COMPUTER MODEL CERTIFICATION

FIDELITY BROKERAGE SERVICES LLC

Investment Strategy Tool within the Planning and Guidance Center ("IST")

July 9, 2019





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Opinion Letter

Chris McDermott SVP, Planning & Advice Services Fidelity Brokerage Services LLC 245 Summer Street, V2A Boston, MA 02210

July 9, 2019

Dear Mr. McDermott:

We have evaluated the Investment Strategy Tool ("IST") computer model provided by Fidelity Brokerage Services LLC to determine if it meets the requirements to be used as a Certified Computer Model as defined by the Employee Retirement Income Security Act of 1974, as amended ["ERISA"] Section 408(g) and Internal Revenue Code ["IRC"] Section 4975(f)(8)(C)(iii).

Based on evaluations that include all material modifications made to IST as of July 9, 2019, it is our opinion that:

- ERISA plan fiduciaries who meet all other ERISA requirements and use the IST computer model, through either an associate-led interaction or a self-directed interaction, will qualify for the fiduciary relief granted under ERISA Section 408(g), and;
- Fidelity Brokerage Services LLC, using the IST computer model to provide investment advice to ERISA participants through either an associate-led or self-directed interaction, is in compliance with ERISA Section 408(g) and IRC Section 4975(d)(17).

Detailed findings from our evaluations will be available from DALBAR and may be obtained from its website.

Information used to form this opinion was provided by Fidelity Brokerage Services LLC and confirmed through public sources where possible. Any material change or discrepancy in this information could reverse our opinion.

Very truly yours,

DALBAR, Inc.



Investment Model Provider Fact Sheet: Fidelity Investments / Fidelity Brokerage Services LLC¹

Company History: Founded and privately held since 1946	Number of Customer Reps: 10,000+	Affiliated Firms: See Page 8
Background Check Clear ²	Total Assets under Management/Administration: \$2.65 trillion / \$7.42 trillion	Primary Business of Firm: Broker/Dealer Services, Personal and Workplace Retirement Services
Primary Compensation Sources: Various	Customer Accounts: 67 Million+	Broker/Dealer Name: Fidelity Brokerage Services LLC
Geographic Coverage National provider of brokerage and retirement services	Clients and customers: 23,000 employers managing employee benefits 27 Million+ customers investing with Fidelity	RIA Name: N/A
Previously Certified: October 8, 2018	 Material Changes since Last Certifi Inclusion of index-based m 	ication: nodels for workplace accounts
Web Sites www.fidelity.com www.netbenefits.com www.fidelity.com/calculators	-tools/planning-guidance-center	

¹ Firm Metrics as of Q1, 2019

² Disclosure events exist, but nothing unusual or concerning for a firm this size.



Investment Model Fact Sheet: Investment Strategy Tool ("IST")

	investment	viode	l Characteristics			
	Age	✓	Time Horizon	✓	Risk Tolerance	✓
Inputs	Current Investments	✓	Other Assets	√	Sources of Income	✓
				I	nvestment Preferences	✓
	Explanation of Asset	1	Allocation by	✓	Allocation by	1
Outputs	Classes		Asset Class		Investment	
	Risk Category Selected	1	Allocation	1	Method of	1
	7		Graphic		Acceptance	
Defaults	Time-based Target Asset Mi	x				
mplementation	User has the option of rebal	lancing	to execute recom	men	idation.	

	Risk Categories			
	Domestic Stock (%)	Foreign Stock (%)	Bonds (%)	Short Term (%)
Short-Term	0	0	0	100
Conservative	14	6	50	30
Moderate with Income	21	9	50	20
Moderate	28	12	45	15
Balanced	35	15	40	10
Growth with Income	42	18	35	5
Growth	49	21	25	5
Aggressive Growth	60	25	15	0
Most Aggressive	70	30	0	0



Fee Structure

Usual fees charged for services:

No fee is charged to the investor for this advice service.

Contractual arrangements that could result in direct or indirect compensation to manager or affiliates on the basis of investment decisions if clients take actions on the basis of advice given:

Fidelity Brokerage Services LLC and its affiliates receive revenue from proprietary products and third parties in the form of commissions, revenue sharing, sales loads, 12b-1 fees, finders' fees, sub-transfer agent fees, management fees, transaction fees, payments for referrals, etc. that may present a material conflict of interest.

Fidelity has multiple relationships with other financial institutions that also provide securities products and services that FBS may recommend to retail clients which may cause an actual or potential material conflict of interest. In addition, financial institutions themselves may be clients of FBS or an affiliate or may provide products and services to Fidelity or its clients. Relationships with associates at these firms, or associate incentives such as entertainment by these firms, may result in an actual, potential or perceived material conflict of interest. Associate incentives such as gifts or entertainment provided by associates at the firm or third parties, or relationships with associates at the firm or third parties, may lead to a conflict of interest.

Testing of the model revealed no signs of bias stemming from these potential conflicts.

