345 Avenue of the Americas, New York, NY 10105

AB Custom Alternative Solutions LLC is an investment adviser registered with the U.S. Securities and Exchange Commission. They were acquired by AllianceBernstein L.P. in a September 2016 transaction.

W.P. Stewart Asset Management Ltd.

1345 Avenue of the Americas, New York, NY 10105

W.P. Stewart Asset Management Ltd. is an investment adviser registered with the U.S. Securities and Exchange Commission. It was acquired by AllianceBernstein L.P. in a December 2013 transaction.

AB Broadly Syndicated Loan Manager LLC

1345 Avenue of the Americas, New York, NY 10105

AB Broadly Syndicated Loan Manager LLC is an investment adviser that is primarily focused on sourcing, structuring, and managing investments in collateralized loan obligations.

OTHER RELATED ENTITIES

As noted above, AB serves as investment adviser to a diversified family of open-end and closed-end US registered investment companies, non-US based mutual funds, non-US local market mutual funds and structured products. Information about those funds, their strategies, and their distribution to investors can be found at www.alliancebernstein.com. AB may also serve as sub-adviser on client accounts including registered investment companies.

Our Alternative Investment Strategies platform offers clients of Bernstein Private Wealth Services the ability to invest in hedge funds managed by AB and funds advised by other managers. AB personnel select the other hedge fund managers who participate in the Alternative Investment Strategies platform, pursuant to various objective and subjective criteria as disclosed in the relevant offering documents. Some of those managers who satisfy the applicable criteria also may be clients of Bernstein LLC, or may have certain business relationships with EQH or its affiliates.

In addition to hedge funds and mutual funds, AB is investment adviser to a number of open- and closed-end private investment partnerships whose shares or units are exempt from registration under the Investment Company Act of 1940, and therefore may only be distributed to investors who meet certain legal qualifications.

Examples of vehicles in this latter category include the following.

AB is the investment adviser to the Alliance Capital Group Trust, the Bernstein Group Trust, Alliance Institutional Fund, the AllianceBernstein Delaware Business Trust, and the Sanford C. Bernstein Delaware Business Trust. These are pooled investment vehicles through which certain institutions—such as pension, profit sharing, stock bonus and governmental plans—may commingle their assets for investment purposes. These units are privately offered and exempt from registration under the Investment Company Act.

AB is also the investment adviser to Collective Investment Trusts ("CITs") for which AllianceBernstein Trust Company, LLC ("ABTC"), a wholly-owned subsidiary of AB, is the trustee. These CITs are pooled investment vehicles through which the assets of certain types of clients are commingled for investment purposes. These clients include only trusts whose beneficiaries are employee benefit plans governed by ERISA and government-sponsored plans provided that (i) any government-sponsored plan is a plan or trust described in Section 401(a) or 414(d) of the Internal Revenue Code of 1986, as amended, (ii) investment in ABTC's CIT(s) is not prohibited by the governing

instrument for such plan, and (iii) such investment is directed by a fiduciary other than ABTC with the power to authorize such investment. The CITs are privately offered and are exempt from registration under the Investment Company Act.

Similarly, AB acts as investment manager and account administrator for certain Insurance Company Separate Accounts. These accounts hold assets for employee benefit plans governed by ERISA.

Bernstein LLC is the settlor and investment manager for certain Canadian trusts. These Canadian trusts are pooled investment vehicles through which certain qualifying Canadian clients may commingle their assets for investment purposes. Bernstein LLC has delegated portfolio management of these pooled fund trusts to AB.

AB is the investment adviser to AllianceBernstein Venture Fund I, L.P. This investment vehicle was created with the objective to achieve long-term capital appreciation through equity and equity-related investments, acquired in private transactions, in early stage growth companies. Interests in this partnership are not registered and are available only to certain qualified investors.

AB also is the sponsor and investment adviser to other privately placed funds that invest, or intend to invest, in various strategies, including: various real estate asset classes; equities; financial services; private credit; hedge fund strategies; global energy exploration assets; and global “strategic opportunities” in various asset classes, among others.

In many cases, these vehicles invest in strategies similar to those offered through the Retail Services funds described above. Certain employees of AB have an investment interest in these vehicles and their general partner entities. AB’s policies take steps to avoid or mitigate these potential conflicts. For a list of these and other private investment partnerships, please see AllianceBernstein L.P.’s Form ADV Part 1.

H. CODE OF ETHICS, PERSONAL TRADING, AND CLIENT TRANSACTIONS (ADV ITEM 11)

OUR CODE OF ETHICS

All AB employees are required to follow our Code of Business Conduct and Ethics (the “Code” or “Code of Ethics”).

The Code summarizes the firm’s values, ethical standards, and commitment to address potential conflicts of interest that arise from its activities. Policies and procedures have been designed to implement the principles in the Code, some of which are described in this section.

The Code can be viewed at www.alliancebernstein.com or a copy may be obtained from AB by writing to the Chief Compliance Officer, 1345 Avenue of the Americas, New York, NY 10105.

EMPLOYEE PERSONAL TRADING

Personal securities transactions by an employee of an investment adviser may raise a potential conflict of interest when that employee owns or trades in a security that is owned or considered for purchase or sale by a client, or recommended for purchase or sale by an employee to a client. AB’s Code of Ethics includes rules that are designed to detect and prevent conflicts of interest when investment professionals and other employees own, buy or sell securities which may be owned by, or bought or sold for clients.

The Code generally discourages employees from engaging in personal trading in individual securities. Before an employee can engage in a personal securities trade, the Code requires that he or she obtain

preclearance from our Compliance Department. Employee investments in AB Mutual Funds are subject to pre-clearance, but investments in other open-ended mutual funds and certain ETFs are exempt from pre-clearance. Securities purchased by employees must be held for at least 60 days. An employee is allowed to conduct up to twenty (20) securities trades each month. The Code requires US employees to maintain accounts at certain designated brokerage firms, and requires that all employee personal accounts be disclosed to the firm.

Subject to reporting and certain controls, we allow our employees to hire discretionary investment advisers to manage their personal accounts.

The Code’s personal trading procedures are administered by the firm’s Legal and Compliance Department. The firm has established a Code of Ethics Oversight Committee, which is responsible for reviewing exceptions to and violations of the Code, as well as establishing new or amending rules as necessary. The members of that Committee are some of AB’s most senior personnel.

OUTSIDE BUSINESS AFFILIATIONS

Outside business activities of an employee of an investment adviser may raise potential conflicts of interest depending on the employee’s position within AB and AB’s relationship with the activity in question. Outside business activities may also create a potential conflict of interest if they cause an AB employee to choose between that interest and the interests of AB or any client of AB.

AB employees are generally prohibited from serving on the board of directors or trustees or in any other management capacity of any unaffiliated public company. AB employees also may not serve on any board of directors or trustees of a private company without prior written approval from the employee’s supervisor and the Legal and Compliance Department.

AB’s Code of Ethics does not prohibit non-management directors of AB from serving on the board of directors or trustees of unaffiliated public companies. Such activity is not uncommon in the financial services industry, and such directorships are disclosed in our public SEC filings. We believe that prohibiting such activity could impair our ability to attract qualified non-management directors.

The following non-management directors of AB currently serve on the board of directors of an unaffiliated public company:

Dan Kaye	CME Group (CME)
Kristi Matus	Cerence (CRNC)

From time to time, we may invest on behalf of clients in securities of companies that include one of our non-management directors on the board.

Under our Code of Ethics, employees of AB are permitted to serve on the boards of directors of not-for-profit organizations. These organizations may issue publicly-traded debt obligations to fund projects such as the construction of buildings, dormitories, etc. AB may purchase such securities on behalf of its client accounts.

OUR INTERESTS IN CLIENT TRANSACTIONS

AB does not manage any “proprietary” investment accounts—i.e., accounts that are funded with the firm’s own money for the primary purpose of creating profits for the firm. Accordingly, AB in the ordinary course does not compete with clients in the market for securities.

Similarly, AB does not use its own money to trade as a counterparty with client accounts.

We do not purchase for clients, or recommend the purchase of, securities issued by AB or its affiliates. We liquidate, as soon as is practical, any positions in public securities issued by AB or its affiliates that become subject to our discretion.

However, AB may participate or have an interest in client transactions several other ways, which are described below. In the following situations, we attempt to make all portfolio management decisions in our clients' best interests:

- + **Affiliated Brokers.** Bernstein LLC, Bernstein Limited, Bernstein Hong Kong and Bernstein Canada (collectively, "Bernstein") effect securities transactions as agents for clients of AB for which the clients may pay commissions. These commissions may be at "execution-only" rates or higher full-service rates. AB will only use affiliated brokers in circumstances where AB has received permission to send trades to the affiliated broker and has determined that it can provide similar execution than an unaffiliated broker. Use of these affiliated brokers is subject to our obligation to seek best execution as described further in Section I and only done with the prior authorization of the client.
- + **Agency Cross Trades.** An agency cross transaction occurs when securities are traded by one of our client accounts through Bernstein, and a client of Bernstein is on the other side of that transaction. Our affiliated brokers execute such agency cross transactions only when our client has provided written authorization. This authorization can be terminated at any time by written notice. There can be benefits to our clients from the use of agency cross trades. There are also potential conflicts of interest, as Bernstein LLC receives commissions from both sides of the trade. We notify clients annually of the total number of agency cross transactions undertaken for their accounts over the previous year, the amount of commissions paid on the cross-transactions and the total commission paid by the clients on the other side of the transactions.
- + **Cross Trades.** With the exceptions noted elsewhere in this section, it is our general policy not to engage in buying or selling of securities from one managed account to another (typically referred to as a "cross trade"). The vast majority of trades made for AB's client accounts are executed through the open market. We may engage in cross trading under limited circumstances, but we only do so when we can ensure that the transaction is fair to all parties. Under such circumstances, we will receive no transaction-based compensation from the trade and we only proceed when we reasonably believe that best execution can be achieved. In certain situations, specific consent for each such transaction may be required from both sides. Where a registered investment company is involved, we execute transactions in accordance with the provisions of Rule 17a-7 under the Investment Company Act. We do not enter into cross transactions involving one or more ERISA accounts unless written consent of the plan fiduciary is received, and then only in accordance with applicable law and our written policies.
- + **Currency Trading.** AB normally executes currency transactions on an active basis through our trading desk, except where market restrictions in some emerging currencies exist and execution for trade settlement is arranged by the custodian directly. When

actively managing trades across numerous accounts, we may (through instructions to counterparties or on our own) net client purchases and client sales in the same currency to reduce our clients' transaction costs.

- + **Initial Account Funding.** From time to time, we purchase and sell securities for accounts funded with our own assets, which also is known as "seed capital." These accounts are intended to establish a performance history for a new or potential product or service. AB may earn a profit on its seed capital investments. In addition, we buy and sell short term cash instruments for our own account. Our transactions are aggregated with client orders and are subject to our procedures regarding fair access to investment opportunities.
- + **Partnership Interests in Certain Funds.** Certain wholly owned subsidiaries of AB serve as the general partner of for many of our privately placed funds that we manage. Such general partners may have small, or no, investment in these funds. In addition, AB may invest as an investor in certain of these funds, either with "seed capital" or on the same terms as other investors. Employees and their family members, and directors of AB may also invest in the funds. In addition, AB, as investment adviser to these funds, receives a management fee from such funds.
- + **Firm and Employee Investments.** As noted elsewhere in this Brochure, AB employees may invest in services managed by the firm. In addition, the firm itself may invest in its services through deferred compensation plans sponsored for the benefit of employees. These investments pose a risk that employees with influence over investment decisions will favor the portfolios in which they have a personal interest. However, we believe that our Code of Ethics, trade allocation and inside information policies manage these risks. We also believe that employee investments in AB services align the interests of our firm (and our employees) with those of our clients.
- + **Error Correction Trades.** From time to time, AB and Bernstein are required to take positions in an error account within the scope of their ordinary business activities. Potential conflicts relating to the correction of errors are discussed in more detail below.
- + **Institutional Research Services.** Bernstein may make institutional investment recommendations to their broker-dealer clients that differ from those implemented by AB's investment management professionals. In addition, Bernstein's institutional brokerage clients often have investment philosophies that differ significantly from those of AB. Accordingly, Bernstein's institutional investment recommendations and securities transactions on behalf of institutional brokerage clients may differ from the actions taken by AB for client accounts.
- + **Credit Balances.** Bernstein LLC pays interest on its brokerage clients' cash balances at a monthly rate based on the average of the 90-day and 180-day Treasury bill rates. Bernstein LLC holds clients' net cash balances in special reserve bank accounts for the exclusive benefit of customers. The reserve account held for the benefit of other clients (not subject to ERISA) may invest in Treasury bills of maturity greater than 180 days. Any spread between its investment of clients' cash balances (other than those subject to ERISA) and the interest it pays to clients on such balances is kept by Bernstein LLC. This creates an incentive to maintain or increase cash balances in non-ERISA accounts.

OUR APPROACH TO OTHER POTENTIAL CONFLICTS

Various parts of this brochure discuss potential conflicts of interest that arise from our asset management business model. We disclose these conflicts due to the fiduciary relationship we have with our investment advisory clients.

