



Find out which ETFs are commission-free at Vanguard

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Commission-free*

Vanguard ETFs® (exchange-traded funds)

Ticker	Name
BIV	VANGUARD INTERMEDIATE-TERM BOND ETF
BLV	VANGUARD LONG-TERM BOND ETF
BND	VANGUARD TOTAL BOND MARKET ETF
BNDW	VANGUARD TOTAL WORLD BOND ETF
BNDX	VANGUARD TOTAL INTERNATIONAL BOND ETF
BSV	VANGUARD SHORT-TERM BOND ETF
EDV	VANGUARD EXTENDED DURATION TREASURY ETF
ESGV	VANGUARD ESG U.S. STOCK ETF
IVOG	VANGUARD S&P MID-CAP 400 GROWTH ETF
IVOO	VANGUARD S&P MID-CAP 400 ETF
IVOV	VANGUARD S&P MID-CAP 400 VALUE ETF
MGC	VANGUARD MEGA CAP ETF
MGK	VANGUARD MEGA CAP GROWTH ETF
MGV	VANGUARD MEGA CAP VALUE ETF
VAW	VANGUARD MATERIALS ETF
VB	VANGUARD SMALL-CAP ETF
VBK	VANGUARD SMALL-CAP GROWTH ETF
VBR	VANGUARD SMALL-CAP VALUE ETF
VCIT	VANGUARD INTERMEDIATE-TERM CORP BOND ETF
VCLT	VANGUARD INTERMEDIATE-TERM CORP BOND ETF
VCR	VANGUARD CONSUMER DISCRETIONARY ETF
VCSH	VANGUARD SHORT-TERM CORPORATE BOND ETF
VDC	VANGUARD CONSUMER STAPLES ETF
VDE	VANGUARD ENERGY ETF
VEA	VANGUARD FTSE DEVELOPED MARKETS ETF
VEU	VANGUARD FTSE ALL-WORLD EX-US ETF
VFH	VANGUARD FINANCIALS ETF
VFLQ	VANGUARD U.S. LIQUIDITY FACTOR ETF
VFMF	VANGUARD U.S. MULTIFACTOR ETF

Vanguard ETFs (continued)

Ticker	Name
VFMO	VANGUARD U.S. MOMENTUM FACTOR ETF
VMV	VANGUARD U.S. MINIMUM VOLATILITY ETF
VFQY	VANGUARD U.S. QUALITY FACTOR ETF
VFVA	VANGUARD U.S. VALUE FACTOR ETF
VGIT	VANGUARD INTERMEDIATE-TERM TREASURY ETF
VGK	VANGUARD FTSE EUROPE ETF
VGLT	VANGUARD LONG-TERM TREASURY ETF
VGSH	VANGUARD SHORT-TERM TREASURY ETF
VGT	VANGUARD INFORMATION TECHNOLOGY ETF
VHT	VANGUARD HEALTH CARE ETF
VIG	VANGUARD DIVIDEND APPRECIATION ETF
VIGI	VANGUARD INTERNAT DIV APPRECIATION ETF
VIOG	VANGUARD S&P SMALL-CAP 600 GROWTH ETF
VIOO	VANGUARD S&P SMALL-CAP 600 ETF
VIOV	VANGUARD S&P SMALL-CAP 600 VALUE ETF
VIS	VANGUARD INDUSTRIALS ETF
VMBS	VANGUARD MORTGAGE-BACKED SECURITIES ETF
VNQ	VANGUARD REAL ESTATE ETF
VNQI	VANGUARD GLOBAL EX-U.S. REAL ESTATE ETF
VO	VANGUARD MID-CAP ETF
VOE	VANGUARD MID-CAP VALUE ETF
VONE	VANGUARD RUSSELL 1000 ETF
VONG	VANGUARD RUSSELL 1000 GROWTH ETF
VONV	VANGUARD RUSSELL 1000 VALUE ETF
VOO	VANGUARD S&P 500 ETF
VOOG	VANGUARD S&P 500 GROWTH ETF
VOOV	VANGUARD S&P 500 VALUE ETF
VOT	VANGUARD MID-CAP GROWTH ETF
VOX	VANGUARD COMMUNICATION SERVICES ETF