Sources of compensation:

Fidelity Investments receives compensation that varies based on the products or services chosen by their clients. Due to this, Fidelity will receive variable compensation in connection to the recommendation to buy, sell or hold certain products and services. Where sales loads, finder's fees, and other commission-based compensation apply, the more transactions entered into, and/or the greater their value, the more compensation Fidelity Investments receives. Fidelity also receives investment advisory and wrap fees associated with advisory services that they recommend to clients.

Other factors or suggestions from others that could improperly influence investment decisions or the advice given to clients:

None.



Investment Model Provider Disclosures

The following important disclosures follow:

- DALBAR Certification
- Scope of Evaluation
- Acceptance of Fiduciary Responsibility
- Adviser Affiliations
- Additional Disclosures



DALBAR has evaluated the **Investment Strategy Tool ("IST")** offered by **Fidelity Brokerage Services LLC** to determine compliance with United States Department of Labor and DALBAR standards for Fiduciary Advisers as defined by the Employee Retirement Income Security Act of 1974, as amended [ERISA] Section 408(g) and Internal Revenue Code [IRC] Section 4975(d)(17) and associated regulations.

The following evaluations were performed:

Due Diligence Requirements	
Objective process to assess:	
Adviser qualifications	✓
Quality of services offered	✓
Reasonableness of fees charged for the service	\checkmark
Avoidance of self-dealing	✓
Avoidance of conflicts of interest	✓
Avoidance of other improper influence	✓
Process that takes into account:	
Use of generally accepted investment theories	\checkmark
Experience and qualifications of the adviser	✓
 Adviser's registration in accordance with applicable federal and/or state securities law 	✓
 Willingness of manager to assume fiduciary status and responsibility under ERISA 	✓



Adviser Affiliations

Fidelity Brokerage Services LLC has disclosed that it is affiliated with the following firms:

- ✓ FIDELITY PRIME FINANCING
- ✓ FIDELITY PERSONAL AND WORKPLACE ADVISORS LLC
- ✓ LUMINEX TRADING & ANALYTICS LLC
- ✓ IMPRESA MANAGEMENT LLC
- ✓ FIDELITY BUSINESS SERVICES INDIA PRIVATE LIMITED
- ✓ FIDELITY SELECTCO, LLC
- ✓ FIDELITY MANAGEMENT & RESEARCH (JAPAN)
 LIMITED
- ✓ FIDELITY MANAGEMENT & RESEARCH (HONG KONG)
 LIMITED
- ✓ FIDELITY CLEARING CANADA ULC
- ✓ FIDELITY (CANADA) ASSET MANAGEMENT ULC
- ✓ FIDELITY INSTITUTIONAL ASSET MANAGEMENT TRUST COMPANY
- ✓ FIDELITY PERSONAL TRUST COMPANY, FSB.

- ✓ FIAM LLC
- ✓ BALLYROCK INVESTMENT ADVISORS LLC
- ✓ FMR CO., INC.
- ✓ NATIONAL FINANCIAL SERVICES LLC
- ✓ FIDELITY DISTRIBUTORS CORPORATION
- ✓ FIDELITY GLOBAL BROKERAGE GROUP, INC.
- ✓ FIDELITY INVESTMENTS CANADA ULC
- ✓ FIDELITY INVESTMENTS INSTITUTIONAL SERVICES COMPANY, INC.
- ✓ FIDELITY INVESTMENTS MONEY MANAGEMENT, INC.
- ✓ FMR INVESTMENT MANAGEMENT (UK) LIMITED
- ✓ FIDELITY MANAGEMENT & RESEARCH COMPANY
- ✓ FIDELITY MANAGEMENT TRUST COMPANY
- ✓ STRATEGIC ADVISERS, INC.

Additional Disclosures

None.



Investment Model Certification Results

DALBAR has evaluated the Investment Strategy Tool ("IST") computer model to be offered by **Fidelity Brokerage Services LLC** to determine if it will meet the requirements to be used as a Certified Computer Model as defined by the Employee Retirement Income Security Act of 1974, as amended ["ERISA"]
Section 408(g) and Internal Revenue Code ["IRC"] Section 4975(f)(8)(C)(iii).

The methodologies used for the evaluation are presented in the following sections. The methodologies applied were consistent with each specific requirement of the regulations. There were no limitations or restrictions imposed on DALBAR in the selection or application of the methodologies used.

DALBAR has a 30-year history recognized by industry and government as an independent third-party expert in the business of providing evaluations, ratings and performance due diligence. Dalbar certifications are recognized as marks of excellence in adviser services, communications, electronic and telephone services. Dalbar is the only ratings firm with an SEC no-action letter exempting its evaluations from the testimonial rule. Given its history, reputation and our extensive involvement in fiduciary adviser training, we believe that Dalbar meets or exceeds the expertise and proficiency required to conduct certifications required by 29 CFR 2550.408g-1(b)(4)(iii) and IRC Section 4975(f)(8)(C)(iii)(III).