When acting as a fiduciary, AB owes its investment advisory clients a duty of loyalty. This includes the duty to address, or at minimum disclose, conflicts of interest that may exist between different clients; between the firm and clients; or between our employees and our clients. Where potential conflicts arise from our fiduciary activities, we take steps to mitigate, or at least disclose, them. Where our activities do not involve fiduciary obligations—such as the level of client servicing we offer through each client channel—we reserve the right to act in accord with our business judgment.

Conflicts arising from fiduciary activities that we cannot avoid (or choose not to avoid) are mitigated through written policies that we believe protect the interests of our clients as a whole. In these cases—which include issues such as personal trading and client entertainment, discussed above—regulators have generally prescribed detailed rules or principles for investment firms to follow. By complying with these rules and using robust compliance practices, we believe that we handle these conflicts appropriately.

Some potential conflicts are outside the scope of compliance monitoring. Identifying these conflicts requires careful and continuing consideration of the interaction of different products, business lines, operational processes and incentive structures. These interactions are not static; changes in the firm's activities can lead to new potential conflicts. Potential conflicts may also arise from new products or services, operational changes, new reporting lines and market developments.

To assist in this area, AB has appointed a Conflicts Committee, which is chaired by the firm's Conflicts Officer. The Committee is comprised of compliance directors, firm counsel and experienced business leaders, who review areas of change and assess the adequacy of controls. The work of the Conflicts Committee is overseen by the Code of Ethics Oversight Committee.

While we do not believe that there are any conflicts that pose material risks to our clients' interests, the following potential conflicts are inherent in our structure and activities:

- + **Acting for More Than One Client.** We operate most services for multiple clients and certain issuers may be investment opportunities for more than one service at any one time. Various investment decisions we make may benefit certain clients to the disadvantage of others. This may impact your account in various ways:
 - + As noted in Section C, we generally combine all orders for the same security with the same instructions into one aggregate order. As a result, your account might invest or disinvest over a longer period of time and over a larger number of transactions than might have been the case had we operated just your account. Additionally, a larger order may result in higher execution costs (for example, if we determined that we need a broker to act as a principal to facilitate the order). Our priority is to ensure that our systems of order aggregation and trade allocation are fair among different clients' accounts.
 - + Different services could have inconsistent views of the same security. That could result in certain services owning a security while others may have sold the security short (or similarly, one

service is significantly over-weighted versus a benchmark while another is significantly under-weighted). Actions taken by us that benefit the accounts of one service, such as proxy and bondholder voting, may have a negative impact on the accounts in the other service. We have established procedures that require investment professionals to act independently for the benefit of the clients in their own service. See Section N for more information about our Proxy and Governance Voting Policy.

- + We may make investments at different priorities in the capital structure of the same issuer. As discussed above, actions taken by us that benefit the accounts of one service (such as equity holders) may have a negative impact on the accounts in the other service (such as debt holders). These actions include both proxy voting and, when applicable, participation in bankruptcy or reorganization committees. We have established procedures that require investment professionals to act independently for the benefit of the clients in their own service. See Section N for more information about our Proxy and Governance Voting Policy.
- + Different services could be trading with competing instructions. We may be purchasing a security for certain clients at the same time that we may be selling it for others. In these situations, executing either order may have a negative impact on the other. Additionally, we may be selling a security owned by certain clients while establishing a short position for others. In these situations, market regulations generally prohibit us from aggregating the orders; therefore, as a result, certain accounts may be executed before others. In both of these cases, we have established procedures to rotate the competing orders in a way that would be fair and equitable to all accounts over time.
- + Legal, risk management or regulatory limits may preclude your account from participating in an investment opportunity. A portfolio manager may be restricted from entering orders in a security if accounts of AB, in aggregate, have reached certain ownership levels set by local regulations or our investment risk team. Please refer to *Limitations On Ownership And Trading Of Securities For Client Accounts* in Section M.
- + **Active Management.** As a firm, we endeavor to create and implement active management investment strategies that we think can exceed the performance of corresponding indices and benchmarks (and passively managed strategies and investments based on them) and can command higher fees than would typically apply in the case of passively managed strategies or investments, which generally track or mirror the composition of corresponding indices or benchmarks. This presents a potential conflict because the availability of higher fees could affect our objectivity when designing or evaluating actively managed strategies or in recommending them to clients. We believe that our policies and practices are designed to help ensure that we act prudently in the design and evaluation of actively managed strategies and in recommending them to clients, although passive investments may outperform actively managed ones at certain times.
- + **Allocation of Investment Opportunities.** Our policies generally require the pro rata distribution of investment opportunities across the appropriate accounts. Sometimes, however, investment opportunities are in short supply and there are not enough securities

available to create a meaningful holding in every account for which the security might be a suitable investment. In these cases, our policies allow us to allocate available securities among accounts with investment objectives most closely aligned to the investment's attributes. For example, we may choose to allocate a small cap initial public offering among investors in our small cap service, even though the stock might also be suitable for other portfolios with a broader range of holdings.

+ **Capacity.** To avoid compromising the investment performance of our existing clients we may decide to close a particular investment product to new investors by removing it from the list of services we offer. We might do this while leaving capacity for existing customers to add to their existing investments. We might also reserve capacity for new ventures or services that we intend to launch.

+ **Employee Investments.** There is a potential conflict of interest when an employee owns or trades in a security that is owned or considered for purchase or sale by a client, or recommended for purchase or sale by an employee to a client. The Code of Ethics includes policies that are designed to detect and prevent conflicts of interest when investment professionals and other employees own, buy or sell securities which may be owned by, or bought or sold for clients.

As noted previously, we encourage our employees to invest in the services we offer to clients, including portfolios that are offered through pooled vehicles. In some cases, employees may invest at a discounted advisory fee or no fee. These investments pose a risk that employees with influence over investment decisions will favor the portfolios in which they have a personal interest. It also poses a risk that certain employees will personally buy or sell interests in those vehicles based upon material nonpublic information concerning those vehicles. We believe that our trade allocation and inside information policies manage these risks. In addition, employee investments and withdrawals from our portfolios are bound by the same rules applicable to all investors, and some rules applicable to employee withdrawals can be more restrictive.

+ **Errors.** We correct trading errors affecting client accounts in a fair and timely manner. If correction of an error has resulted in a loss, we may decide to make the client whole as a result of the error. Ultimately, however, it is AB that decides whether an incident is an error that requires compensation. In some cases, an element of subjective judgement is required to determine whether an error has taken place, whether it requires compensation and how to calculate the loss involved, if any. Also, in certain circumstances, correcting an error may require the firm to take ownership of securities in its own error account. The disposition of those securities may create a gain in the firm's error account. To manage potential conflicts concerning errors, we have implemented a written Error Resolution policy and have created an Error Review Committee that is chaired by risk management personnel, among other steps.

+ **Fees.** We have a large client base, and the fee arrangements with our clients vary widely. The fact that our revenues are represented by the fees we charge our clients means that we cannot be considered to be acting as your fiduciary when negotiating fees. For instance, performance compensation may create an incentive to make riskier or more speculative investments. Additionally, our Bernstein Financial Advisors and other distribution personnel may receive commission payments for certain services that could

provide an incentive to recommend investment products based on the compensation received, rather than the client's needs. For example, the higher fees Bernstein earns on equity services compared to fixed income services, or on actively managed services compared to passive services, resulting in higher commissions earned by Bernstein advisers, may induce them to recommend the higher fee services.

+ **Gifts and Entertainment.** Our employees who acquire products and services that are used in our investment activities should not be unduly influenced by the receipt of gifts, meals or entertainment from the sellers of such products or services. Similarly, our employees should not attempt to unduly influence clients or potential clients with these or other inducements, such as charitable or political contributions. In order to help identify and manage these potential conflicts of interest, we have adopted a Policy and Procedures for Giving and Receiving Gifts and Entertainment (the "Gifts Policy") under our Code of Ethics. Among other things, the Gifts Policy generally prohibits the exchange of cash gifts, limits the value of non-cash business gifts to \$100, and sets basic limits on the value of business entertainment that our employees can provide or accept. Department manager approval is required for activities above those limits. However, the Gifts Policy prohibits trading personnel from accepting any forms of gifts or entertainment from any brokers or other service providers doing business with the firm. Trading personnel may receive incremental business meals with compliance approval. Certain forms of business entertainment are also prohibited for all employees. We also comply with the relevant local rules, laws and regulations related to gifts and entertainment in other jurisdictions in which we operate.

+ **Guideline Interpretation.** As noted earlier, investment decisions in our chief strategies regularly affect more than one client account. Often, the investment decision could affect hundreds or even thousands of accounts, many of which may have submitted written investment guidelines to us. To address the risk of us interpreting guidelines unreasonably to favor or allow decisions that investment personnel already have made, we rely on other personnel (including those in compliance, legal and risk management functions) to determine the ultimate meaning of guidelines. The investigation and correction of guideline breaches is the responsibility of risk managers with input from compliance personnel, who are independent of any investment team.

+ **Investing in New Services.** When AB creates a new service for our clients, we often make an initial investment with the firm's capital or present the investment opportunity to our clients who choose to make the investment. However, there are situations where the initial investment opportunity is appropriate for our mutual fund managers or where the firm has discretion of client assets. When these investment opportunities present themselves in our mutual funds, the firm relies on the mutual fund independent directors to review and approve the arrangements. When these investment opportunities present themselves elsewhere, the opportunity is reviewed and approved by the firm's New Products and Initiatives (NPI) Committee that is independent of the investment teams.

+ **Investments in the Same Issuer or Related Issuer.** Our separate portfolio management teams may make separate investments in the capital structure of the same issuer or closely related

issuers. It is possible that one of our services or portfolios could take action as controlling owners of a capital structure that could adversely affect our clients who are invested in other parts of the same issuer or certain related assets. Where such situations occur in the ordinary course of our investment process, we will take steps to separate the decision-making of the relevant investment teams, and allow them to take action in the best interests of the portfolios under their management.

+ **Limitation on Offerings for Bernstein Private Wealth Services.**

As a component of its integrated approach, Bernstein Private Wealth Services primarily offers its clients products and services that are managed by AB and those that are distributed by AB Investments, Inc. and Bernstein LLC, and offers limited products or services by third-party managers to meet other investment objectives not currently offered by AB

+ **Relationships with Influential Clients.** Our single largest asset management client is AXA (including its subsidiaries and affiliates).

In addition, certain clients serviced by Institutional Services and Bernstein Private Wealth Services could be perceived to have the ability to influence AB's business conduct due to the amount of assets they control or their public reputations. Nevertheless, when conducting our investment activities, we treat all clients in a strategy in the same way, as reflected in our policies.

+ **Proxy Voting.** As an investment adviser that exercises proxy voting authority over client securities, AB has a fiduciary duty to vote proxies in a timely manner and make voting decisions that are in our clients' best interests. We recognize that there may be potential conflicts of interest when we vote a proxy on behalf of clients. We have adopted a detailed policy statement that addresses and describes the steps we take to mitigate conflicts when voting proxies. Please see Section N for a description of the steps we take to mitigate conflicts when voting proxies on behalf of clients.

+ **Securities Valuation.** Typically, our fees are based upon the value of our clients' portfolios. AB has the authority to determine the value of securities that are difficult to price and, in such cases, may have an incentive to select the highest potential price for those securities, even when a lower price may be more reasonable. To mitigate that potential conflict, our policies require our pricing personnel to follow specific steps when calculating the fair value of a security. Those personnel are overseen by our Valuation Committee, the members of which are all in control functions. No portfolio managers, sales or corporate finance staff members are responsible for valuation decisions.

+ **Selecting Execution Brokers.** AB and its employees have a variety of relationships with the financial services firms that execute our client trades. For example, many of those firms distribute shares of AB's sponsored mutual funds or other services to their customers. And at any given time, those firms or their affiliates can themselves be asset management clients of AB or institutional clients of Bernstein. Our portfolio managers may take a position in the securities issued by those firms as investments for client portfolios, which may be significant. One of the brokers we may use, Sanford C. Bernstein & Co., is our wholly owned subsidiary. Our selection of trading vendors is not based upon those relationships. Rather, AB has a duty to select brokers,

dealers and other trading venues that provide best execution for our clients. Please refer to the following Section I on "How We Select Brokers."

I. BROKERAGE PRACTICES (ADV ITEM 12)

HOW WE EXECUTE TRANSACTIONS

We rely upon brokers, dealers and other trading intermediaries to execute our client securities transactions. Other than those who pay an all-inclusive fee, clients pay the transaction charges associated with the execution of their trades. The brokers, dealers and other vendors that we utilize for trade execution are selected by AB's trading personnel, using the standards described below.

HOW WE SELECT BROKERS

In the previous section we discussed AB's conflicts of interest when selecting brokers. However, as a discretionary investment adviser, AB has a duty to select brokers, dealers and other trading venues that provide best execution for our clients.

Generally speaking, the duty of best execution requires an investment adviser to seek to execute securities transactions for clients in such a manner that the client's total cost or proceeds in each transaction is the most favorable under the circumstances, taking into account all relevant factors. The lowest possible commission, while very important, is not the only consideration.

We seek best execution in all portfolio trading activities for all investment disciplines and products, regardless of whether commissions are charged. This applies to trading in any instrument, security or contract including equities, bonds, and forward or derivative contracts.