Commission-free ETFs

Vanguard ETFs *(continued)*

Ticker	Name
VPL	VANGUARD FTSE PACIFIC ETF
VPU	VANGUARD UTILITIES ETF
VSGX	VANGUARD ESG INTERNATIONAL STOCK ETF
VSS	VANGUARD FTSE ALL-WORLD EX-US SM-CAP ETF
VT	VANGUARD TOTAL WORLD STOCK ETF
VTC	VANGUARD TOTAL CORPORATE BOND ETF
VTEB	VANGUARD TAX-EXEMPT BOND ETF
VTHR	VANGUARD RUSSELL 3000 ETF
VTI	VANGUARD TOTAL STOCK MARKET ETF
VTIP	VANGUARD SHORT-TERM INFLAT-PROT SECS ETF
VTV	VANGUARD VALUE ETF
VTWG	VANGUARD RUSSELL 2000 GROWTH ETF
VTWO	VANGUARD RUSSELL 2000 ETF
VTWV	VANGUARD RUSSELL 2000 VALUE ETF
VUG	VANGUARD GROWTH ETF
W	VANGUARD LARGE-CAP ETF
VWO	VANGUARD FTSE EMERGING MARKETS ETF
VWOB	VANGUARD EMERGING MARKETS GOV BOND ETF
VXF	VANGUARD EXTENDED MARKET ETF
VXUS	VANGUARD TOTAL INTERNATIONAL STOCK ETF
VYM	VANGUARD HIGH DIVIDEND YIELD ETF
VYMI	VANGUARD INTERNAT HIGH DIVIDEND YIELD ETF

ETFs from other companies

Aberdeen

Ticker	Name
AOIL	CRUDE OIL K-1 FREE

Active Weighting Funds ETF Trust

Ticker	Name
PLCY	EVENTSHARES US POLICY ALPHA

ACQUIRERS

Ticker	Name
ZIG	ETF ACQUIRERS ETF

AdvisorShares

Ticker	Name
AADR	ADVISORSHARES DORSEY WRIGHT ADR ETF
ACT	ADVISORSHARES VICE ETF
CWS	ADVISORSHARES FOCUSED EQUITY ETF
BKCH	ADVISORSHARES SABRETOOTH ETF
DBLV	ADVISORSHARES DOUBLELINE VALUE EQUITY ETF
DWMC	ADVISORSHARES DORSEY WRIGHT MICRO-CAP
DWSH	ADVISORSHARES DORSEY WRIGHT SHORT ETF
FLRT	ADVISORSHARES PACIFIC ASSET ENHCD FLT RT
FNG	ADVISORSHARES NEW TECH AND MEDIA ETF
FWDB	MADRONA GLOBAL BOND ETF
HOLD	ADVISORSHARES SAGE CORE RESERVES
MINC	ADVISORSHARES NEWFLEET MULTI-SECTOR INC
SCAP	ADVISORSHARES CORNERSTONE SMALL CAP ETF
VEGA	ADVISORSHARES STAR GLOBAL BUY-WRITE ETF

AGFIQ

Ticker	Name
BTAL	AGFIQ U.S. MKT NEUTRAL ANTI-BETA FACTOR
CHEP	AGFIQ U.S. MKT NEUTRAL VALUE FACTOR
DIVA	AGFIQ HEDGED DIVIDEND INCOME FUND
GLIF	AGFIQ GLOBAL INFRASTRUCTURE ETF
MOM	AGFIQ U.S. MARKET NEUTRAL MOMENTUM FUND
SIZ	AGFIQ U.S. MARKET NEUTRAL SIZE FUND
USHG	AGFIQ DYNAMIC HEDGED U.S. EQUITY ETF

Alpha Architect

Ticker	Name
FRDM	ALPHA ARCHITECT FREEDOM 100 EMERGING MARKETS ETF
IMOM	ALPHA ARCHITECT INTL QUANT MOMENTUM
IVAL	ALPHA ARCHITECT INTL QUANT VALUE

