

091-21295jm

For Internal Use Only
Sec File No. 9-

Submit 1 Original
and 9 Copies

OMB APPROVAL	
OMB Number:	3235-0504
Expires:	July 31, 2016
Estimated average burden hours per response. . . .	3.60

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 19b-4(e)

Information Required of a Self-Regulatory Organization Listing and Trading a New
Derivative Securities Product Pursuant to Rule 19b-4(e) Under the Securities Exchange Act of 1934

READ ALL INSTRUCTIONS PRIOR TO COMPLETING FORM

Part I Initial Listing Report

- Name of Self-Regulatory Organization Listing New Derivative Securities Product:
Investors Exchange LLC
- Type of Issuer of New Derivative Securities Product (e.g., clearinghouse, broker-dealer, corporation, etc.):
See Attachment A
- Class of New Derivative Securities Product:
See Attachment A
- Name of Underlying Instrument:
See Attachment A
- If Underlying Instrument is an Index, State Whether it is Broad-Based or Narrow-Based:
See Attachment A
- Ticker Symbol(s) of New Derivative Securities Product:
See Attachment A
- Market or Markets Upon Which Securities Comprising Underlying Instrument Trades:
See Attachment A
- Settlement Methodology of New Derivative Securities Product:
Regular way trades settle on T+3 (cash settled)
- Position Limits of New Derivative Securities Product (if applicable):
Not applicable

RECEIVED
2016 SEP 19 PM 2:58
SEC / TM



16019206

Part II Execution

The undersigned represents that the governing body of the above-referenced Self-Regulatory Organization has duly approved, or has duly delegated its approval to the undersigned for, the listing and trading of the above-referenced new derivative securities product according to its relevant trading rules, procedures, surveillance programs and listing standards.

Name of Official Responsible for Form:
Claudia Crowley

Title:
Chief Regulatory Officer

Telephone Number:
646-343-2041

Manual Signature of Official Responsible for Form:

Claudia Crowley (handwritten signature)

Date:
September 12, 2016

Act	Securities Exchange Act of 1934
Section	19b-4
Rule	19b-4(e)
Public Availability:	SEP 19 2016

Instructions for Completing Form 19b-4(e)

- I. Terms. Unless the context clearly indicates otherwise, terms used in this Form have the meaning ascribed to them in the Securities Exchange Act of 1934, as amended, and Rule 19b-4 thereunder.
- II. Who Must File; When to File. Rule 19b-4(e) requires every self-regulatory organization (SRO) seeking to rely on Rule 19b-4(e) to file Form 19b-4(e) with the Securities and Exchange Commission (Commission or SEC) at least 5 business days after commencement of trading a new derivative securities product that is not deemed to be a proposed rule change. Each time an SRO files Form 19b-4(e), the execution page must be completed.
- III. Number of Copies; How and Where to File. File the original and nine copies of each Form 19b-4(e) with the SEC, 450 Fifth Street, N.W., Washington, D.C. 20549. The SRO must keep an exact copy of the filing for its records. All copies must be legible. The filing date of any Form 19b-4(e) is the date of its actual receipt by the SEC, provided that the filing complies with applicable requirements.
- IV. Format of Filing. An SRO may use the printed Form 19b-4(e) or a reproduction of it.
- V. Paperwork Reduction Act Disclosure. Form 19b-4(e) requires an SRO filing the Form to provide the Commission with certain information concerning the nature of the new derivative securities product it intends to list and/or trade.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid control number. Sections 3(a)(26), 3(a)(27), 3(a)(28), 3(b), 19(b), 23(a) and 36(a) of the Securities Exchange Act of 1934 authorize the Commission to collect information on Form 19b-4(e) from SROs. See 15 U.S.C. §§78c(a)(26), 78c(a)(27), 78c(a)(28), 78c(b), 78s(b), 78w(a), 78mm(a).

Any member of the public may direct to the Commission any comments concerning the accuracy of the burden estimate on the facing page of Form 19b-4(e) and any suggestions for reducing this burden.

The principal purpose of Form 19b-4(e) is to enable the Commission to maintain an accurate record of the listing and trading of all new derivative securities products on the SROs not deemed to be proposed rule changes pursuant to Rule 19b-4(e).

It is estimated SROs will spend approximately 2 hours completing each Form 19b-4(e).

It is mandatory that an SRO file Form 19b-4(e) with the Commission at least 5 business days after commencement of trading a new derivative securities product that is not deemed to be a proposed rule change.

No assurance of confidentiality is given by the Commission with respect to the responses made in the Form. The public has access to the information contained in the Form.

This collection of information has been reviewed by the Office of Management and Budget (OMB) in accordance with the clearance requirements of 44 U.S.C. 3507. The applicable Privacy Act system of records is SEC-2 and the routine uses of the records are set forth at 40 FR 39255 (August 27, 1975) and 41 FR 5318 (February 5, 1976).

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
GSG	Trust	Commodity Index Trust Shares	S&P GSCI Index	US	N/A
PHYS	Trust	Commodity-Based Trust Shares	Physical Gold Spot Price	Global	N/A
PSLV	Trust	Commodity-Based Trust Shares	Physical Silver Spot Price	Global	N/A
SPPP	Trust	Commodity-Based Trust Shares	Physical Platinum and Palladium Spot Price	Global	N/A
GLD	Trust	Commodity-Based Trust Shares	London Bullion Market Association (LBMA) PM Gold Price LBMA PM Gold Price, LBMA Silver Price, LBMA PM Platinum Price, LBMA Palladium Price	Global	N/A
GLTR	Trust	Commodity-Based Trust Shares	Price	Global	N/A
IAU	Trust	Commodity-Based Trust Shares	London Bullion Market Association (LBMA) PM Gold Price	Global	N/A
OUNZ	Trust	Commodity-Based Trust Shares	London Bullion Market Association (LBMA) PM Gold Price	Global	N/A
PALL	Trust	Commodity-Based Trust Shares	London Bullion Market Association (LBMA) Palladium Price	Global	N/A
PPLT	Trust	Commodity-Based Trust Shares	London Bullion Market Association (LBMA) PM Platinum Price	Global	N/A
SGOL	Trust	Commodity-Based Trust Shares	London Bullion Market Association (LBMA) PM Gold Price	Global	N/A
SIVR	Trust	Commodity-Based Trust Shares	London Bullion Market Association (LBMA) Silver Price ("London Silver Price")	Global	N/A
SLV	Trust	Commodity-Based Trust Shares	London Bullion Market Association (LBMA) Silver Price ("London Silver Price")	Global	N/A
FXA	Trust	Currency Trust Shares	WM/Reuters Closing Spot Rate - Australian Dollar (AUD)	US	N/A
FXB	Trust	Currency Trust Shares	WM/Reuters Closing Spot Rate - British Pound (GBP)	US	N/A
FXC	Trust	Currency Trust Shares	WM/Reuters Closing Spot Rate - Canadian Dollar (CAD)	US	N/A
FXCH	Trust	Currency Trust Shares	WM/Reuters Closing Spot Rate - Chinese R. Yuan HK (CNH)	US	N/A
FXE	Trust	Currency Trust Shares	WM/Reuters Closing Spot Rate - Euro (EUR)	US	N/A
FXF	Trust	Currency Trust Shares	WM/Reuters Closing Spot Rate - Swiss Franc (CHF)	US	N/A
FXS	Trust	Currency Trust Shares	WM/Reuters Closing Spot Rate - Swedish Krona (SEK)	US	N/A
FXSG	Trust	Currency Trust Shares	WM/Reuters Closing Spot Rate - Singapore Dollar (SGD)	US	N/A
FXY	Trust	Currency Trust Shares	WM/Reuters Closing Spot Rate - Japanese Yen (JPY)	US	N/A
ADZ	Corporation	ETN	DB Liquid Commodity Index - Optimum Yield Agriculture Excess Return	US	Narrow
AGA	Corporation	ETN	DB Liquid Commodity Index - Optimum Yield Agriculture Excess Return	US	Narrow
AGF	Corporation	ETN	DB Liquid Commodity Index - Optimum Yield Agriculture Excess Return	US	Narrow
AMJ	Corporation	ETN	Alerian MLP Index	US	Broad
AMJL	Corporation	ETN	Alerian MLP Index	US	Broad
AMU	Corporation	ETN	Alerian MLP Index	US	Broad
AMUB	Corporation	ETN	Alerian MLP Index	US	Broad
ATMP	Corporation	ETN	Atlantic Trust Select MLP Index	US	Broad
AYT	Corporation	ETN	Barclays Capital Global Emerging Markets Strategy (GEMS) Asia 8 Index	Global	Narrow
BAL	Corporation	ETN	Bloomberg Cotton Subindex	US	Narrow
BCM	Corporation	ETN	Barclays Commodity Index Pure Beta ER	Global	Broad
BDCL	Corporation	ETN	Wells Fargo Business Development Company Index	US	Broad
BDCS	Corporation	ETN	Wells Fargo Business Development Company Index	US	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
BDCZ	Corporation	ETN	Wells Fargo Business Development Company Index	US	Broad
BDD	Corporation	ETN	DBIQ Optimum Yield Industrial Metals Index Excess Return	Global	Narrow
BDG	Corporation	ETN	DBIQ Optimum Yield Industrial Metals Index Excess Return	Global	Narrow
BLNG	Corporation	ETN	Barclays Commodity Index Precious Metal Pure Beta ER	US	Narrow
BOM	Corporation	ETN	DBIQ Optimum Yield Industrial Metals Index Excess Return	Global	Narrow
BOS	Corporation	ETN	DBIQ Optimum Yield Industrial Metals Index Excess Return	Global	Narrow
BSWN	Corporation	ETN	S&P 500 VIX Futures Tail Risk Index TR – Short Term	US	Narrow
BUNL	Corporation	ETN	DBIQ Long BUND Future Index	Global	Narrow
BUNT	Corporation	ETN	DBIQ Long BUND Future Index	Global	Narrow
BWV	Corporation	ETN	CBOE S&P 500 Buy Write Index	US	Broad
CAFE	Corporation	ETN	Barclays Capital Coffee Pure Beta Index	US	Narrow
CAPE	Corporation	ETN	Shiller Barclays CAPE US Core Sector Index	US	Broad
CEFL	Corporation	ETN	ISE High Income Index	US	Broad
CHOC	Corporation	ETN	Barclays Capital Cocoa Pure Beta Index	US	Narrow
CNY	Corporation	ETN	S&P Chinese Renminbi Index	US	Narrow
COW	Corporation	ETN	Bloomberg Livestock Subindex	US	Narrow
CSCR	Corporation	ETN	Credit Suisse Commodity Backwardation Index	Global	Narrow
CSLS	Corporation	ETN	Credit Suisse Long/Short Liquid Index (Net)	Global	Broad
CTNN	Corporation	ETN	Barclays Capital Cotton Pure Beta Index	US	Narrow
CUPM	Corporation	ETN	Barclays Copper Pure Beta Index	Global	Narrow
DAG	Corporation	ETN	DB Liquid Commodity Index - Optimum Yield Agriculture Excess Return	US	Narrow
DCNG	Corporation	ETN	Barclays Natural Gas Seasonal Index	US	Narrow
DDP	Corporation	ETN	Deutsche Bank Liquid Commodity Index	Global	Narrow
DEE	Corporation	ETN	Deutsche Bank Liquid Commodity Index	Global	Narrow
DFVL	Corporation	ETN	Barclays Capital 5Y US Treasury Futures Targeted Exposure Index	US	Broad
DFVS	Corporation	ETN	Barclays Capital 5Y US Treasury Futures Targeted Exposure Index	US	Broad
DGAZ	Corporation	ETN	S&P GSCI Natural Gas Index Excess Return	US	Broad
DGLD	Corporation	ETN	S&P GSCI Gold Index Excess Return	US	Broad
DGP	Corporation	ETN	DBIQ Optimum Yield Gold Index Excess Return	US	Narrow
DGZ	Corporation	ETN	DBIQ Optimum Yield Gold Index Excess Return	US	Narrow
DIRT	Corporation	ETN	Barclays Commodity Index Agriculture Pure Beta ER	US	Broad
DIVC	Corporation	ETN	Miller/Howard Strategic Dividend Index	US	Broad
DJCI	Corporation	ETN	Bloomberg Commodity Index	Global	Broad
DJP	Corporation	ETN	Bloomberg Commodity Index	Global	Broad
DLBL	Corporation	ETN	Barclays Long Bond US Treasury Futures Targeted Exposure Index	US	Broad
DLBS	Corporation	ETN	Barclays Long Bond US Treasury Futures Targeted Exposure Index	US	Broad
DOD	Corporation	ETN	Dow Jones High Yield Select 10 Index	US	Broad
DRR	Corporation	ETN	Double Short Euro Index	US	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
DSLV	Corporation	ETN	S&P GSCI Silver Index Excess Return	US	Broad
DTO	Corporation	ETN	Deutsche Bank Liquid Commodity Index — Light Crude Excess Return	US	Narrow
DTUL	Corporation	ETN	Barclays Capital 2Y US Treasury Futures Targeted Exposure Index	US	Broad
DTUS	Corporation	ETN	Barclays Capital 2Y US Treasury Futures Targeted Exposure Index	US	Broad
DTYL	Corporation	ETN	Barclays Capital 10Y US Treasury Futures Targeted Exposure Index	US	Broad
DTYS	Corporation	ETN	Barclays Capital 10Y US Treasury Futures Targeted Exposure Index	US	Broad
DVHI	Corporation	ETN	NYSE Diversified High Income Index	US	Broad
DVHL	Corporation	ETN	NYSE Diversified High Income Index	US	Broad
DVYL	Corporation	ETN	Dow Jones U.S. Select Dividend Index	US	Broad
DWTI	Corporation	ETN	S&P GSCI Crude Oil Index Excess Return	US	Broad
DYY	Corporation	ETN	DBIQ Optimum Yield Diversified Commodity Index Excess Return	Global	Narrow
DZZ	Corporation	ETN	DBIQ Optimum Yield Gold Index Excess Return	US	Narrow
EEH	Corporation	ETN	SPECTRUM Large Cap U.S. Sector Momentum Index	US	Broad
EMLB	Corporation	ETN	MSCI Emerging Markets Index	Global	Broad
EMSA	Corporation	ETN	MSCI Emerging Markets Index	Global	Broad
ERO	Corporation	ETN	EUR/USD Exchange Rate	US	Narrow
FBG	Corporation	ETN	Russell 1000 Growth Index	US	Broad
FBGX	Corporation	ETN	Russell 1000 Growth Index	US	Broad
FEEU	Corporation	ETN	STOXX Europe 50 Index	Global	Broad
FIBG	Corporation	ETN	Russell 1000 Growth Index	US	Broad
FIEE	Corporation	ETN	STOXX Europe 50 Index	Global	Broad
FIEG	Corporation	ETN	MSCI World High Dividend Yield Index	Global	Broad
FIEU	Corporation	ETN	STOXX Europe 50 Index	Global	Broad
FIGY	Corporation	ETN	MSCI World High Dividend Yield Index	Global	Broad
FIHD	Corporation	ETN	MSCI World High Dividend Yield Index	Global	Broad
FLAT	Corporation	ETN	Barclays Capital U.S. Treasury 2Y/10Y Yield Curve Index	US	Broad
FLGE	Corporation	ETN	Russell 1000 Growth Index	US	Broad
FMLP	Corporation	ETN	Wells Fargo Master Limited Partnership ex Energy Index	US	Broad
FOIL	Corporation	ETN	Barclays Capital Aluminum Pure Beta Index	Global	Narrow
FUD	Corporation	ETN	UBS Bloomberg CMCI Food	Global	Broad
FUE	Corporation	ETN	Merrill Lynch Commodity index eXtra Biofuels Exchange Series Excess Return	Global	Narrow
GAZ	Corporation	ETN	Bloomberg Natural Gas Subindex	US	Narrow
GBB	Corporation	ETN	GBP/USD Exchange Rate	US	Narrow
GCE	Corporation	ETN	Claymore CEF Index	US	Broad
GLDI	Corporation	ETN	Credit Suisse NASDAQ Gold FLOWS 103 Index	US	Narrow
GRN	Corporation	ETN	Barclays Capital Global Carbon Index	Global	Narrow
GRU	Corporation	ETN	Merrill Lynch Commodity index eXtra (GRains) Excess Return	US	Narrow

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
GRWN	Corporation	ETN	Barclays Commodity Index Softs Pure Beta ER	US	Narrow
GSC	Corporation	ETN	S&P GSCI Enhanced Commodity Strategy Index	Global	Broad
GSP	Corporation	ETN	S&P GSCI Index	Global	Broad
HDLV	Corporation	ETN	Solactive US High Dividend Low Volatility Index	US	Broad
HEVY	Corporation	ETN	Barclays Commodity Index Industrial Metals Pure Beta ER	Global	Narrow
HOML	Corporation	ETN	ISE Exclusively Homebuilders Index	US	Broad
HOMX	Corporation	ETN	ISE Exclusively Homebuilders Index	US	Broad
ICI	Corporation	ETN	Barclays Optimized Currency Carry Index	US	Broad
IMLP	Corporation	ETN	S&P MLP Index	US	Broad
INP	Corporation	ETN	MSCI India Index	Global	Broad
INR	Corporation	ETN	S&P Indian Rupee Index	US	Narrow
IVOP	Corporation	ETN	S&P 500 VIX Short-Term Futures Index	US	Narrow
JEM	Corporation	ETN	Barclays Capital GEMS Index	Global	Narrow
JGBD	Corporation	ETN	DBIQ Short JGB Future Index	Global	Narrow
JGBL	Corporation	ETN	DBIQ Long JGB Future Index	Global	Narrow
JGBS	Corporation	ETN	DBIQ Short JGB Future Index	Global	Narrow
JGBT	Corporation	ETN	DBIQ Long JGB Future Index	Global	Narrow
JJA	Corporation	ETN	Bloomberg Agriculture Subindex	US	Broad
JJC	Corporation	ETN	Bloomberg Copper Subindex	Global	Narrow
JJE	Corporation	ETN	Bloomberg Energy Subindex	US	Narrow
JJG	Corporation	ETN	Bloomberg Grains Subindex	US	Narrow
JJM	Corporation	ETN	Bloomberg Industrial Metals Subindex	Global	Narrow
JJN	Corporation	ETN	Bloomberg Nickel Subindex - Excess Return	Global	Narrow
JJP	Corporation	ETN	Bloomberg Precious Metals Subindex - Excess Return	US	Narrow
JJS	Corporation	ETN	Bloomberg Softs Subindex - Excess Return	US	Narrow
JJT	Corporation	ETN	Bloomberg Tin Subindex - Excess Return	Global	Narrow
JJU	Corporation	ETN	Bloomberg Aluminum Subindex	Global	Narrow
JO	Corporation	ETN	Bloomberg Coffee Subindex	US	Narrow
JYN	Corporation	ETN	JPY/USD Exchange Rate	US	Narrow
LBDC	Corporation	ETN	Wells Fargo Business Development Company Index	US	Broad
LBND	Corporation	ETN	DBIQ Long Bond Future Index	US	Narrow
LD	Corporation	ETN	Bloomberg Lead Subindex	Global	Narrow
LEDD	Corporation	ETN	Barclays Lead Pure Beta Index	Global	Narrow
LMLP	Corporation	ETN	Wells Fargo Master Limited Partnership ex Energy Index	US	Broad
LRET	Corporation	ETN	MSCI US REIT Index	US	Broad
LSC	Corporation	ETN	S&P Commodity Trends Indicator - Price Return	US	Broad
LSTK	Corporation	ETN	Barclays Commodity Index Livestock Pure Beta ER	US	Narrow
LSVX	Corporation	ETN	S&P 500 VIX Futures Variable Long/Short Index TR – Short Term	US	Narrow