Our standards and procedures governing best execution are set forth in several written policies. Generally, to achieve best execution, we consider the following factors, without limitation, in selecting brokers and intermediaries: (1) Execution capability; (2) Order size and market depth; (3) Ability and willingness to commit capital; (4) Availability of competing markets and liquidity; (5) Trading characteristics of the security; (6) Availability of accurate information comparing markets; (7) Quantity and quality of research received from the broker dealer; (8) Financial responsibility of the broker-dealer; (9) Confidentiality; (10) Reputation and integrity; (11) Responsiveness; (12) Recordkeeping; (13) Available technology; and (14) Ability to address current market conditions. AB regularly evaluates the execution, performance and risk profile of the broker-dealers it uses.

Our policy strictly prohibits the direct or indirect use of client account transactions to compensate any broker, dealer, intermediary or other agent for the promotion or sale of AB mutual funds, services or other products.

Our affiliated broker-dealers, especially Bernstein LLC, may be used to effect transactions for client accounts. However, where required by Section 11(a)(1)(H) of the Exchange Act and/or Department of Labor Prohibited Transaction Exemption 86-128, AB seeks prior authorization for the use of an affiliated broker. Similarly, when transacting securities with affiliated broker-dealers for registered investment companies, AB complies with Rule 17e-1 under the Investment Company Act.

AB's trading professionals are responsible for continuously monitoring and evaluating the performance and execution capabilities of brokers

that transact orders for our client accounts to ensure consistent quality executions. This information is reported to the firm's Best Execution Committee, which oversees broker-selection issues. In addition, we periodically review our transaction costs in light of current market circumstances using internal tools and analysis as well as statistical analysis and other relevant information from external vendors.

SERVICES WE RECEIVE FROM BROKERS

While AB selects brokers primarily on the basis of their execution capabilities, the direction of transactions to such brokers may also be based on the quality and amount of research services they provide to us and indirectly to our clients. These client commission arrangements and commission sharing arrangements (formerly known as soft commissions) are designed to supplement our own internal research and investment strategy capabilities.

In accordance with SEC guidance, we regularly consider whether a given service provides lawful and appropriate assistance to the investment management process and ensure the cost of the service bears a reasonable relationship to the value of the research or service. We comply with the relevant rules of the United Kingdom's Financial Conduct Authority when paying for services in the UK and the SEC rules when paying for services in the United States.

For investment services or strategies managed in the EU, AB will absorb the cost of research in compliance with local regulations. AB's decision to absorb the cost of research for such investment services or strategies will apply to all clients invested in those services or strategies and will not be limited to a specific group of clients based on region or country. For investment services or strategies managed outside the EU, clients will continue to contribute to the payment of research either through their brokerage commissions or through a portion of their management fee as negotiated with AB.

The research services we acquire through client commission arrangements include, without limitation: (1) a wide variety of written reports on individual companies and industries, general economic conditions, and other matters relevant to our investment analyses; (2) direct access to research analysts throughout the financial community; (3) mathematical models; (4) access to expert matching networks; and (5) proxy voting research services. We may acquire market data services using commission credits generated by our New York equity trading desk, consistent with United States laws and regulations and SEC guidance.

These services may require the use of computer systems whose software components may be provided to AB. In situations where the systems can be used for both research and non-research purposes, we make an appropriate allocation and only permit brokers to pay the portion of the system that is used for research purposes. Research services furnished by brokers that we deal with are used to carry out our investment management responsibilities with respect to various client accounts over which we exercise investment discretion. Under Section 28(e), AB is not required to use eligible research services in managing those accounts which generated the commissions used to acquire it. Accordingly, such services may sometimes be utilized in connection with accounts that may not have paid any or all commission to the relevant brokers. Similarly, although some clients do not generate commissions which result in research being provided—such as AB's Managed Accounts offered to retail investors—they may still benefit

from the research provided in connection with other transactions placed for other clients.

Client commission arrangements benefit AB because we do not have to produce or pay for the research and services we obtain through them. While our policy is to seek best execution, we may select a broker for a portion of our trades which charges higher transaction costs if we determine in good faith that the cost is reasonable in relation to the value of the brokerage and research services provided.

Despite these potential conflicts, we believe that we are able to negotiate costs on client transactions that are competitive and consistent with our policy to seek best execution. In addition, we do not enter into agreements or understandings with any brokers regarding the placement of securities transactions because of the research services they provide. However, we do have an internal procedure for allocating transactions, in a manner consistent with our execution policy, to brokers that we have identified as providing superior executions and research services of particular benefit to clients. AB's Research Allocation Committee has the principal oversight responsibility for periodically reviewing and evaluating the commission allocation process.

SMA programs do not generate commissions and therefore do not contribute toward payment for research services. However, as noted above, such clients may benefit from research services paid for with other clients' commissions.

We accommodate special requests on broker selection, although AB reserves the right to reject or limit certain instructions. Clients must also be aware of the consequences of specific instructions on restricting broker selection. Trades for these clients may be segregated from the aggregated clients' order and would no longer receive the advantages that may result from aggregating orders. Normally, such trades are placed after the aggregated order and these clients may be disadvantaged by the market impact of trading for other portfolios.

Other clients permit us to use such brokers, but prohibit us from using commissions generated by their accounts to acquire research services from so-called "third-party" research providers—i.e., independent research firms that agree to receive payment from the brokers we use for trade execution. However, commissions from these client accounts in most cases still will be used to acquire research generated internally by brokers (also called "proprietary" research). These clients also still participate in aggregated orders with clients who have not made such a request and could therefore realize the price and execution benefits of the aggregated order and the liquidity provided by the use of broker capital. Clients in both of these categories generally do not experience lower transaction costs than other clients.

AB does not use commissions of clients domiciled in certain countries to acquire "third-party" research where the regulations in such jurisdictions make it unlawful or impractical.

CLIENT DIRECTED TRADING

Some clients ask us to participate in their Directed Trading Programs (also called "commission recapture" programs), in which they direct us to execute their trades with certain brokers. In these cases, we retain our usual discretion in selecting broker-dealers and negotiating commissions for the client's account, subject to the specific directions. We accept these instructions subject to specific limits that we have established. We believe that our ability to obtain best execution would be impaired above such limits. Market conditions and modifications to

AB's trading practices may cause us to vary the limits from time to time. In such cases, we may follow the instructions but may not obtain best execution on all directed transactions.

Clients who participate in such programs are advised to consider whether the commissions, execution, clearance and settlement capabilities provided by their selected broker-dealer will be comparable to those obtainable by AB from other broker-dealers. Transactions for clients making such a direction are generally not aggregated for purposes of execution with orders for the same securities for other accounts that we manage. Such clients may therefore forfeit the advantages that can result from aggregated orders (which may be executed prior to directed trades), such as negotiated commission rates associated with alternative trading approaches and the liquidity provided by the use of broker capital.

We generally execute directed trades after trades have been executed for non-directed accounts. As a result, the account may receive a price and execution that is less favorable than that obtained for non-directed accounts, particularly in volatile markets. We may also execute trades in securities with market makers in those securities. Even if the client's selected broker-dealer is a market maker in such securities, we may be unable to obtain best execution as a result of each respective brokerage arrangement. Any client direction agreement must be in writing. Clients are encouraged to specify the level of commissions or target they desire, but may not exceed limits imposed by each investment discipline. In the absence of a specific direction or target, we set targets and limits and inform the client in writing.

OTHER TRADING MATTERS

Principal vs. Agency Transactions. AB's trading personnel are responsible for determining whether to place a trade on behalf of a client account with a broker on a principal or agency basis. Generally, a broker is considered to act as a principal when it transacts in a security with its own capital or for its own account. This decision, made on a trade-by-trade basis, is based on several factors. For example, trades made on a principal basis could lead to a higher execution cost, and therefore are only used when we believe that the extra cost is justified by the added liquidity and speed of execution. The additional commission is correlated to the level of risk taken by the broker on the trade.

The size of an order may also influence a decision to opt for an agency or principal basis. When current market conditions suggest that the size of the order placed may affect the price of the security, trading personnel may ask the broker to take a position (when we are selling) or to sell short (when we are buying) a security. Accounts may pay a premium for this additional risk assumed by the broker. Trading on a principal basis may also be preferable when engaging in a program trade. When trading in a basket of securities, often in relatively small quantities, we may ask a broker to execute the order "across the board," meaning that the broker will buy from us or sell to us the entire block of securities from its own account. Clients benefit from the speed of the execution, as the account would not be subject to market risk during an extended execution period.

Clients that have trading restrictions and/or reporting obligations with respect to principal or agency transactions with particular brokers or dealers are required to notify us in writing of those affiliations and any associated trading restrictions for their accounts.

Algorithmic Trading and Alternative Trading Systems (ATS). AB directs client portfolio transactions to brokers for execution and uses

electronic, self-directed algorithmic trading tools to execute on various exchanges and Alternative Trading Systems (commonly referred to as dark pools). In an effort to maximize execution quality, reduce market impact and transaction costs incurred by clients and increase anonymity of orders, we use non-full service brokerage alternatives. This includes the use of execution-only brokers, algorithmic tools and other electronic order routing products offered by brokers and Alternative Trading Systems. Per share commission rates for these execution services are substantially lower than rates on full service brokerage transactions, including our affiliated broker, Bernstein LLC.

Increasing the use of non-full service alternatives has helped to reduce overall commission costs to clients, even though commission rates are only one component of a best execution analysis. We attempt to utilize these alternatives as much as possible across all equity accounts on a fair and equitable basis, when appropriate and we believe that doing so achieves the best execution for a particular order. Trading through these alternative platforms at certain commission rates also allows us to generate credits that can be used to acquire research services.

Due to the nature of the marketplace, certain securities are more likely to be available in sufficient quantity through non-full service alternatives than others. As a result, depending on the investment service and other factors such as the timing of orders, the percentage of a client's transactions executed through non-full service alternatives will vary. Therefore, certain clients may receive the benefit of these lower transaction costs more often than other clients and thus would experience lower overall transaction costs.

We believe that in order to achieve "best execution" for clients on an overall basis, we continue to require services offered by full service brokers that are not offered by non-full service alternatives. Although commission rates paid to full service broker-dealers are substantially higher than non-full service alternatives, we believe that the fees are reasonable in relation to the value of the brokerage and research services provided.

Brokerage Selection—Managed Account Programs. With regard to a particular trade, we may conclude that an SMA program account may be materially disadvantaged by effecting that transaction through the SMA sponsor or the broker-dealer designated by the SMA sponsor. AB may therefore place the order on an aggregated basis with institutional or mutual fund accounts; in which case, the SMA client would be responsible to pay the additional transaction charge.

Holdings in Securities Exchanges. Client accounts may hold positions in the securities of exchanges or companies that operate or have significant investments in market centers. These holdings bear no influence on our decisions to direct orders to brokers, exchanges or markets centers.

Liquidity Rebates. Bernstein LLC or unaffiliated brokers may earn liquidity rebates when placing orders in certain Market Centers while trading on behalf of AB.

Brokers are chosen based on our policy of seeking best execution, which is determined by several quantitative and qualitative factors. It is against AB's policy to take into consideration the broker's potential to earn ECN liquidity rebates when deciding whether to choose a particular full service broker.

Foreign Exchange Transactions. AB normally executes currency transactions on an active basis through our currency trading desk, except

where market restrictions in some emerging currencies exist and execution for trade settlement is arranged by the custodian directly. In addition, certain of our asset-management clients direct their currency trades to their custodian banks for execution via standing instructions, and in such cases as well as in the case of restricted emerging currencies, AB does not know the precise execution time of the foreign exchange trade and cannot influence the exchange rates applied to these trades.

Whenever our institutional client portfolios engage in foreign exchange transactions, or we are otherwise authorized by a client mandate to utilize certain types of derivative instruments, AB may use the services of an unaffiliated intermediary as an information depository for purposes of delivering to counterparties client information and constituent and other documentation as may be required by counterparties in connection with such foreign exchange or derivatives transactions.

J. REVIEW OF ACCOUNTS (ADV ITEM 13)

REGULAR ACCOUNT REVIEWS

AB regularly reviews and evaluates accounts for compliance with each client's investment objectives, policies and restrictions. We also periodically review portfolios for deviations from our target portfolio construction criteria for the service, including asset diversification and performance. For accounts handled through Bernstein Private Wealth Services, we review for adherence to the directed asset allocation and product mix. For SMA programs, AB reviews and evaluates model strategies to ensure compliance with the strategy's investment objectives, policies and restrictions.

As noted above, AB uses systems to assist with guideline compliance. Compliance personnel and others at the firm review the coding in our guideline compliance systems as appropriate. These compliance systems generate alerts to indicate potential guideline breaches on a daily basis. The alerts are reviewed and resolved by the Client Guideline Management group, the Portfolio Management Group and our compliance personnel. Our portfolio managers, compliance officers and legal counsel are involved in reviewing these alerts as needed.

In all cases, portfolios are reviewed when significant cash or securities are added to or withdrawn from the account or when AB is advised of a change in circumstances that warrants a change in management of the account. Other events that may trigger a review include asset allocation imbalances or significant model or investment strategy changes. Various tools and quality control reports are used to identify these triggers.