Commission-free ETFs

Alpha Architect *(continued)*

Ticker	Name
QMOM	ALPHA ARCHITECT U.S. QUANT MOMENTUM
QVAL	ALPHA ARCHITECT U.S. QUANT VALUE ETF
VMOT	ALPHA ARCHITECT VALUE MOMENTUM TREND

ALPS

Ticker	Name
ACES	ALPS CLEAN ENERGY ETF
AMLP	ALERIAN MLP ETF
BFOR	BARRON'S 400 ETF
DTEC	ALPS DISRUPTIVE TECHNOLOGIES ETF
EDOG	ALPS EMERGING SECTOR DIVIDEND DOGS ETF
ENFR	ALERIAN ENERGY INFRASTRUCTURE ETF
EQL	ALPS EQUAL SECTOR WEIGHT
GRI	COHEN & STEERS GL RLTY MAJ
IDOG	ALPS INTERNATIONAL SECTOR DIVIDEND DOGS
RFCI	RIVERFRONT DYNAMIC CORE INCOME ETF
RFDA	RIVERFRONT DYNAMIC US DIVIDEND ADVANTAGE
RFFC	RIVERFRONT DYNAMIC US FLEX-CAP ETF
RFUN	RIVERFRONT DYNAMIC UNCONSTRAINED INCOME
RIGS	RIVERFRONT STRATEGIC INCOME FUND
SBIO	ALPS MEDICAL BREAKTHROUGHS ETF
SDOG	ALPS SECTOR DIVIDEND DOGS ETF
SGDJ	SPROTT JUNIOR GOLD MINERS ETF
SGDM	SPROTT GOLD MINERS ETF

American Century ETF Trust

Ticker	Name
KORP	AMERICAN CENTURY DIVERSIFIED CORP BD ETF
TAXF	AMERICAN CENTURY DIVERSIFIED MUNI BD ETF
QINT	AMERICAN CENTURY QLTY DIVERSIFIED INTL ETF
VALQ	AMERICAN CENTURY STOXX U.S. QUALITY VAL
QGRO	AMERICAN CENTURY STOXX U.S. QLTY GR ETF

Amplify Investments LLC

Ticker	Name
BATT	AMPLIFY ADVANCED BATTERY METALS & MATRLS
BLOK	AMPLIFY TRANSFORMATIONAL DATA SHARING
DIVO	AMPLIFY YIELDSHARES CWP DIV & OPT INCOME
EASI	AMPLIFY EASI TACTICAL GROWTH ETF
IBUY	AMPLIFY ONLINE RETAIL ETF
LEND	AMPLIFY CROWDBUREAU PEER TO PEER LENDING & CROWDFUNDING ETF
SWAN	AMPLIFY BLACKSWAN GROWTH & TREASURY CORE ETF
XBUY	AMPLIFY INTL ONLINE RETAIL ETF

Anfield

Ticker	Name
AFIF	TWO ROADS ANFIELD UNIVERSAL FIXED INCOME ETF
DALT	ANFIELD CAPITAL DIVERSIFIED ALTERNATIVES
LSAF	TWO ROADS LEADERSHARES ALPHAFACOR CORE ETF

ACQUIRERS

Ticker	Name
ZIG	ETF ACQUIRERS ETF

ARK ETF Trust

Ticker	Name
ARKF	ARK FINTECH INNOVATION ETF
ARKG	ARK GENOMIC REVOLUTION MULTI-SECTOR ETF
ARKK	ARK INNOVATION ETF
ARKQ	ARK INDUSTRIAL INNOVATION ETF
ARKW	ARK WEB X.0 ETF
IZRL	ARK ISRAEL INNOVATIVE TECHNOLOGY ETF
PRNT	3D PRINTING (THE)