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
MFLA	Corporation	ETN	MSCI EAFE Index	Global	Broad
MLPB	Corporation	ETN	Alerian MLP Infrastructure Index	US	Broad
MLPC	Corporation	ETN	Miller/Howard MLP Fundamental Index	US	Broad
MLPG	Corporation	ETN	Alerian Natural Gas MLP Index	US	Broad
MLPI	Corporation	ETN	Alerian MLP Infrastructure Index	US	Broad
MLPN	Corporation	ETN	Cushing 30 MLP Index	US	Broad
MLPO	Corporation	ETN	S&P MLP Index	US	Broad
MLPQ	Corporation	ETN	Alerian MLP Infrastructure Index	US	Broad
MLPS	Corporation	ETN	Alerian MLP Infrastructure Index	US	Broad
MLPW	Corporation	ETN	Wells Fargo Master Limited Partnership Index	US	Broad
MLPY	Corporation	ETN	Cushing MLP High Income Index	US	Broad
MLPZ	Corporation	ETN	S&P MLP Index	US	Broad
MLTI	Corporation	ETN	NYSE Multi-Asset High Income Index	US	Broad
MORL	Corporation	ETN	MVIS Global Mortgage REITs Index (Price)	Global	Broad
MRRL	Corporation	ETN	MVIS Global Mortgage REITs Index (Price)	Global	Broad
NIB	Corporation	ETN	Bloomberg Cocoa Subindex	US	Narrow
NINI	Corporation	ETN	Barclays Nickel Pure Beta Index	Global	Narrow
OIIL	Corporation	ETN	Bloomberg WTI Crude Oil Subindex	US	Narrow
OIL	Corporation	ETN	S&P GSCI Crude Oil Index Excess Return	US	Broad
OILX	Corporation	ETN	S&P GSCI Crude Oil Index Excess Return	US	Broad
OLEM	Corporation	ETN	Barclays Capital WTI Crude Oil Pure Beta ER Index	US	Narrow
OLO	Corporation	ETN	DBIQ Optimum Yield Crude Oil Index Excess Return	Global	Narrow
ONG	Corporation	ETN	Barclays Commodity Index Energy Pure Beta ER	US	Narrow
PGD	Corporation	ETN	Barclays Capital GEMS Pegged Currency Index	Global	Narrow
PGM	Corporation	ETN	Bloomberg Platinum Subindex - Excess Return	US	Narrow
PTM	Corporation	ETN	UBS Bloomberg CMCI Platinum Excess Return	Global	Narrow
REML	Corporation	ETN	FTSE NAREIT All Mortgage Capped Index	US	Broad
RJA	Corporation	ETN	Rogers International Commodity Index - Agriculture Excess Return	Global	Broad
RJI	Corporation	ETN	Rogers International Commodity Index - Excess Return	Global	Broad
RJN	Corporation	ETN	Rogers International Commodity Index - Energy Excess Return	Global	Narrow
RJZ	Corporation	ETN	Rogers International Commodity Index - Metals Excess Return	Global	Broad
RODI	Corporation	ETN	Return on Disability US LargeCap ETN Total Return USD Index	US	Broad
ROLA	Corporation	ETN	Russell 1000 Index	US	Broad
RTLA	Corporation	ETN	Russell 2000 Index	US	Broad
RWXL	Corporation	ETN	Dow Jones Global ex-U.S. Select Real Estate Securities Index	Global	Broad
SBND	Corporation	ETN	DBIQ Short Bond Future Index	US	Narrow
SBV	Corporation	ETN	Barclays Pure Beta Series 2 Index	Global	Narrow
SDYL	Corporation	ETN	S&P High Yield Dividend Aristocrats Index	US	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker</u> <u>Symbol</u>	<u>(2) Type of Issuer of</u> <u>NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which</u> <u>Securities Comprising</u> <u>Underlying Instrument</u> <u>Trades</u>	<u>(5) Broad or</u> <u>Narrow</u>
SFLA	Corporation	ETN	S&P 500 Index	US	Broad
SGAR	Corporation	ETN	Barclays Sugar Pure Beta Index	US	Narrow
SGG	Corporation	ETN	Bloomberg Sugar Subindex - Excess Return	US	Narrow
SLVO	Corporation	ETN	Credit Suisse NASDAQ Silver FLOWS 106 Index	US	Narrow
SMHD	Corporation	ETN	Solactive US Small Cap High Dividend Index	US	Broad
SPGH	Corporation	ETN	S&P 500 Gold Hedged Index	US	Broad
SPLX	Corporation	ETN	S&P 500 Index	US	Broad
STPP	Corporation	ETN	Barclays Capital U.S. Treasury 2Y/10Y Yield Curve Index	US	Narrow
SZO	Corporation	ETN	Deutsche Bank Liquid Commodity Index — Light Crude Excess Return	US	Narrow
TALL	Corporation	ETN	S&P 500 Trend Allocator PR Index	US	Broad
TAPR	Corporation	ETN	Barclays Inverse US Treasury Futures Composite Index	US	Narrow
UAG	Corporation	ETN	UBS Bloomberg CMCI Agriculture	Global	Broad
UBC	Corporation	ETN	UBS Bloomberg CMCI Livestock	Global	Narrow
UBG	Corporation	ETN	UBS Bloomberg CMCI Gold	Global	Narrow
UBM	Corporation	ETN	UBS Bloomberg CMCI Industrial Metals	Global	Narrow
UBN	Corporation	ETN	UBS Bloomberg CMCI Energy	Global	Narrow
UCI	Corporation	ETN	UBS Bloomberg CMCI (Constant Maturity Commodity Index)	Global	Narrow
UCIB	Corporation	ETN	UBS Bloomberg CMCI (Constant Maturity Commodity Index)	Global	Narrow
UGAZ	Corporation	ETN	S&P GSCI Natural Gas Index Excess Return	US	Broad
UGLD	Corporation	ETN	S&P GSCI Gold Index Excess Return	US	Broad
URR	Corporation	ETN	Double Long Euro Index	US	Broad
USLV	Corporation	ETN	S&P GSCI Silver Index Excess Return	US	Broad
USV	Corporation	ETN	UBS Bloomberg CMCI Silver	Global	Narrow
UWTI	Corporation	ETN	S&P GSCI Crude Oil Index Excess Return	US	Broad
VQT	Corporation	ETN	S&P 500 Dynamic VEQTOR Index - Excess Return	US	Broad
VQTS	Corporation	ETN	S&P 500 VEQTOR Switch Index	US	Broad
VXX	Corporation	ETN	S&P 500 VIX Short-Term Futures Index	US	Narrow
VXZ	Corporation	ETN	S&P 500 VIX Mid-Term Futures Index Excess Return	US	Narrow
WEET	Corporation	ETN	Barclays Commodity Index Grains & Oilseeds Pure Beta ER	US	Narrow
WIL	Corporation	ETN	Barclays Women in Leadership Index	US	Broad
WMW	Corporation	ETN	Morningstar Wide Moat Focus 20 Index	US	Broad
XIVH	Corporation	ETN	S&P 500 VIX Futures Short Volatility Hedged Index TR – Short Term	US	Narrow
XVIX	Corporation	ETN	S&P 500 VIX Futures Term-Structure Index ER	US	Narrow
XVZ	Corporation	ETN	S&P 500 Dynamic VIX Futures Index - Excess Return	US	Narrow
XXV	Corporation	ETN	S&P 500 VIX Short-Term Futures Index	US	Narrow
MLPE	Corporation	ETN	Miller/Howard MLP Fundamental Index	US	Broad
AAXJ	Fund	Index Fund Shares	MSCI All Country Asia ex Japan Index	Global	Broad
ACIM	Fund	Index Fund Shares	MSCI ACWI IMI Index	Global	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
ACTX	Fund	Index Fund Shares	Solactive Guru Activist Index	US	Broad
ACWF	Fund	Index Fund Shares	MSCI ACWI Diversified Multiple-Factor Index	Global	Broad
ACWI	Fund	Index Fund Shares	MSCI All Country World Index	Global	Broad
ACWV	Fund	Index Fund Shares	MSCI All Country World Minimum Volatility Index	Global	Broad
ACWX	Fund	Index Fund Shares	MSCI ACWI ex USA Index	Global	Broad
AFK	Fund	Index Fund Shares	MVIS GDP Africa Index	Global	Broad
AFTY	Fund	Index Fund Shares	FTSE China A50 Index	Global	Broad
AGG	Fund	Index Fund Shares	Barclays U.S. Aggregate Bond Index	US	Broad
AGGE	Fund	Index Fund Shares	IQ Enhanced Core Bond U.S. Index	US	Narrow
AGGP	Fund	Index Fund Shares	IQ Enhanced Core Plus Bond U.S. Index	US	Narrow
AGGY	Fund	Index Fund Shares	Barclays U.S. Aggregate Enhanced Yield Index	US	Broad
AGND	Fund	Index Fund Shares	Barclays Rate Hedged U.S. Aggregate Bond Index, Negative Five Duration	US	Broad
AGZ	Fund	Index Fund Shares	Barclays U.S. Agency Bond Index	US	Broad
AGZD	Fund	Index Fund Shares	Barclays Rate Hedged U.S. Aggregate Bond Index, Zero Duration	US	Broad
AIA	Fund	Index Fund Shares	S&P Asia 50 Index	Global	Broad
AIRR	Fund	Index Fund Shares	Richard Bernstein Advisors American Industrial Renaissance Index	US	Broad
ALFA	Fund	Index Fund Shares	AlphaClone Hedge Fund Downside Hedged Index	US	Broad
ALFI	Fund	Index Fund Shares	AlphaClone International Downside Hedged Index	Global	Broad
ALTS	Fund	Index Fund Shares	Morningstar Diversified Alternatives Index	US	Narrow
ALTY	Fund	Index Fund Shares	Indxx SuperDividend Alternatives Index	US	Broad
AMLP	Fund	Index Fund Shares	Alerian MLP Infrastructure Index	US	Broad
AND	Fund	Index Fund Shares	FTSE Andean 40 Index	Global	Broad
ANGL	Fund	Index Fund Shares	BofA Merrill Lynch US Fallen Angel High Yield Index	US	Broad
AOA	Fund	Index Fund Shares	S&P Target Risk Aggressive Index	US	Broad
AOK	Fund	Index Fund Shares	S&P Target Risk Conservative Index	US	Broad
AOM	Fund	Index Fund Shares	S&P Target Risk Moderate Index	US	Broad
AOR	Fund	Index Fund Shares	S&P Target Risk Growth Index	US	Broad
ARGT	Fund	Index Fund Shares	MSCI All Argentina 25/50 Index	Global	Broad
ASEA	Fund	Index Fund Shares	FTSE ASEAN 40 Index	Global	Broad
ASET	Fund	Index Fund Shares	Northern Trust Real Assets Allocation Index	US	Narrow
ASHR	Fund	Index Fund Shares	CSI 300 Index	Global	Broad
ASHS	Fund	Index Fund Shares	CSI 500 Index	Global	Broad
ASHX	Fund	Index Fund Shares	CSI 300 USD Hedged Index	Global	Narrow
AUSE	Fund	Index Fund Shares	WisdomTree Australia Dividend Index	Global	Broad
AXIL	Fund	Index Fund Shares	WisdomTree Asia Pacific ex-Japan Index	Global	Broad
AXIV	Fund	Index Fund Shares	MSCI AC Asia ex Japan Minimum Volatility (USD) Index	Global	Broad
BAB	Fund	Index Fund Shares	BofA Merrill Lynch Build America Bond Index	US	Broad
BABS	Fund	Index Fund Shares	Barclays Build America Bond Index	US	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
BBC	Fund	Index Fund Shares	BioShares Biotechnology Clinical Trials Index	US	Broad
BBH	Fund	Index Fund Shares	MVIS US Listed Biotech 25 Index (Price)	US	Broad
BBP	Fund	Index Fund Shares	BioShares Biotechnology Products Index	US	Broad
BBRC	Fund	Index Fund Shares	FTSE Beyond BRICs Index	Global	Broad
BEMO	Fund	Index Fund Shares	Aptus Behavioral Momentum Index	US	Broad
BFIT	Fund	Index Fund Shares	INDXX Global Health & Wellness Index	Global	Broad
BFOR	Fund	Index Fund Shares	Barrons 400 Index	US	Broad
BIB	Fund	Index Fund Shares	NASDAQ Biotechnology Index	US	Broad
BICK	Fund	Index Fund Shares	ISE BICK Index	Global	Broad
BIGD	Fund	Index Fund Shares	ISE Big Data Index	Global	Broad
BIK	Fund	Index Fund Shares	S&P BRIC 40 Index	Global	Broad
BIL	Fund	Index Fund Shares	Barclays 1-3 Month U.S. Treasury Bill Index	US	Broad
BIS	Fund	Index Fund Shares	NASDAQ Biotechnology Index	US	Broad
BITE	Fund	Index Fund Shares	BITE Index	US	Broad
BIV	Fund	Index Fund Shares	Barclays U.S. 5-10 Year Government/Credit Float Adjusted Index	US	Broad
BIZD	Fund	Index Fund Shares	MVIS US Business Development Companies Index (Price)	US	Broad
BJK	Fund	Index Fund Shares	MVIS Global Gaming Index (Price)	Global	Broad
BKF	Fund	Index Fund Shares	MSCI BRIC Index	Global	Broad
BKLN	Fund	Index Fund Shares	S&P/LSTA U.S. Leveraged Loan 100 Index	US	Broad
BLV	Fund	Index Fund Shares	Barclays U.S. Long Government/Credit Float Adjusted Index	US	Broad
BMLA	Fund	Index Fund Shares	BullMark LatAm Select Leaders Index	Global	Broad
BND	Fund	Index Fund Shares	Barclays U.S. Aggregate Float Adjusted Index	US	Broad
BNDS	Fund	Index Fund Shares	Barclays U.S. Aggregate Bond Index	US	Broad
BNDX	Fund	Index Fund Shares	Barclays Global Aggregate ex-USD Float Adjusted RIC Capped Index (USD Hedged)	US	Broad
BRAQ	Fund	Index Fund Shares	Solactive Brazil Consumer Index	Global	Broad
BRAZ	Fund	Index Fund Shares	Solactive Brazil Mid Cap Index	Global	Broad
BRF	Fund	Index Fund Shares	MVIS Brazil Small-Cap Index (Price)	Global	Broad
BRZU	Fund	Index Fund Shares	MSCI Brazil 25/50 Index	Global	Broad
BSCG	Fund	Index Fund Shares	NASDAQ BulletShares USD Corporate Bond 2016 Index	US	Broad
BSCH	Fund	Index Fund Shares	NASDAQ BulletShares USD Corporate Bond 2017 Index	US	Broad
BSCI	Fund	Index Fund Shares	NASDAQ BulletShares USD Corporate Bond 2018 Index	US	Broad
BSCJ	Fund	Index Fund Shares	NASDAQ BulletShares USD Corporate Bond 2019 Index	US	Broad
BSCK	Fund	Index Fund Shares	NASDAQ BulletShares USD Corporate Bond 2020 Index	US	Broad
BSCL	Fund	Index Fund Shares	NASDAQ BulletShares USD Corporate Bond 2021 Index	US	Broad
BSCM	Fund	Index Fund Shares	NASDAQ BulletShares USD Corporate Bond 2022 Index	US	Broad
BSCN	Fund	Index Fund Shares	NASDAQ BulletShares USD Corporate Bond 2023 Index	US	Broad
BSCO	Fund	Index Fund Shares	NASDAQ BulletShares USD Corporate Bond 2024 Index	US	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
BSCP	Fund	Index Fund Shares	NASDAQ BulletShares USD Corporate Bond 2025 Index	US	Broad
BSJG	Fund	Index Fund Shares	NASDAQ BulletShares USD High Yield Corporate Bond 2016 Index	US	Broad
BSJH	Fund	Index Fund Shares	NASDAQ BulletShares USD High Yield Corporate Bond 2017 Index	US	Broad
BSJI	Fund	Index Fund Shares	NASDAQ BulletShares USD High Yield Corporate Bond 2018 Index	US	Broad
BSJJ	Fund	Index Fund Shares	NASDAQ BulletShares USD High Yield Corporate Bond 2019 Index	US	Broad
BSJK	Fund	Index Fund Shares	NASDAQ BulletShares USD High Yield Corporate Bond 2020 Index	US	Broad
BSJL	Fund	Index Fund Shares	NASDAQ BulletShares USD High Yield Corporate Bond 2021 Index	US	Broad
BSJM	Fund	Index Fund Shares	NASDAQ BulletShares USD High Yield Corporate Bond 2022 Index	US	Broad
BSJN	Fund	Index Fund Shares	NASDAQ BulletShares USD High Yield Corporate Bond 2023 Index	US	Broad
BSV	Fund	Index Fund Shares	Barclays U.S. 1-5 Year Government/Credit Float Adjusted Index	US	Broad
BTAL	Fund	Index Fund Shares	Dow Jones U.S. Thematic Market Neutral Anti-Beta Index - Price Return	US	Broad
BUZ	Fund	Index Fund Shares	BUZZ Social Media Insights Index (Price Return)	US	Broad
BWX	Fund	Index Fund Shares	Barclays Global Treasury Ex-US Capped Index	US	Broad
BWZ	Fund	Index Fund Shares	Barclays 1-3 Year Global Treasury ex-U.S. Capped Index	US	Broad
BYLD	Fund	Index Fund Shares	Morningstar U.S. Bond Market Yield-Optimized Index	US	Broad
BZQ	Fund	Index Fund Shares	MSCI Brazil 25/50 Index	Global	Narrow
CAPX	Fund	Index Fund Shares	S&P 500 Capex Efficiency Index	US	Broad
CARZ	Fund	Index Fund Shares	NASDAQ OMX Global Auto Index	Global	Broad
CATH	Fund	Index Fund Shares	S&P 500 Catholic Values Index	US	Broad
CBND	Fund	Index Fund Shares	Barclays Issuer Scored Corporate Index	US	Broad
CBON	Fund	Index Fund Shares	ChinaBond China High Quality Bond Index	US	Broad
CCXE	Fund	Index Fund Shares	WisdomTree Commodity Country Equity Index	Global	Broad
CDC	Fund	Index Fund Shares	CEMP U.S. Large Cap High Dividend 100 Long/Cash Volatility Weighted Index	US	Broad
CDL	Fund	Index Fund Shares	CEMP US Large Cap High Dividend 100 Volatility Weighted Index	US	Broad
CEMB	Fund	Index Fund Shares	Morningstar Emerging Markets Corporate Bond Index	US	Broad
CEZ	Fund	Index Fund Shares	CEMP Emerging Market 500 Volatility Weighted Index	Global	Broad
CFA	Fund	Index Fund Shares	CEMP U.S. Large Cap 500 Volatility Weighted Index	US	Broad
CFO	Fund	Index Fund Shares	CEMP U.S. Large Cap 500 Long/Cash Volatility Weighted Index	US	Broad
CGW	Fund	Index Fund Shares	S&P Global Water Index	Global	Broad
CHAD	Fund	Index Fund Shares	CSI 300 Index	Global	Narrow
CHAU	Fund	Index Fund Shares	CSI 300 Index	Global	Broad
CHEP	Fund	Index Fund Shares	Dow Jones U.S. Thematic Market Neutral Value Index - Price Return	US	Broad
CHIE	Fund	Index Fund Shares	Solactive China Energy Index	Global	Broad
CHII	Fund	Index Fund Shares	Solactive China Industrials Index	Global	Broad
CHIM	Fund	Index Fund Shares	Solactive China Materials Index	Global	Broad
CHIQ	Fund	Index Fund Shares	Solactive China Consumer Index	Global	Broad
CHIX	Fund	Index Fund Shares	Solactive China Financials Index	Global	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
CIBR	Fund	Index Fund Shares	NASDAQ CTA Cybersecurity Index	Global	Broad
CID	Fund	Index Fund Shares	CEMP International High Dividend 100 Volatility Weighted Index	Global	Broad
CIL	Fund	Index Fund Shares	CEMP International 500 Volatility Weighted Index	Global	Broad
CIU	Fund	Index Fund Shares	Barclays U.S. Intermediate Credit Bond Index	US	Broad
CIZ	Fund	Index Fund Shares	CEMP International 500 Long/Cash Volatility Weighted Index	Global	Broad
CJNK	Fund	Index Fund Shares	BofA Merrill Lynch US Diversified Crossover Corporate Index	US	Broad
CLAW	Fund	Index Fund Shares	Dow Jones U.S. Select Home Construction Index	US	Narrow
CLY	Fund	Index Fund Shares	Barclays U.S. Long Credit Index	US	Broad
CMBS	Fund	Index Fund Shares	Barclays U.S. CMBS (ERISA Only) Index	US	Broad
CMF	Fund	Index Fund Shares	S&P California AMT-Free Municipal Bond Index	US	Broad
CN	Fund	Index Fund Shares	MSCI China All Shares Index	Global	Broad
CNCR	Fund	Index Fund Shares	Loncar Cancer Immunotherapy Index	US	Broad
CNDA	Fund	Index Fund Shares	IQ Canada Small Cap Index	Global	Broad
CNDF	Fund	Index Fund Shares	MSCI USA Consumer Discretionary Diversified Multiple-Factor Capped Index	US	Broad
CNHX	Fund	Index Fund Shares	MSCI China A International with CNH 100% Hedged to USD Index	Global	Broad
CNSF	Fund	Index Fund Shares	MSCI USA Consumer Staples Diversified Multiple-Factor Capped Index	US	Broad
CNTR	Fund	Index Fund Shares	Dow Jones U.S. Contrarian Opportunities Index	US	Broad
CNXT	Fund	Index Fund Shares	SME-ChiNext 100 Index	Global	Broad
CNYA	Fund	Index Fund Shares	MSCI China A International Index	Global	Broad
COBO	Fund	Index Fund Shares	Solactive Diversified USD Covered Bond Index	US	Broad
COPX	Fund	Index Fund Shares	Solactive Global Copper Miners Index	Global	Broad
CORP	Fund	Index Fund Shares	BofA Merrill Lynch US Corporate Index	US	Broad
CPI	Fund	Index Fund Shares	IQ CPI Inflation Hedged Index	US	Broad
CQQQ	Fund	Index Fund Shares	AlphaShares China Technology Index	Global	Broad
CRAK	Fund	Index Fund Shares	MVIS Global Oil Refiners Index	Global	Broad
CRBN	Fund	Index Fund Shares	MSCI ACWI Low Carbon Target Index	Global	Broad
CRED	Fund	Index Fund Shares	Barclays U.S. Credit Bond Index	US	Broad
CROP	Fund	Index Fund Shares	IQ Global Agribusiness Small Cap Index	Global	Broad
CSA	Fund	Index Fund Shares	CEMP US Small Cap 500 Volatility Weighted Index	US	Broad
CSB	Fund	Index Fund Shares	CEMP US Small Cap High Dividend 100 Volatility Weighted Index	US	Broad
CSD	Fund	Index Fund Shares	S&P U.S. Spin-Off Index	US	Broad
CSF	Fund	Index Fund Shares	CEMP U.S. Small Cap 500 Long/Cash Volatility Weighted Index	US	Broad
CSJ	Fund	Index Fund Shares	Barclays U.S. 1-3 Year Credit Bond Index	US	Broad
CSM	Fund	Index Fund Shares	Credit Suisse 130/30 Index	US	Broad
CURE	Fund	Index Fund Shares	Health Care Select Sector Index	US	Broad
CUT	Fund	Index Fund Shares	MSCI ACWI IMI Timber Select Capped Index	Global	Broad
CVY	Fund	Index Fund Shares	Zacks Multi-Asset Income Index	US	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
CWB	Fund	Index Fund Shares	Barclays U.S. Convertible Bond >\$500MM Index	US	Broad
CWI	Fund	Index Fund Shares	MSCI ACWI ex USA Index	Global	Broad
CXA	Fund	Index Fund Shares	Barclays Managed Money Municipal California Index	US	Broad
CXSE	Fund	Index Fund Shares	WisdomTree China ex-State-Owned Enterprises Index	Global	Broad
CZA	Fund	Index Fund Shares	Zacks Mid-Cap Core Index	US	Broad
DAX	Fund	Index Fund Shares	DAX Index	Global	Broad
DBAP	Fund	Index Fund Shares	MSCI Asia Pacific ex Japan US Dollar Hedged Index	Global	Broad
DBAU	Fund	Index Fund Shares	MSCI Australia US Dollar Hedged Index	Global	Broad
DBAW	Fund	Index Fund Shares	MSCI ACWI ex USA Hedged to USD Index	Global	Broad
DBBR	Fund	Index Fund Shares	MSCI Brazil US Dollar Hedged Index	Global	Broad
DBEF	Fund	Index Fund Shares	MSCI EAFE US Dollar Hedged Index	Global	Broad
DBEM	Fund	Index Fund Shares	MSCI EM US Dollar Hedged Index	Global	Broad
DBES	Fund	Index Fund Shares	MSCI EAFE Small Cap US Dollar Hedged Index	Global	Broad
DBEU	Fund	Index Fund Shares	MSCI Europe US Dollar Hedged Index	Global	Broad
DBEZ	Fund	Index Fund Shares	MSCI EMU IMI US Dollar Hedged Index	Global	Broad
DBGR	Fund	Index Fund Shares	MSCI Germany US Dollar Hedged Index	Global	Broad
DBIF	Fund	Index Fund Shares	S&P Global Infrastructure Index (USD) (Hedged) (Net TR)	Global	Broad
DBIT	Fund	Index Fund Shares	MSCI Italy 25/50 US Dollar Hedged Index	Global	Broad
DBJP	Fund	Index Fund Shares	MSCI Japan US Dollar Hedged Index	Global	Broad
DBKO	Fund	Index Fund Shares	MSCI Korea 25/50 US Dollar Hedged Index	Global	Broad
DBMX	Fund	Index Fund Shares	MSCI Mexico IMI 25/50 Hedged to USD Index	Global	Broad
DBRE	Fund	Index Fund Shares	Dow Jones Global ex-U.S. Select Real Estate Securities Total Return Net Index (USD) Hedged	Global	Broad
DBSE	Fund	Index Fund Shares	MSCI Southern Europe US Dollar Hedged Index	Global	Broad
DBSP	Fund	Index Fund Shares	MSCI Spain 25/50 US Dollar Hedged Index	Global	Broad
DBU	Fund	Index Fund Shares	WisdomTree Global ex-US Utilities Index	Global	Broad
DBUK	Fund	Index Fund Shares	MSCI United Kingdom US Dollar Hedged Index	Global	Broad
DDBI	Fund	Index Fund Shares	QS DBI Developed ex-US Diversified Index	Global	Broad
DDEZ	Fund	Index Fund Shares	WisdomTree Dynamic Currency Hedged Europe Equity Index	Global	Broad
DDG	Fund	Index Fund Shares	Dow Jones U.S. Oil & Gas Index	US	Narrow
DDJP	Fund	Index Fund Shares	WisdomTree Dynamic Currency Hedged Japan Equity Index	Global	Broad
DDLS	Fund	Index Fund Shares	WisdomTree Dynamic Currency Hedged International SmallCap Equity Index	Global	Broad
DDM	Fund	Index Fund Shares	Dow Jones Industrial Average	US	Broad
DDWM	Fund	Index Fund Shares	WisdomTree Dynamic Currency Hedged International Equity Index	Global	Broad
DEEF	Fund	Index Fund Shares	FTSE Developed ex US Comprehensive Factor Index	Global	Broad
DEF	Fund	Index Fund Shares	Sabrient Defensive Equity Index	US	Broad
DEFA	Fund	Index Fund Shares	MSCI EAFE Adaptive Hedge to USD Index	US	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
DEM	Fund	Index Fund Shares	WisdomTree Emerging Markets High Dividend Index	Global	Broad
DEMG	Fund	Index Fund Shares	FTSE Emerging Comprehensive Factor Index	Global	Broad
DES	Fund	Index Fund Shares	WisdomTree SmallCap Dividend Index	US	Broad
DESC	Fund	Index Fund Shares	Russell 2000 Comprehensive Factor Index	US	Broad
DEUS	Fund	Index Fund Shares	Russell 1000 Comprehensive Factor Index	US	Broad
DEW	Fund	Index Fund Shares	WisdomTree Global High Dividend Index	Global	Broad
DEWJ	Fund	Index Fund Shares	MSCI Japan Adaptive Hedge to USD Index	US	Narrow
DEZU	Fund	Index Fund Shares	MSCI EMU Adaptive Hedge to USD Index	US	Narrow
DFE	Fund	Index Fund Shares	WisdomTree Europe SmallCap Dividend Index	Global	Broad
DFJ	Fund	Index Fund Shares	WisdomTree Japan SmallCap Dividend Index	Global	Broad
DFND	Fund	Index Fund Shares	Realty Shares DIVCON Dividend Defender Index	US	Broad
DGRE	Fund	Index Fund Shares	WisdomTree Emerging Markets Quality Dividend Growth Index	Global	Broad
DGRO	Fund	Index Fund Shares	Morningstar U.S. Dividend Growth Index	US	Broad
DGRS	Fund	Index Fund Shares	WisdomTree U.S. SmallCap Quality Dividend Growth Index	US	Broad
DGRW	Fund	Index Fund Shares	WisdomTree U.S. Quality Dividend Growth Index	US	Broad
DGS	Fund	Index Fund Shares	WisdomTree Emerging Markets SmallCap Dividend Index	Global	Broad
DGT	Fund	Index Fund Shares	The Global Dow	Global	Broad
DHS	Fund	Index Fund Shares	WisdomTree High Dividend Index	US	Broad
DHVV	Fund	Index Fund Shares	Diamond Hill Valuation-Weighted 500 Index	US	Broad
DIG	Fund	Index Fund Shares	Dow Jones U.S. Oil & Gas Index	US	Broad
DIM	Fund	Index Fund Shares	WisdomTree International MidCap Dividend Index	Global	Broad
DIV	Fund	Index Fund Shares	Indxx SuperDividend U.S. Low Volatility Index	US	Broad
DIVA	Fund	Index Fund Shares	Indxx Hedged Dividend Income Index	US	Broad
DJD	Fund	Index Fund Shares	Dow Jones Industrial Average Yield Weighted	US	Broad
DLN	Fund	Index Fund Shares	WisdomTree LargeCap Dividend Index	US	Broad
DLS	Fund	Index Fund Shares	WisdomTree International SmallCap Dividend Index	Global	Broad
DNL	Fund	Index Fund Shares	WisdomTree Global ex-US Quality Dividend Growth Index	Global	Broad
DOG	Fund	Index Fund Shares	Dow Jones Industrial Average	US	Broad
DOL	Fund	Index Fund Shares	WisdomTree International LargeCap Dividend Index	Global	Broad
DON	Fund	Index Fund Shares	WisdomTree MidCap Dividend Index	US	Broad
DOO	Fund	Index Fund Shares	WisdomTree International Dividend ex-Financials Index	Global	Broad
DPK	Fund	Index Fund Shares	MSCI EAFE Index	Global	Narrow
DPST	Fund	Index Fund Shares	Solactive Regional Bank Index	US	Broad
DRIP	Fund	Index Fund Shares	S&P Oil & Gas Exploration & Production Select Industry Index	US	Narrow
DRN	Fund	Index Fund Shares	MSCI US REIT Index	US	Broad
DRV	Fund	Index Fund Shares	MSCI US REIT Index	US	Narrow
DRW	Fund	Index Fund Shares	WisdomTree Global ex-US Real Estate Index	Global	Broad
DSI	Fund	Index Fund Shares	MSCI KLD 400 Social Index	US	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
DSUM	Fund	Index Fund Shares	Citigroup Dim Sum (Offshore CNY) Bond Index	US	Broad
DTD	Fund	Index Fund Shares	WisdomTree Dividend Index	US	Broad
DTH	Fund	Index Fund Shares	WisdomTree International High Dividend Index	Global	Broad
DTN	Fund	Index Fund Shares	WisdomTree Dividend ex-Financials Index	US	Broad
DUG	Fund	Index Fund Shares	Dow Jones U.S. Oil & Gas Index	US	Broad
DUST	Fund	Index Fund Shares	NYSE Arca Gold Miners Index (Price Return)	Global	Narrow
DVEM	Fund	Index Fund Shares	WisdomTree Emerging Markets Dividend Index	Global	Broad
DVP	Fund	Index Fund Shares	TWM Deep Value Index	US	Broad
DVY	Fund	Index Fund Shares	Dow Jones U.S. Select Dividend Index	US	Broad
DVYA	Fund	Index Fund Shares	Dow Jones Asia/Pacific Select Dividend 30 Index	Global	Broad
DVYE	Fund	Index Fund Shares	Dow Jones Emerging Markets Select Dividend Index	Global	Broad
DWAQ	Fund	Index Fund Shares	Dorsey Wright NASDAQ Technical Leaders Index	US	Broad
DWAS	Fund	Index Fund Shares	Dorsey Wright SmallCap Technical Leaders Index	US	Broad
DWFI	Fund	Index Fund Shares	Dorsey Wright Fixed Income Allocation Index	US	Narrow
DWIN	Fund	Index Fund Shares	Dorsey Wright Multi-Asset Income Index	US	Narrow
DWLV	Fund	Index Fund Shares	Dorsey Wright Multi-Factor Global Equity Index	US	Narrow
DWM	Fund	Index Fund Shares	WisdomTree International Equity Index	Global	Broad
DWTR	Fund	Index Fund Shares	Dorsey Wright Sector 4 Index	US	Narrow
DWX	Fund	Index Fund Shares	S&P International Dividend Opportunities Index Price Return	Global	Broad
DXD	Fund	Index Fund Shares	Dow Jones Industrial Average	US	Broad
DXGE	Fund	Index Fund Shares	WisdomTree Germany Hedged Equity Index	Global	Broad
DXJ	Fund	Index Fund Shares	WisdomTree Japan Hedged Equity Index	Global	Broad
DXJC	Fund	Index Fund Shares	WisdomTree Japan Hedged Capital Goods Index	Global	Broad
DXJF	Fund	Index Fund Shares	WisdomTree Japan Hedged Financials Index	Global	Broad
DXJH	Fund	Index Fund Shares	WisdomTree Japan Hedged Health Care Index	Global	Broad
DXJR	Fund	Index Fund Shares	WisdomTree Japan Hedged Real Estate Index	Global	Broad
DXJS	Fund	Index Fund Shares	WisdomTree Japan Hedged SmallCap Equity Index	Global	Broad
DXJT	Fund	Index Fund Shares	WisdomTree Japan Hedged Tech, Media and Telecom Index	Global	Broad
DXKW	Fund	Index Fund Shares	WisdomTree Korea Hedged Equity Index	Global	Broad
DXPS	Fund	Index Fund Shares	WisdomTree United Kingdom Hedged Equity Index	Global	Broad
DXUS	Fund	Index Fund Shares	WisdomTree Global ex-U.S. Hedged Dividend Index	Global	Broad
DYB	Fund	Index Fund Shares	WisdomTree Dynamic Bearish U.S. Equity Index	US	Broad
DYLS	Fund	Index Fund Shares	WisdomTree Dynamic Long/Short U.S. Equity Index	US	Broad
DZK	Fund	Index Fund Shares	MSCI EAFE Index	Global	Broad
EBND	Fund	Index Fund Shares	Barclays EM Local Currency Government Diversified Index	US	Broad
ECH	Fund	Index Fund Shares	MSCI Chile IMI 25/50 Index	Global	Broad
ECNS	Fund	Index Fund Shares	MSCI China Small Cap Index	Global	Broad
ECON	Fund	Index Fund Shares	Dow Jones Emerging Markets Consumer Titans 30 Index	Global	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
EDBI	Fund	Index Fund Shares	QS DBI Emerging Markets Diversified Index	Global	Broad
EDC	Fund	Index Fund Shares	MSCI Emerging Markets Index	Global	Broad
EDEN	Fund	Index Fund Shares	MSCI Denmark IMI 25/50 Index	Global	Broad
EDIV	Fund	Index Fund Shares	S&P Emerging Markets Dividend Opportunities Index	Global	Broad
EDOG	Fund	Index Fund Shares	S-Network Emerging Sector Dividend Dogs Index	Global	Broad
EDV	Fund	Index Fund Shares	Barclays U.S. Treasury STRIPS 20-30 Year Equal Par Bond Index	US	Broad
EDZ	Fund	Index Fund Shares	MSCI Emerging Markets Index	Global	Narrow
EEB	Fund	Index Fund Shares	BNY Mellon BRIC Select DR Index	Global	Broad
EELV	Fund	Index Fund Shares	S&P BMI Emerging Markets Low Volatility Index	Global	Broad
EEM	Fund	Index Fund Shares	MSCI Emerging Markets Index	Global	Broad
EEMA	Fund	Index Fund Shares	MSCI Emerging Markets Asia Index	Global	Broad
EEML	Fund	Index Fund Shares	MSCI Emerging Markets Latin America Index	Global	Broad
EEMO	Fund	Index Fund Shares	S&P Momentum Emerging Plus LargeMidCap Index	Global	Broad
EEMS	Fund	Index Fund Shares	MSCI Emerging Markets Small Cap Index	Global	Broad
EEMV	Fund	Index Fund Shares	MSCI Emerging Markets Minimum Volatility Index	Global	Broad
EES	Fund	Index Fund Shares	WisdomTree SmallCap Earnings Index	US	Broad
EET	Fund	Index Fund Shares	MSCI Emerging Markets Index	Global	Narrow
EEV	Fund	Index Fund Shares	MSCI Emerging Markets Index	Global	Narrow
EFA	Fund	Index Fund Shares	MSCI EAFE Index	Global	Broad
EFAD	Fund	Index Fund Shares	MSCI EAFE Dividend Masters Index	Global	Broad
EFAV	Fund	Index Fund Shares	MSCI EAFE Minimum Volatility Index	Global	Broad
EFFE	Fund	Index Fund Shares	JPMorgan ETF Efficiente 10 TR Series X Index	US	Narrow
EFG	Fund	Index Fund Shares	MSCI EAFE Growth Index	Global	Broad
EFNL	Fund	Index Fund Shares	MSCI Finland IMI 25/50 Index	Global	Broad
EFO	Fund	Index Fund Shares	MSCI EAFE Index	Global	Narrow
EFU	Fund	Index Fund Shares	MSCI EAFE Index	Global	Narrow
EFV	Fund	Index Fund Shares	MSCI EAFE Value Index	Global	Broad
EFZ	Fund	Index Fund Shares	MSCI EAFE Index	Global	Narrow
EGPT	Fund	Index Fund Shares	MVIS Egypt Index (Price)	Global	Broad
EIDO	Fund	Index Fund Shares	MSCI Indonesia Investable Market Index	Global	Broad
EIRL	Fund	Index Fund Shares	MSCI All Ireland Capped Index	Global	Broad
EIS	Fund	Index Fund Shares	MSCI Israel Capped Investable Market Index	Global	Broad
ELKU	Fund	Index Fund Shares	FTSE RAFI US Equity Income Index	US	Broad
EMAG	Fund	Index Fund Shares	MVIS EM Aggregate Bond Index (Price)	US	Broad
EMB	Fund	Index Fund Shares	J.P. Morgan EMBI Global Core Index	US	Broad
EMBB	Fund	Index Fund Shares	MSCI EM Beyond BRIC Index	Global	Broad
EMCD	Fund	Index Fund Shares	BofA Merrill Lynch Emerging Markets Diversified Corporate Index	US	Broad
EMCG	Fund	Index Fund Shares	WisdomTree Emerging Markets Consumer Growth Index	Global	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
EMCR	Fund	Index Fund Shares	S&P Emerging Markets Core Index	Global	Broad
EMDV	Fund	Index Fund Shares	MSCI Emerging Markets Dividend Masters Index	Global	Broad
EMFM	Fund	Index Fund Shares	Solactive Next Emerging & Frontier Index	Global	Broad
EMFT	Fund	Index Fund Shares	MSCI EM 50 Index	Global	Broad
EMGF	Fund	Index Fund Shares	MSCI Emerging Markets Diversified Multiple-Factor Index	Global	Broad
EMHY	Fund	Index Fund Shares	Morningstar Emerging Markets High Yield Bond Index	US	Broad
EMHZ	Fund	Index Fund Shares	MSCI Emerging Markets Horizon Index	Global	Broad
EMIF	Fund	Index Fund Shares	S&P Emerging Markets Infrastructure Index	Global	Broad
EMIH	Fund	Index Fund Shares	Solactive Emerging Markets Bond - Interest Rate Hedged Index	US	Broad
EMLC	Fund	Index Fund Shares	J.P. Morgan Government Bond Index – Emerging Markets Global Core	US	Broad
EMQQ	Fund	Index Fund Shares	EMQQ The Emerging Markets Internet & Ecommerce Index	Global	Broad
EMRE	Fund	Index Fund Shares	AlphaShares Emerging Markets Real Estate Index	Global	Broad
EMSD	Fund	Index Fund Shares	WisdomTree Strong Dollar Emerging Markets Equity Index	Global	Broad
EMSH	Fund	Index Fund Shares	DBIQ Short Duration Emerging Market Bond Index	US	Broad
EMSO	Fund	Index Fund Shares	S&P Emerging Markets Strategic Opportunities Index	Global	Broad
ENFR	Fund	Index Fund Shares	Alerian Energy Infrastructure Index (Price Return)	Global	Broad
ENOR	Fund	Index Fund Shares	MSCI Norway IMI 25/50 Index	Global	Broad
ENY	Fund	Index Fund Shares	S&P/TSX High Income Energy Index - Price Return	Global	Broad
ENZL	Fund	Index Fund Shares	MSCI New Zealand IMI 25/50 Index	Global	Broad
EPHE	Fund	Index Fund Shares	MSCI Philippines Investable Market Index	Global	Broad
EPI	Fund	Index Fund Shares	WisdomTree India Earnings Index	Global	Broad
EPOL	Fund	Index Fund Shares	MSCI Poland IMI 25/50 Index	Global	Broad
EPP	Fund	Index Fund Shares	MSCI Pacific ex-Japan Index	Global	Broad
EPRF	Fund	Index Fund Shares	S&P U.S. High Quality Preferred Stock Index	US	Broad
EPS	Fund	Index Fund Shares	WisdomTree Earnings 500 Index	US	Broad
EPU	Fund	Index Fund Shares	MSCI All Peru Capped Index	Global	Broad
EPV	Fund	Index Fund Shares	FTSE Developed Europe Index	Global	Narrow
EQAL	Fund	Index Fund Shares	Russell 1000 Equal Weight Index	US	Broad
EQL	Fund	Index Fund Shares	Bank of America Securities - Merrill Lynch Equal Sector Weight Index	US	Broad
EQLT	Fund	Index Fund Shares	Workplace Equality Index	US	Broad
EQWL	Fund	Index Fund Shares	Russell Top 200 Equal Weight Index	US	Broad
EQWM	Fund	Index Fund Shares	Russell MidCap Equal Weight Index	US	Broad
EQWS	Fund	Index Fund Shares	Russell 2000 Equal Weight Index	US	Broad
ERGF	Fund	Index Fund Shares	MSCI USA Energy Diversified Multiple-Factor Capped Index	US	Broad
ERUS	Fund	Index Fund Shares	MSCI Russia 25/50 Index	Global	Broad
ERX	Fund	Index Fund Shares	Energy Select Sector Index	US	Broad
ERY	Fund	Index Fund Shares	Energy Select Sector Index	US	Narrow
ERYY	Fund	Index Fund Shares	Energy Select Sector Index	US	Narrow