We also have several risk committees that provide independent oversight of investment management processes (although not necessarily of individual client portfolios). Committee functions include calibrating portfolio and functional risks, ensuring adherence to investment policies, reviewing portfolios against benchmarks, reviewing quantitative models, aggregating firm-wide holdings and reviewing performance dispersion among managers.

REPORTS TO CLIENTS

Depending on their preference, clients serviced through Institutional Services and/or Bernstein Private Wealth Services receive, on a monthly or quarterly basis, portfolio appraisal reports and summaries, purchase and sales reports, performance reviews and transaction summaries. Upon request, confirmations of each trade can be sent to

clients or their custodian banks on a trade-by-trade, monthly, quarterly or semi-annual basis. Confirmations are in some instances sent through the automated system of the Depository Trust Company to a client or its custodian bank after each execution of a transaction in the account. SMA clients receive reports from the program sponsor firms.

At the client's request, a cumulative monthly statement can also be provided that shows the commissions per share paid by the account on all transactions since the beginning of the calendar year. It also lists the names of the executing brokers and whether they were selected by AB or the client.

Pursuant to Section 11(a)(1)(H) of the Exchange Act and/or Prohibited Transaction Exemption 86-128 ("PTE 86-128") under ERISA, reports are furnished to clients regarding securities transactions with Bernstein LLC and pursuant to PTE 86-128 with respect to Bernstein. In addition, special reports may be developed which are tailored to meet specific client requirements. AB encourages frequent review with its clients, particularly early in the relationship. Formal performance reviews are generally held or offered on a quarterly basis.

We also respond to special requests of clients for ad hoc reports related to activity in their account including, for example, proxy voting.

K. CLIENT REFERRALS AND OTHER COMPENSATION (ADV ITEM 14)

SOLICITOR AGREEMENTS

Persons introducing new client accounts to AB (including Bernstein Private Wealth Services) may receive a portion of the advisory fee generated by the account for a period which varies on a case-by-case basis. In addition, we may compensate a solicitor for introducing a direct investor in an investment company or other pooled vehicle managed by AB. Such compensation amounts to a portion of the management fee that we earn from the investment company or pooled vehicle, in compliance with legal requirements. These fees are not paid by clients.

Employees of AXA Advisors, an affiliate of AXA Financial, who refer clients to our Bernstein Private Wealth Services, are paid a portion of our management fee under an existing solicitor arrangement. In 2013, AB entered into a solicitor arrangement with McMorgan & Co., under which the latter will be paid a portion of our management fee for successfully referring clients with Taft-Hartley retirement plans. Both arrangements comply with the relevant provisions of the Investment Advisers Act of 1940.

PAYMENTS TO VENDORS AND CONSULTANTS

AB purchases data, research, conference attendance and other services or products from vendors or institutional asset management consultants. On occasion, our Institutional Services unit purchases such services from institutional asset management consultants who conduct searches and recommend money managers to prospective clients. The sale of such products and services may be profitable to consultants, which may indirectly reduce the cost of the consulting services to prospective institutional clients. In order to mitigate potential conflicts for the consultants, we do not purchase such services and products unless we have determined in good faith that they provide AB with industry data and/or proper assistance in marketing our services and that the cost is reasonable in light of the data or services being provided.

AB's *Statement of Policy and Procedures Regarding Consultant Conflicts of Interest* addresses conflicts that can arise as a result of the referral services consultants provide to separate account clients as well as in circumstances where consultants evaluate and recommend mutual funds for prospective client investments.

Listed below are the costs of the products and services that the Institutional Investment Management unit purchased from institutional asset management consultants in 2019:

Name of Consultant	Cost of 2019 Purchases
Callan Associates	\$20,000
Mercer Investing Consulting	\$20,000
Segal Marco Advisors	\$2,500

AB also purchases data and publications from firms that analyze or review the mutual funds we sponsor such as Lipper and Morningstar. AB may have sub-advisory relationships with the independent investment advisory arm of firms such as Morningstar, Mercer, and Wilshire for mutual funds or other commingled vehicles. In addition, AB may provide or sell aggregated trade data to vendors. Any trade data provided will be general, rather than client-specific.

EMPLOYEE REFERRALS

Our employees are eligible to earn an account referral bonus for referring a potential client to AB. Senior management determines whether an employee's involvement was significant enough to warrant this bonus. Certain employees may not be eligible for an Account Referral Bonus due to a conflict of interest or other reasons as determined by senior management. In particular, portfolio managers and research analysts are not eligible to receive payments based on solicitation efforts from companies they cover.

L. CUSTODY (ADV ITEM 15)

AllianceBernstein L.P. does not take actual custody of client assets. Rather, our client assets are custodied at trust banks and broker-dealers, including our affiliated broker-dealer, Bernstein LLC.

Our clients receive statements concerning their portfolios from both AB and their custodians. We encourage clients to compare the statements received from their custodians with the statements they receive from AB.

M. INVESTMENT DISCRETION (ADV ITEM 16)

INVESTMENT DISCRETION

AB provides both discretionary and non-discretionary investment advisory services. The vast majority of our clients grant discretion, which allows us to manage portfolios and make investment decisions without client consultation regarding the securities and other assets that are bought and sold for the account. In such accounts, we do not require client approval for the total amount of the securities and other assets to be bought and sold, the choice of executing brokers, or the price and commission rates for such transactions.

All clients, with the exception of certain SMA clients, are required to enter into a written investment advisory agreement with us (or an affiliate) prior to the establishment of an advisory relationship.

In some instances, clients may seek to limit or restrict our discretionary authority by imposing investment guidelines or restrictions on their account. Please refer to Section A for a discussion of our approach to reviewing, accepting and managing accounts that impose investment guidelines or restrictions.

In non-discretionary relationships, we make periodic investment recommendations to clients about the securities that should be bought or sold and the total amount of such transactions. Clients may ask AB to place orders for the purchase or sale of the securities being recommended, either through executing brokers of our choice or according to the client's request. Orders placed by AB are aggregated with those discretionary clients in the same security, based on standard procedures.

We do not, however, delay trading for discretionary client orders while a non-discretionary client considers an investment recommendation. In addition, non-discretionary clients will not share in the allocation of those trades that were completed before they approved an order. In cases where the non-discretionary client places its own orders without our involvement, procedures are adopted to ensure it is fair to both the discretionary and non-discretionary clients.

LIMITATIONS ON OWNERSHIP AND TRADING OF SECURITIES FOR CLIENT ACCOUNTS

From time to time, we may invest on behalf of our clients in securities subject to various ownership limitations such as charter provisions, shareholder rights plans (commonly known as "poison pills") and regulatory restrictions on ownership. AB takes precautions to comply with any ownership limitations applicable to any specific security as failure to monitor such levels could lead to adverse regulatory action or dilution of client holdings. In addition, we have adopted procedures that restrict further purchases of equity securities when the aggregate holdings of all client accounts and the client accounts of its related persons reaches 16.5% of the shares outstanding (except in cases where a lower limit is required by law, regulation or specific issuer restrictions). When these limits are reached, we determine if there are any risk management or other concerns that preclude further purchases. If not, the security is re-opened for purchase.

Additional transactions in the securities of a publicly traded company may also be prevented by our business activities or those of a related party (such as AXA or entities under AXA's control). For example, if AB or a related party took a significant interest in a publicly traded company, we could be prevented from buying or selling that security for clients during periods in which such a transaction might otherwise be desirable.

From time to time, Bernstein LLC, our affiliated broker-dealer, may be involved in public offerings of equity securities. Accounts subject to the requirements of the Investment Company Act of 1940 may be subject to limitations in participation when Bernstein LLC is acting as an underwriter for the offering. Accounts subject to ERISA may be prohibited from participating when Bernstein LLC is receiving compensation as a manager or co-manager on an offering, and may be subject to limitations in participation in other situations.

CLAIMS ON BEHALF OF CLIENTS

Our investment discretion authority does not give AB power of attorney to initiate legal proceedings on behalf of the client accounts we manage. Accordingly, we do not initiate lawsuits or pursue litigation on behalf of our clients in the U.S. or internationally. This includes lawsuits for damage claims they may have with respect to securities transacted in their AB accounts. Further, AB does not make decisions on a client's behalf in legal proceedings or provide advice on whether to engage or participate in legal proceedings.

AB does not submit securities class action settlement claims or opt-in to class actions on behalf of all advisory clients. The service is available under specific terms to clients of Bernstein Private Wealth Services who custody assets at Bernstein LLC and to certain client accounts that also receive administration services from AB. These services are provided on a best efforts basis. However, AB will only file class action proof of claims for those clients when the information required to file has been provided within the past 10 years. Although AB maintains the vast majority of this information electronically, AB is not required to keep records for more than 10 years according to local regulations and customs.

Pursuant to our investment discretion, we file claims for bankruptcy trust proceeds on behalf of existing clients whose account holdings appear to create eligible claims. We identify these bankruptcy proceedings and file such claims based upon our reasonable best efforts. Clients who require higher levels of bankruptcy claim services are encouraged to obtain them from their account custodians or outside counsel.

N. VOTING CLIENT SECURITIES (ADV ITEM 17)

INTRODUCTION

As an investment adviser, we have a fiduciary duty to make investment decisions that are in our clients' best interests by maximizing the value of their shares. Proxy voting is an integral part of this process, through which we support strong corporate governance structures, shareholder rights, and transparency.

Our Proxy Voting and Governance Policy ("Proxy Voting and Governance Policy" or "Policy") outlines our policies for proxy voting and includes a wide range of issues that often appear on proxies. It applies to all of AB's investment management subsidiaries and investment services groups investing on behalf of clients globally. The Policy is intended for use by those involved in the proxy voting decision-making process and those responsible for the administration of proxy voting ("Proxy Managers"), in order to ensure that our proxy voting policies and procedures are implemented consistently. Copies of the Policy, our voting records, as noted below in "Voting Transparency", and other related documents can be found on our Internet site (www.alliancebernstein.com).

We have an obligation to vote proxies in a timely manner and we apply the principles in this policy to our proxy decisions. We believe a company's environmental, social and governance ("ESG") practices may have a significant effect on the value of the company, and we take these factors into consideration when voting.

We sometimes manage accounts where proxy voting is directed by clients or newly-acquired subsidiary companies. In these cases, voting decisions may deviate from the Proxy Voting and Governance Policy.

RESEARCH UNDERPINS DECISION MAKING

As a research-driven firm, we approach our proxy voting responsibilities with the same commitment to rigorous research and engagement that we apply to all of our investment activities. The different investment philosophies utilized by our investment teams may occasionally result in different conclusions being drawn regarding certain proposals and, in turn, may result in the Proxy Manager making different voting decisions on the same proposal. Nevertheless, the Proxy Manager votes proxies with the goal of maximizing the value of the securities in client portfolios.

In addition to our firm-wide proxy voting policies, we have a Proxy Voting and Governance Committee ("Proxy Voting and Governance Committee" or "Committee"), which provides oversight and includes senior investment professionals from Equities, Legal personnel and Operations personnel. It is the responsibility of the Committee to evaluate and maintain proxy voting procedures and guidelines, to evaluate proposals and issues not covered by these guidelines, to consider changes in policy, and to review this Policy no less frequently than annually. In addition, the Committee meets at least three times annually and as necessary to address special situations.

ENGAGEMENT

In evaluating proxy issues and determining our votes, we welcome and seek out the points of view of various parties. Internally, the Proxy Manager may consult the Proxy Voting and Governance Committee, Chief Investment Officers, and/or Research Analysts across our equities platforms, and Portfolio Managers in whose managed accounts a stock is held. Externally, we may engage with companies in advance of their Annual General Meeting, and throughout the year. We believe engagement provides the opportunity to share our philosophy, our corporate governance values, and more importantly, affect positive change. Also, these meetings often are joint efforts between the investment professionals, who are best positioned to comment on company-specific details, and the Proxy Manager(s), who offer a more holistic view of governance practices and relevant trends. In addition, we engage with shareholder proposal proponents and other stakeholders to understand different viewpoints and objectives.

PROXY VOTING GUIDELINES

Our proxy voting guidelines are both principles-based and rules-based. We adhere to a core set of principles that are described in the Policy. We assess each proxy proposal in light of these principles. Our proxy voting "litmus test" is what we view as most likely to maximize long-term shareholder value. We believe that authority and accountability for setting and executing corporate policies, goals and compensation generally should rest with the board of directors and senior management. In return, we support strong investor rights that allow shareholders to hold directors and management accountable if they fail to act in the best interests of shareholders.