Commission-free ETFs

ArrowShares

Ticker	Name
ARCM	ARROW RESERVE CAPITAL MANAGEMENT ETF
DOGS	ARROW DOGS OF THE WORLD ETF
DWAT	ARROW INVMTS TR ARROW DWA TACTICAL ETF
DWCR	ARROW DWA COUNTRY ROTATION ETF
GYLD	ARROW DOW JONES GLOBAL YIELD
QVM	ARROW QVM EQUITY FACTOR ETF

Belpoint

Ticker	Name
TBND	TACTICAL INCOME ETF

BioShares Biotechnology

Ticker	Name
BBC	VIRTUS LIFESCI BIOTECH CLINICAL TRIALS
BBP	VIRTUS LIFESCI BIOTECH PRODUCTS ETF
PFFA	VIRTUS INFRACAP U.S. PREFERRED STOCK ETF

Cambria

Ticker	Name
CCOR	CAMBRIA CORE EQUITY ETF
EYLD	CAMBRIA EMERGING SHAREHOLDER YIELD ETF
FYLD	CAMBRIA FOREIGN SHAREHOLDER YIELD
GAA	CAMBRIA GLOBAL ASSET ALLOCATION ETF
GMOM	CAMBRIA GLOBAL MOMENTUM ETF
GVAL	CAMBRIA GLOBAL VALUE ETF
SOVB	CAMBRIA SOVEREIGN BOND ETF
SYLD	CAMBRIA SHAREHOLDER YIELD ETF
TAIL	CAMBRIA TAIL RISK ETF
TRTY	CAMBRIA TRINITY ETF
VAMO	CAMBRIA VALUE AND MOMENTUM ETF

Capital Wealth Advisors

Ticker	Name
CWAI	CWA INCOME ETF

Columbia

Ticker	Name
DIAL	COLUMBIA DIVERSIFIED FIX INCM ALLOCATION
ECON	COLUMBIA EMERGING MARKETS CONSUMER ETF
ESGN	COLUMBIA SUSTAINABLE INTERNATIONAL EQTY
ESGS	COLUMBIA SUSTAINABLE U.S. EQUITY INCOME
ESGW	COLUMBIA SUSTAINABLE GLOBAL EQUITY INCOM
INCO	COLUMBIA INDIA CONSUMER ETF
MUST	COLUMBIA MULTI SECTOR MUNI INCOME ETF
XCEM	COLUMBIA EM CORE EX-CHINA ETF

CSOP ETF Trust

Ticker	Name
AFTY	CSOP FTSE CHINA A50
CNHX	CSOP MSCI CHINA A INTERNATIONAL HEDGED

Cushing

Ticker	Name
XLEY	CUSHING ENERGY & MLP ETF
XLSY	CUSHING ENERGY SUPPLY CHAIN & MLP ETF
XLTY	CUSHING TRANSPORTATION & MLP ETF
XLUY	CUSHING UTILITY & MLP ETF

Davis Fundamental ETF Trust

Ticker	Name
DFNL	DAVIS SELECT FINANCIAL ETF
DINT	DAVIS SELECT INTERNATIONAL ETF
DUSA	DAVIS SELECT U.S. EQUITY ETF
DWLD	DAVIS SELECT WORLDWIDE ETF

Commission-free ETFs

Defiance

Ticker	Name
FIVG	DEFIANCE NEXT GEN CONNECTIVITY ETF
QTUM	DEFIANCE QUANTUM ETF
VIDG	DEFIANCE NEXT GENERATION VIDEO GAMING ETF

Direxion

Ticker	Name
COM	DIREXION AUSPICE BROAD COMMODITY STRAT
KNOW	DIREXION ALL CAP INSIDER SENTIMENT SHR
QQQE	DIREXION NASDAQ-100 EQUAL WEIGHTED INDE
RWCD	DIREXION MSCI CYCLICALS OVER DEFENSIVES ETF
RWDC	DIREXION MSCI DEFENSIVES OVER CYCLICAL ETF
RWDE	DIREXION MSCI DEVELOPED OVER EMERGING MARKETS ETF
RWED	DIREXION MSCI EMERGING OVER DEVELOPED MARKETS ETF
RWGV	DIREXION RUSSELL 1000 GROWTH OVER VALUE ETF
RWIU	DIREXION FTSE RUSSELL INTL OVER U S ETF
RWLS	DIREXION RUSSELL LARGE OVER SMALL CAP ETF
RWSL	DIREXION RUSSELL SMALL OVER LARGE ETF
RWUI	DIREXION FTSE RUSSELL US OVER INTL ETF
RWVG	DIREXION RUSSELL 1000 VALUE OVER GROWTH ETF
ZMLP	DIREXION ZACKS MLP HIGH INCOME INDEX SHS