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
ESG	Fund	Index Fund Shares	STOXX USA ESG Impact Index	US	Broad
ESGD	Fund	Index Fund Shares	MSCI EAFE ESG Select Index	Global	Broad
ESGE	Fund	Index Fund Shares	MSCI EM ESG Select Index	Global	Broad
ESGG	Fund	Index Fund Shares	STOXX Global ESG Impact Index	Global	Broad
ESGN	Fund	Index Fund Shares	Beta Advantage Sustainable International Equity Income 100 Index	Global	Broad
ESGS	Fund	Index Fund Shares	Beta Advantage Sustainable U.S. Equity Income 100 Index	US	Broad
ESGW	Fund	Index Fund Shares	Beta Advantage Sustainable Global Equity Income 200 Index	Global	Broad
ETHO	Fund	Index Fund Shares	Etho Climate Leadership Index – US	US	Broad
EUDG	Fund	Index Fund Shares	WisdomTree Europe Quality Dividend Growth Index	Global	Broad
EUDV	Fund	Index Fund Shares	MSCI Europe Dividend Masters Index	Global	Broad
EUFN	Fund	Index Fund Shares	MSCI Europe Financials Index	Global	Broad
EUM	Fund	Index Fund Shares	MSCI Emerging Markets Index	Global	Narrow
EUMV	Fund	Index Fund Shares	MSCI Europe Minimum Volatility (USD) Index	Global	Broad
EURL	Fund	Index Fund Shares	FTSE Developed Europe Index	Global	Broad
EUSA	Fund	Index Fund Shares	MSCI USA Equal Weighted Index	US	Broad
EJSC	Fund	Index Fund Shares	WisdomTree Europe Hedged SmallCap Equity Index	Global	Broad
EVX	Fund	Index Fund Shares	NYSE Arca Environmental Services Index	US	Broad
EWA	Fund	Index Fund Shares	MSCI Australia Index	Global	Broad
EWC	Fund	Index Fund Shares	MSCI Canada Index	Global	Broad
EWD	Fund	Index Fund Shares	MSCI Sweden Index	Global	Broad
EWEM	Fund	Index Fund Shares	MSCI Emerging Markets Equal Country Weighted Index	Global	Broad
EWG	Fund	Index Fund Shares	MSCI Germany Index	Global	Broad
EWGS	Fund	Index Fund Shares	MSCI Germany Small Cap Index	Global	Broad
EWH	Fund	Index Fund Shares	MSCI Hong Kong Index	Global	Broad
EWI	Fund	Index Fund Shares	MSCI Italy 25/50 Index	Global	Broad
EWJ	Fund	Index Fund Shares	MSCI Japan Index	Global	Broad
EWK	Fund	Index Fund Shares	MSCI Belgium IMI 25/50 Index	Global	Broad
EWL	Fund	Index Fund Shares	MSCI Switzerland 25/50 Index	Global	Broad
EWM	Fund	Index Fund Shares	MSCI Malaysia Index	Global	Broad
EWMC	Fund	Index Fund Shares	S&P MidCap 400 Equal Weight Index Price Return	US	Broad
EWN	Fund	Index Fund Shares	MSCI Netherlands Investable Market Index	Global	Broad
EWO	Fund	Index Fund Shares	MSCI Austria IMI 25/50 Index	Global	Broad
EWP	Fund	Index Fund Shares	MSCI Spain 25/50 Index	Global	Broad
EWQ	Fund	Index Fund Shares	MSCI France Index	Global	Broad
EWRE	Fund	Index Fund Shares	S&P 500 Equal Weight Real Estate Index	US	Broad
EWS	Fund	Index Fund Shares	MSCI Singapore Index	Global	Broad
EWSC	Fund	Index Fund Shares	S&P SmallCap 600 Equal Weight Index	US	Broad
EWT	Fund	Index Fund Shares	MSCI Taiwan Index	Global	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
EWU	Fund	Index Fund Shares	MSCI United Kingdom Index	Global	Broad
EWUS	Fund	Index Fund Shares	MSCI United Kingdom Small Cap Index	Global	Broad
EWV	Fund	Index Fund Shares	MSCI Japan Index	Global	Narrow
EWW	Fund	Index Fund Shares	MSCI Mexico IMI 2S/50 Index	Global	Broad
EWX	Fund	Index Fund Shares	S&P Emerging Markets Under USD2 Billion Index	Global	Broad
EWY	Fund	Index Fund Shares	MSCI Korea 2S/50 Index	Global	Broad
EWZ	Fund	Index Fund Shares	MSCI Brazil 2S/50 Index	Global	Broad
EWZS	Fund	Index Fund Shares	MSCI Brazil Small Cap Index	Global	Broad
EXI	Fund	Index Fund Shares	S&P Global 1200 Industrials Sector Index	Global	Broad
EXT	Fund	Index Fund Shares	WisdomTree Earnings Index	US	Broad
EYLD	Fund	Index Fund Shares	Cambria Emerging Shareholder Yield Index	Global	Broad
EZA	Fund	Index Fund Shares	MSCI South Africa Index	Global	Broad
EZJ	Fund	Index Fund Shares	MSCI Japan Index	Global	Narrow
EZM	Fund	Index Fund Shares	WisdomTree MidCap Earnings Index	US	Broad
EZR	Fund	Index Fund Shares	WisdomTree Europe Local Recovery Index	Global	Broad
EZU	Fund	Index Fund Shares	MSCI EMU Index	Global	Broad
EZY	Fund	Index Fund Shares	WisdomTree LargeCap Value Index	US	Broad
FAB	Fund	Index Fund Shares	NASDAQ AlphaDEX Multi Cap Value Index	US	Broad
FAD	Fund	Index Fund Shares	NASDAQ AlphaDEX Multi Cap Growth Index	US	Broad
FALN	Fund	Index Fund Shares	Barclays US High Yield Fallen Angel 3% Capped Index	US	Broad
FAN	Fund	Index Fund Shares	ISE Global Wind Energy Index	Global	Broad
FAS	Fund	Index Fund Shares	Russell 1000 Financial Services Index	US	Broad
FAUS	Fund	Index Fund Shares	NASDAQ AlphaDEX Australia Index	Global	Broad
FAZ	Fund	Index Fund Shares	Russell 1000 Financial Services Index	US	Narrow
FAZZ	Fund	Index Fund Shares	Financial Select Sector Index	US	Narrow
FBT	Fund	Index Fund Shares	NYSE Arca Biotechnology Index	US	Broad
FBZ	Fund	Index Fund Shares	NASDAQ AlphaDEX Brazil Index	Global	Broad
FCA	Fund	Index Fund Shares	NASDAQ AlphaDEX China Index	Global	Broad
FCAN	Fund	Index Fund Shares	NASDAQ AlphaDEX Canada Index	Global	Broad
FCFI	Fund	Index Fund Shares	TrimTabs Intl Free-Cash-Flow Index	Global	Broad
FCG	Fund	Index Fund Shares	ISE-REVERE Natural Gas Index	US	Broad
FCOM	Fund	Index Fund Shares	MSCI USA IMI Telecommunication Services 2S/50 Index	US	Broad
FDD	Fund	Index Fund Shares	STOXX Europe Select Dividend 30 Index	Global	Broad
FDIS	Fund	Index Fund Shares	MSCI USA IMI Consumer Discretionary Index	US	Broad
FDL	Fund	Index Fund Shares	Morningstar Dividend Leaders Index	US	Broad
FDM	Fund	Index Fund Shares	Dow Jones Select MicroCap Index	US	Broad
FDN	Fund	Index Fund Shares	Dow Jones Internet Composite Index	US	Broad
FDT	Fund	Index Fund Shares	NASDAQ AlphaDEX Developed Markets Ex-US Index	Global	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
FDTS	Fund	Index Fund Shares	NASDAQ AlphaDEX Developed Markets ex-US Small Cap Index	Global	Broad
FEM	Fund	Index Fund Shares	NASDAQ AlphaDEX Emerging Markets Index	Global	Broad
FEMS	Fund	Index Fund Shares	NASDAQ AlphaDEX Emerging Markets Small Cap Index	Global	Broad
FENY	Fund	Index Fund Shares	MSCI USA IMI Energy Index	US	Broad
FEP	Fund	Index Fund Shares	NASDAQ AlphaDEX Europe Index	Global	Broad
FEU	Fund	Index Fund Shares	STOXX Europe 50 Index	Global	Broad
FEUZ	Fund	Index Fund Shares	NASDAQ AlphaDEX Eurozone Index	Global	Broad
FEX	Fund	Index Fund Shares	NASDAQ AlphaDEX Large Cap Core Index	US	Broad
FEZ	Fund	Index Fund Shares	EURO STOXX 50 Index	Global	Broad
FFR	Fund	Index Fund Shares	FTSE EPRA/NAREIT Developed Index	Global	Broad
FGD	Fund	Index Fund Shares	Dow Jones Global Select Dividend Index	Global	Broad
FGM	Fund	Index Fund Shares	NASDAQ AlphaDEX Germany Index	Global	Broad
FHK	Fund	Index Fund Shares	NASDAQ AlphaDEX Hong Kong Index	Global	Broad
FHLC	Fund	Index Fund Shares	MSCI USA IMI Health Care Index	US	Broad
FIDU	Fund	Index Fund Shares	MSCI USA IMI Industrials Index	US	Broad
FILL	Fund	Index Fund Shares	MSCI ACWI Select Energy Producers Investable Market Index	Global	Broad
FINU	Fund	Index Fund Shares	Financial Select Sector Index	US	Broad
FINZ	Fund	Index Fund Shares	Financial Select Sector Index	US	Narrow
FITS	Fund	Index Fund Shares	Solactive Health and Fitness Index	Global	Broad
FIW	Fund	Index Fund Shares	ISE Water Index	US	Broad
FJP	Fund	Index Fund Shares	NASDAQ AlphaDEX Japan Index	Global	Broad
FKO	Fund	Index Fund Shares	NASDAQ AlphaDEX South Korea Index	Global	Broad
FKU	Fund	Index Fund Shares	NASDAQ AlphaDEX United Kingdom Index	Global	Broad
FLAG	Fund	Index Fund Shares	WeatherStorm Forensic Accounting Long-Short Index	US	Broad
FLM	Fund	Index Fund Shares	ISE Global Engineering and Construction Index	Global	Broad
FLN	Fund	Index Fund Shares	NASDAQ AlphaDEX Latin America Index	Global	Broad
FLOT	Fund	Index Fund Shares	Barclays U.S. Dollar Floating Rate Note < 5 Years Index	US	Broad
FLQD	Fund	Index Fund Shares	LibertyQ Global Dividend Index	Global	Broad
FLQE	Fund	Index Fund Shares	LibertyQ Emerging Markets Index	Global	Broad
FLQG	Fund	Index Fund Shares	LibertyQ Global Equity Index	Global	Broad
FLQH	Fund	Index Fund Shares	LibertyQ International Equity Hedged Index	Global	Broad
FLRN	Fund	Index Fund Shares	Barclays U.S. Dollar Floating Rate Note < 5 Years Index	US	Broad
FLTR	Fund	Index Fund Shares	MVIS US Investment Grade Floating Rate Index (Price)	US	Broad
FM	Fund	Index Fund Shares	MSCI Frontier Markets 100 Index	Global	Broad
FMAT	Fund	Index Fund Shares	MSCI USA IMI Materials Index	US	Broad
FMK	Fund	Index Fund Shares	NASDAQ AlphaDEX Mega Cap Index	US	Broad
FNCF	Fund	Index Fund Shares	MSCI USA Financials Diversified Multiple-Factor Capped Index	US	Broad
FNCL	Fund	Index Fund Shares	MSCI USA IMI Financials Index	US	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
FNDA	Fund	Index Fund Shares	Russell Fundamental U.S. Small Company Index	US	Broad
FNDB	Fund	Index Fund Shares	Russell Fundamental U.S. Index	US	Broad
FNDC	Fund	Index Fund Shares	Russell Fundamental Developed ex-U.S. Small Company Index	Global	Broad
FNDE	Fund	Index Fund Shares	Russell Fundamental Emerging Markets Large Company Index	Global	Broad
FNDF	Fund	Index Fund Shares	Russell Fundamental Developed ex-U.S. Large Company Index	Global	Broad
FNDX	Fund	Index Fund Shares	Russell Fundamental U.S. Large Company Index	US	Broad
FNI	Fund	Index Fund Shares	ISE ChIndia Index	US	Broad
FNK	Fund	Index Fund Shares	NASDAQ AlphaDEX Mid Cap Value Index	US	Broad
FNX	Fund	Index Fund Shares	NASDAQ AlphaDEX Mid Cap Core Index	US	Broad
FNZ	Fund	Index Fund Shares	NASDAQ AlphaDEX Mid Cap Growth Index	US	Broad
FONE	Fund	Index Fund Shares	NASDAQ CTA Smartphone Index	Global	Broad
FPA	Fund	Index Fund Shares	NASDAQ AlphaDEX Asia Pacific Ex-Japan Index	Global	Broad
FPX	Fund	Index Fund Shares	IPOX US 100 Index (USD) (Price)	US	Broad
FPXI	Fund	Index Fund Shares	IPOX International Index (USD) (Price)	Global	Broad
FRAK	Fund	Index Fund Shares	MVIS Global Unconventional Oil & Gas (Price)	Global	Broad
FREL	Fund	Index Fund Shares	MSCI USA IMI Real Estate Index	US	Broad
FRI	Fund	Index Fund Shares	S&P United States REIT Index	US	Broad
FRN	Fund	Index Fund Shares	BNY Mellon New Frontier Index	Global	Broad
FSTA	Fund	Index Fund Shares	MSCI USA IMI Consumer Staples Index	US	Broad
FSZ	Fund	Index Fund Shares	NASDAQ AlphaDEX Switzerland Index	Global	Broad
FTA	Fund	Index Fund Shares	NASDAQ AlphaDEX Large Cap Value Index	US	Broad
FTAG	Fund	Index Fund Shares	Indxx Global Agriculture Index	Global	Broad
FTC	Fund	Index Fund Shares	NASDAQ AlphaDEX Large Cap Growth Index	US	Broad
FTCS	Fund	Index Fund Shares	The Capital Strength Index	US	Broad
FTEC	Fund	Index Fund Shares	MSCI USA IMI Information Technology Index	US	Broad
FTRI	Fund	Index Fund Shares	Indxx Global Natural Resources Income Index	Global	Broad
FTW	Fund	Index Fund Shares	NASDAQ AlphaDEX Taiwan Index	Global	Broad
FTY	Fund	Index Fund Shares	FTSE NAREIT Real Estate 50 Index	US	Broad
FUTY	Fund	Index Fund Shares	MSCI USA IMI Utilities Index	US	Broad
FV	Fund	Index Fund Shares	Dorsey Wright Focus Five Index	US	Narrow
FVC	Fund	Index Fund Shares	Dorsey Wright Dynamic Focus Five Index	US	Narrow
FVD	Fund	Index Fund Shares	Value Line Dividend Index	US	Broad
FVL	Fund	Index Fund Shares	Value Line 100 Index	US	Broad
FXD	Fund	Index Fund Shares	StrataQuant Consumer Discretionary Index	US	Broad
FXEP	Fund	Index Fund Shares	S&P EPAC Ex. Korea Low Volatility USD Hedged Index	Global	Broad
FXEU	Fund	Index Fund Shares	S&P Eurozone Low Volatility USD Hedged Index	Global	Broad
FXG	Fund	Index Fund Shares	StrataQuant Consumer Staples Index	US	Broad
FXH	Fund	Index Fund Shares	StrataQuant Health Care Index	US	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
FXI	Fund	Index Fund Shares	FTSE China 50 Index	Global	Broad
FXJP	Fund	Index Fund Shares	S&P Japan 500 Low Volatility USD Hedged Index	Global	Broad
FXL	Fund	Index Fund Shares	StrataQuant Technology Index	US	Broad
FXN	Fund	Index Fund Shares	StrataQuant Energy Index	US	Broad
FXO	Fund	Index Fund Shares	StrataQuant Financials Index	US	Broad
FXP	Fund	Index Fund Shares	FTSE China 50 Index	Global	Narrow
FXR	Fund	Index Fund Shares	StrataQuant Industrials Index	US	Broad
FXU	Fund	Index Fund Shares	StrataQuant Utilities Index	US	Broad
FXZ	Fund	Index Fund Shares	StrataQuant Materials Index	US	Broad
FYC	Fund	Index Fund Shares	NASDAQ AlphaDEX Small Cap Growth Index	US	Broad
FYLD	Fund	Index Fund Shares	Cambria Foreign Shareholder Yield Index	Global	Broad
FYT	Fund	Index Fund Shares	NASDAQ AlphaDEX Small Cap Value Index	US	Broad
FYX	Fund	Index Fund Shares	NASDAQ AlphaDEX Small Cap Core Index	US	Broad
GAA	Fund	Index Fund Shares	Cambria Global Asset Allocation Index	US	Broad
GAF	Fund	Index Fund Shares	S&P Mid-East & Africa BMI Index	Global	Broad
GAMR	Fund	Index Fund Shares	EEFund Video Game Tech Index	Global	Broad
GARD	Fund	Index Fund Shares	Realty Shares DIVCON Dividend Guard Index	US	Broad
GASL	Fund	Index Fund Shares	ISE-REVERE Natural Gas Index	US	Broad
GASX	Fund	Index Fund Shares	ISE-REVERE Natural Gas Index	US	Narrow
GBF	Fund	Index Fund Shares	Barclays U.S. Government/Credit Bond Index	US	Broad
GDJJ	Fund	Index Fund Shares	MVIS Global Junior Gold Miners Index (Price)	Global	Narrow
GDJS	Fund	Index Fund Shares	MVIS Global Junior Gold Miners Index (Price)	Global	Narrow
GDX	Fund	Index Fund Shares	NYSE Arca Gold Miners Index (Price Return)	Global	Broad
GDXJ	Fund	Index Fund Shares	MVIS Global Junior Gold Miners Index (Price)	Global	Broad
GDXS	Fund	Index Fund Shares	NYSE Arca Gold Miners Index (Price Return)	Global	Narrow
GDXX	Fund	Index Fund Shares	NYSE Arca Gold Miners Index (Price Return)	Global	Narrow
GEM	Fund	Index Fund Shares	Goldman Sachs ActiveBeta Emerging Markets Equity Index	Global	Broad
GEX	Fund	Index Fund Shares	Ardour Global Index - Extra Liquid	Global	Broad
GGOV	Fund	Index Fund Shares	Markit iBoxx EUR Germany Sovereign & Sub-Sovereign Liquid Index	US	Broad
GHII	Fund	Index Fund Shares	S&P High Income Infrastructure Index	Global	Broad
GHYG	Fund	Index Fund Shares	Markit iBoxx Global Developed Markets High Yield Index	US	Broad
GII	Fund	Index Fund Shares	S&P Global Infrastructure Index Price Return	Global	Broad
GLDX	Fund	Index Fund Shares	Solactive Global Gold Explorers Index	Global	Broad
GMF	Fund	Index Fund Shares	S&P Asia Pacific Emerging BMI Index	Global	Broad
GML	Fund	Index Fund Shares	S&P Latin America BMI Index	Global	Broad
GMM	Fund	Index Fund Shares	S&P Emerging BMI Index	Global	Broad
GNAT	Fund	Index Fund Shares	WisdomTree Global Natural Resources Index	Global	Broad
GNMA	Fund	Index Fund Shares	Barclays U.S. GNMA Bond Index	US	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
GNR	Fund	Index Fund Shares	S&P Global Natural Resources Index	Global	Broad
GNRX	Fund	Index Fund Shares	Indxx Global Generics & New Pharma Index	Global	Broad
GOVT	Fund	Index Fund Shares	ICE U.S. Treasury Core Bond Index	US	Broad
GQRE	Fund	Index Fund Shares	Northern Trust Global Quality Real Estate Index Price Return	Global	Broad
GREK	Fund	Index Fund Shares	MSCI All Greece Select 25/50 Index	Global	Broad
GRES	Fund	Index Fund Shares	IQ Global Resources Index	Global	Broad
GRI	Fund	Index Fund Shares	Cohen & Steers Global Realty Majors Index	Global	Broad
GRID	Fund	Index Fund Shares	NASDAQ OMX Clean Edge Smart Grid Infrastructure Index	Global	Broad
GSD	Fund	Index Fund Shares	WisdomTree Global SmallCap Dividend Index	Global	Broad
GSEU	Fund	Index Fund Shares	Goldman Sachs ActiveBeta Europe Equity Index	Global	Broad
GSIE	Fund	Index Fund Shares	Goldman Sachs ActiveBeta International Equity Index	Global	Broad
GSJY	Fund	Index Fund Shares	Goldman Sachs ActiveBeta Japan Equity Index	Global	Broad
GSLC	Fund	Index Fund Shares	Goldman Sachs ActiveBeta U.S. Large Cap Equity Index	US	Broad
GTIP	Fund	Index Fund Shares	BofA Merrill Lynch Global Diversified Inflation-Linked Index	US	Broad
GULF	Fund	Index Fund Shares	WisdomTree Middle East Dividend Index	Global	Broad
GUNR	Fund	Index Fund Shares	Morningstar Global Upstream Natural Resources Index	Global	Broad
GUR	Fund	Index Fund Shares	S&P European Emerging Capped BMI Index	Global	Broad
GURI	Fund	Index Fund Shares	Solactive Guru International Index	Global	Broad
GURU	Fund	Index Fund Shares	Solactive Guru Index (Price)	US	Broad
GUSH	Fund	Index Fund Shares	S&P Oil & Gas Exploration & Production Select Industry Index	US	Broad
GVAL	Fund	Index Fund Shares	Cambria Global Value Index	Global	Broad
GVI	Fund	Index Fund Shares	Barclays U.S. Intermediate Government/Credit Bond Index	US	Broad
GWL	Fund	Index Fund Shares	S&P Developed Ex-U.S. BMI Index	Global	Broad
GWX	Fund	Index Fund Shares	S&P Developed Ex-U.S. Under USD2 Billion Index	Global	Broad
GXC	Fund	Index Fund Shares	S&P China BMI Index	Global	Broad
GXF	Fund	Index Fund Shares	FTSE Nordic 30 Index	Global	Broad
GXG	Fund	Index Fund Shares	MSCI All Colombia Capped Index	Global	Broad
GYLD	Fund	Index Fund Shares	Dow Jones Global Composite Yield Index	Global	Broad
HACK	Fund	Index Fund Shares	ISE Cyber Security Index	Global	Broad
HACV	Fund	Index Fund Shares	MSCI ACWI Minimum Volatility (USD) 100% Hedged to USD Index	Global	Broad
HACW	Fund	Index Fund Shares	MSCI ACWI 100% Hedged to USD Index	Global	Broad
HAHA	Fund	Index Fund Shares	CSI 300 Smart Index	Global	Broad
HAKD	Fund	Index Fund Shares	ISE Cyber Security Index	Global	Narrow
HAKK	Fund	Index Fund Shares	ISE Cyber Security Index	Global	Narrow
HAO	Fund	Index Fund Shares	AlphaShares China Small Cap Index	Global	Broad
HAP	Fund	Index Fund Shares	The Rogers-VanEck Natural Resources Index	Global	Broad
HAUD	Fund	Index Fund Shares	MSCI Australia 100% Hedged to USD Index	Global	Narrow
HAWX	Fund	Index Fund Shares	MSCI ACWI ex USA 100% Hedged to USD Index	Global	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
HBU	Fund	Index Fund Shares	Dow Jones U.S. Select Home Construction Index	US	Broad
HBZ	Fund	Index Fund Shares	Dow Jones U.S. Select Home Construction Index	US	Narrow
HCRF	Fund	Index Fund Shares	MSCI USA Health Care Diversified Multiple-Factor Capped Index	US	Broad
HDAW	Fund	Index Fund Shares	MSCI ACWI ex USA High Dividend Yield US Dollar Hedged Index	Global	Broad
HDEE	Fund	Index Fund Shares	MSCI Emerging Markets High Dividend Yield US Dollar Hedged Index	Global	Broad
HDEF	Fund	Index Fund Shares	MSCI EAFE High Dividend Yield US Dollar Hedged Index	Global	Broad
HDEZ	Fund	Index Fund Shares	MSCI EMU High Dividend Yield US Dollar Hedged Index	Global	Broad
HDG	Fund	Index Fund Shares	Merrill Lynch Factor Model - Exchange Series	US	Broad
HDLS	Fund	Index Fund Shares	WisdomTree International Hedged SmallCap Dividend Index	Global	Narrow
HDRW	Fund	Index Fund Shares	WisdomTree Global ex-U.S. Hedged Real Estate Index	Global	Broad
HDV	Fund	Index Fund Shares	Morningstar Dividend Yield Focus Index	US	Broad
HDWM	Fund	Index Fund Shares	WisdomTree International Hedged Equity Index	Global	Broad
HDWX	Fund	Index Fund Shares	S&P International Dividend Opportunities USD Hedged Index	Global	Narrow
HEDJ	Fund	Index Fund Shares	WisdomTree Europe Hedged Equity Index	Global	Broad
HEEM	Fund	Index Fund Shares	MSCI Emerging Markets 100% Hedged to USD Index	Global	Broad
HEFA	Fund	Index Fund Shares	MSCI EAFE 100% Hedged to USD Index	Global	Broad
HEFV	Fund	Index Fund Shares	MSCI EAFE Minimum Volatility (USD) 100% Hedged to USD Index	Global	Broad
HEMV	Fund	Index Fund Shares	MSCI Emerging Markets Minimum Volatility (USD) 100% Hedged to USD Index	Global	Broad
HEUS	Fund	Index Fund Shares	MSCI Europe Small Cap 100% Hedged to USD Index	Global	Narrow
HEUV	Fund	Index Fund Shares	MSCI Europe Minimum Volatility (USD) 100% Hedged to USD Index	Global	Narrow
HEWC	Fund	Index Fund Shares	MSCI Canada 100% Hedged to USD Index	Global	Narrow
HEWG	Fund	Index Fund Shares	MSCI Germany 100% Hedged to USD Index	Global	Narrow
HEWI	Fund	Index Fund Shares	MSCI Italy 25/50 100% Hedged to USD Index	Global	Narrow
HEWJ	Fund	Index Fund Shares	MSCI Japan 100% Hedged to USD Index	Global	Narrow
HEWL	Fund	Index Fund Shares	MSCI Switzerland 25/50 100% Hedged to USD Index	Global	Narrow
HEWP	Fund	Index Fund Shares	MSCI Spain 25/50 100% Hedged to USD Index	Global	Narrow
HEWU	Fund	Index Fund Shares	MSCI United Kingdom 100% Hedged to USD Index	Global	Narrow
HEWW	Fund	Index Fund Shares	MSCI Mexico Investable Market Index (IMI) 25/50 100% Hedged to USD Index	Global	Narrow
HEWY	Fund	Index Fund Shares	MSCI Korea 25/50 100% Hedged to USD Index	Global	Narrow
HEZU	Fund	Index Fund Shares	MSCI EMU 100% Hedged to USD Index	Global	Narrow
HFEZ	Fund	Index Fund Shares	EURO STOXX 50 Hedged USD Index	Global	Narrow
HFXE	Fund	Index Fund Shares	FTSE Developed Europe 50% Hedged to USD Index	Global	Broad
HFXI	Fund	Index Fund Shares	FTSE Developed ex North America 50% Hedged to USD Index	Global	Broad
HFXJ	Fund	Index Fund Shares	FTSE Japan 50% Hedged to USD Index	Global	Broad
HGEU	Fund	Index Fund Shares	FTSE Developed Europe 100% Hedged to USD Index	Global	Broad
HGI	Fund	Index Fund Shares	Zacks International Multi-Asset Income Index	Global	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
HGJP	Fund	Index Fund Shares	FTSE Japan 100% Hedged to USD Index	Global	Broad
HGSD	Fund	Index Fund Shares	WisdomTree Global Hedged SmallCap Dividend Index	Global	Narrow
HHYX	Fund	Index Fund Shares	Markit iBoxx Global Developed Markets ex-US High Yield (USD Hedged) Index	US	Broad
HILO	Fund	Index Fund Shares	EGAI Emerging Markets Quality Dividend Index	Global	Broad
HIPS	Fund	Index Fund Shares	TFMS HIPS 300 Index	US	Broad
HJPX	Fund	Index Fund Shares	JPX-Nikkei 400 Net Total Return USD Hedged Index	US	Narrow
HREX	Fund	Index Fund Shares	MSCI World ex USA IMI Core Real Estate Capped 100% Hedged To USD Index	Global	Broad
HSCZ	Fund	Index Fund Shares	MSCI EAFE Small Cap 100% Hedged to USD Index	Global	Broad
HSPX	Fund	Index Fund Shares	S&P 500 Stock Covered Call Index	US	Broad
HVPW	Fund	Index Fund Shares	NYSE Arca U.S. Equity High Volatility Put Write Index	US	Narrow
HYD	Fund	Index Fund Shares	Barclays Municipal Custom High-Yield Composite Index	US	Broad
HYDD	Fund	Index Fund Shares	Barclays US High Yield Very Liquid Index	US	Narrow
HYEM	Fund	Index Fund Shares	BofA Merrill Lynch Diversified High Yield US Emerging Markets Corporate Plus Index	US	Broad
HYG	Fund	Index Fund Shares	Markit iBoxx USD Liquid High Yield Index	US	Broad
HYHG	Fund	Index Fund Shares	Citi High Yield (Treasury Rate-Hedged) Index	US	Broad
HYIH	Fund	Index Fund Shares	Solactive High Yield Corporate Bond - Interest Rate Hedged Index	US	Broad
HYMB	Fund	Index Fund Shares	S&P Municipal Yield Index	US	Broad
HYND	Fund	Index Fund Shares	BofA Merrill Lynch 0-5 Year U.S. High Yield Constrained, Negative Seven Duration Index	US	Broad
HYS	Fund	Index Fund Shares	BofA Merrill Lynch 0-5 Year US High Yield Constrained Index	US	Broad
HYXE	Fund	Index Fund Shares	Markit iBoxx USD Liquid High Yield ex-Oil and Gas Index	US	Broad
HYXU	Fund	Index Fund Shares	Markit iBoxx Global Developed Markets ex-US High Yield Index	US	Broad
HYZD	Fund	Index Fund Shares	BofA Merrill Lynch 0-5 Year U.S. High Yield Constrained, Zero Duration Index	US	Broad
IAGG	Fund	Index Fund Shares	Barclays Global Aggregate ex USD 10% Issuer Capped (Hedged) Index	US	Broad
IAI	Fund	Index Fund Shares	Dow Jones U.S. Select Investment Services Index	US	Broad
IAK	Fund	Index Fund Shares	Dow Jones U.S. Select Insurance Index	US	Broad
IAT	Fund	Index Fund Shares	Dow Jones U.S. Select Regional Banks Index	US	Broad
IBB	Fund	Index Fund Shares	NASDAQ Biotechnology Index	US	Broad
IBCC	Fund	Index Fund Shares	Barclays 2018 Maturity High Quality Corporate Index	US	Broad
IBCD	Fund	Index Fund Shares	Barclays 2020 Maturity High Quality Corporate Index	US	Broad
IBCE	Fund	Index Fund Shares	Barclays 2023 Maturity High Quality Corporate Index	US	Broad
IBDB	Fund	Index Fund Shares	Barclays 2018 Maturity Corporate Index	US	Broad
IBDC	Fund	Index Fund Shares	Barclays 2020 Maturity Corporate Index	US	Broad
IBDD	Fund	Index Fund Shares	Barclays 2023 Maturity Corporate Index	US	Broad
IBDF	Fund	Index Fund Shares	Barclays December 2016 Maturity Corporate Index	US	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
IBDH	Fund	Index Fund Shares	Barclays December 2018 Maturity Corporate Index	US	Broad
IBDJ	Fund	Index Fund Shares	Barclays December 2017 Maturity Corporate Index	US	Broad
IBDK	Fund	Index Fund Shares	Barclays December 2019 Maturity Corporate Index	US	Broad
IBDL	Fund	Index Fund Shares	Barclays December 2020 Maturity Corporate Index	US	Broad
IBDM	Fund	Index Fund Shares	Barclays December 2021 Maturity Corporate Index	US	Broad
IBDN	Fund	Index Fund Shares	Barclays December 2022 Maturity Corporate Index	US	Broad
IBDO	Fund	Index Fund Shares	Barclays December 2023 Maturity Corporate Index	US	Broad
IBDP	Fund	Index Fund Shares	Barclays December 2024 Maturity Corporate Index	US	Broad
IBDQ	Fund	Index Fund Shares	Barclays December 2025 Maturity Corporate Index	US	Broad
IBLN	Fund	Index Fund Shares	iBillionaire Index	US	Broad
IBME	Fund	Index Fund Shares	S&P AMT-Free Municipal Series 2016 Index	US	Broad
IBMF	Fund	Index Fund Shares	S&P AMT-Free Municipal Series 2017 Index	US	Broad
IBMG	Fund	Index Fund Shares	S&P AMT-Free Municipal Series 2018 Index	US	Broad
IBMH	Fund	Index Fund Shares	S&P AMT-Free Municipal Series 2019 Index	US	Broad
IBMI	Fund	Index Fund Shares	S&P AMT-Free Municipal Series 2020 Index	US	Broad
IBMJ	Fund	Index Fund Shares	S&P AMT-Free Municipal Series Dec 2021 Index	US	Broad
IBMK	Fund	Index Fund Shares	S&P AMT-Free Municipal Series Dec 2021 Index	US	Broad
IBND	Fund	Index Fund Shares	Barclays Global Aggregate ex-USD > \$1B: Corporate Bond Index	US	Broad
IBUY	Fund	Index Fund Shares	EQM Online Retail Index	Global	Broad
ICF	Fund	Index Fund Shares	Cohen & Steers Realty Majors Index	US	Broad
ICLN	Fund	Index Fund Shares	S&P Global Clean Energy Index	Global	Broad
ICOL	Fund	Index Fund Shares	MSCI All Colombia Capped Index	Global	Broad
ICVT	Fund	Index Fund Shares	Barclays U.S. Convertible Cash Pay Bond > \$250MM Index	US	Broad
IDHQ	Fund	Index Fund Shares	S&P Quality Developed ex-U.S. LargeMidCap Index	Global	Broad
IDLB	Fund	Index Fund Shares	FTSE Developed ex US Low Beta Equal Weight Index	Global	Broad
IDLV	Fund	Index Fund Shares	S&P BMI International Developed Low Volatility Index	Global	Broad
IDMO	Fund	Index Fund Shares	S&P Momentum Developed ex-U.S. & South Korea LargeMidCap Index	Global	Broad
IDOG	Fund	Index Fund Shares	S-Network International Sector Dividend Dogs Index	Global	Broad
IDU	Fund	Index Fund Shares	Dow Jones U.S. Utilities Index	US	Broad
IDV	Fund	Index Fund Shares	Dow Jones EPAC Select Dividend Index	Global	Broad
IDX	Fund	Index Fund Shares	MVIS Indonesia Index (Price)	Global	Broad
IDXJ	Fund	Index Fund Shares	MVIS Indonesia Small-Cap (Price)	Global	Broad
IEF	Fund	Index Fund Shares	ICE U.S. Treasury 7-10 Year Bond Index	US	Broad
IEFA	Fund	Index Fund Shares	MSCI EAFE Investable Market Index	Global	Broad
IEI	Fund	Index Fund Shares	ICE U.S. Treasury 3-7 Year Bond Index	US	Broad
IEMG	Fund	Index Fund Shares	MSCI Emerging Markets Investable Market Index	Global	Broad
IEO	Fund	Index Fund Shares	Dow Jones U.S. Select Oil Exploration & Production Index	US	Broad
IEUR	Fund	Index Fund Shares	MSCI Europe Investable Market Index	Global	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
IEUS	Fund	Index Fund Shares	MSCI Europe Small Cap Index	Global	Broad
IEV	Fund	Index Fund Shares	S&P Europe 350 Index	Global	Broad
IEZ	Fund	Index Fund Shares	Dow Jones U.S. Select Oil Equipment & Services Index	US	Broad
IFEU	Fund	Index Fund Shares	FTSE EPRA/NAREIT Developed Europe Index	Global	Broad
IFGL	Fund	Index Fund Shares	FTSE EPRA/NAREIT Developed Real Estate ex-U.S. Index	Global	Broad
IFLY	Fund	Index Fund Shares	Reality Shares Drone Index	Global	Broad
IFV	Fund	Index Fund Shares	Dorsey Wright International Focus Five Index	US	Narrow
IGE	Fund	Index Fund Shares	S&P North American Natural Resources Sector Index	Global	Broad
IGEM	Fund	Index Fund Shares	J.P. Morgan Custom EM Intermediate Term Investment Grade Bond Index	US	Broad
IGF	Fund	Index Fund Shares	S&P Global Infrastructure Index Price Return	Global	Broad
IGHG	Fund	Index Fund Shares	Citi Corporate Investment Grade (Treasury Rate-Hedged) Index	US	Broad
IGIH	Fund	Index Fund Shares	Solactive Investment Grade Bond - Interest Rate Hedged Index	US	Broad
IGM	Fund	Index Fund Shares	S&P North American Technology Sector Index	Global	Broad
IGN	Fund	Index Fund Shares	S&P North American Technology-Multimedia Networking Index	Global	Broad
IGOV	Fund	Index Fund Shares	S&P/Citigroup International Treasury Bond Index Ex-US	US	Broad
IGRO	Fund	Index Fund Shares	Morningstar Global ex-US Dividend Growth Index	Global	Broad
IGS	Fund	Index Fund Shares	Markit iBoxx USD Liquid Investment Grade Index	US	Narrow
IGU	Fund	Index Fund Shares	Markit iBoxx USD Liquid Investment Grade Index	US	Narrow
IGV	Fund	Index Fund Shares	S&P North American Technology-Software Index	Global	Broad
IHDG	Fund	Index Fund Shares	WisdomTree International Hedged Quality Dividend Growth Index	Global	Broad
IHE	Fund	Index Fund Shares	Dow Jones U.S. Select Pharmaceuticals Index	US	Broad
IHF	Fund	Index Fund Shares	Dow Jones U.S. Select Health Care Providers Index	US	Broad
IHI	Fund	Index Fund Shares	Dow Jones U.S. Select Medical Equipment Index	US	Broad
IHY	Fund	Index Fund Shares	BofA Merrill Lynch Global Ex-US Issuers High Yield Constrained Index	US	Broad
IJH	Fund	Index Fund Shares	S&P MidCap 400 Index	US	Broad
IJJ	Fund	Index Fund Shares	S&P MidCap 400 Value Index	US	Broad
IJK	Fund	Index Fund Shares	S&P MidCap 400 Growth Index	US	Broad
IJNK	Fund	Index Fund Shares	Barclays Global HY ex US Domiciled 350mn+ Cash Pay Index	US	Broad
IJR	Fund	Index Fund Shares	S&P SmallCap 600 Index	US	Broad
IJS	Fund	Index Fund Shares	S&P SmallCap 600 Value Index	US	Broad
IJT	Fund	Index Fund Shares	S&P SmallCap 600 Growth Index	US	Broad
ILF	Fund	Index Fund Shares	S&P Latin America 40 Index	Global	Broad
ILTB	Fund	Index Fund Shares	Barclays U.S. 10+ Year Universal Index	US	Broad
IMTM	Fund	Index Fund Shares	MSCI World ex USA Momentum Index	Global	Broad
INCO	Fund	Index Fund Shares	Indxx India Consumer Index	Global	Broad
INDA	Fund	Index Fund Shares	MSCI India Index	Global	Broad
INDF	Fund	Index Fund Shares	MSCI USA Industrials Diversified Multiple-Factor Capped Index	US	Broad
INDL	Fund	Index Fund Shares	Indus India Index	Global	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
INDY	Fund	Index Fund Shares	CNX Nifty Index	Global	Broad
INTF	Fund	Index Fund Shares	MSCI World ex USA Diversified Multiple-Factor Index	Global	Broad
INXX	Fund	Index Fund Shares	Indxx India Infrastructure Index	Global	Broad
INY	Fund	Index Fund Shares	Barclays Managed Money Municipal New York Index	US	Broad
IOIL	Fund	Index Fund Shares	IQ Global Oil Small Cap Index	Global	Broad
IOO	Fund	Index Fund Shares	S&P Global 100 Index	Global	Broad
IPAC	Fund	Index Fund Shares	MSCI Pacific Investable Market Index	Global	Broad
IPAY	Fund	Index Fund Shares	ISE Mobile Payments Index	Global	Broad
IPD	Fund	Index Fund Shares	S&P Developed Ex-U.S. BMI Consumer Discretionary Sector Index	Global	Broad
IPE	Fund	Index Fund Shares	Barclays U.S. Government Inflation-Linked Bond Index	US	Broad
IPF	Fund	Index Fund Shares	S&P Developed Ex-U.S. BMI Financials Sector Index	Global	Broad
IPFF	Fund	Index Fund Shares	S&P International Preferred Stock Index	Global	Broad
IPK	Fund	Index Fund Shares	S&P Developed Ex-U.S. BMI Information Technology Sector Index	Global	Broad
IPKW	Fund	Index Fund Shares	NASDAQ International BuyBack Achievers Index	Global	Broad
IPN	Fund	Index Fund Shares	S&P Developed Ex-U.S. BMI Industrial Sector Index	Global	Broad
IPO	Fund	Index Fund Shares	Renaissance IPO Index	US	Broad
IPOS	Fund	Index Fund Shares	Renaissance International IPO Index	Global	Broad
IPS	Fund	Index Fund Shares	S&P Developed Ex-U.S. BMI Consumer Staples Sector Index	Global	Broad
IPU	Fund	Index Fund Shares	S&P Developed Ex-U.S. BMI Utilities Sector Index	Global	Broad
IPW	Fund	Index Fund Shares	S&P Developed Ex-U.S. BMI Energy Sector Index	Global	Broad
IQDE	Fund	Index Fund Shares	Northern Trust International Quality Dividend Defensive Index	Global	Broad
IQDF	Fund	Index Fund Shares	Northern Trust International Quality Dividend Index	Global	Broad
IQDG	Fund	Index Fund Shares	WisdomTree International Quality Dividend Growth Index	Global	Broad
IQDY	Fund	Index Fund Shares	Northern Trust International Quality Dividend Dynamic Index	Global	Broad
IQLT	Fund	Index Fund Shares	MSCI World ex USA Sector Neutral Quality Index	Global	Broad
IRV	Fund	Index Fund Shares	S&P Developed Ex-U.S. BMI Materials Sector Index	Global	Broad
IRY	Fund	Index Fund Shares	S&P Developed Ex-U.S. BMI Health Care Sector Index	Global	Broad
ISCF	Fund	Index Fund Shares	MSCI World ex USA Small Cap Diversified Multiple-Factor Index	Global	Broad
ISHG	Fund	Index Fund Shares	S&P/Citigroup International Treasury Bond Index Ex-US 1-3 Year	US	Broad
ISRA	Fund	Index Fund Shares	BlueStar Israel Global Index	Global	Broad
IST	Fund	Index Fund Shares	S&P Developed Ex-U.S. BMI Telecommunication Services Sector Index	Global	Broad
ISTB	Fund	Index Fund Shares	Barclays U.S. Universal 1-5 Year Index	US	Broad
ISZE	Fund	Index Fund Shares	MSCI World ex USA Risk Weighted Index	Global	Broad
ITA	Fund	Index Fund Shares	Dow Jones U.S. Select Aerospace & Defense Index	US	Broad
ITB	Fund	Index Fund Shares	Dow Jones U.S. Select Home Construction Index	US	Broad
ITE	Fund	Index Fund Shares	Barclays Intermediate U.S. Treasury Index	US	Broad
ITEQ	Fund	Index Fund Shares	TASE-BlueStar Israel Global Technology Index	Global	Broad
ITIP	Fund	Index Fund Shares	BofA Merrill Lynch Global ex-US Diversified Inflation-Linked Index	Global	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
ITM	Fund	Index Fund Shares	Barclays AMT-Free Intermediate Continuous Municipal Index	US	Broad
ITOT	Fund	Index Fund Shares	S&P Total Market Index	US	Broad
ITR	Fund	Index Fund Shares	Barclays U.S. Intermediate Corporate Bond Index	US	Broad
IUSB	Fund	Index Fund Shares	Barclays U.S. Universal Index	US	Broad
IUSG	Fund	Index Fund Shares	Russell 3000 Growth Index	US	Broad
IUSV	Fund	Index Fund Shares	Russell 3000 Value Index	US	Broad
IVE	Fund	Index Fund Shares	S&P 500 Value Index	US	Broad
IVLU	Fund	Index Fund Shares	MSCI World ex USA Enhanced Value Index	Global	Broad
IVOG	Fund	Index Fund Shares	S&P MidCap 400 Growth Index	US	Broad
IVOO	Fund	Index Fund Shares	S&P MidCap 400 Index	US	Broad
IVOV	Fund	Index Fund Shares	S&P MidCap 400 Value Index	US	Broad
IVV	Fund	Index Fund Shares	S&P 500 Index	US	Broad
IVW	Fund	Index Fund Shares	S&P 500 Growth Index	US	Broad
IWB	Fund	Index Fund Shares	Russell 1000 Index	US	Broad
IWC	Fund	Index Fund Shares	Russell Microcap Index	US	Broad
IWD	Fund	Index Fund Shares	Russell 1000 Value Index	US	Broad
IWF	Fund	Index Fund Shares	Russell 1000 Growth Index	US	Broad
IWL	Fund	Index Fund Shares	Russell Top 200 Index	US	Broad
IWM	Fund	Index Fund Shares	Russell 2000 Index	US	Broad
IWN	Fund	Index Fund Shares	Russell 2000 Value Index	US	Broad
IWO	Fund	Index Fund Shares	Russell 2000 Growth Index	US	Broad
IWP	Fund	Index Fund Shares	Russell Midcap Growth Index	US	Broad
IWR	Fund	Index Fund Shares	Russell Midcap Index	US	Broad
IWS	Fund	Index Fund Shares	Russell Midcap Value Index	US	Broad
IWV	Fund	Index Fund Shares	Russell 3000 Index	US	Broad
IWX	Fund	Index Fund Shares	Russell Top 200 Value Index	US	Broad
IWY	Fund	Index Fund Shares	Russell Top 200 Growth Index	US	Broad
IXC	Fund	Index Fund Shares	S&P Global 1200 Energy Sector Index	Global	Broad
IXG	Fund	Index Fund Shares	S&P Global 1200 Financials Sector Index	Global	Broad
IXJ	Fund	Index Fund Shares	S&P Global 1200 Healthcare Sector Index	Global	Broad
IXN	Fund	Index Fund Shares	S&P Global 1200 Information Technology Sector Index	Global	Broad
IXP	Fund	Index Fund Shares	S&P Global 1200 Telecommunications Sector Index	Global	Broad
IXUS	Fund	Index Fund Shares	MSCI ACWI ex USA Investable Market Index	Global	Broad
IYC	Fund	Index Fund Shares	Dow Jones U.S. Consumer Services Index	US	Broad
IYE	Fund	Index Fund Shares	Dow Jones U.S. Oil & Gas Index	US	Broad
IYF	Fund	Index Fund Shares	Dow Jones U.S. Financials Index	US	Broad
IYG	Fund	Index Fund Shares	Dow Jones U.S. Financial Services Index	US	Broad
IYH	Fund	Index Fund Shares	Dow Jones U.S. Health Care Index	US	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
IYJ	Fund	Index Fund Shares	Dow Jones U.S. Industrials Index	US	Broad
IYK	Fund	Index Fund Shares	Dow Jones U.S. Consumer Goods Index	US	Broad
IYLD	Fund	Index Fund Shares	Morningstar Multi-Asset High Income Index (Price Return)	US	Broad
IYM	Fund	Index Fund Shares	Dow Jones U.S. Basic Materials Index	US	Broad
IYR	Fund	Index Fund Shares	Dow Jones U.S. Real Estate Index	US	Broad
IYT	Fund	Index Fund Shares	Dow Jones Transportation Average Index	US	Broad
IYW	Fund	Index Fund Shares	Dow Jones U.S. Technology Index	US	Broad
IYY	Fund	Index Fund Shares	Dow Jones U.S. Index	US	Broad
IYZ	Fund	Index Fund Shares	Dow Jones U.S. Select Telecommunications Index	US	Broad
JDG	Fund	Index Fund Shares	WisdomTree Japan Quality Dividend Growth Index	Global	Broad
JDST	Fund	Index Fund Shares	MVIS Global Junior Gold Miners Index (Price)	Global	Narrow
JETS	Fund	Index Fund Shares	U.S. Global Jets Index	Global	Broad
JGBB	Fund	Index Fund Shares	WisdomTree Japan Interest Rate Strategy Index	US	Narrow
JHDG	Fund	Index Fund Shares	WisdomTree Japan Hedged Quality Dividend Growth Index	Global	Broad
JHMA	Fund	Index Fund Shares	John Hancock Dimensional Materials Index	US	Broad
JHMC	Fund	Index Fund Shares	John Hancock Dimensional Consumer Discretionary Index	US	Broad
JHME	Fund	Index Fund Shares	John Hancock Dimensional Energy Index	US	Broad
JHMF	Fund	Index Fund Shares	John Hancock Dimensional Financials Index	US	Broad
JHMH	Fund	Index Fund Shares	John Hancock Dimensional Healthcare Index	US	Broad
JHMI	Fund	Index Fund Shares	John Hancock Dimensional Industrials Index	US	Broad
JHML	Fund	Index Fund Shares	John Hancock Dimensional Large Cap Index	US	Broad
JHMM	Fund	Index Fund Shares	John Hancock Dimensional Mid Cap Index	US	Broad
JHMS	Fund	Index Fund Shares	John Hancock Dimensional Consumer Staples Index	US	Broad
JHMT	Fund	Index Fund Shares	John Hancock Dimensional Technology Index	US	Broad
JHMU	Fund	Index Fund Shares	John Hancock Dimensional Utilities Index	US	Broad
JKD	Fund	Index Fund Shares	Morningstar Large Core Index	US	Broad
JKE	Fund	Index Fund Shares	Morningstar Large Growth Index	US	Broad
JKF	Fund	Index Fund Shares	Morningstar Large Value Index	US	Broad
JKG	Fund	Index Fund Shares	Morningstar Mid Core Index	US	Broad
JKH	Fund	Index Fund Shares	Morningstar Mid Growth Index	US	Broad
JKI	Fund	Index Fund Shares	Morningstar Mid Value Index	US	Broad
JKJ	Fund	Index Fund Shares	Morningstar Small Core Index	US	Broad
JKK	Fund	Index Fund Shares	Morningstar Small Growth Index	US	Broad
JKL	Fund	Index Fund Shares	Morningstar Small Value Index	US	Broad
JNK	Fund	Index Fund Shares	Barclays US High Yield Very Liquid Index	US	Broad
JNUG	Fund	Index Fund Shares	MVIS Global Junior Gold Miners Index (Price)	Global	Broad
JPEH	Fund	Index Fund Shares	FTSE Developed Europe Diversified Factor 100% Hedged to USD Index	Global	Narrow
JPEM	Fund	Index Fund Shares	FTSE Emerging Diversified Factor Index	Global	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
JPEU	Fund	Index Fund Shares	FTSE Developed Europe Diversified Factor Index	Global	Broad
JPGE	Fund	Index Fund Shares	FTSE Developed Diversified Factor Index	Global	Broad
JPIH	Fund	Index Fund Shares	FTSE Developed ex North America Diversified Factor 100% Hedged to USD Index	Global	Narrow
JPIN	Fund	Index Fund Shares	FTSE Developed ex North America Diversified Factor Index	Global	Broad
JPME	Fund	Index Fund Shares	Russell Midcap Diversified Factor Index	US	Broad
JPMV	Fund	Index Fund Shares	MSCI Japan Minimum Volatility (USD) Index	Global	Broad
JPN	Fund	Index Fund Shares	JPX-Nikkei Index 400	Global	Broad
JPNH	Fund	Index Fund Shares	JPX-Nikkei 400 Net Total Return USD Hedged Index	Global	Broad
JPNL	Fund	Index Fund Shares	MSCI Japan Index	Global	Broad
JPP	Fund	Index Fund Shares	Russell/Nomura PRIME Index	Global	Broad
JPUS	Fund	Index Fund Shares	Russell 1000 Diversified Factor Index	US	Broad
JPX	Fund	Index Fund Shares	MSCI Pacific ex-Japan Index	Global	Narrow
JPXN	Fund	Index Fund Shares	JPX-Nikkei Index 400	Global	Broad
JSC	Fund	Index Fund Shares	Russell/Nomura Japan Small Cap Index	Global	Broad
JSMD	Fund	Index Fund Shares	Janus Small/Mid Cap Growth Alpha Index	US	Broad
JSML	Fund	Index Fund Shares	Janus Small Cap Growth Alpha Index	US	Broad
JUNE	Fund	Index Fund Shares	Dhandho Junoon Index	US	Broad
JXI	Fund	Index Fund Shares	S&P Global 1200 Utilities Sector Index	Global	Broad
KBA	Fund	Index Fund Shares	MSCI China A International Index	Global	Broad
KBE	Fund	Index Fund Shares	S&P Banks Select Industry Index	US	Broad
KBWB	Fund	Index Fund Shares	KBW Nasdaq Bank Index	US	Broad
KBWD	Fund	Index Fund Shares	KBW Nasdaq Financial Sector Dividend Yield Index	US	Broad
KBWP	Fund	Index Fund Shares	KBW Nasdaq Property & Casualty Index	US	Broad
KBWR	Fund	Index Fund Shares	KBW Nasdaq Regional Banking Index	US	Broad
KBWY	Fund	Index Fund Shares	KBW Nasdaq Premium Yield Equity REIT Index	US	Broad
KCE	Fund	Index Fund Shares	S&P Capital Markets Select Industry Index	US	Broad
KCNY	Fund	Index Fund Shares	CSI Diversified High Grade Commercial Paper Index	US	Broad
KEMP	Fund	Index Fund Shares	FTSE Emerging incl China Overseas non-R/QFII GDP Weighted Index	Global	Broad
KFYP	Fund	Index Fund Shares	Zacks New China Index	Global	Broad
KIE	Fund	Index Fund Shares	S&P Insurance Select Industry Index	US	Broad
KLD	Fund	Index Fund Shares	MSCI USA ESG Select Index	US	Broad
KLDW	Fund	Index Fund Shares	GaveKal Knowledge Leaders Developed World Index	Global	Broad
KLEM	Fund	Index Fund Shares	GaveKal Knowledge Leaders Emerging Markets Index	Global	Broad
KNOW	Fund	Index Fund Shares	Sabrient Multi-Cap Insider/Analyst Quant-Weighted Index	US	Broad
KOL	Fund	Index Fund Shares	MVIS Global Coal Index (Price)	Global	Broad
KORU	Fund	Index Fund Shares	MSCI Korea 25/50 Index	Global	Narrow
KRE	Fund	Index Fund Shares	S&P Regional Banks Select Industry Index	US	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
KRMA	Fund	Index Fund Shares	Concinnity Conscious Companies Index	US	Broad
KROO	Fund	Index Fund Shares	IQ Australia Small Cap Index	Global	Broad
KRS	Fund	Index Fund Shares	S&P Regional Banks Select Industry Index	US	Narrow
KRU	Fund	Index Fund Shares	S&P Regional Banks Select Industry Index	US	Broad
KSA	Fund	Index Fund Shares	MSCI Saudi Arabia IMI 25/50 Index	Global	Broad
KWEB	Fund	Index Fund Shares	CSI Overseas China Internet Index	Global	Broad
KWT	Fund	Index Fund Shares	MVIS Global Solar Energy Index (Price)	Global	Broad
KXI	Fund	Index Fund Shares	S&P Global 1200 Consumer Staples Sector Index	Global	Broad
LABD	Fund	Index Fund Shares	S&P Biotechnology Select Industry Index	US	Narrow
LABS	Fund	Index Fund Shares	S&P Biotechnology Select Industry Index	US	Narrow
LABU	Fund	Index Fund Shares	S&P Biotechnology Select Industry Index	US	Broad
LARE	Fund	Index Fund Shares	Solactive Latin America Real Estate Index	Global	Broad
LBJ	Fund	Index Fund Shares	S&P Latin America 40 Index	Global	Broad
LDRI	Fund	Index Fund Shares	NASDAQ LadderRite 0-5 Year USD Corporate Bond Index	US	Broad
LEAD	Fund	Index Fund Shares	Realty Shares DIVCON Leaders Dividend Index	US	Broad
LEMB	Fund	Index Fund Shares	Barclays Emerging Markets Broad Local Currency Bond Index	US	Broad
LGLV	Fund	Index Fund Shares	Russell 1000 Low Volatility Index	US	Broad
LIT	Fund	Index Fund Shares	Solactive Global Lithium Index	Global	Broad
LKOR	Fund	Index Fund Shares	Northern Trust Credit-Scored US Long Corporate Bond Index	US	Broad
LLDM	Fund	Index Fund Shares	FTSE Developed ex North America Index	Global	Narrow
LLEM	Fund	Index Fund Shares	FTSE Emerging Index	Global	Narrow
LLSC	Fund	Index Fund Shares	Russell 2000 Index	US	Narrow
LLSP	Fund	Index Fund Shares	S&P 500 Index	US	Narrow
LNGR	Fund	Index Fund Shares	INDXX Global Longevity Thematic Index	Global	Broad
LOWC	Fund	Index Fund Shares	MSCI ACWI Low Carbon Target Index	Global	Broad
LQD	Fund	Index Fund Shares	Markit iBoxx USD Liquid Investment Grade Index	US	Broad
LRGF	Fund	Index Fund Shares	MSCI USA Diversified Multiple-Factor Index	US	Broad
LTL	Fund	Index Fund Shares	Dow Jones U.S. Select Telecommunications Index	US	Broad
LTPZ	Fund	Index Fund Shares	BofA Merrill Lynch 15+ Year US Inflation-Linked Treasury Index	US	Narrow
LVHD	Fund	Index Fund Shares	QS Low Volatility High Dividend Index	US	Broad
LVL	Fund	Index Fund Shares	S&P Global Dividend Opportunities Index	Global	Broad
LWC	Fund	Index Fund Shares	Barclays U.S. Long Term Corporate Bond Index	US	Broad
MATF	Fund	Index Fund Shares	MSCI USA Materials Diversified Multiple-Factor Capped Index	US	Broad
MBB	Fund	Index Fund Shares	Barclays U.S. MBS Index	US	Broad
MBG	Fund	Index Fund Shares	Barclays U.S. MBS Index	US	Broad
MBSD	Fund	Index Fund Shares	BofA Merrill Lynch Constrained Duration US Mortgage Backed Securities Index	US	Broad
MCHI	Fund	Index Fund Shares	MSCI China Index	Global	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
MCRO	Fund	Index Fund Shares	IQ Hedge Macro Index	US	Broad
MDD	Fund	Index Fund Shares	S&P Developed Ex-U.S. Between USD2 Billion and USD5 Billion Index	Global	Broad
MDIV	Fund	Index Fund Shares	NASDAQ US Multi-Asset Diversified Income Index	US	Broad
MDYG	Fund	Index Fund Shares	S&P MidCap 400 Growth Index	US	Broad
MDYV	Fund	Index Fund Shares	S&P MidCap 400 Value Index	US	Broad
MES	Fund	Index Fund Shares	MVIS GDP GCC Index	Global	Broad
MGC	Fund	Index Fund Shares	CRSP US Mega Cap Index	US	Broad
MGK	Fund	Index Fund Shares	CRSP US Mega Cap Growth Index	US	Broad
MGV	Fund	Index Fund Shares	CRSP US Mega Cap Value Index	US	Broad
MIDU	Fund	Index Fund Shares	S&P MidCap 400 Index	US	Broad
MIDZ	Fund	Index Fund Shares	S&P MidCap 400 Index	US	Narrow
MILN	Fund	Index Fund Shares	INDXX Millennials Thematic Index	US	Broad
MLN	Fund	Index Fund Shares	Barclays AMT-Free Long Continuous Municipal Index	US	Broad
MLPA	Fund	Index Fund Shares	Solactive MLP Infrastructure Index	US	Broad
MLPJ	Fund	Index Fund Shares	Solactive Junior MLP Composite Index	US	Broad
MLPX	Fund	Index Fund Shares	Solactive MLP & Energy Infrastructure Index	US	Broad
MMTM	Fund	Index Fund Shares	S&P 1500 Positive Momentum Tilt Index	US	Broad
MNA	Fund	Index Fund Shares	IQ Merger Arbitrage Index	Global	Broad
MOAT	Fund	Index Fund Shares	Morningstar Wide Moat Focus 20 Index	US	Broad
MOM	Fund	Index Fund Shares	Dow Jones U.S. Thematic Market Neutral Momentum Index - Price Return	US	Broad
MOO	Fund	Index Fund Shares	MVIS Global Agribusiness Index (Price)	Global	Broad
MORT	Fund	Index Fund Shares	MVIS Global Mortgage REITs Index (Price)	Global	Broad
MOTI	Fund	Index Fund Shares	Morningstar Global ex-US Moat Focus Index	Global	Broad
MPCT	Fund	Index Fund Shares	MSCI ACWI Sustainable Impact Index	Global	Broad
MRGR	Fund	Index Fund Shares	S&P Merger Arbitrage Index	Global	Broad
MTK	Fund	Index Fund Shares	Morgan Stanley Technology Index	US	Broad
MTUM	Fund	Index Fund Shares	MSCI USA Momentum Index	US	Broad
MUB	Fund	Index Fund Shares	S&P National AMT-Free Municipal Bond Index	US	Broad
MVV	Fund	Index Fund Shares	S&P MidCap 400 Index	US	Broad
MXI	Fund	Index Fund Shares	S&P Global 1200 Materials Sector Index	Global	Broad
MYY	Fund	Index Fund Shares	S&P MidCap 400 Index	US	Narrow
MZZ	Fund	Index Fund Shares	S&P MidCap 400 Index	US	Narrow
NAIL	Fund	Index Fund Shares	Dow Jones U.S. Select Home Construction Index	US	Broad
NANR	Fund	Index Fund Shares	S&P BMI North American Natural Resources Index	Global	Broad
NASH	Fund	Index Fund Shares	LocalShares Nashville Index	US	Broad
NFO	Fund	Index Fund Shares	Sabrient Insider Sentiment Index	US	Broad
NFRA	Fund	Index Fund Shares	STOXX Global Broad Infrastructure Index (USD Price)	Global	Broad
NGE	Fund	Index Fund Shares	MSCI All Nigeria Select 25/50 Index	Global	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
NLR	Fund	Index Fund Shares	MVIS Global Uranium & Nuclear Energy Index	Global	Broad
NOBL	Fund	Index Fund Shares	S&P 500 Dividend Aristocrats Index	US	Broad
NORW	Fund	Index Fund Shares	MSCI Norway IMI 25/50 Index	Global	Broad
NUGT	Fund	Index Fund Shares	NYSE Arca Gold Miners Index (Price Return)	Global	Broad
NYF	Fund	Index Fund Shares	S&P New York AMT-Free Municipal Bond Index	US	Broad
OAPH	Fund	Index Fund Shares	FTSE Developed Asia Pacific Qual / Vol / Yield Factor 5% Capped Index	Global	Narrow
OASI	Fund	Index Fund Shares	FTSE Developed Asia Pacific Qual / Vol / Yield Factor 5% Capped Index	Global	Broad
OEF	Fund	Index Fund Shares	S&P 100 Index	US	Broad
OEUH	Fund	Index Fund Shares	FTSE Developed Europe Qual / Vol / Yield 5% Capped 100% Hedged to USD Factor Index	Global	Narrow
OEUR	Fund	Index Fund Shares	FTSE Developed Europe Qual / Vol / Yield Factor 5% Capped Index	Global	Broad
OEW	Fund	Index Fund Shares	S&P 100 Equal Weight Index	US	Broad
OIH	Fund	Index Fund Shares	MVIS US Listed Oil Services 25 Index (Price)	US	Broad
OLD	Fund	Index Fund Shares	Solactive Long Term Care Index	Global	Broad
ONEK	Fund	Index Fund Shares	Russell 1000 Index	US	Broad
ONEO	Fund	Index Fund Shares	Russell 1000 Momentum Focused Factor Index	US	Broad
ONEQ	Fund	Index Fund Shares	NASDAQ Composite Index	US	Broad
ONEV	Fund	Index Fund Shares	Russell 1000 Low Volatility Focused Factor Index	US	Broad
ONEY	Fund	Index Fund Shares	Russell 1000 Yield Focused Factor Index	US	Broad
OPD	Fund	Index Fund Shares	Wilshire Large Cap Optimized Diversification Index	US	Broad
ORG	Fund	Index Fund Shares	Solactive Organics Index	Global	Broad
OUSA	Fund	Index Fund Shares	FTSE US Qual / Vol / Yield Factor 5% Capped Index	US	Broad
OVLC	Fund	Index Fund Shares	Guggenheim U.S. Large Cap Optimized Volatility Index	US	Broad
PAEU	Fund	Index Fund Shares	Pacer Autopilot Hedged European Index	Global	Broad
PAF	Fund	Index Fund Shares	FTSE RAFI Developed Asia Pacific ex Japan Index	Global	Broad
PAGG	Fund	Index Fund Shares	NASDAQ OMX Global Agriculture Index	Global	Broad
PAK	Fund	Index Fund Shares	MSCI All Pakistan Select 25/50 Index	Global	Broad
PBD	Fund	Index Fund Shares	WilderHill New Energy Global Innovation Index	Global	Broad
PBE	Fund	Index Fund Shares	Dynamic Biotech & Genome Intellidex Index	US	Broad
PBJ	Fund	Index Fund Shares	Dynamic Food & Beverage Intellidex Index	US	Broad
PBP	Fund	Index Fund Shares	CBOE S&P 500 Buy Write Index	US	Broad
PBS	Fund	Index Fund Shares	Dynamic Media Intellidex Index	US	Broad
PBW	Fund	Index Fund Shares	WilderHill Clean Energy Index	US	Broad
PCEF	Fund	Index Fund Shares	S-Network Composite Closed-End Fund Index	US	Broad
PCY	Fund	Index Fund Shares	DBIQ Emerging Market USD Liquid Balanced Index	US	Broad
PDN	Fund	Index Fund Shares	FTSE RAFI Developed ex US Mid Small 1500 Index	Global	Broad
PDP	Fund	Index Fund Shares	Dorsey Wright Technical Leaders Index	US	Broad
PEJ	Fund	Index Fund Shares	Dynamic Leisure & Entertainment Intellidex Index	US	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
PEK	Fund	Index Fund Shares	CSI 300 Index	Global	Broad
PERM	Fund	Index Fund Shares	Solactive Permanent Index	Global	Broad
PEX	Fund	Index Fund Shares	LPX Direct US Price Index	Global	Broad
PEY	Fund	Index Fund Shares	NASDAQ US Dividend Achievers 50 Index	US	Broad
PEZ	Fund	Index Fund Shares	Dorsey Wright Consumer Cyclical Technical Leaders Index	US	Broad
PFF	Fund	Index Fund Shares	S&P U.S. Preferred Stock Index	US	Broad
PFI	Fund	Index Fund Shares	Dorsey Wright Financials Technical Leaders Index	US	Broad
PFIG	Fund	Index Fund Shares	RAFI Bonds US Investment Grade 1-10 Index	US	Broad
PFM	Fund	Index Fund Shares	NASDAQ US Broad Dividend Achievers Index	US	Broad
PFXF	Fund	Index Fund Shares	Wells Fargo Hybrid and Preferred Securities ex Financials Index	US	Broad
PGAL	Fund	Index Fund Shares	FTSE Portugal 20 Index	Global	Broad
PGF	Fund	Index Fund Shares	Wells Fargo Hybrid and Preferred Securities Financial Index	US	Broad
PGHD	Fund	Index Fund Shares	Pacer Global Cash Cows Dividend 100 Index	Global	Broad
PGHY	Fund	Index Fund Shares	DB Global Short Maturity High Yield Bond Index	US	Broad
PGJ	Fund	Index Fund Shares	NASDAQ Golden Dragon China Index	US	Broad
PGX	Fund	Index Fund Shares	BofA Merrill Lynch Core Plus Fixed Rate Preferred Securities Index	US	Broad
PHB	Fund	Index Fund Shares	RAFI Bonds US High Yield 1-10 Index	US	Broad
PHO	Fund	Index Fund Shares	NASDAQ OMX US Water Index	US	Broad
PICB	Fund	Index Fund Shares	S&P International Corporate Bond Index	US	Broad
PICK	Fund	Index Fund Shares	MSCI ACWI Select Metals & Mining Producers Ex Gold & Silver Investable Market Index	Global	Broad
PID	Fund	Index Fund Shares	NASDAQ International Dividend Achievers Index	Global	Broad
PIE	Fund	Index Fund Shares	Dorsey Wright Emerging Markets Technical Leaders Index	Global	Broad
PILL	Fund	Index Fund Shares	Dynamic Pharmaceutical Intellidex Index	US	Narrow
PILS	Fund	Index Fund Shares	Dynamic Pharmaceutical Intellidex Index	US	Narrow
PIN	Fund	Index Fund Shares	Indus India Index	Global	Broad
PIO	Fund	Index Fund Shares	NASDAQ OMX Global Water Index	Global	Broad
PIZ	Fund	Index Fund Shares	Dorsey Wright Developed Markets Technical Leaders Index	Global	Broad
PJP	Fund	Index Fund Shares	Dynamic Pharmaceutical Intellidex Index	US	Broad
PKB	Fund	Index Fund Shares	Dynamic Building & Construction Intellidex Index	US	Broad
PKW	Fund	Index Fund Shares	NASDAQ US Buyback Achievers Index	US	Broad
PLND	Fund	Index Fund Shares	MVIS Poland Index (Price)	Global	Broad
PLW	Fund	Index Fund Shares	Ryan/NASDAQ U.S. 1-30 Year Treasury Laddered Index	US	Broad
PMR	Fund	Index Fund Shares	Dynamic Retail Intellidex Index	US	Broad
PNQI	Fund	Index Fund Shares	NASDAQ Internet Index	US	Broad
PPA	Fund	Index Fund Shares	SPADE Defense Index	US	Broad
PPH	Fund	Index Fund Shares	MVIS US Listed Pharmaceutical 25 Index (Price)	US	Broad
PRB	Fund	Index Fund Shares	Barclays Municipal Pre-Refunded-Treasury-Escrowed Index	US	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
PRF	Fund	Index Fund Shares	FTSE RAFI US 1000 Index	US	Broad
PRFZ	Fund	Index Fund Shares	FTSE Research Affiliates Fundamentals US 1500 Small-Mid Index	US	Broad
PRN	Fund	Index Fund Shares	Dorsey Wright Industrials Technical Leaders Index	US	Broad
PSAU	Fund	Index Fund Shares	NASDAQ OMX Global Gold & Precious Metals Index	Global	Broad
PSCC	Fund	Index Fund Shares	S&P SmallCap 600 Capped Consumer Staples Index	US	Broad
PSCD	Fund	Index Fund Shares	S&P SmallCap 600 Capped Consumer Discretionary Index	US	Broad
PSCE	Fund	Index Fund Shares	S&P SmallCap 600 Capped Energy Index	US	Broad
PSCF	Fund	Index Fund Shares	S&P SmallCap 600 Capped Financials Index	US	Broad
PSCH	Fund	Index Fund Shares	S&P SmallCap 600 Capped HealthCare Index	US	Broad
PSCI	Fund	Index Fund Shares	S&P SmallCap 600 Capped Industrials Index	US	Broad
PSCM	Fund	Index Fund Shares	S&P SmallCap 600 Capped Materials Index	US	Broad
PSCT	Fund	Index Fund Shares	S&P SmallCap 600 Capped Information Technology Index	US	Broad
PSCU	Fund	Index Fund Shares	S&P SmallCap 600 Capped Utilities & Telecom Services Index	US	Broad
PSET	Fund	Index Fund Shares	Nasdaq US Price Setters Price Return Index	US	Broad
PSI	Fund	Index Fund Shares	Dynamic Semiconductor Intellidex Index	US	Broad
PSJ	Fund	Index Fund Shares	Dynamic Software Intellidex Index	US	Broad
PSK	Fund	Index Fund Shares	Wells Fargo Hybrid and Preferred Securities Aggregate Index	US	Broad
PSL	Fund	Index Fund Shares	Dorsey Wright Consumer Staples Technical Leaders Index	US	Broad
PSP	Fund	Index Fund Shares	Red Rocks Global Listed Private Equity Index	Global	Broad
PSQ	Fund	Index Fund Shares	NASDAQ-100 Index	US	Broad
PST	Fund	Index Fund Shares	Barclays U.S. 7-10 Year Treasury Bond Index	US	Narrow
PTEU	Fund	Index Fund Shares	Pacer Trendpilot European Index	Global	Broad
PTF	Fund	Index Fund Shares	Dorsey Wright Technology Technical Leaders Index	US	Broad
PTH	Fund	Index Fund Shares	Dorsey Wright Healthcare Technical Leaders Index	US	Broad
PTLC	Fund	Index Fund Shares	Pacer Wilshire US Large-Cap Trendpilot Index	US	Broad
PTMC	Fund	Index Fund Shares	Pacer Wilshire US Mid-Cap Trendpilot Index	US	Broad
PTNQ	Fund	Index Fund Shares	Pacer NASDAQ-100 Trendpilot Index	US	Broad
PUI	Fund	Index Fund Shares	Dorsey Wright Utilities Technical Leaders Index	US	Broad
PUTW	Fund	Index Fund Shares	CBOE S&P 500 PutWrite Index	US	Narrow
PUW	Fund	Index Fund Shares	WilderHill Progressive Energy Index	US	Broad
PVI	Fund	Index Fund Shares	Bloomberg US Municipal AMT-Free Weekly VRDO Index	US	Broad
PWB	Fund	Index Fund Shares	Dynamic Large Cap Growth Intellidex Index	US	Broad
PWC	Fund	Index Fund Shares	Dynamic Market Intellidex Index	US	Broad
PWV	Fund	Index Fund Shares	Dynamic Large Cap Value Intellidex Index	US	Broad
PWZ	Fund	Index Fund Shares	BofA Merrill Lynch California Long-Term Core Plus Municipal Securities Index	US	Broad
PXE	Fund	Index Fund Shares	Dynamic Energy Exploration & Production Intellidex Index	US	Broad
PXF	Fund	Index Fund Shares	FTSE RAFI Developed ex U.S. 1000 Index	Global	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
PXH	Fund	Index Fund Shares	FTSE RAFI Emerging Markets Index	Global	Broad
PXI	Fund	Index Fund Shares	Dorsey Wright Energy Technical Leaders Index	US	Broad
PXJ	Fund	Index Fund Shares	Dynamic Oil Services Intellidex Index	US	Broad
PXLG	Fund	Index Fund Shares	Russell Top 200 Pure Growth Index	US	Broad
PXLV	Fund	Index Fund Shares	Russell Top 200 Pure Value Index	US	Broad
PXMG	Fund	Index Fund Shares	Russell Midcap Pure Growth Index	US	Broad
PXMV	Fund	Index Fund Shares	Russell Midcap Pure Value Index	US	Broad
PXQ	Fund	Index Fund Shares	Dynamic Networking Intellidex Index	US	Broad
PXR	Fund	Index Fund Shares	S-Network Emerging Infrastructure Builders Index	Global	Broad
PXSG	Fund	Index Fund Shares	Russell 2000 Pure Growth Index	US	Broad
PXSV	Fund	Index Fund Shares	Russell 2000 Pure Value Index	US	Broad
PY	Fund	Index Fund Shares	Nasdaq US Shareholder Yield Price Return Index	US	Broad
PYZ	Fund	Index Fund Shares	Dorsey Wright Basic Materials Technical Leaders Index	US	Broad
PZA	Fund	Index Fund Shares	BofA Merrill Lynch National Long-Term Core Plus Municipal Securities Index	US	Broad
PZD	Fund	Index Fund Shares	Cleantech Index	Global	Broad
PZI	Fund	Index Fund Shares	Zacks Micro Cap Index	US	Broad
PZT	Fund	Index Fund Shares	BofA Merrill Lynch New York Long-Term Core Plus Municipal Securities Index	US	Broad
QABA	Fund	Index Fund Shares	NASDAQ OMX ABA Community Bank Index	US	Broad
QAI	Fund	Index Fund Shares	IQ Hedge Multi-Strategy Index	US	Broad
QAT	Fund	Index Fund Shares	MSCI All Qatar Capped Index	Global	Broad
QAUS	Fund	Index Fund Shares	MSCI Australia Factor Mix A-Series Capped Index	Global	Broad
QCAN	Fund	Index Fund Shares	MSCI Canada Factor Mix A-Series Capped Index	Global	Broad
QCLN	Fund	Index Fund Shares	NASDAQ Clean Edge Green Energy Index	US	Broad
QDEF	Fund	Index Fund Shares	Northern Trust Quality Dividend Defensive Index	US	Broad
QDEU	Fund	Index Fund Shares	MSCI Germany Factor Mix A-Series Capped Index	Global	Broad
QDF	Fund	Index Fund Shares	Northern Trust Quality Dividend Index	US	Broad
QDYN	Fund	Index Fund Shares	Northern Trust Quality Dividend Dynamic Index	US	Broad
QED	Fund	Index Fund Shares	IQ Hedge Event-Driven Index	US	Broad
QEFA	Fund	Index Fund Shares	MSCI EAFE Factor Mix A-Series Index	Global	Broad
QEMM	Fund	Index Fund Shares	MSCI Emerging Markets Factor Mix A-Series Index	Global	Broad
QESP	Fund	Index Fund Shares	MSCI Spain Factor Mix A-Series Capped Index	Global	Broad
QGBR	Fund	Index Fund Shares	MSCI UK Factor Mix A-Series Capped Index	Global	Broad
QGTA	Fund	Index Fund Shares	IQ Leaders GTAA Tracker Index	US	Broad
QID	Fund	Index Fund Shares	NASDAQ-100 Index	US	Broad
QINC	Fund	Index Fund Shares	Richard Bernstein Advisors Quality Income Index	US	Broad
QJPN	Fund	Index Fund Shares	MSCI Japan Factor Mix A-Series Capped Index	Global	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
QKOR	Fund	Index Fund Shares	MSCI Korea Factor Mix A-Series Capped Index	Global	Broad
QLC	Fund	Index Fund Shares	Northern Trust Quality Large Cap Index	US	Broad
QLD	Fund	Index Fund Shares	NASDAQ-100 Index	US	Broad
QLS	Fund	Index Fund Shares	IQ Hedge Long/Short Index	US	Broad
QLTA	Fund	Index Fund Shares	Barclays U.S. Corporate Aaa - A Capped Index	US	Broad
QLTB	Fund	Index Fund Shares	Barclays U.S. Corporate Baa - Ba Capped Index	US	Broad
QLTC	Fund	Index Fund Shares	Barclays U.S. Corporate B - Ca Capped Index	US	Broad
QMEX	Fund	Index Fund Shares	MSCI Mexico Factor Mix A-Series Capped Index	Global	Broad
QMN	Fund	Index Fund Shares	IQ Hedge Market Neutral Index	US	Broad
QQEW	Fund	Index Fund Shares	NASDAQ-100 Equal Weighted Index	US	Broad
QQQC	Fund	Index Fund Shares	NASDAQ OMX China Technology Index	Global	Broad
QQQE	Fund	Index Fund Shares	NASDAQ-100 Equal Weighted Index	US	Broad
QQXT	Fund	Index Fund Shares	NASDAQ-100 Ex-Tech Sector Index	US	Broad
QTEC	Fund	Index Fund Shares	NASDAQ-100 Technology Sector Index	US	Broad
QTNW	Fund	Index Fund Shares	MSCI Taiwan Factor Mix A-Series Capped Index	Global	Broad
QUAL	Fund	Index Fund Shares	MSCI USA Sector Neutral Quality Index	US	Broad
QUS	Fund	Index Fund Shares	MSCI USA Factor Mix A-Series Capped Index	US	Broad
QVM	Fund	Index Fund Shares	AI Quality Value Momentum Index	US	Broad
QWLD	Fund	Index Fund Shares	MSCI World Factor Mix A-Series Index	Global	Broad
QYLD	Fund	Index Fund Shares	CBOE NASDAQ 100 BuyWrite V2 Index	US	Broad
RALS	Fund	Index Fund Shares	FTSE RAFI US 1000 Long/Short Index	US	Broad
RBL	Fund	Index Fund Shares	S&P Russia Capped BMI Index	Global	Broad
RCD	Fund	Index Fund Shares	S&P 500 Equal Weight Index Consumer Discretionary Price Return	US	Broad
RDIV	Fund	Index Fund Shares	RevenueShares Ultra Dividend Index	US	Broad
RDVY	Fund	Index Fund Shares	NASDAQ US Rising Dividend Achievers Index	US	Broad
REET	Fund	Index Fund Shares	FTSE EPRA/NAREIT Global REIT Index	Global	Broad
REGL	Fund	Index Fund Shares	S&P MidCap 400 Dividend Aristocrats Index	US	Broad
REM	Fund	Index Fund Shares	FTSE NAREIT All Mortgage Capped Index	US	Broad
REMX	Fund	Index Fund Shares	MVIS Global Rare Earth/Strategic Metals Index (Price)	Global	Broad
RETL	Fund	Index Fund Shares	Russell 1000 Retail Index	US	Broad
REW	Fund	Index Fund Shares	Dow Jones U.S. Technology Index	US	Narrow
REZ	Fund	Index Fund Shares	FTSE NAREIT All Residential Capped Index	US	Broad
RFG	Fund	Index Fund Shares	S&P MidCap 400 Pure Growth Index	US	Broad
RFV	Fund	Index Fund Shares	S&P MidCap 400 Pure Value Index	US	Broad
RGI	Fund	Index Fund Shares	S&P 500 Equal Weight Index Industrials Price Return	US	Broad
RGRO	Fund	Index Fund Shares	S&P Global Broad Market Index	Global	Broad
RHS	Fund	Index Fund Shares	S&P 500 Equal Weight Index Consumer Staples Price Return	US	Broad
RINF	Fund	Index Fund Shares	Citi 30 Year TIPS (Treasury Rate-Hedged) Index	US	Narrow