Our proxy voting guidelines pertaining to specific issues are set forth in the Policy and include guidelines relating to board and director proposals, compensation proposals, capital changes and anti-takeover

proposals, auditor proposals, shareholder rights and governance proposals, and environmental, social and disclosure proposals. We generally vote proposals in accordance with these guidelines but, consistent with our “principles-based” approach to proxy voting, we may deviate from the guidelines if warranted by the specific facts and circumstances of the situation (i.e., if, under the circumstances, we believe that deviating from our stated policy is necessary to help maximize long-term shareholder value). In situations where our policy is case-by-case, the Policy often provides criteria that will guide our decision. In situations where our policy on a particular issue is case-by-case and the vote cannot be clearly decided by an application of our stated policy, a member of the Committee or his/her designee will make the voting decision in accordance with the basic principle of our policy to vote proxies with the intention of maximizing the value of the securities in our client accounts. Where appropriate, the views of investment professionals are considered. In addition, these guidelines are not intended to address all issues that may appear on all proxy ballots. Proposals not specifically addressed by these guidelines, whether submitted by management or shareholders, will be evaluated on a case-by-case basis, always keeping in mind our fiduciary duty to make voting decisions that, by maximizing long-term shareholder value, are in our clients’ best interests. Lastly, we may choose to abstain on certain case-by-case items involving strategic decisions for positions held in purely passive portfolios as the cost of making an affirmative decision (time, resources, etc.) outweighs the effect of such an election on the value of the investment.

CONFLICTS OF INTEREST

We recognize that there may be a potential material conflict of interest when we vote a proxy solicited by an issuer whose retirement plan we manage, or we administer, who distributes AB-sponsored mutual funds, or with whom we or an employee has another business or personal relationship that may affect how we vote on the issuer’s proxy. Similarly, we may have a potential material conflict of interest when deciding how to vote on a proposal sponsored or supported by a shareholder group that is a client. In order to avoid any perceived or actual conflict of interest, we have established procedures for use when we encounter a potential conflict to ensure that our voting decisions are based on our clients’ best interests and are not the product of a conflict. These procedures include compiling a list of companies and organizations whose proxies may pose potential conflicts of interest (e.g., if such company is our client) and reviewing our proposed votes for these companies and organizations in light of the Policy and ISS’s recommendations. If our proposed vote is contrary to, or not contemplated in, the Policy, is consistent with a client’s position and is contrary to ISS’s recommendation, we refer the proposed vote to our Conflicts Officer for his determination.

In addition, the Committee takes reasonable steps to verify that ISS continues to be independent, including an annual review of ISS’s conflict management procedures. When reviewing these conflict management procedures, we consider, among other things, whether ISS (i) has the capacity and competency to adequately analyze proxy issues; and (ii) can offer research in an impartial manner and in the best interests of our clients.

RESEARCH SERVICES

We subscribe to the corporate governance and proxy research services of Institutional Shareholder Services (“ISS”). All our investment professionals can access these materials via the Proxy Manager and/or the Committee.

CONFIDENTIAL VOTING

AB supports confidentiality before the actual vote has been cast. Employees are prohibited from revealing how we intend to vote except to (i) members of the Committee; (ii) Portfolio Managers who hold the security in their managed accounts; (iii) the Research Analyst(s) who cover(s) the security; (iv) clients, upon request, for the securities held in their portfolios; and (v) clients who do not hold the security or for whom AB does not have proxy voting authority, but who provide AB with a signed Non-Disclosure Agreement.

VOTING TRANSPARENCY

We publish our voting records on our Internet site (www.alliancebernstein.com) quarterly, 30 days after the end of the previous quarter. Many clients have requested that we provide them with periodic reports on how we voted their proxies. Clients may obtain information about how we voted proxies on their behalf by contacting their Advisor. Alternatively, clients may make a written request to the Chief Compliance Officer.

RECORDKEEPING

All of the records referenced in our Policy are kept in an easily accessible place for at least the length of time required by local regulation and custom, and, if such local regulation requires that records are kept for less than five years from the end of the fiscal year during which the last entry was made on such record, we follow the U.S. rule of five years. We maintain the vast majority of these records electronically. We keep paper records, if any, in one of our offices for at least two years.

LOANED SECURITIES

Many of our clients have entered into securities lending arrangements with agent lenders to generate additional revenue. We will not be able to vote securities that are on loan under these types of arrangements. However, under rare circumstances, for voting issues that may have a significant impact on the investment, we may request that clients or custodians recall securities that are on loan if we determine that the benefit of voting outweighs the costs and lost revenue to the client or fund and the administrative burden of retrieving the securities.

FURTHER INFORMATION AVAILABLE

Clients may obtain a copy of our Proxy Voting and Governance Policy and information about how we voted with respect to their securities by writing to:

AllianceBernstein L.P.

Attn: Chief Compliance Officer
1345 Avenue of the Americas
New York, NY 10105

O. FINANCIAL INFORMATION (ADV ITEM 18)

Audited financial statements of AllianceBernstein L.P. and AllianceBernstein Holding L.P. are publicly disclosed annually in connection with the SEC Form 10-K filings by each of those entities.

The Form 10-Ks filed by each entity for the year ended December 31, 2018 are available through our public website at the following address:

<https://alliancebernsteinholdinglp.gcs-web.com/static-files/050d6de4-f0fe-458c-9fa5-0dcd71300c85>

We are not presently aware of any financial condition that is reasonably likely to impair our ability to meet contractual commitments to our clients.

P. APPENDIX A—FEE SCHEDULES

ACTIVE US EQUITY MANAGEMENT

US Strategic Value

- + 0.900% on the first \$15 million
- + 0.500% on the next \$35 million
- + 0.400% on the balance

Minimum Account Size: \$50 million

US Diversified Value

- + 0.650% on the first \$25 million
- + 0.500% on the next \$25 million
- + 0.400% on the next \$50 million
- + 0.300% on the next \$100 million
- + 0.250% on the balance

Minimum Account Size: \$50 million

US Relative Value

- + 0.650% on the first \$25 million
- + 0.500% on the next \$25 million
- + 0.400% on the next \$50 million
- + 0.300% on the next \$100 million
- + 0.250% on the balance

Minimum Account Size: \$50 million

US Small & Mid Cap Value

- + 0.950% on the first \$25 million
- + 0.750% on the next \$25 million
- + 0.650% on the next \$50 million
- + 0.550% on the balance

Minimum Account Size: \$25 million

US Small Cap Value

- + 1.000% on the first \$25 million
- + 0.900% on the next \$25 million
- + 0.750% on the balance

Minimum Account Size: \$25 million

US Large Cap Growth

- + 0.800% on the first \$25 million
- + 0.500% on the next \$25 million
- + 0.400% on the next \$50 million
- + 0.300% on the next \$100 million
- + 0.250% on the balance

Minimum Account Size: \$50 million

Concentrated US Growth

- + 0.800% on the first \$50 million
- + 0.700% on the next \$50 million
- + 0.600% on the balance

Minimum Account Size: \$50 million

US Thematic Research

- + 0.800% on the first \$25 million
- + 0.500% on the next \$25 million
- + 0.400% on the next \$50 million
- + 0.300% on the next \$100 million
- + 0.250% on the balance

Minimum Account Size: \$50 million

US Small & Mid Cap Growth

- + 0.950% on the first \$25 million
- + 0.750% on the next \$25 million
- + 0.650% on the next \$50 million
- + 0.550% on the balance

Minimum Account Size: \$25 million

US Small Cap Growth

- + 1.000% on the first \$50 million
- + 0.850% on the next \$50 million
- + 0.750% on the balance

Minimum Account Size: \$25 million

US Strategic Core Equity

- + 0.450% on the first \$25 million
- + 0.400% on the next \$25 million
- + 0.350% on the next \$50 million
- + 0.300% on the next \$100 million
- + 0.250% on the balance

OR

- + 0.100% plus 20% beta-adjusted net excess return

Minimum Account Size: \$50 million

US Core Opportunities

- + 0.800% on the first \$25 million
- + 0.500% on the next \$25 million
- + 0.400% on the next \$50 million
- + 0.300% on the next \$100 million
- + 0.250% on the balance

Minimum Account Size: \$50 million

Select US Equity (Long only)

- + 1.000% on the first \$25 million
- + 0.800% on the next \$25 million
- + 0.700% on the balance

Minimum Account Size: \$200 million

Select US Equity Long/Short

- + 1.000% plus 20% of net excess return
- Minimum Account Size: \$100 million

US Small & Mid Cap Style Blend

- + 0.950% on the first \$25 million
 - + 0.750% on the next \$25 million
 - + 0.650% on the next \$50 million
 - + 0.600% on the next \$100 million
 - + 0.550% on the balance
- Minimum Account Size: \$25 million

US Equity Income

- + 0.65% on the first \$25 million
 - + 0.50% on the next \$25 million
 - + 0.40% on the next \$50 million
 - + 0.30% on the next \$100 million
 - + 0.25% on the balance
- Minimum Account Size: \$50 million

US Growth

- + 0.80% on the first \$25 million
 - + 0.50% on the next \$25 million
 - + 0.40% on the next \$50 million
 - + 0.30% on the next \$100 million
 - + 0.25% on the balance
- Minimum Account Size: \$50 million

ACTIVE GLOBAL/INTERNATIONAL EQUITY MANAGEMENT

Global/International Strategic Value

- + 0.900% on the first \$25 million
 - + 0.700% on the next \$25 million
 - + 0.600% on the next \$50 million
 - + 0.500% on the balance
- Minimum Account Size: \$50 million

Global/International Value

- + 0.800% on the first \$25 million
 - + 0.600% on the next \$25 million
 - + 0.500% on the next \$50 million
 - + 0.400% on the balance
- Minimum Account Size: \$50 million

Concentrated Global/International Growth

- + 0.900% on the first \$50 million
 - + 0.750% on the next \$50 million
 - + 0.650% on the balance
- Minimum Account Size: \$50 million

Global Thematic/Sustainable Thematic Research

- + 0.800% on the first \$25 million
 - + 0.600% on the next \$25 million
 - + 0.500% on the next \$50 million
 - + 0.400% on the balance
- Minimum Account Size: \$50 million

International Small Cap

- + 1.000% on the first \$25 million
 - + 0.850% on the next \$25 million
 - + 0.750% on the next \$50 million
 - + 0.650% on the balance
- Minimum Account Size: \$25 million

Global Core Equity

- + 0.800% on the first \$25 million
 - + 0.600% on the next \$50 million
 - + 0.500% on the balance
- Minimum Account Size: \$50 million

Global/International Strategic Core

- + 0.550% on the first \$25 million
 - + 0.500% on the next \$25 million
 - + 0.450% on the next \$50 million
 - + 0.350% upon the balance
- OR
- + 0.150% plus 20% beta-adjusted net excess return
- Minimum Account Size: \$50 million

Global/International Style Blend

- + 0.800% on the first \$25 million
 - + 0.650% on the next \$25 million
 - + 0.550% on the next \$50 million
 - + 0.450% on the next \$100 million
 - + 0.400% on the balance
- Minimum Account Size: \$50 million

All China Equity

- + 0.800% on the first \$50 million
 - + 0.700% on the next \$50 million
 - + 0.600% on the balance
- Minimum Account Size: \$50 million

European Opportunities

- + 0.750% on the first \$25 million
 - + 0.600% on the next \$25 million
 - + 0.500% on the next \$50 million
 - + 0.475% on the next \$100 million
 - + 0.450% on the balance
- Minimum Account Size: \$50 million

Regional Growth

- + 0.600% on the first \$25 million
- + 0.450% on the next \$25 million
- + 0.350% on the next \$50 million
- + 0.300% on the next \$100 million
- + 0.250% on the balance

Minimum Account Size: \$50 million

Japan Strategic Value

- + 0.650% on the first \$25 million
- + 0.500% on the next \$25 million
- + 0.400% on the next \$50 million
- + 0.375% on the next \$100 million
- + 0.350% on the balance

Minimum Account Size: \$50 million

Emerging Markets Value

- + 1.150% on the first \$25 million
- + 0.950% on the next \$25 million
- + 0.850% on the balance

Minimum Account Size: \$25 million

Emerging Markets Growth

- + 1.000% on the first \$25 million
- + 0.900% on the next \$25 million
- + 0.750% on the balance

Minimum Account Size: \$25 million

Emerging Markets Strategic Core

- + 1.000% on the first \$25 million
- + 0.900% on the next \$25 million
- + 0.800% on the balance

OR

- + 0.200% plus 20% beta-adjusted net excess return

Minimum Account Size: \$25 million

Asia ex Japan Value

- + 0.950% on the first \$25 million
- + 0.850% on the next \$25 million
- + 0.800% on the next \$50 million
- + 0.700% on the balance

Minimum Account Size: \$25 million

Asia Pacific ex Japan Value

- + 0.80% on the first \$25 million
- + 0.70% on the next \$25 million
- + 0.65% on the next \$50 million
- + 0.55% on the balance

Minimum Account Size: \$25 million

Global Diversified Value

- + 0.70% on the first \$25 million
- + 0.55% on the next \$25 million
- + 0.45% on the next \$50 million
- + 0.35% on the balance

Minimum Account Size: \$50 million

Emerging Markets Style Blend

- + 1.00% on the first \$25 million
- + 0.80% on the balance

Minimum Account Size: \$25 million

Global Research Insights

- + 1.00% on the first \$50 million
- + 0.80% on the next \$50 million
- + 0.70% on the balance

Minimum Account Size: \$50 million

ACTIVE US FIXED INCOME MANAGEMENT**US Core/Mortgage**

- + 0.450% on the first \$30 million
- + 0.180% on the balance

Minimum Account Size: \$100 million

US Strategic Core Plus

- + 0.500% on the first \$30 million
- + 0.200% on the balance

Minimum Account Size: \$100 million

US High Yield

- + 0.550% on the first \$50 million
- + 0.350% on the balance

Minimum Account Size: \$100 million

Insurance—Core

- + 0.300% on the first \$20 million
- + 0.200% on the next \$80 million
- + 0.150% on the next \$100 million
- + 0.120% on the next \$100 million
- + 0.100% on the balance