Based on the results of the evaluation it has been determined that the IST computer model meets the requirements, including specifically the requirements of 29 CFR 2550.408g-1(b)(4)(i).



METH = Evaluation of Methodology documentation APP = Through written statement via Application

TEST = Model Test **WS** = Written Statement

COMP = Compared to Comparable Models **RPP** = Review of rep policies and procedures

NOT = Review of notifications/disclosures/ final recommendation document

Specific Findings

COMPLIANCE TEST	METHOD OF EVALUATION	RESULT	COMMENT
s investment theory recognized as being generally accepted?	METH TEST	√	Screening and selection methodologies define a structured and objective approach that applies the generally accepted investment variables of risk, asset allocation, time horizon and expected returns based on historical patterns.
Cost	СОМР	✓	No fee will be charged for the use of the model.
Other specific requirements and best practices:			
Takes fees and expenses into account	METH TEST	✓	The Model Test demonstrated that lower cost investment options are favored.
Requests and utilizes participant/investor information about age, time horizons, risk tolerance, current investments, other assets, sources of income and investment preferences	METH TEST RPP	✓	The Model Test demonstrated that the information requested from plan participants at IRA investors meets industry best practices. This includes inputs of age, time horizons, risk tolerance, current investments, sources of Income, investment preferences, and other assets.



COMPLIANCE TEST	METHOD OF EVALUATION	RESULT	COMMENT
Utilize objective criteria to select and allocate designated plan investments.	МЕТН	✓	Screening and selection methodologies define a structured and objective approach that applies the generally accepted investment variables of risk, asset allocation, time horizon and expected returns based on historical patterns. Methodology with respect to strategy recommendations (Target Date Funds, Target Allocations Funds, Managed Accounts or Model Portfolios) was also evaluated and found to be objective and reasonable.
Does not:			
Favor investments that compensate investment model provider or affiliates.	METH TEST APP RPP	✓	The Model Test demonstrated that the tool doe not favor investments that compensate Fidelity Brokerage Services LLC or its affiliates.
Favor investments that result in greater compensation to investment model provider or affiliates.	METH TEST APP RPP	✓	The Model Test demonstrated that the tool doe not favor investments that compensate Fidelity Brokerage Services LLC or its affiliates.
Base investment selection on criteria that cannot be expected to persist.	МЕТН	√	Funds are screened and selected on generally accepted criteria including, but not limited to total assets, sufficient historical data, and risk adjusted return.
Does:			
Consider all designated investments except those noted below	METH TEST	✓	All designated plan investments are considered by the computer model in the investment selection process (except those noted below).
Exclude employer securities	METH WS	✓	By default, the tool assumes that all assets in an account will be liquidated and the strategy applied to all such assets. Users of the tool can override this default.
Excludes investments that vary asset mix	МЕТН	✓	These categories of investments are excluded from the plan's designated investments during the investment selection process.
Exclude retirement income annuities	МЕТН	✓	These categories of investments are excluded from the plan's designated investments during the investment selection process.
Provide participant with a list of exclusions.	TEST WS	✓	Investments within the plan not considered by the model are disclosed to the participant.



Explanation of Methods Used

Метнор	DESCRIPTION OF PROCESS		
Evaluation of Methodology Documentation	All methodology documentation is evaluated to determine the investment approach used by the computer model.		
Model Test	The standard DALBAR test of investor profiles was used. An allocation was established by answering all questions in a likely manner of that hypothetical investor. These hypothetical investors are (1) new to the workforce, (2) at the investment threshold, (3) a highly compensated employee (4) a pre-retiree and (5) a retiree.		
Comparison to Comparable Models	The cost and functionality of computer models that are known to be used for investment selection and asset allocation are compared to the computer model being evaluated.		
Written Statement	Additional written statements were requested and provided by the fiduciary adviser.		
Interview	Fiduciary adviser was interviewed to clarify questions raised during the evaluation process.		
Evaluate notifications/disclosures	Notifications and disclosures were reviewed to ensure compliance with regulations. Notifications must contain all required content, in a manner that is calculated to be understood.		
Review of Associate Policies and Procedures	For certification of the computer model under an in- person, associate-led interaction, policies and procedures were examined to ensure the associate's inclusion in the process does not affect the design and operation of the computer model.		

Previous Certifications Related to Workplace Accounts

Previous Certification Date	Workplace Account Change
May 18, 2017	Initial Certification
September 21, 2017	Guaranteed Income Adjustment to Target Asset Mix Complementary Asset Adjustment to Target Asset Mix
September 5, 2018	Inclusion of associate-led interaction with Tool
October 8, 2018	Recommendation of target date funds and target allocation funds for workplace accounts.

Material Changes to Workplace Accounts since Last Certification

Current Certification Date	Workplace Account Change
July 8, 2019	Inclusion of index-based models for workplace accounts.