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
RING	Fund	Index Fund Shares	MSCI ACWI Select Gold Miners Investable Market Index	Global	Broad
ROAM	Fund	Index Fund Shares	Lattice Risk-Optimized Advancing Markets Strategy Index	Global	Broad
ROBO	Fund	Index Fund Shares	Robo Global Robotics and Automation Index	Global	Broad
RODM	Fund	Index Fund Shares	Lattice Risk-Optimized Developed Markets (ex-US) Strategy Index	Global	Broad
ROGS	Fund	Index Fund Shares	Lattice Risk-Optimized Global Small Cap Strategy Index	Global	Broad
ROM	Fund	Index Fund Shares	Dow Jones U.S. Technology Index	US	Broad
ROOF	Fund	Index Fund Shares	IQ U.S. Real Estate Small Cap Index	US	Broad
ROUS	Fund	Index Fund Shares	Lattice Risk-Optimized US Large Cap Equity Strategy Index	US	Broad
RPG	Fund	Index Fund Shares	S&P 500 Pure Growth Index	US	Broad
RPV	Fund	Index Fund Shares	S&P 500 Pure Value Index	US	Broad
RSCO	Fund	Index Fund Shares	Russell Small Cap Completeness Index	US	Broad
RSP	Fund	Index Fund Shares	S&P 500 Equal Weight Index Price Return	US	Broad
RSX	Fund	Index Fund Shares	MVIS Russia Index (Price)	Global	Broad
RSXJ	Fund	Index Fund Shares	MVIS Russia Small-Cap Index (Price)	Global	Broad
RTH	Fund	Index Fund Shares	MVIS US Listed Retail 25 Index (Price)	US	Broad
RTM	Fund	Index Fund Shares	S&P 500 Equal Weight Index Materials Price Return	US	Broad
RTR	Fund	Index Fund Shares	RevenueShares ADR Index	US	Broad
RUSL	Fund	Index Fund Shares	MVIS Russia Index (Price)	Global	Broad
RUSS	Fund	Index Fund Shares	MVIS Russia Index (Price)	Global	Broad
RVNU	Fund	Index Fund Shares	Solactive Municipal Infrastructure Revenue Bond Index	US	Broad
RWJ	Fund	Index Fund Shares	RevenueShares Small Cap Index	US	Broad
RWK	Fund	Index Fund Shares	RevenueShares Mid Cap Index	US	Broad
RWL	Fund	Index Fund Shares	RevenueShares Large Cap Index	US	Broad
RWM	Fund	Index Fund Shares	Russell 2000 Index	US	Broad
RWO	Fund	Index Fund Shares	Dow Jones Global Select Real Estate Securities Index	Global	Broad
RWR	Fund	Index Fund Shares	Dow Jones U.S. Select REIT Index	US	Broad
RWV	Fund	Index Fund Shares	RevenueShares Navellier Overall A-100 Index	US	Broad
RWW	Fund	Index Fund Shares	RevenueShares Financials Sector Index	US	Broad
RWX	Fund	Index Fund Shares	Dow Jones Global ex-U.S. Select Real Estate Securities Index	Global	Broad
RXD	Fund	Index Fund Shares	Dow Jones U.S. Health Care Index	US	Narrow
RXI	Fund	Index Fund Shares	S&P Global 1200 Consumer Discretionary Sector Index	Global	Broad
RXL	Fund	Index Fund Shares	Dow Jones U.S. Health Care Index	US	Broad
RYE	Fund	Index Fund Shares	S&P 500 Equal Weight Index Energy Price Return	US	Broad
RYF	Fund	Index Fund Shares	S&P 500 Equal Weight Index Financials Price Return	US	Broad
RYH	Fund	Index Fund Shares	S&P 500 Equal Weight Index Health Care Price Return	US	Broad
RYJ	Fund	Index Fund Shares	Raymond James SB-1 Equity Index	US	Broad
RYT	Fund	Index Fund Shares	S&P 500 Equal Weight Index Technology Price Return	US	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
RYU	Fund	Index Fund Shares	S&P 500 Equal Weight Index Telecommunication Services & Utilities Price Return	US	Broad
RZG	Fund	Index Fund Shares	S&P SmallCap 600 Pure Growth Index	US	Broad
RZV	Fund	Index Fund Shares	S&P SmallCap 600 Pure Value Index	US	Broad
SAA	Fund	Index Fund Shares	S&P SmallCap 600 Index	US	Broad
SAGG	Fund	Index Fund Shares	Barclays U.S. Aggregate Bond Index	US	Narrow
SBB	Fund	Index Fund Shares	S&P SmallCap 600 Index	US	Narrow
SBEU	Fund	Index Fund Shares	Scientific Beta Developed Europe Multi-Beta Multi-Strategy Equal Weight Index	Global	Broad
SBIO	Fund	Index Fund Shares	Poliwogg Medical Breakthroughs Index	US	Broad
SBUS	Fund	Index Fund Shares	Scientific Beta United States Multi-Beta Multi-Strategy Equal Weight Index	US	Broad
SCC	Fund	Index Fund Shares	Dow Jones U.S. Consumer Services Index	US	Narrow
SCHA	Fund	Index Fund Shares	Dow Jones U.S. Small-Cap Total Stock Market Index	US	Broad
SCHB	Fund	Index Fund Shares	Dow Jones U.S. Broad Stock Market Index	US	Broad
SCHC	Fund	Index Fund Shares	FTSE Developed Small Cap ex-US Liquid Index	Global	Broad
SCHD	Fund	Index Fund Shares	Dow Jones U.S. Dividend 100 Index	US	Broad
SCHE	Fund	Index Fund Shares	FTSE Emerging Index	Global	Broad
SCHF	Fund	Index Fund Shares	FTSE Developed ex-US Index	Global	Broad
SCHG	Fund	Index Fund Shares	Dow Jones U.S. Large-Cap Growth Total Stock Market Index	US	Broad
SCHH	Fund	Index Fund Shares	Dow Jones U.S. Select REIT Index	US	Broad
SCHM	Fund	Index Fund Shares	Dow Jones U.S. Mid-Cap Total Stock Market Index	US	Broad
SCHO	Fund	Index Fund Shares	Barclays U.S. 1-3 Year Treasury Bond Index	US	Broad
SCHP	Fund	Index Fund Shares	Barclays U.S. Treasury Inflation Protected Securities (TIPS) Index (Series L)	US	Broad
SCHR	Fund	Index Fund Shares	Barclays U.S. 3-10 Year Treasury Bond Index	US	Broad
SCHV	Fund	Index Fund Shares	Dow Jones U.S. Large-Cap Value Total Stock Market Index	US	Broad
SCHX	Fund	Index Fund Shares	Dow Jones U.S. Large-Cap Total Stock Market Index	US	Broad
SCHZ	Fund	Index Fund Shares	Barclays U.S. Aggregate Bond Index	US	Broad
SCID	Fund	Index Fund Shares	Scientific Beta Extended Europe Multi-Beta Multi-Strategy Equal Risk Contribution Index	Global	Broad
SCIF	Fund	Index Fund Shares	MVIS India Small-Cap Index (Price)	Global	Broad
SCIJ	Fund	Index Fund Shares	Scientific Beta Japan Multi-Beta Multi-Strategy Equal Risk Contribution Index	Global	Broad
SCIN	Fund	Index Fund Shares	Indxx India Small Cap Index	Global	Broad
SCIU	Fund	Index Fund Shares	Scientific Beta United States Multi-Beta Multi-Strategy Equal Risk Contribution Index	US	Broad
SCIX	Fund	Index Fund Shares	Scientific Beta Developed Asia-Pacific ex-Japan Multi-Beta Multi-Strategy Equal Risk Contribution In	Global	Broad
SCJ	Fund	Index Fund Shares	MSCI Japan Small Cap Index	Global	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
SCPB	Fund	Index Fund Shares	Barclays U.S. 1-3 Year Corporate Bond Index	US	Broad
SCTO	Fund	Index Fund Shares	JPMorgan U.S. Sector Rotator TR Series X Index	US	Narrow
SCZ	Fund	Index Fund Shares	MSCI EAFE Small Cap Index	Global	Broad
SDD	Fund	Index Fund Shares	S&P SmallCap 600 Index	US	Narrow
SDEM	Fund	Index Fund Shares	INDXX SuperDividend Emerging Markets Index	Global	Broad
SDIV	Fund	Index Fund Shares	Solactive Global SuperDividend Index	Global	Broad
SDOG	Fund	Index Fund Shares	S-Network Sector Dividend Dogs Index	US	Broad
SDOW	Fund	Index Fund Shares	Dow Jones Industrial Average	US	Broad
SDP	Fund	Index Fund Shares	Dow Jones U.S. Utilities Index	US	Narrow
SDS	Fund	Index Fund Shares	S&P 500 Index	US	Broad
SDY	Fund	Index Fund Shares	S&P High Yield Dividend Aristocrats Index	US	Broad
SEA	Fund	Index Fund Shares	Dow Jones Global Shipping Index	Global	Broad
SEF	Fund	Index Fund Shares	Dow Jones U.S. Financials Index	US	Narrow
SFHJ	Fund	Index Fund Shares	WisdomTree Fundamental U.S. Short-term High Yield Corporate Bond Index	US	Broad
SFIG	Fund	Index Fund Shares	WisdomTree Fundamental U.S. Short-term Corporate Bond Index	US	Broad
SGDJ	Fund	Index Fund Shares	Sprott Zacks Junior Gold Miners Index	Global	Broad
SGDM	Fund	Index Fund Shares	Sprott Zacks Gold Miners Index	US	Broad
SH	Fund	Index Fund Shares	S&P 500 Index	US	Broad
SHE	Fund	Index Fund Shares	SSGA Gender Diversity Index	US	Broad
SHM	Fund	Index Fund Shares	Barclays Managed Money Municipal Short Term Index	US	Broad
SHV	Fund	Index Fund Shares	ICE U.S. Treasury Short Bond Index	US	Broad
SHY	Fund	Index Fund Shares	ICE U.S. Treasury 1-3 Year Bond Index	US	Broad
SHYD	Fund	Index Fund Shares	Barclays Municipal High Yield Short Duration Index	US	Broad
SHYG	Fund	Index Fund Shares	Markit iBoxx USD Liquid High Yield 0-5 Index	US	Broad
SICK	Fund	Index Fund Shares	Health Care Select Sector Index	US	Narrow
SIJ	Fund	Index Fund Shares	Dow Jones U.S. Industrials Index	US	Narrow
SIL	Fund	Index Fund Shares	Solactive Global Silver Miners Index	Global	Broad
SILJ	Fund	Index Fund Shares	ISE Junior Silver (Small Cap Miners/Explorers) Index	Global	Broad
SIPE	Fund	Index Fund Shares	Barclays 0-5 Year Government Inflation-linked Bond Index	US	Broad
SIZ	Fund	Index Fund Shares	Dow Jones U.S. Thematic Market Neutral Size Index - Price Return	US	Broad
SIZE	Fund	Index Fund Shares	MSCI USA Risk Weighted Index	US	Broad
SJB	Fund	Index Fund Shares	Markit iBoxx USD Liquid High Yield Index	US	Narrow
SJNK	Fund	Index Fund Shares	Barclays US High Yield 350mn Cash Pay 0-5 Yr 2% Capped Index	US	Broad
SKF	Fund	Index Fund Shares	Dow Jones U.S. Financials Index	US	Narrow
SKOR	Fund	Index Fund Shares	Northern Trust Credit-Scored US Corporate Bond Index	US	Broad
SKYY	Fund	Index Fund Shares	ISE Cloud Computing Index	Global	Broad
SLIM	Fund	Index Fund Shares	Solactive Obesity Index	Global	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
SLQD	Fund	Index Fund Shares	Markit iBoxx USD Liquid Investment Grade 0-5 Index	US	Broad
SLVP	Fund	Index Fund Shares	MSCI ACWI Select Silver Miners Investable Market Index	Global	Broad
SLX	Fund	Index Fund Shares	NYSE Arca Steel Index	US	Broad
SLY	Fund	Index Fund Shares	S&P SmallCap 600 Index	US	Broad
SLYG	Fund	Index Fund Shares	S&P SmallCap 600 Growth Index	US	Broad
SLYV	Fund	Index Fund Shares	S&P SmallCap 600 Value Index	US	Broad
SMB	Fund	Index Fund Shares	Barclays AMT-Free Short Continuous Municipal Index	US	Broad
SMDD	Fund	Index Fund Shares	S&P MidCap 400 Index	US	Narrow
SMDV	Fund	Index Fund Shares	Russell 2000 Dividend Growth Index	US	Broad
SMEZ	Fund	Index Fund Shares	EURO STOXX Small Index	Global	Broad
SMH	Fund	Index Fund Shares	MVIS US Listed Semiconductor 25 Index (Price)	US	Broad
SMIN	Fund	Index Fund Shares	MSCI India Small Cap Index	Global	Broad
SMK	Fund	Index Fund Shares	MSCI Mexico IMI 25/50 Index	Global	Narrow
SMLF	Fund	Index Fund Shares	MSCI USA Small Cap Diversified Multiple-Factor Index	US	Broad
SMLL	Fund	Index Fund Shares	Russell 2000 Index	US	Narrow
SMLV	Fund	Index Fund Shares	Russell 2000 Low Volatility Index	US	Broad
SMN	Fund	Index Fund Shares	Dow Jones U.S. Basic Materials Index	US	Narrow
SNLN	Fund	Index Fund Shares	Markit iBoxx USD Liquid Leveraged Loan Index	US	Broad
SOCL	Fund	Index Fund Shares	Solactive Social Media Index	Global	Broad
SOIL	Fund	Index Fund Shares	Solactive Global Fertilizers/Potash Index	Global	Broad
SOP	Fund	Index Fund Shares	S&P Oil & Gas Exploration & Production Select Industry Index	US	Narrow
SOXL	Fund	Index Fund Shares	PHLX Semiconductor Sector Index	US	Broad
SOXS	Fund	Index Fund Shares	PHLX Semiconductor Sector Index	US	Narrow
SOXX	Fund	Index Fund Shares	PHLX Semiconductor Sector Index	US	Broad
SPDN	Fund	Index Fund Shares	S&P 500 Index	US	Narrow
SPFF	Fund	Index Fund Shares	S&P Enhanced Yield North American Preferred Stock Index	Global	Broad
SPHB	Fund	Index Fund Shares	S&P 500 High Beta Index	US	Broad
SPHD	Fund	Index Fund Shares	S&P 500 Low Volatility High Dividend Index	US	Broad
SPHQ	Fund	Index Fund Shares	S&P 500 Quality Index	US	Broad
SPLV	Fund	Index Fund Shares	S&P 500 Low Volatility Index	US	Broad
SPMO	Fund	Index Fund Shares	S&P 500 Momentum Index	US	Broad
SPUN	Fund	Index Fund Shares	Horizon Kinetics Global Spin-Off Index	Global	Broad
SPUU	Fund	Index Fund Shares	S&P 500 Index	US	Broad
SPVU	Fund	Index Fund Shares	S&P 500 Enhanced Value Index	US	Broad
SPXE	Fund	Index Fund Shares	S&P 500 Ex-Energy Index	US	Broad
SPXH	Fund	Index Fund Shares	VelocityShares Volatility Hedged Large Cap Index	US	Broad
SPXL	Fund	Index Fund Shares	S&P 500 Index	US	Broad
SPXN	Fund	Index Fund Shares	S&P 500 Ex-Financials Index	US	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
SPXS	Fund	Index Fund Shares	S&P 500 Index	US	Broad
SPXT	Fund	Index Fund Shares	S&P 500 Ex-Information Technology & Telecommunications Services Index	US	Broad
SPXU	Fund	Index Fund Shares	S&P 500 Index	US	Broad
SPXV	Fund	Index Fund Shares	S&P 500 Ex-Health Care Index	US	Broad
SPYB	Fund	Index Fund Shares	S&P 500 Buyback Index	US	Broad
SPYD	Fund	Index Fund Shares	S&P 500 High Dividend Index	US	Broad
SPYG	Fund	Index Fund Shares	S&P 500 Growth Index	US	Broad
SPYV	Fund	Index Fund Shares	S&P 500 Value Index	US	Broad
SPYX	Fund	Index Fund Shares	S&P 500 Fossil Fuel Free Index	US	Broad
SQQQ	Fund	Index Fund Shares	NASDAQ-100 Index	US	Broad
SRET	Fund	Index Fund Shares	Solactive Global SuperDividend REIT Index	Global	Broad
SRS	Fund	Index Fund Shares	Dow Jones U.S. Real Estate Index	US	Broad
SRTY	Fund	Index Fund Shares	Russell 2000 Index	US	Broad
SSG	Fund	Index Fund Shares	Dow Jones U.S. Semiconductors Index	US	Narrow
SSO	Fund	Index Fund Shares	S&P 500 Index	US	Broad
SST	Fund	Index Fund Shares	Barclays 1-5 Year U.S. Treasury Bond Index	US	Broad
STIP	Fund	Index Fund Shares	Barclays U.S. Treasury Inflation-Protected Securities (TIPS) 0-5 Years Index (Series-L)	US	Broad
STPZ	Fund	Index Fund Shares	BofA Merrill Lynch 1-5 Year US Inflation-Linked Treasury Index	US	Broad
SUB	Fund	Index Fund Shares	S&P Short Term National AMT-Free Municipal Bond Index	US	Broad
SZK	Fund	Index Fund Shares	Dow Jones U.S. Consumer Goods Index	US	Narrow
TAN	Fund	Index Fund Shares	MAC Global Solar Energy Index	Global	Broad
TAO	Fund	Index Fund Shares	AlphaShares China Real Estate Index	Global	Broad
TBF	Fund	Index Fund Shares	Barclays U.S. 20+ Year Treasury Bond Index	US	Narrow
TBT	Fund	Index Fund Shares	Barclays U.S. 20+ Year Treasury Bond Index	US	Narrow
TBX	Fund	Index Fund Shares	Barclays U.S. 7-10 Year Treasury Bond Index	US	Narrow
TBZ	Fund	Index Fund Shares	Barclays U.S. 3-7 Year Treasury Bond Index	US	Narrow
TCHF	Fund	Index Fund Shares	MSCI USA Information Technology Diversified Multiple-Factor Capped Index	US	Broad
TDIV	Fund	Index Fund Shares	NASDAQ Technology Dividend Index	US	Broad
TDTF	Fund	Index Fund Shares	iBoxx 5-Year Target Duration TIPS Index	US	Broad
TDTT	Fund	Index Fund Shares	iBoxx 3-Year Target Duration TIPS Index	US	Broad
TECL	Fund	Index Fund Shares	Technology Select Sector Index	US	Broad
TECS	Fund	Index Fund Shares	Technology Select Sector Index	US	Narrow
TECZ	Fund	Index Fund Shares	Technology Select Sector Index	US	Narrow
TFI	Fund	Index Fund Shares	Barclays Municipal Managed Money Index	US	Broad
TFLO	Fund	Index Fund Shares	Barclays U.S. Treasury Floating Rate Index	US	Narrow
THD	Fund	Index Fund Shares	MSCI Thailand IMI 25/50 Index	Global	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
THHY	Fund	Index Fund Shares	MVIS US Treasury-Hedged High Yield Bond Index (Price)	US	Broad
THRK	Fund	Index Fund Shares	Russell 3000 Index	US	Broad
TILT	Fund	Index Fund Shares	Morningstar US Market Factor Tilt Index PR	US	Broad
TIP	Fund	Index Fund Shares	Barclays U.S. Treasury Inflation Protected Securities (TIPS) Index (Series L)	US	Broad
TIPX	Fund	Index Fund Shares	Barclays 1-10 Year Government Inflation-linked Bond Index	US	Broad
TIPZ	Fund	Index Fund Shares	BofA Merrill Lynch US Inflation-Linked Treasury Index	US	Broad
TLDH	Fund	Index Fund Shares	Morningstar Developed Markets ex-US Factor Tilt Hedged Index	Global	Narrow
LEH	Fund	Index Fund Shares	Morningstar Emerging Markets Factor Tilt Hedged Index	Global	Narrow
TLH	Fund	Index Fund Shares	ICE U.S. Treasury 10-20 Year Bond Index	US	Broad
TLO	Fund	Index Fund Shares	Barclays Long U.S. Treasury Index	US	Broad
TLT	Fund	Index Fund Shares	ICE U.S. Treasury 20+ Year Bond Index	US	Broad
TLTD	Fund	Index Fund Shares	Morningstar Developed Markets ex-US Factor Tilt Index	Global	Broad
TLTE	Fund	Index Fund Shares	Morningstar Emerging Markets Factor Tilt Index	Global	Broad
TMF	Fund	Index Fund Shares	ICE U.S. Treasury 20+ Year Bond Index	US	Broad
TMV	Fund	Index Fund Shares	ICE U.S. Treasury 20+ Year Bond Index	US	Narrow
TNA	Fund	Index Fund Shares	Russell 2000 Index	US	Broad
TOFR	Fund	Index Fund Shares	2 For 1 Index	US	Broad
TOK	Fund	Index Fund Shares	MSCI Kokusai Index	Global	Broad
TOLZ	Fund	Index Fund Shares	Dow Jones Brookfield Global Infrastructure Composite Index	Global	Broad
TPS	Fund	Index Fund Shares	Barclays U.S. Treasury Inflation Protected Securities (TIPS) Index (Series L)	US	Narrow
TPYP	Fund	Index Fund Shares	Tortoise North American Pipeline Index	Global	Broad
TQQQ	Fund	Index Fund Shares	NASDAQ-100 Index	US	Broad
TRSK	Fund	Index Fund Shares	VelocityShares Tail Risk Hedged Large Cap Index	US	Broad
TTT	Fund	Index Fund Shares	Barclays U.S. 20+ Year Treasury Bond Index	US	Narrow
TUR	Fund	Index Fund Shares	MSCI Turkey Investable Market Index	Global	Broad
TUSA	Fund	Index Fund Shares	NASDAQ AlphaDEX Total US Market Index	US	Broad
TUZ	Fund	Index Fund Shares	BofA Merrill Lynch 1-3 Year US Treasury Index	US	Broad
TWM	Fund	Index Fund Shares	Russell 2000 Index	US	Broad
TWOK	Fund	Index Fund Shares	Russell 2000 Index	US	Broad
TYBS	Fund	Index Fund Shares	ICE U.S. Treasury 20+ Year Bond Index	US	Narrow
TYD	Fund	Index Fund Shares	ICE U.S. Treasury 7-10 Year Bond Index	US	Narrow
TYNS	Fund	Index Fund Shares	ICE U.S. Treasury 7-10 Year Bond Index	US	Narrow
TYO	Fund	Index Fund Shares	ICE U.S. Treasury 7-10 Year Bond Index	US	Narrow
TZA	Fund	Index Fund Shares	Russell 2000 Index	US	Narrow
UAE	Fund	Index Fund Shares	MSCI All UAE Capped Index	Global	Broad
UBR	Fund	Index Fund Shares	MSCI Brazil 25/50 Index	Global	Narrow
UBT	Fund	Index Fund Shares	Barclays U.S. 20+ Year Treasury Bond Index	US	Broad
UCC	Fund	Index Fund Shares	Dow Jones U.S. Consumer Services Index	US	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
UDBI	Fund	Index Fund Shares	QS DBI US Diversified Index	US	Broad
UDOW	Fund	Index Fund Shares	Dow Jones Industrial Average	US	Broad
UGE	Fund	Index Fund Shares	Dow Jones U.S. Consumer Goods Index	US	Broad
UJB	Fund	Index Fund Shares	Markit iBoxx USD Liquid High Yield Index	US	Narrow
UMDD	Fund	Index Fund Shares	S&P MidCap 400 Index	US	Broad
UMX	Fund	Index Fund Shares	MSCI Mexico IMI 25/50 Index	Global	Narrow
UOP	Fund	Index Fund Shares	S&P Oil & Gas Exploration & Production Select Industry Index	US	Broad
UPRO	Fund	Index Fund Shares	S&P 500 Index	US	Broad
UPV	Fund	Index Fund Shares	FTSE Developed Europe Index	Global	Narrow
UPW	Fund	Index Fund Shares	Dow Jones U.S. Utilities Index	US	Broad
URA	Fund	Index Fund Shares	Solactive Global Uranium Index	Global	Broad
URE	Fund	Index Fund Shares	Dow Jones U.S. Real Estate Index	US	Broad
URTH	Fund	Index Fund Shares	MSCI World Index	Global	Broad
URTY	Fund	Index Fund Shares	Russell 2000 Index	US	Broad
USD	Fund	Index Fund Shares	Dow Jones U.S. Semiconductors Index	US	Broad
USFR	Fund	Index Fund Shares	Bloomberg U.S. Treasury Floating Rate Bond Index	US	Narrow
USLB	Fund	Index Fund Shares	Russell 1000 Low Beta Equal Weight Index	US	Broad
USMV	Fund	Index Fund Shares	MSCI USA Minimum Volatility (USD) Index	US	Broad
USSD	Fund	Index Fund Shares	WisdomTree Strong Dollar U.S. Equity Index	US	Broad
UST	Fund	Index Fund Shares	Barclays U.S. 7-10 Year Treasury Bond Index	US	Broad
USWD	Fund	Index Fund Shares	WisdomTree Weak Dollar U.S. Equity Index	US	Broad
UTLF	Fund	Index Fund Shares	MSCI USA Utilities Diversified Multiple-Factor Capped Index	US	Broad
UWM	Fund	Index Fund Shares	Russell 2000 Index	US	Broad
UXI	Fund	Index Fund Shares	Dow Jones U.S. Industrials Index	US	Broad
UXJ	Fund	Index Fund Shares	MSCI Pacific ex-Japan Index	Global	Narrow
UYG	Fund	Index Fund Shares	Dow Jones U.S. Financials Index	US	Broad
UYM	Fund	Index Fund Shares	Dow Jones U.S. Basic Materials Index	US	Broad
VAW	Fund	Index Fund Shares	MSCI US Investable Market Materials 25/50 Index	US	Broad
VB	Fund	Index Fund Shares	CRSP US Small Cap Index	US	Broad
VBK	Fund	Index Fund Shares	CRSP US Small Cap Growth Index	US	Broad
VBND	Fund	Index Fund Shares	Vident Core U.S. Bond Index	US	Broad
VBR	Fund	Index Fund Shares	CRSP US Small Cap Value Index	US	Broad
VCIT	Fund	Index Fund Shares	Barclays U.S. 5-10 Year Corporate Index	US	Broad
VCLT	Fund	Index Fund Shares	Barclays U.S. Long Term Corporate Bond Index	US	Broad
VCR	Fund	Index Fund Shares	MSCI US Investable Market Consumer Discretionary 25/50 Index	US	Broad
VCSH	Fund	Index Fund Shares	Barclays U.S. 1-5 Year Corporate Index	US	Broad
VDC	Fund	Index Fund Shares	MSCI US Investable Market Consumer Staples 25/50 Index	US	Broad
VDE	Fund	Index Fund Shares	MSCI US Investable Market Energy 25/50 Index	US	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
VEA	Fund	Index Fund Shares	FTSE Developed All Cap ex US Index	Global	Broad
VEGI	Fund	Index Fund Shares	MSCI ACWI Select Agriculture Producers Investable Market Index	Global	Broad
VEU	Fund	Index Fund Shares	FTSE All-World ex US Index	Global	Broad
VFH	Fund	Index Fund Shares	MSCI US Investable Market Financials 25/50 Index	US	Broad
VGIT	Fund	Index Fund Shares	Barclays U.S. 3-10 Year Government Float Adjusted Index	US	Broad
VGK	Fund	Index Fund Shares	FTSE Developed Europe All Cap Index	Global	Broad
VGLT	Fund	Index Fund Shares	Barclays U.S. Long Government/Credit Float Adjusted Index	US	Broad
VGSH	Fund	Index Fund Shares	Barclays U.S. 1-3 Year Government Float Adjusted Index	US	Broad
VGT	Fund	Index Fund Shares	MSCI US Investable Market Information Technology 25/50 Index	US	Broad
VHT	Fund	Index Fund Shares	MSCI US Investable Market Health Care 25/50 Index	US	Broad
VIDI	Fund	Index Fund Shares	Vident Core International Equity Index	Global	Broad
VIG	Fund	Index Fund Shares	NASDAQ US Dividend Achievers Select Index	US	Broad
VIGI	Fund	Index Fund Shares	Nasdaq International Dividend Achievers Select Index	Global	Broad
VIOG	Fund	Index Fund Shares	S&P SmallCap 600 Growth Index	US	Broad
VIOO	Fund	Index Fund Shares	S&P SmallCap 600 Index	US	Broad
VIOV	Fund	Index Fund Shares	S&P SmallCap 600 Value Index	US	Broad
VIS	Fund	Index Fund Shares	MSCI US Investable Market Industrials 25/50 Index	US	Broad
VIXH	Fund	Index Fund Shares	CBOE VIX Tail Hedge Index	US	Broad
VLU	Fund	Index Fund Shares	S&P 1500 Low Valuation Tilt Index	US	Broad
VLUE	Fund	Index Fund Shares	MSCI USA Enhanced Value Index	US	Broad
VMBS	Fund	Index Fund Shares	Barclays U.S. MBS Float Adjusted Index	US	Broad
VNM	Fund	Index Fund Shares	MVIS Vietnam Index (Price)	Global	Broad
VNQ	Fund	Index Fund Shares	MSCI US REIT Index	US	Broad
VNQI	Fund	Index Fund Shares	S&P Global Ex-US Property Index	Global	Broad
VO	Fund	Index Fund Shares	CRSP US Mid Cap Index	US	Broad
VOE	Fund	Index Fund Shares	CRSP US Mid Cap Value Index	US	Broad
VONE	Fund	Index Fund Shares	Russell 1000 Index	US	Broad
VONG	Fund	Index Fund Shares	Russell 1000 Growth Index	US	Broad
VONV	Fund	Index Fund Shares	Russell 1000 Value Index	US	Broad
VOO	Fund	Index Fund Shares	S&P 500 Index	US	Broad
VOOG	Fund	Index Fund Shares	S&P 500 Growth Index	US	Broad
VOOV	Fund	Index Fund Shares	S&P 500 Value Index	US	Broad
VOT	Fund	Index Fund Shares	CRSP US Mid Cap Growth Index	US	Broad
VOX	Fund	Index Fund Shares	MSCI US Investable Market Telecommunication Services 25/50 Index	US	Broad
VPL	Fund	Index Fund Shares	FTSE Developed Asia Pacific All Cap Index	Global	Broad
VPU	Fund	Index Fund Shares	MSCI US Investable Market Utilities 25/50 Index	US	Broad
VRP	Fund	Index Fund Shares	Wells Fargo Hybrid and Preferred Securities Floating and Variable Rate Index	US	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
VSPY	Fund	Index Fund Shares	S&P 500 Volatility Response Index	US	Narrow
VSS	Fund	Index Fund Shares	FTSE Global Small Cap ex US Index	Global	Broad
VT	Fund	Index Fund Shares	FTSE Global All Cap Index	Global	Broad
VTEB	Fund	Index Fund Shares	S&P National AMT-Free Municipal Bond Index	US	Broad
VTHR	Fund	Index Fund Shares	Russell 3000 Index	US	Broad
VTI	Fund	Index Fund Shares	CRSP US Total Market Index	US	Broad
VTIP	Fund	Index Fund Shares	Barclays U.S. Treasury Inflation-Protected Securities (TIPS) 0-5 Year Index	US	Broad
VTV	Fund	Index Fund Shares	CRSP US Large Cap Value Index	US	Broad
VTWG	Fund	Index Fund Shares	Russell 2000 Growth Index	US	Broad
VTWO	Fund	Index Fund Shares	Russell 2000 Index	US	Broad
VTWV	Fund	Index Fund Shares	Russell 2000 Value Index	US	Broad
VUG	Fund	Index Fund Shares	CRSP US Large Cap Growth Index	US	Broad
VUSE	Fund	Index Fund Shares	Vident Core U.S. Stock Index	US	Broad
VV	Fund	Index Fund Shares	CRSP US Large Cap Index	US	Broad
VWO	Fund	Index Fund Shares	FTSE Emerging Markets All Cap China A Net Tax (US RIC) Transition Index	Global	Broad
VWOB	Fund	Index Fund Shares	Barclays USD Emerging Markets Government RIC Capped Index	US	Broad
VXF	Fund	Index Fund Shares	S&P Completion Index	US	Broad
VXUS	Fund	Index Fund Shares	FTSE Global All Cap ex US Index	Global	Broad
VYM	Fund	Index Fund Shares	FTSE High Dividend Yield Index	US	Broad
VYMI	Fund	Index Fund Shares	FTSE All-World ex US High Dividend Yield Index	Global	Broad
WDIV	Fund	Index Fund Shares	S&P Global Dividend Aristocrats Index	Global	Broad
WDRW	Fund	Index Fund Shares	Solactive Regional Bank Index	US	Narrow
WFHY	Fund	Index Fund Shares	WisdomTree Fundamental U.S. High Yield Corporate Bond Index	US	Broad
WFIG	Fund	Index Fund Shares	WisdomTree Fundamental U.S. Corporate Bond Index	US	Broad
WIP	Fund	Index Fund Shares	Citi International Inflation-Linked Securities Select Index	US	Broad
WIZE	Fund	Index Fund Shares	CrowdInvest Wisdom Index	US	Broad
WMCR	Fund	Index Fund Shares	Wilshire US Micro-Cap Index	US	Broad
WOOD	Fund	Index Fund Shares	S&P Global Timber & Forestry Index	Global	Broad
WPS	Fund	Index Fund Shares	S&P Developed Ex-U.S. Property Index	Global	Broad
WREI	Fund	Index Fund Shares	Wilshire US Real Estate Investment Trust Index	US	Broad
XAR	Fund	Index Fund Shares	S&P Aerospace & Defense Select Industry Index	US	Broad
XBI	Fund	Index Fund Shares	S&P Biotechnology Select Industry Index	US	Broad
XCEM	Fund	Index Fund Shares	EGAI Emerging Markets ex-China Index	Global	Broad
XES	Fund	Index Fund Shares	S&P Oil & Gas Equipment & Services Select Industry Index	US	Broad
XHB	Fund	Index Fund Shares	S&P Homebuilders Select Industry Index	US	Broad
XHE	Fund	Index Fund Shares	S&P Health Care Equipment Select Industry Index	US	Broad
XHS	Fund	Index Fund Shares	S&P Health Care Services Select Industry Index	US	Broad
XINA	Fund	Index Fund Shares	MSCI China A International IMI Index	Global	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
XITK	Fund	Index Fund Shares	FactSet Innovative Technology Index	US	Broad
XLB	Fund	Index Fund Shares	Materials Select Sector Index	US	Broad
XLE	Fund	Index Fund Shares	Energy Select Sector Index	US	Broad
XLF	Fund	Index Fund Shares	Financial Select Sector Index	US	Broad
XLFS	Fund	Index Fund Shares	Financial Services Select Sector Index	US	Broad
XLG	Fund	Index Fund Shares	S&P 500 Top 50 Index	US	Broad
XLI	Fund	Index Fund Shares	Industrial Select Sector Index	US	Broad
XLK	Fund	Index Fund Shares	Technology Select Sector Index	US	Broad
XLP	Fund	Index Fund Shares	Consumer Staples Select Sector Index	US	Broad
XLRE	Fund	Index Fund Shares	Real Estate Select Sector Index	US	Broad
XLU	Fund	Index Fund Shares	Utilities Select Sector Index	US	Broad
XLV	Fund	Index Fund Shares	Health Care Select Sector Index	US	Broad
XLY	Fund	Index Fund Shares	Consumer Discretionary Select Sector Index	US	Broad
XME	Fund	Index Fund Shares	S&P Metals & Mining Select Industry Index	US	Broad
XMLV	Fund	Index Fund Shares	S&P MidCap 400 Low Volatility Index	US	Broad
XMPT	Fund	Index Fund Shares	S-Network Municipal Bond Closed-End Fund Index	US	Broad
XOP	Fund	Index Fund Shares	S&P Oil & Gas Exploration & Production Select Industry Index	US	Broad
XPH	Fund	Index Fund Shares	S&P Pharmaceuticals Select Industry Index	US	Broad
XPP	Fund	Index Fund Shares	FTSE China 50 Index	Global	Narrow
XRLV	Fund	Index Fund Shares	S&P 500 Low Volatility Rate Response Index	US	Broad
XRT	Fund	Index Fund Shares	S&P Retail Select Industry Index	US	Broad
XSD	Fund	Index Fund Shares	S&P Semiconductor Select Industry Index	US	Broad
XSLV	Fund	Index Fund Shares	S&P SmallCap 600 Low Volatility Index	US	Broad
XSOE	Fund	Index Fund Shares	WisdomTree Emerging Markets ex-State-Owned Enterprises Index	Global	Broad
XSW	Fund	Index Fund Shares	S&P Software & Services Select Industry Index	US	Broad
XT	Fund	Index Fund Shares	Morningstar Exponential Technologies Index	Global	Broad
XTH	Fund	Index Fund Shares	S&P Technology Hardware Select Industry Index	US	Broad
XTL	Fund	Index Fund Shares	S&P Telecom Select Industry Index	US	Broad
XTN	Fund	Index Fund Shares	S&P Transportation Select Industry Index	US	Broad
XWEB	Fund	Index Fund Shares	S&P Internet Select Industry Index	US	Broad
YANG	Fund	Index Fund Shares	FTSE China 50 Index	Global	Broad
BTEC	Fund	Index Fund Shares	Nasdaq Healthcare Innovators Index	US	Broad
EMDD	Fund	Index Fund Shares	INDXX Beyond BRICs Index	Global	Broad
EUFL	Fund	Index Fund Shares	MSCI Europe Financials Index	Global	Broad
EUFS	Fund	Index Fund Shares	MSCI Europe Financials Index	Global	Broad
FINQ	Fund	Index Fund Shares	Solactive FinTech Index	Global	Broad
GENY	Fund	Index Fund Shares	Nasdaq Global Millennial Opportunity Index	Global	Broad
IMED	Fund	Index Fund Shares	ETFx HealthTech Index	Global	Broad