Minimum Account Size: \$100 million

Treasury Short Duration

- + 0.300% on the first \$20 million
- + 0.200% on the next \$80 million
- + 0.150% on the next \$150 million
- + 0.125% on the next \$250 million
- + 0.100% on the balance

Minimum Account Size: \$25 million

US Investment Grade Corporates

- + 0.500% on the first \$30 million
 - + 0.200% on the balance
- Minimum Account Size: \$100 million

Insurance—Core Total Return

- + 0.450% on the first \$30 million
 - + 0.180% on the balance
- Minimum Account Size: \$100 million

Insurance- Private Placements

- + 0.250% on the first \$200 million
 - + 0.230% on the next \$800 million
 - + 0.200% on the balance
- Minimum Account Size: \$100 million

Money Market

- + 0.100% on the balance
- Minimum Account Size: \$100 million

ACTIVE GLOBAL/INTERNATIONAL FIXED INCOME MANAGEMENT

Emerging Market Debt/Emerging Corporate Debt

- + 0.55% on the first \$50 million
 - + 0.35% on the balance
- Minimum Account Size: \$100 million

Global Fixed Income/Global Ex-US Fixed Income

- + 0.450% on the first \$30 million
 - + 0.230% on the balance
- Minimum Account Size: \$100 million

Global Plus/Global Credit Fixed Income

- + 0.500% on the first \$30 million
 - + 0.250% on the balance
- Minimum Account Size: \$100 million

Global High Yield/Global High Income

- + 0.550% on the first \$50 million
 - + 0.350% on the balance
- Minimum Account Size: \$100 million

Low Volatility High Yield

- + 0.550% on the first \$50 million
 - + 0.350% on the balance
- Minimum Account Size: \$100 million

Diversified Yield/Plus

- + 0.400% on the first \$50 million
 - + 0.250% on the balance
- Minimum Account Size: \$100 million

Global Short Duration

- + 0.300% on the first \$20 million
 - + 0.200% on the next \$80 million
 - + 0.150% on the next \$150 million
 - + 0.125% on the next \$250 million
 - + 0.100% on the balance
- Minimum Account Size: \$100 million

Sustainable Global Credit

- + 0.325% on the first \$100 million
 - + 0.250% on the balance
- Minimum Account Size: \$100 million

Financial Credit

- + 0.450% on the first \$100 million
 - + 0.350% on the balance
- Minimum Account Size: \$100 million

Canada Core Plus/Advanced/Long Duration

- + 0.500% on the first CAD \$40 million
 - + 0.200% on the balance
- Minimum Account Size: CAD \$140 million

PASSIVE MANAGEMENT

S&P 500

- + 0.040% on the first \$300 million
 - + 0.030% on the first \$200 million
 - + 0.020% on the balance
- Minimum Account Size: \$50 million

International/Global Equity Index

- + 0.070% on the first \$300 million
 - + 0.050% on the next \$200 million
 - + 0.030% on the balance
- Minimum Account Size: \$50 million

US Bond Index

- + 0.120% on the first \$50 million
 - + 0.100% on the next \$50 million
 - + 0.080% on the balance
- Minimum Account Size: \$20 million

Passive MBS Strategy

- + • 0.180% on the first \$250 million
 - + • 0.120% on the next \$250 million
 - + • 0.100% on the next \$500 million
 - + • 0.080% on the next \$1,000 million
 - + • 0.050% on the balance
- Minimum Account Size: \$500 million

MULTI-ASSET, STRUCTURED AND ENHANCED INDEX MANAGEMENT

Emerging Markets Multi Asset

- + • 0.850% on the first \$25 million
- + • 0.800% on the next \$25 million
- + • 0.750% on the balance

Minimum Account Size: \$50 million

All Market Real Return Strategy

- + • 0.750% on the first \$150 million
- + • 0.600% on the next \$150 million
- 0.500% on the balance

Minimum Account Size: \$150 million

Dynamic All Market

- + • 0.600% on the first \$500 million
- + • 0.500% on the balance

Minimum Account Size: \$250 million

Global Factor

- + • 0.250% on the first \$100 million
- + • 0.200% on the next \$50 million
- + • 0.140% on the balance

Minimum Account Size: \$100 million

International Factor Long

- + • 0.250% on the first \$100 million
- + • 0.200% on the next \$50 million
- + • 0.140% on the balance

Minimum Account Size: \$100 million

North America Factor Long

- + • 0.250% on the first \$100 million
- + • 0.200% on the next \$50 million
- + • 0.140% on the balance

Minimum Account Size: \$100 million

Customized Retirement Strategies

- + • 0.050% on the next \$500 million
- + • 0.040% on the next \$1500 million
- + • 0.030% on the balance

Minimum Account Size: \$100 million

Q. APPENDIX B—SUMMARY OF MATERIAL CHANGES FOR 2019 (ADV ITEM 2)

On March 31, 2020, AllianceBernstein L.P. and the related investment advisers identified on the cover page ("AB") filed the annual update of their Form ADV Part 2A brochure with the U.S. Securities and Exchange Commission ("SEC"). Material changes to AB's Part 2A since the last annual update on March 29, 2019 are as follows:

In 2019, AXA sold its entire remaining interest in EQH. EQH and its subsidiaries continue to own a controlling economic interest in AB. In addition, a minority economic interest in AB was owned by the public through AllianceBernstein Holding, L.P. (*Section A – AB's Investment Advisory Business*)

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Brochure Supplement: Concentrated Global Growth Team

April 2020

AllianceBernstein L.P., 1345 Avenue of the Americas, New York, NY 10105 | 212.969.1000

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Name / Year of Birth / Work Address	Educational Background and Business Experience	Disciplinary Information	Other Business Activities	Additional Compensation	Supervision
James T. Tierney, Jr. Year of Birth: 1966 1345 Avenue of the Americas New York, NY 10105 212-823-3824	Providence College, BS in Finance Columbia University, MBA	Nothing to report.	Nothing to report.	Nothing to report.	Christopher Hogbin SVP/Co-Head of Equities 212-823-3725 See footnote for details on how supervision is performed.
Chief Investment Officer—Concentrated US Growth, AllianceBernstein, 2013-Present Managing Director and Chief Investment Officer, W.P. Stewart & Co., Ltd., 2010-2013 Director and Chief Investment Officer, WPS Advisors, Inc, 2010-2013 Senior Vice President, WPS Advisors, Inc, 2003-2013 Portfolio Manager/Analyst, WPS Advisors, Inc, 2000-2013					



Name / Year of Birth / Work Address	Educational Background and Business Experience		Disciplinary Information	Other Business Activities	Additional Compensation	Supervision
<p>Mark I. Phelps Year of Birth: 1959</p> <p>50 Berkeley Street London W1J 8HA (W1J 8SB for England +44207-959-4517</p>	<p>University of York, BA (Honors) in Economics</p> <p>Royal Military Academy</p>	<p>Chief Investment Officer—Concentrated Global Growth, AllianceBernstein, 2013-Present</p> <p>Chief Executive Officer and Director, W.P. Stewart & Co., Ltd., 2008-2013</p> <p>President and Managing Director-Global Inv, W.P. Stewart & Co., Ltd., 2007-2013</p> <p>Deputy Managing Director-Global Inv, W.P. Stewart & Co., Ltd., 2006-2007</p> <p>Chief Executive Officer, W.P. Stewart & Co. (Europe), Ltd., 2006-2013</p> <p>Director, W.P. Stewart & Co. (Europe), Ltd., 2005-2013</p> <p>Director, W.P. Stewart Asset Management (Europe), Ltd., 2010-2012</p>	<p>Nothing to report.</p>	<p>Nothing to report.</p>	<p>Nothing to report.</p>	<p>Christopher Hogbin SVP/Co-Head of Equities 212-823-3725</p> <p>See footnote for details on how supervision is performed.</p>



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Name / Year of Birth / Work Address	Educational Background and Business Experience		Disciplinary Information	Other Business Activities	Additional Compensation	Supervision
<p>Debasish Chakrabarti Year of Birth: 1977</p> <p>50 Berkeley Street London W1J 8HA (W1J 8SB for England +44207-959-4518</p>	<p>University of Bristol, BSc (Honors) in Economics</p> <p>London Business School, MSc in Finance</p>	<p>Portfolio Manager/Senior Research Analyst—Concentrated Global Growth, AllianceBernstein, 2013-Present</p> <p>VP, Global Equity Portfolio Manager/Analyst, WPS Advisors, Inc., 2009-2013</p> <p>European Equity Analyst, WP Stewart & Co, Ltd, 2005-2009</p>	<p>Nothing to report.</p>	<p>Nothing to report.</p>	<p>Nothing to report.</p>	<p>Mark I. Phelps Chief Investment Officer—Concentrated Global Growth +44-207-959-4517</p> <p>See footnote for details on how supervision is performed.</p>
<p>Michael Walker Year of Birth: 1972</p> <p>1345 Avenue of the Americas New York, NY 10105 212-823-3826</p>	<p>University of Pennsylvania (Wharton School), BS in Economics</p>	<p>Portfolio Manager/Senior Research Analyst—Concentrated Growth, AllianceBernstein, 2013-Present</p> <p>Portfolio Manager/Analyst, WPS Advisors, Inc, 2009-2013</p> <p>Senior Vice President, WPS Advisors, Inc, 2011-2013</p> <p>Vice President, WPS Advisors, Inc, 2009-2011</p> <p>Managing Director and Analyst, Ark Asset Management, 2007-2009</p>	<p>Nothing to report.</p>	<p>Nothing to report.</p>	<p>Nothing to report.</p>	<p>James T. Tierney, Jr. Chief Investment Officer—Concentrated US Growth 212-823-3824</p> <p>See footnote for details on how supervision is performed.</p>

Supervision: AB investment professionals are subject to various forms of oversight including an independent risk program and direct supervision by managers within their respective business units. The firm's risk oversight and investment committees also provide general oversight of the investment management processes, and include senior AB investment professionals and other managers.



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Brochure Supplement: Concentrated US Growth Team

April 2020

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James T. Tierney, Jr. Year of Birth: 1966 1345 Avenue of the Americas New York, NY 10105 212-823-3824	Providence College, BS in Finance Columbia University, MBA	Chief Investment Officer—Concentrated US Growth, AllianceBernstein, 2013-Present Managing Director and Chief Investment Officer, W.P. Stewart & Co., Ltd., 2010-2013 Director and Chief Investment Officer, WPS Advisors, Inc, 2010-2013 Senior Vice President, WPS Advisors, Inc, 2003-2013 Portfolio Manager/Analyst, WPS Advisors, Inc, 2000-2013	Nothing to report.	Nothing to report.	Christopher Hogbin SVP/Co-Head of Equities 212-823-3725 See footnote for details on how supervision is performed.



Name / Year of Birth / Work Address	Educational Background and Business Experience		Disciplinary Information	Other Business Activities	Additional Compensation	Supervision
<p>Mark I. Phelps Year of Birth: 1959</p> <p>50 Berkeley Street London W1J 8HA (W1J 8SB for England +44207-959-4517</p>	<p>University of York, BA (Honors) in Economics</p> <p>Royal Military Academy</p>	<p>Chief Investment Officer—Concentrated Global Growth, AllianceBernstein, 2013-Present</p> <p>Chief Executive Officer and Director, W.P. Stewart & Co., Ltd., 2008-2013</p> <p>President and Managing Director-Global Inv, W.P. Stewart & Co., Ltd., 2007-2013</p> <p>Deputy Managing Director-Global Inv, W.P. Stewart & Co., Ltd., 2006-2007</p> <p>Chief Executive Officer, W.P. Stewart & Co. (Europe), Ltd., 2006-2013</p> <p>Director, W.P. Stewart & Co. (Europe), Ltd., 2005-2013</p> <p>Director, W.P. Stewart Asset Management (Europe), Ltd., 2010-2012</p>	<p>Nothing to report.</p>	<p>Nothing to report.</p>	<p>Nothing to report.</p>	<p>Christopher Hogbin SVP/Co-Head of Equities 212-823-3725</p> <p>See footnote for details on how supervision is performed.</p>



