



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 2022 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 2022, 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	J.P. Morgan Chase & Co
Barclays Capital	Jefferies
Citigroup	Morgan Stanley
Cowen & Co.	Oppenheimer & Co.
Credit Suisse	UBS Securities
Goldman Sachs	Virtu

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 2022, approximately 27% percent of overall equity commissions generated by AB were internally allocated to the acquisition of research services and approximately 73% 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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