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
LVHI	Fund	Index Fund Shares	QS International Low Volatility High Dividend Index	Global	Broad
MELT	Fund	Index Fund Shares	NYSE Arca Gold Miners Index	Global	Broad
PRNT	Fund	Index Fund Shares	Total 3D-Printing Index	Global	Broad
PUTW	Fund	Index Fund Shares	CBOE S&P 500 PutWrite Index	US	Broad
WTRX	Fund	Index Fund Shares	Zacks Global Water Index	Global	Broad
AADR	Fund	Managed Fund Shares	N/A	US	N/A
ALD	Fund	Managed Fund Shares	N/A	US	N/A
AMZA	Fund	Managed Fund Shares	N/A	US	N/A
ARKG	Fund	Managed Fund Shares	N/A	US	N/A
ARKK	Fund	Managed Fund Shares	N/A	US	N/A
ARKQ	Fund	Managed Fund Shares	N/A	US	N/A
ARKW	Fund	Managed Fund Shares	N/A	US	N/A
AUNZ	Fund	Managed Fund Shares	N/A	US	N/A
BOND	Fund	Managed Fund Shares	N/A	US	N/A
BZF	Fund	Managed Fund Shares	N/A	US	N/A
CCX	Fund	Managed Fund Shares	N/A	US	N/A
CEW	Fund	Managed Fund Shares	N/A	US	N/A
CFGE	Fund	Managed Fund Shares	N/A	US	N/A
CLYH	Fund	Managed Fund Shares	N/A	US	N/A
COMT	Fund	Managed Fund Shares	N/A	Global	N/A
CRDT	Fund	Managed Fund Shares	N/A	US	N/A
CYB	Fund	Managed Fund Shares	N/A	US	N/A
DI	Fund	Managed Fund Shares	N/A	US	N/A
DIVI	Fund	Managed Fund Shares	N/A	US	N/A
DIVY	Fund	Managed Fund Shares	N/A	US	N/A
DWAT	Fund	Managed Fund Shares	N/A	US	N/A
ELD	Fund	Managed Fund Shares	N/A	US	N/A
EMBH	Fund	Managed Fund Shares	N/A	US	N/A
EMCB	Fund	Managed Fund Shares	N/A	US	N/A
EMLP	Fund	Managed Fund Shares	N/A	Global	N/A
EMTL	Fund	Managed Fund Shares	N/A	US	N/A
EPRO	Fund	Managed Fund Shares	N/A	US	N/A
FAAR	Fund	Managed Fund Shares	N/A	Global	N/A
FBND	Fund	Managed Fund Shares	N/A	US	N/A
FCOR	Fund	Managed Fund Shares	N/A	US	N/A
FCVT	Fund	Managed Fund Shares	N/A	US	N/A
FDIV	Fund	Managed Fund Shares	N/A	Global	N/A
FEMB	Fund	Managed Fund Shares	N/A	US	N/A