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Name / Year of Birth / Work Address	Educational Background and Business Experience		Disciplinary Information	Other Business Activities	Additional Compensation	Supervision
<p>Debasish Chakrabarti Year of Birth: 1977</p> <p>50 Berkeley Street London W1J 8HA (W1J 8SB for England +44207-959-4518</p>	<p>University of Bristol, BSc (Honors) in Economics</p> <p>London Business School, MSc in Finance</p>	<p>Portfolio Manager/Senior Research Analyst—Concentrated Global Growth, AllianceBernstein, 2013-Present</p> <p>VP, Global Equity Portfolio Manager/Analyst, WPS Advisors, Inc., 2009-2013</p> <p>European Equity Analyst, WP Stewart & Co, Ltd, 2005-2009</p>	<p>Nothing to report.</p>	<p>Nothing to report.</p>	<p>Nothing to report.</p>	<p>Mark I. Phelps Chief Investment Officer—Concentrated Global Growth +44-207-959-4517</p> <p>See footnote for details on how supervision is performed.</p>
<p>Michael Walker Year of Birth: 1972</p> <p>1345 Avenue of the Americas New York, NY 10105 212-823-3826</p>	<p>University of Pennsylvania (Wharton School), BS in Economics</p>	<p>Portfolio Manager/Senior Research Analyst—Concentrated Growth, AllianceBernstein, 2013-Present</p> <p>Portfolio Manager/Analyst, WPS Advisors, Inc, 2009-2013</p> <p>Senior Vice President, WPS Advisors, Inc, 2011-2013</p> <p>Vice President, WPS Advisors, Inc, 2009-2011</p> <p>Managing Director and Analyst, Ark Asset Management, 2007-2009</p>	<p>Nothing to report.</p>	<p>Nothing to report.</p>	<p>Nothing to report.</p>	<p>James T. Tierney, Jr. Chief Investment Officer—Concentrated US Growth 212-823-3824</p> <p>See footnote for details on how supervision is performed.</p>

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Brochure Supplement: Credit Portfolio Management Team

April 2020

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Name / Year of Birth / Work Address	Educational Background and Business Experience	Disciplinary Information	Other Business Activities	Additional Compensation	Supervision
Shawn E. Keegan Year of Birth: 1971 1345 Avenue of the Americas New York, NY 10105 212969-6061	Siena College BS in Finance Portfolio Manager AllianceBernstein 1997 - Present	Nothing to report.	Nothing to report.	Nothing to report.	Tiffanie Wong VP/Portfolio Manager 212-969-1082 See footnote for details on how supervision is performed.
Jorgen Kjaersgaard Year of Birth: 1964 50 Berkeley Street London W1J 8HA (W1J 8SB for England +44207-959-4552	Aarhus School of Business, Aarhus University MBA in Finance Aarhus School of Business, Aarhus University BS in Business Administration 2007 - Present Executive Director for structured credit solutions Rabobank 2005 - 2007	Nothing to report.	Nothing to report.	Nothing to report.	Gershon M. Distenfeld Director of High Yield 212-969-6131 See footnote for details on how supervision is performed.

CFA: To earn the CFA charter, one must pass the CFA Program, a graduate-level self-study program that combines a broad curriculum with professional conduct requirements, culminating in three sequential exams. Candidates must have at least a bachelor's degree, or its equivalent, from an accredited college or university and at least four years of qualified investment work experience. More information is available at www.cfainstitute.org.

ABI: ABI is an SEC-registered broker-dealer and FINRA member. ABI is an affiliate of AB and is primarily involved in the distribution of the AB family of mutual funds.

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Brochure Supplement: Global and International Value Investment Team

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Name / Year of Birth / Work Address	Educational Background and Business Experience	Disciplinary Information	Other Business Activities	Additional Compensation	Supervision
<p>Avraham Lavi Year of Birth: 1966 50 Berkeley Street London W1J 8HA (W1J 8SB for England +44207-959-4516</p>	<p>New York University MBA in Finance Bar-Ilan University BA in Accounting and Economics</p>	<p>Nothing to report.</p>	<p>Registered representative of Sanford C. Bernstein & Co., LLC ("SCB"). See footnote for details.</p>	<p>Nothing to report.</p>	<p>Christopher Hogbin SVP/Co-Head of Equities 212-823-3725 See footnote for details on how supervision is performed.</p>
	<p>Chief Investment Officer, Global and International Value Equities AllianceBernstein 2016 - Present Co-CIO, Global Value Equities and Global Director of Value Research AllianceBernstein 2014 - 2016 CIO, European Value Equities and Global Director of Value Research AllianceBernstein 2012 - 2013 Chief Investment Officer, European Value Equities AllianceBernstein 2006 - 2012 Director of Research, European Value Equities AllianceBernstein 2000 - 2006</p>				



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Name / Year of Birth / Work Address	Educational Background and Business Experience	Disciplinary Information	Other Business Activities	Additional Compensation	Supervision
<p>Tawhid Ali Year of Birth: 1971 50 Berkeley Street London W1J 8HA (W1J 8SB for England +44207-959-4562</p>	<p>University of Chicago, Booth School of Business MBA in Finance and Strategy Harvard University BA in Engineering Sciences</p> <p>Portfolio Manager, Global and International Value Equities AllianceBernstein 2016 - Present Chief Investment Officer, European Value Equities AllianceBernstein 2013 - Present Director of Research, European Value Equities AllianceBernstein 2003 - 2013</p>	<p>Nothing to report.</p>	<p>Nothing to report.</p>	<p>Nothing to report.</p>	<p>Avraham Lavi Chief Investment Officer, Global and International Value Equities +44-20-7959-4516 See footnote for details on how supervision is performed.</p>

SCB: SCB is an SEC-registered broker-dealer and FINRA member. SCB is an affiliate of AB and provides trade execution, clearance and custody services for the advisory clients of AB Bernstein, Private Wealth Management.

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Brochure Supplement: Dynamic Asset Allocation Portfolio Team

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Name / Year of Birth / Work Address	Educational Background and Business Experience	Disciplinary Information	Other Business Activities	Additional Compensation	Supervision
Daniel J. Loewy Year of Birth: 1974 1345 Avenue of the Americas New York, NY 10105 212-823-2776	Columbia University MBA in Finance Cornell University BS in Industrial and Labor Relations Chief Investment Officer—Multi-Asset Solutions AllianceBernstein 2013 - Present Co-CIO and Director of Research, Dynamic Asset Allocation Strategies AllianceBernstein 2007 - 2013 Director of Research, Wealth Management Group AllianceBernstein 2002 - 2007 Chartered Financial Analyst (CFA). See footnote for details.	Nothing to report.	Registered representative of Sanford C. Bernstein & Co., LLC ("SCB"). See footnote for details.	Nothing to report.	Seth Bernstein President and CEO 212-969-6151 See footnote for details on how supervision is performed.
Brian T. Brugman Year of Birth: 1980 1345 Avenue of the Americas New York, NY 10105 212-823-3635	University of California, Los Angeles Doctorate in Physics University of California, Riverside BS in Physics, Applied Mathematics Portfolio Manager AllianceBernstein 2007 - Present Graduate Student Researcher University of California, Los Angeles 2002 - 2007	Nothing to report.	Nothing to report.	Nothing to report.	Daniel J. Loewy Chief Investment Officer—Multi-Asset Solutions 212-823-2776 See footnote for details on how supervision is performed.



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CFA: To earn the CFA charter, one must pass the CFA Program, a graduate-level self-study program that combines a broad curriculum with professional conduct requirements, culminating in three sequential exams. Candidates must have at least a bachelor's degree, or its equivalent, from an accredited college or university and at least four years of qualified investment work experience. More information is available at www.cfainstitute.org.

SCB: SCB is an SEC-registered broker-dealer and FINRA member. SCB is an affiliate of AB and provides trade execution, clearance and custody services for the advisory clients of AB Bernstein, Private Wealth Management.

Supervision: AB investment professionals are subject to various forms of oversight including an independent risk program and direct supervision by managers within their respective business units. The firm's risk oversight and investment committees also provide general oversight of the investment management processes, and include senior AB investment professionals and other managers.

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Brochure Supplement: Municipal Portfolio Management Team

April 2020

AllianceBernstein L.P., 1345 Avenue of the Americas, New York, NY 10105 | 212.969.1000

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Name / Year of Birth / Work Address	Educational Background and Business Experience	Disciplinary Information	Other Business Activities	Additional Compensation	Supervision
Robert B. Davidson III Year of Birth: 1961 1345 Avenue of the Americas New York, NY 10105 212-823-3152	New York University MBA in Finance Wesleyan University BA in Interdisciplinary program covering Economics, Government, History and Political Philosophy	Nothing to report.	Nothing to report.	Nothing to report.	Douglas J. Peebles Head of Fixed Income 212-823-3018 See footnote for details on how supervision is performed.
Terrance T. Hults Year of Birth: 1966 1345 Avenue of the Americas New York, NY 10105 212-969-6453	Columbia University MBA in Finance Williams College BA in Economics	Nothing to report.	Nothing to report.	Nothing to report.	Scott A. DiMaggio Portfolio Manager 212-969-6946 See footnote for details on how supervision is performed.
Daryl E. Clements Year of Birth: 1967 1345 Avenue of the Americas New York, NY 10105 212-969-2362	Pace University MBA in Finance Brooklyn College BS in Management and Finance	Nothing to report.	Nothing to report.	Nothing to report.	Terrance T. Hults Portfolio Manager 212-969-6453 See footnote for details on how supervision is performed.

Supervision: AB investment professionals are subject to various forms of oversight including an independent risk program and direct supervision by managers within their respective business units. The firm's risk oversight and investment committees also provide general oversight of the investment management processes, and include senior AB investment professionals and other managers.



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Brochure Supplement: US Small & Mid-Cap Value Investment Team

April 2020

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Name / Year of Birth / Work Address	Educational Background and Business Experience	Disciplinary Information	Other Business Activities	Additional Compensation	Supervision
James W. MacGregor Year of Birth: 1967 1345 Avenue of the Americas New York, NY 10105 212-823-2777	University of Chicago MBA in Analytic Finance London School of Economics and Political Science MS in Economics McGill University BA in Economics	Nothing to report.	Registered representative of Sanford C. Bernstein & Co., LLC ("SCB"). See footnote for details.	Nothing to report.	Avraham Lavi Chief Investment Officer, Global and International Value Equities +44207-959-4516 See footnote for details on how supervision is performed.
	Chief Investment Officer - US Small & Mid-Cap Value Equities AllianceBernstein 2009 - Present Chief Investment Officer - Canadian Value Equities AllianceBernstein 2009 - 2012 Director of Research - Small & Mid-Cap Value Equities AllianceBernstein 2004 - 2008 Chartered Financial Analyst (CFA). See footnote for details.				



Name / Year of Birth / Work Address	Educational Background and Business Experience		Disciplinary Information	Other Business Activities	Additional Compensation	Supervision
Erik Turenchalk Year of Birth: 1973 1345 Avenue of the Americas New York, NY 10105 212-823-2656	University of Connecticut BS in Business Administration	Portfolio Manager - US Small & Mid-Cap Value Equities AllianceBernstein 2020 - Present Senior Research Analyst AllianceBernstein 2012 - 2019 Research Analyst AllianceBernstein 2005 - 2011 Chartered Financial Analyst (CFA). See footnote for details.	Nothing to report.	Nothing to report.	Nothing to report.	James W. MacGregor Chief Investment Officer - US Small & Mid-Cap Value Equities 212-823-2777 See footnote for details on how supervision is performed.

CFA: To earn the CFA charter, one must pass the CFA Program, a graduate-level self-study program that combines a broad curriculum with professional conduct requirements, culminating in three sequential exams. Candidates must have at least a bachelor's degree, or its equivalent, from an accredited college or university and at least four years of qualified investment work experience. More information is available at www.cfainstitute.org.

SCB: SCB is an SEC-registered broker-dealer and FINRA member. SCB is an affiliate of AB and provides trade execution, clearance and custody services for the advisory clients of AB Bernstein, Private Wealth Management.

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Brochure Supplement: Thematic Research Investment Team

April 2020

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Name / Year of Birth / Work Address	Educational Background and Business Experience	Disciplinary Information	Other Business Activities	Additional Compensation	Supervision
Daniel C. Roarty Year of Birth: 1971 1735 Market St. Suite 3800 Philadelphia, PA 19103 212-969-6248	University of Pennsylvania, Wharton School of Business MBA Fairfield University BS	Nothing to report.	Nothing to report.	Nothing to report.	Christopher Hogbin SVP/Co-Head of Equities 212-823-3725 See footnote for details on how supervision is performed.
	Chief Investment Officer—Global Growth & Thematic Equities AllianceBernstein 2013 - Present Team Leader—Global/International Research Growth & Technology Sector Head AllianceBernstein 2012 - 2013 Technology Sector Head AllianceBernstein 2011 - 2012 Managing Director Nuveen Investments 2001 - 2010 Chartered Financial Analyst (CFA). See footnote for details.				

CFA: To earn the CFA charter, one must pass the CFA Program, a graduate-level self-study program that combines a broad curriculum with professional conduct requirements, culminating in three sequential exams. Candidates must have at least a bachelor's degree, or its equivalent, from an accredited college or university and at least four years of qualified investment work experience. More information is available at www.cfainstitute.org.