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
FFTY	Fund	Managed Fund Shares	N/A	US	N/A
FIBR	Fund	Managed Fund Shares	N/A	US	N/A
FLRT	Fund	Managed Fund Shares	N/A	US	N/A
FLTB	Fund	Managed Fund Shares	N/A	US	N/A
FMB	Fund	Managed Fund Shares	N/A	US	N/A
FMF	Fund	Managed Fund Shares	N/A	Global	N/A
FPE	Fund	Managed Fund Shares	N/A	US	N/A
FTGC	Fund	Managed Fund Shares	N/A	Global	N/A
FTHI	Fund	Managed Fund Shares	N/A	US	N/A
FTLB	Fund	Managed Fund Shares	N/A	US	N/A
FTLS	Fund	Managed Fund Shares	N/A	US	N/A
FTSD	Fund	Managed Fund Shares	N/A	US	N/A
FTSL	Fund	Managed Fund Shares	N/A	US	N/A
FTSM	Fund	Managed Fund Shares	N/A	US	N/A
FUT	Fund	Managed Fund Shares	N/A	Global	N/A
FWDB	Fund	Managed Fund Shares	N/A	US	N/A
FWDD	Fund	Managed Fund Shares	N/A	US	N/A
FWDI	Fund	Managed Fund Shares	N/A	US	N/A
GAL	Fund	Managed Fund Shares	N/A	US	N/A
GEUR	Fund	Managed Fund Shares	N/A	US	N/A
GHE	Fund	Managed Fund Shares	N/A	US	N/A
GHS	Fund	Managed Fund Shares	N/A	US	N/A
GIVE	Fund	Managed Fund Shares	N/A	Global	N/A
GMMB	Fund	Managed Fund Shares	N/A	US	N/A
GMOM	Fund	Managed Fund Shares	N/A	US	N/A
GMTB	Fund	Managed Fund Shares	N/A	US	N/A
GSY	Fund	Managed Fund Shares	N/A	US	N/A
GTAA	Fund	Managed Fund Shares	N/A	US	N/A
GTO	Fund	Managed Fund Shares	N/A	US	N/A
GYEN	Fund	Managed Fund Shares	N/A	US	N/A
HDGE	Fund	Managed Fund Shares	N/A	US	N/A
HECO	Fund	Managed Fund Shares	N/A	US	N/A
HOLD	Fund	Managed Fund Shares	N/A	US	N/A
HTUS	Fund	Managed Fund Shares	N/A	US	N/A
HUSE	Fund	Managed Fund Shares	N/A	US	N/A
HYGH	Fund	Managed Fund Shares	N/A	US	N/A
HYLD	Fund	Managed Fund Shares	N/A	US	N/A
HYLS	Fund	Managed Fund Shares	N/A	US	N/A

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
ICN	Fund	Managed Fund Shares	N/A	US	N/A
ICSH	Fund	Managed Fund Shares	N/A	US	N/A
IEIL	Fund	Managed Fund Shares	N/A	Global	N/A
IEIS	Fund	Managed Fund Shares	N/A	Global	N/A
IELG	Fund	Managed Fund Shares	N/A	US	N/A
IESM	Fund	Managed Fund Shares	N/A	US	N/A
ILB	Fund	Managed Fund Shares	N/A	US	N/A
IMOM	Fund	Managed Fund Shares	N/A	Global	N/A
INKM	Fund	Managed Fund Shares	N/A	US	N/A
IVAL	Fund	Managed Fund Shares	N/A	Global	N/A
LALT	Fund	Managed Fund Shares	N/A	Global	N/A
LDUR	Fund	Managed Fund Shares	N/A	US	N/A
LMBS	Fund	Managed Fund Shares	N/A	US	N/A
LQDH	Fund	Managed Fund Shares	N/A	US	N/A
MATH	Fund	Managed Fund Shares	N/A	US	N/A
MAUI	Fund	Managed Fund Shares	N/A	US	N/A
MEAR	Fund	Managed Fund Shares	N/A	US	N/A
MINC	Fund	Managed Fund Shares	N/A	US	N/A
MINT	Fund	Managed Fund Shares	N/A	US	N/A
MUNI	Fund	Managed Fund Shares	N/A	US	N/A
NEAR	Fund	Managed Fund Shares	N/A	US	N/A
NFLT	Fund	Managed Fund Shares	N/A	US	N/A
PDBC	Fund	Managed Fund Shares	N/A	Global	N/A
PHDG	Fund	Managed Fund Shares	N/A	US	N/A
PRME	Fund	Managed Fund Shares	N/A	Global	N/A
PSR	Fund	Managed Fund Shares	N/A	US	N/A
QEH	Fund	Managed Fund Shares	N/A	US	N/A
QMOM	Fund	Managed Fund Shares	N/A	US	N/A
QVAL	Fund	Managed Fund Shares	N/A	US	N/A
RAVI	Fund	Managed Fund Shares	N/A	US	N/A
RFAP	Fund	Managed Fund Shares	N/A	Global	N/A
RFCI	Fund	Managed Fund Shares	N/A	US	N/A
RFDA	Fund	Managed Fund Shares	N/A	US	N/A
RFDI	Fund	Managed Fund Shares	N/A	Global	N/A
RFEM	Fund	Managed Fund Shares	N/A	Global	N/A
RFEU	Fund	Managed Fund Shares	N/A	Global	N/A
RFFC	Fund	Managed Fund Shares	N/A	US	N/A
RFUN	Fund	Managed Fund Shares	N/A	US	N/A