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Brochure Supplement: US Large Cap Growth Investment Team

April 2020

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Name / Year of Birth / Work Address	Educational Background and Business Experience	Disciplinary Information	Other Business Activities	Additional Compensation	Supervision
Vincent C. Dupont Year of Birth: 1962 1345 Avenue of the Americas New York, NY 10105 212-969-1275	Columbia University Doctorate in International Affairs Columbia University Master of Philosophy Degree in International Affairs Northwestern University BA in Political Science and Classics	Nothing to report.	Nothing to report.	Nothing to report.	Frank V. Caruso Chief Investment Officer—US Growth Equities 212-969-6186 See footnote for details on how supervision is performed.
John H. Fogarty Year of Birth: 1970 1345 Avenue of the Americas New York, NY 10105 212-823-2859	Columbia University BA in History Chartered Financial Analyst (CFA). See footnote for details.	Nothing to report.	Nothing to report.	Nothing to report.	Frank V. Caruso Chief Investment Officer—US Growth Equities 212-969-6186 See footnote for details on how supervision is performed.
Frank V. Caruso Year of Birth: 1956 1345 Avenue of the Americas New York, NY 10105 212-969-6186	State University of New York at Oneonta BA in Business Economics Chartered Financial Analyst (CFA). See footnote for details.	Nothing to report.	Registered representative of AllianceBernstein Investments Inc. ("ABI"). See footnote for details.	Nothing to report.	Christopher Hogbin SVP/Co-Head of Equities 212-823-3725 See footnote for details on how supervision is performed.



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CFA: To earn the CFA charter, one must pass the CFA Program, a graduate-level self-study program that combines a broad curriculum with professional conduct requirements, culminating in three sequential exams. Candidates must have at least a bachelor's degree, or its equivalent, from an accredited college or university and at least four years of qualified investment work experience. More information is available at www.cfainstitute.org.

ABI: ABI is an SEC-registered broker-dealer and FINRA member. ABI is an affiliate of AB and is primarily involved in the distribution of the AB family of mutual funds.

Supervision: AB investment professionals are subject to various forms of oversight including an independent risk program and direct supervision by managers within their respective business units. The firm's risk oversight and investment committees also provide general oversight of the investment management processes, and include senior AB investment professionals and other managers.

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Brochure Supplement: US Multi-Sector Fixed Income Portfolio Management Team

April 2020

AllianceBernstein L.P., 1345 Avenue of the Americas, New York, NY 10105 | 212.969.1000

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Name / Year of Birth / Work Address	Educational Background and Business Experience	Disciplinary Information	Other Business Activities	Additional Compensation	Supervision
Michael S. Canter Year of Birth: 1969 1345 Avenue of the Americas New York, NY 10105 212-823-3456	Columbia University Doctorate in Finance Columbia University Master of Philosophy Degree in Finance Northwestern University BA in Mathematics and Economics	Nothing to report.	Nothing to report.	Nothing to report.	Scott A. DiMaggio Portfolio Manager 212-969-6946 See footnote for details on how supervision is performed.

CFA: To earn the CFA charter, one must pass the CFA Program, a graduate-level self-study program that combines a broad curriculum with professional conduct requirements, culminating in three sequential exams. Candidates must have at least a bachelor's degree, or its equivalent, from an accredited college or university and at least four years of qualified investment work experience. More information is available at www.cfainstitute.org.

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ERISA 408(B)(2) DISCLOSURES

The enclosed materials are being provided in connection with the investment management services provided by AllianceBernstein L.P. (“AB”) to the Plan and are designed to comply with the disclosure requirements under Section 408(b)(2) of ERISA. If you are not the “responsible plan fiduciary” authorized to engage service providers for the Plan, please forward these materials to the appropriate Plan fiduciary. Please note that this document is not itself an agreement for services. Further, this document is neither intended to replace or amend any agreement or other contract AB or any affiliate may have with the Plan, nor is it any guarantee with respect to the pricing of any of our services. In the event of any discrepancy between the information contained in these materials and the terms that govern our contractual relationships with the Plan, the latter will govern.

Description of Services that AB Provides to the Plan

AB provides investment management services to your Plan. A complete description of these services can be found in the Investment Management Agreement between the Plan and AB (the “Agreement”) and may include ancillary services, such as research, market updates, educational events, conversations with professionals, and other market color or analytics. This disclosure relates solely to the services provided in connection with the Agreement. For further information about AB’s services, please refer to AB’s Form ADV, Part 2A.

AB’s Fiduciary and Registered Investment Status to the Plan

AB provides its services to the plan as a fiduciary as defined in Section 3(21) of ERISA and as an investment manager as defined in Section 3(38) of ERISA. AB also provides services to the Plan as an investment adviser under the Investment Advisers Act of 1940.

Direct Compensation

AB receives direct compensation from the Plan in connection with the investment management services it provides to the Plan. The amount of direct compensation that is paid to AB is stated in the Agreement and/or accompanying Fee Schedule.

The compensation due to AB is billed by AB with the frequency set forth in the Agreement and payment is remitted to AB by the Plan or the Plan’s sponsor.

Indirect Compensation

AB receives indirect compensation from the Plan in connection with research services related to AB’s management of certain equity investments through client commission arrangements (formerly known as “soft dollars” commission programs) with certain broker-dealers. Although our policy is to seek best execution when placing client securities transactions, under client commission arrangements, we may select a broker with relatively higher transaction costs than competitors if we determine in good faith that the cost is reasonable in relation to the value of the brokerage and research services provided. The proprietary and third-party research we obtain is designed to augment our own internal research and investment strategy capabilities.



A. Description of the Research Services Obtained

All research services acquired by AB through client commission arrangements are intended to satisfy the safe harbor set forth in Section 28(e) of the Securities Exchange Act of 1934. In accordance with the relevant standards, we regularly consider whether a given research service provides lawful and appropriate assistance to the investment management process and make sure the cost of the research service bears a reasonable relationship to the value of the research service.

The research services provided to us include:

- + A wide variety of written reports on individual companies and industries, general economic conditions, and other matters relevant to our investment analyses;
- + Direct access to research analysts throughout the financial community;
- + Mathematical models;
- + Research meetings involving corporate management personnel;
- + Access to expert matching networks; and
- + Proxy voting research services and comparative performance evaluation.

AB's Best Execution Committee has the principal oversight responsibility for periodically reviewing and evaluating the commission allocation process. For further information about AB's use of research services, please refer to AB's Form ADV, Part 2A.



B. Brokers That Provided The Research Services

In 2019, the following broker-dealers provided proprietary research services to, and assisted the acquisition of third-party research services for, AB pursuant to client commission arrangements:

Bank of America/Merrill Lynch	Goldman Sachs
Barclays Capital	J.P. Morgan Chase & Co
BMO Capital Markets	Morgan Stanley
Citigroup	Oppenheimer & Co.
Cowen & Co.	RBC Capital Markets
Credit Suisse	UBS Securities
Deutsche Bank Securities	Virtu ITG

Please note that we do not enter into agreements or understandings with any brokers regarding the placement of securities transactions because of the research services they provide. Rather, we have an internal procedure for allocating transactions in a manner consistent with our execution policy to brokers that we have identified as providing superior executions and research services of particular benefit to clients.



C. Formulas To Determine The Amount Of Indirect Compensation

Research services furnished by brokers are used to carry out our investment management responsibilities with respect to various client accounts over which we exercise investment discretion. Accordingly, such research services may sometimes be utilized in connection with accounts for clients who may not have paid all or any of the commission to the relevant brokers.

In lieu of an estimate of the value of the research services, we provide the following formula: In 2019, approximately 35.6% percent of overall equity commissions generated by AB were internally allocated to the acquisition of research services and approximately 64.4% percent were allocated to trade execution. The commission component allocated to research services was used to acquire both proprietary broker research and traditional third-party research services. Accordingly, a recipient of this 408(b)(2) disclosure could apply these percentages to the total commission generated on their account and determine an estimate of the value of the research benefits to AB.

Compensation Paid Among AB and Its Related Parties

The Plan does not pay any transaction based compensation to AB, its affiliates and/or subcontractors in connection with the investment management service AB provides to the Plan.

Compensation for Termination of the Agreement

Provisions relating to termination of the Agreement are set forth in the Agreement. However, AB receives no additional compensation or penalties for termination.

Compensation for Recordkeeping Services

AB does not receive any compensation for providing recordkeeping services related to the maintenance of Plan accounts, records or statement.

We believe the foregoing reflects, to the best of our knowledge and in light of available guidance, the information required to be provided under Section 408(b)(2) of ERISA in connection with the services AB provides to the Plan. If you have any questions or require further information, including copies of any of the documents referenced herein, please do not hesitate to contact your AB representative.



ELIGIBLE INDIRECT COMPENSATION: RESEARCH SERVICES RECEIVED BY ALLIANCEBERNSTEIN L.P.

For purposes of your Form 5500 preparation, AllianceBernstein L.P.¹ is providing the following disclosures about research services acquired in 2019 through client commission arrangements (formerly known as “soft dollar” commission programs) with certain broker-dealers. We believe that these research services constitute Eligible Indirect Compensation AB receives related to its management of pooled investment funds including the AB mutual funds and collective investment trusts. Other Eligible Indirect Compensation that AB receives—for example, investment management fees—is described in a fund’s prospectus (for mutual funds) and offering memorandum and adoption agreement (for collective investment trusts).

A. Description Of The Eligible Indirect Compensation

AB receives indirect compensation from the Plan in connection with research services related to AB’s management of certain equity investments through client commission arrangements (formerly known as “soft dollars” commission programs) with certain broker-dealers. Although our policy is to seek best execution when placing client securities transactions, under client commission arrangements, we may select a broker with relatively higher transaction costs than competitors if we determine in good faith that the cost is reasonable in relation to the value of the brokerage and research services provided. The proprietary and third-party research we obtain is designed to augment our own internal research and investment strategy capabilities.

B. Description Of The Research Services Obtained

All research services acquired by AB through client commission arrangements are intended to satisfy the safe harbor set forth in Section 28(e) of the Securities Exchange Act of 1934. In accordance with the relevant standards, we regularly consider whether a given research service provides lawful and appropriate assistance to the investment management process and make sure the cost of the research service bears a reasonable relationship to the value of the research service.

The research services provided to us include:

- + A wide variety of written reports on individual companies and industries, general economic conditions, and other matters relevant to our investment analyses;
- + Direct access to research analysts throughout the financial community;
- + Mathematical models;
- + Research meetings involving corporate management personnel;
- + Access to expert matching networks; and
- + Proxy voting research services and comparative performance evaluation.

¹ The Employer Identification Number (EIN) for AllianceBernstein L.P. is 13-4064930.



AB's Best Execution Committee has the principal oversight responsibility for periodically reviewing and evaluating the commission allocation process. For further information about AB's use of research services, please refer to AB's Form ADV, Part 2A.

C. Brokers That Provided The Research Services

In 2019, the following broker-dealers provided proprietary research services to, and assisted the acquisition of third-party research services for, AB pursuant to client commission arrangements:

Bank of America/Merrill Lynch	Goldman Sachs
Barclays Capital	J.P. Morgan Chase & Co
BMO Capital Markets	Morgan Stanley
Citigroup	Oppenheimer & Co.
Cowen & Co.	RBC Capital Markets
Credit Suisse	UBS Securities
Deutsche Bank Securities	Virtu ITG

Please note that we do not enter into agreements or understandings with any brokers regarding the placement of securities transactions because of the research services they provide. Rather, we have an internal procedure for allocating transactions in a manner consistent with our execution policy to brokers that we have identified as providing superior executions and research services of particular benefit to clients.

**D. Formulas To Determine The Amount Of Indirect Compensation**

Research services furnished by brokers are used to carry out our investment management responsibilities with respect to various client accounts over which we exercise investment discretion. Accordingly, such research services may sometimes be utilized in connection with accounts for clients who may not have paid all or any of the commission to the relevant brokers.

In lieu of an estimate of the value of the research services, we provide the following formula: In 2019, approximately 35.6% percent of overall equity commissions generated by AB were internally allocated to the acquisition of research services and approximately 64.4% percent were allocated to trade execution. The commission component allocated to research services was used to acquire both proprietary broker research and traditional third-party research services. Accordingly, a recipient of this 408(b)(2) disclosure could apply these percentages to the total commission generated on their account and determine an estimate of the value of the research benefits to AB.

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We may disclose all of the nonpublic personal information that we collect about our current and former clients, as described above, to non-affiliated third parties to manage our business and as otherwise required or permitted by law, including those that perform transaction processing or servicing functions, marketing services providers that provide marketing services on our behalf pursuant to a joint marketing agreement, and professional services firms that provide knowledge-based services such as accountants, consultants, lawyers and auditors to help manage client accounts. We require all the third-party providers to adhere to our privacy policy or a functional equivalent.

We may also disclose the nonpublic personal information that we collect about current and former clients, as described above, to our affiliated investment, brokerage, service and insurance companies for the purpose of marketing their products or services to clients under circumstances that are permitted by law, such as if our affiliate has its own relationship with you. We have policies and procedures to ensure that certain conditions are met before an AllianceBernstein affiliated company may use information obtained from another affiliate to solicit clients for marketing purposes.

We will also use nonpublic personal information about our clients for our own internal analysis, analytics, research and development, and to improve and add to our client offerings.

We have policies and procedures designed to safeguard the confidentiality and security of nonpublic personal information about our clients that include restricting access to nonpublic personal information to personnel that have been screened and undergone security and privacy training; to personnel who need it to perform their work functions such as our operations, customer service, account management, finance, quality, vendor management and compliance teams as required to provide services, communicate with you and fulfill our legal obligations.

We employ reasonably designed physical, electronic and procedural safeguards to secure and protect client nonpublic personal information.

If you are in the European Economic Area (“EEA”) or Switzerland, we will comply with applicable legal requirements providing adequate protection for the transfer of personal information to recipients in countries outside of the EEA and Switzerland.

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