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
RIGS	Fund	Managed Fund Shares	N/A	US	N/A
RLY	Fund	Managed Fund Shares	N/A	US	N/A
RORO	Fund	Managed Fund Shares	N/A	US	N/A
RRF	Fund	Managed Fund Shares	N/A	Global	N/A
SCAP	Fund	Managed Fund Shares	N/A	US	N/A
SMCP	Fund	Managed Fund Shares	N/A	US	N/A
SMMU	Fund	Managed Fund Shares	N/A	US	N/A
SOVB	Fund	Managed Fund Shares	N/A	US	N/A
SRLN	Fund	Managed Fund Shares	N/A	US	N/A
STOT	Fund	Managed Fund Shares	N/A	US	N/A
SYE	Fund	Managed Fund Shares	N/A	US	N/A
SYG	Fund	Managed Fund Shares	N/A	US	N/A
SYLD	Fund	Managed Fund Shares	N/A	US	N/A
SYV	Fund	Managed Fund Shares	N/A	US	N/A
TOTL	Fund	Managed Fund Shares	N/A	US	N/A
TTFS	Fund	Managed Fund Shares	N/A	US	N/A
TUTI	Fund	Managed Fund Shares	N/A	US	N/A
TUTT	Fund	Managed Fund Shares	N/A	US	N/A
UBND	Fund	Managed Fund Shares	N/A	US	N/A
ULST	Fund	Managed Fund Shares	N/A	US	N/A
USDU	Fund	Managed Fund Shares	N/A	US	N/A
UTES	Fund	Managed Fund Shares	N/A	US	N/A
VALX	Fund	Managed Fund Shares	N/A	US	N/A
VAMO	Fund	Managed Fund Shares	N/A	US	N/A
VEGA	Fund	Managed Fund Shares	N/A	US	N/A
VMAX	Fund	Managed Fund Shares	N/A	US	N/A
VMIN	Fund	Managed Fund Shares	N/A	US	N/A
WBIA	Fund	Managed Fund Shares	N/A	US	N/A
WBIB	Fund	Managed Fund Shares	N/A	US	N/A
WBIC	Fund	Managed Fund Shares	N/A	US	N/A
WBID	Fund	Managed Fund Shares	N/A	US	N/A
WBIE	Fund	Managed Fund Shares	N/A	US	N/A
WBIF	Fund	Managed Fund Shares	N/A	US	N/A
WBIG	Fund	Managed Fund Shares	N/A	US	N/A
WBIH	Fund	Managed Fund Shares	N/A	US	N/A
WBII	Fund	Managed Fund Shares	N/A	US	N/A
WBIL	Fund	Managed Fund Shares	N/A	US	N/A
WDTI	Fund	Managed Fund Shares	N/A	Global	N/A

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
WYDE	Fund	Managed Fund Shares	N/A	US	N/A
HDMV	Fund	Managed Fund Shares	N/A	Global	N/A
HUSV	Fund	Managed Fund Shares	N/A	US	N/A
PMPT	Fund	Managed Fund Shares	N/A	US	N/A
WBIR	Fund	Managed Fund Shares	N/A	Global	N/A
OILD	Fund	Paired Class Shares	S&P GSCI Crude Oil Index Excess Return	US	Broad
OILU	Fund	Paired Class Shares	S&P GSCI Crude Oil Index Excess Return	US	Broad
VXDN	Fund	Paired Class Shares	CBOE Volatility Index	US	Broad
VXUP	Fund	Paired Class Shares	CBOE Volatility Index	US	Broad
BNO	Fund	Partnership Units	Brent Oil Index Futures	Global	Broad
DNO	Fund	Partnership Units	Light Sweet Crude Oil Futures	US	Broad
UGA	Fund	Partnership Units	RBOB Gasoline Futures	US	Broad
UHN	Fund	Partnership Units	Heating Oil Futures	US	Broad
UNG	Fund	Partnership Units	Henry Hub Natural Gas Futures	US	Broad
UNL	Fund	Partnership Units	Henry Hub Natural Gas Futures	US	Broad
USL	Fund	Partnership Units	Light Sweet Crude Oil Futures	US	Broad
USO	Fund	Partnership Units	Light Sweet Crude Oil Futures	US	Broad
ADRA	Fund	Portfolio Depositary Receipts	BNY Mellon Asia 50 ADR Index	US	Broad
ADRD	Fund	Portfolio Depositary Receipts	BNY Mellon Developed Markets 100 ADR Index	US	Broad
ADRE	Fund	Portfolio Depositary Receipts	BNY Mellon Emerging Markets 50 ADR Index	US	Broad
ADRU	Fund	Portfolio Depositary Receipts	BNY Mellon Europe Select ADR Index	US	Broad
DIA	Fund	Portfolio Depositary Receipts	Dow Jones Industrial Average	US	Broad
MDY	Fund	Portfolio Depositary Receipts	S&P MidCap 400 Index	US	Broad
QQQ	Fund	Portfolio Depositary Receipts	NASDAQ-100 Index	US	Broad
SPY	Fund	Portfolio Depositary Receipts	S&P 500 Index	US	Broad
BOIL	Trust	Trust Issued Receipts	Bloomberg Natural Gas Subindex	US	Narrow
CANE	Trust	Trust Issued Receipts	Sugar Futures Contracts	US	Narrow
CMDT	Trust	Trust Issued Receipts	Bloomberg Roll Select Commodity Index - Excess Return	US	Narrow
CORN	Trust	Trust Issued Receipts	CBOT Corn Futures Contract	US	Narrow
CPER	Trust	Trust Issued Receipts	SummerHaven Copper Index	US	Broad
CROC	Trust	Trust Issued Receipts	4:00 p.m. ET Australian dollar in U.S. dollar terms (AUD/USD cross rate) as published by Bloomberg	US	Narrow
DBA	Trust	Trust Issued Receipts	DBIQ Diversified Agriculture Index Excess Return	US	Broad
DBB	Trust	Trust Issued Receipts	DBIQ Optimum Yield Industrial Metals Index Excess Return	Global	Narrow
DBC	Trust	Trust Issued Receipts	DBIQ Optimum Yield Diversified Commodity Index Excess Return	Global	Broad
DBE	Trust	Trust Issued Receipts	DBIQ Optimum Yield Energy Index Excess Return	US	Narrow
DBO	Trust	Trust Issued Receipts	DBIQ Optimum Yield Crude Oil Index Excess Return	US	Narrow
DBP	Trust	Trust Issued Receipts	DBIQ Optimum Yield Precious Metals Index Excess Return	US	Narrow

Attachment A to Form 19b-4(e)

<u>(6) Ticker Symbol</u>	<u>(2) Type of Issuer of NDSP</u>	<u>(3) Class of NDSP</u>	<u>(4) Name of Underlying Instrument</u>	<u>(7) Market(s) upon Which Securities Comprising Underlying Instrument Trades</u>	<u>(5) Broad or Narrow</u>
DBS	Trust	Trust Issued Receipts	DBIQ Optimum Yield Silver Index Excess Return	US	Narrow
DBV	Trust	Trust Issued Receipts	Deutsche Bank G10 Currency Future Harvest Index - Excess Return	US	Narrow
DGL	Trust	Trust Issued Receipts	DBIQ Optimum Yield Gold Index Excess Return	US	Narrow
EUFX	Trust	Trust Issued Receipts	4:00 p.m. ET euro in U.S. dollar terms (EUR/USD cross rate) as published by Bloomberg	US	Narrow
GCC	Trust	Trust Issued Receipts	Continuous Commodity Total Return Index	US	Broad
KOLD	Trust	Trust Issued Receipts	Bloomberg Natural Gas Subindex	US	Narrow
RISE	Trust	Trust Issued Receipts	Sit Rising Rate ETF Benchmark Portfolio	US	Narrow
SOYB	Trust	Trust Issued Receipts	CBOT Soybean Futures Contract	US	Narrow
SVXY	Trust	Trust Issued Receipts	S&P 500 VIX Short-Term Futures Index - Excess Return	US	Narrow
TAGS	Trust	Trust Issued Receipts	CBOT Corn Futures Contract, CBOT Wheat Futures Contract, CBOT Soybean Futures Contract, Sugar Futures Contracts	US	Narrow
TONS	Trust	Trust Issued Receipts	Rotterdam Coal Futures Contracts (Argus/McCloskey Coal Price Index)	US	Broad
UDN	Trust	Trust Issued Receipts	Deutsche Bank Short US Dollar Index Futures Index - Excess Return	US	Narrow
USAG	Trust	Trust Issued Receipts	SummerHaven Agriculture Index Total Return	Global	Broad
USCI	Trust	Trust Issued Receipts	SummerHaven Dynamic Commodity Index	Global	Broad
UUP	Trust	Trust Issued Receipts	Deutsche Bank Long US Dollar Index Futures Index - Excess Return	US	Narrow
UVXY	Trust	Trust Issued Receipts	S&P 500 VIX Short-Term Futures Index - Excess Return	US	Narrow
VIXM	Trust	Trust Issued Receipts	S&P 500 VIX Mid-Term Futures Index Excess Return	US	Narrow
VIXY	Trust	Trust Issued Receipts	S&P 500 VIX Short-Term Futures Index	US	Narrow
WEAT	Trust	Trust Issued Receipts	CBOT Wheat Futures Contract	US	Narrow