Distillate

Ticker	Name
DSTL	DISTILLATE U.S. FUNDAMENTAL STABILITY & VALUE ETF

DWS Xtrackers

Ticker	Name
ACSG	XTRACKERS MSCI ACWI EX USA ESG LEADERS EQUITY ETF
ASHR	XTRACKERS HARVEST CSI 300 CHINA A-SHARE
ASHS	XTRACKERS HARVEST CSI 500 CHINA A-SH SM CP
ASHX	XTRACKERS MSCI CHINA A INCLUSION EQUITY
CN	XTRACKERS MSCI ALL CHINA EQUITY ETF

DWS Xtrackers *(continued)*

Ticker	Name
DBAW	XTRACKERS MSCI ALL WORLD EX US HDG EQ
DBEF	XTRACKERS MSCI EAFE HDG EQ
DBEM	XTRACKERS MSCI EMG MKT HDG EQ
DBEU	XTRACKERS MSCI EUROPE HEDGED EQUITY ETF
DBEZ	XTRACKERS MSCI EUROZONE HDG EQ ETF
DBGR	XTRACKERS MSCI GERMANY HDG EQ ETF
DBJP	XTRACKERS MSCI JAPAN HEDGED EQUITY ETF
DBKO	XTRACKERS MSCI SOUTH KOREA HEDGED EQ
DEEF	XTRACKERS FTSE DEV EX US COMPREH FACTOR
DEMG	XTRACKERS FTSE EMERG COMPREHEN FACTOR
DESC	XTRACKERS RUSSELL 2000 COMPREHEN FACTOR
DEUS	XTRACKERS RUSSELL 1000 COMPREHEN FACTOR
EASG	MSCI EAFE ESG LEADERS EQUITY ETF
EMIH	XTRACKERS EMRG MKT BD - INT RT HDG
EMSG	XTRACKERS MSCI EMERGING MARKETS ESG LEADERS EQUITY ETF
EURZ	XTRACKERS MSCI SOUTHERN EUROPE
HAUZ	XTRACKERS INTL REAL ESTATE ETF
HDAW	XTRACKERS MSCI ALL WLD EX US HI DIV YLD EQ
HDEF	XTRACKERS MSCI EAFE HI DIV YIELD EQUITY
HYDW	XTRACKERS LOW BETA HIGH YIELD BOND ETF
HYIH	XTRACKERS HI YLD CP BD INT RT HEDG
HYLB	XTRACKERS USD HI YLD CORP BD ETF
HYUP	XTRACKERS HIGH BETA HIGH YIELD BOND ETF
IFIX	XTRACKERS BARCLAYS INTL CORP
IGIH	XTRACKERS IVMT GRD BD - INT RT HDG
IGVT	XTRACKERS BARCLAYS INTL TREA
JPN	XTRACKERS JAPAN JPX-NIKKEI 400 ETF
PACA	XTRACKERS MSCI LATIN AMER PAC ALLIANCE ETF
QARP	XTRACKERS RUSSELL 1000 US QARP ETF
RVNU	XTRACKERS MUNI INFRASTRUCTURE REV BD ETF
SHYL	XTRACKERS SHORT DURATION HIGH YIELD BOND
SNPE	XTRACKERS S&P 500 ESG ETF
USSG	XTRACKERS MSCI USA ESG LEADERS EQUITY ETF

Commission-free ETFs

EntrepreneurShares Series Trust

Ticker	Name
ENR	ERSHARES ENTREPRENEUR 30 ETF
ERSX	ERSHARES NON-US SMALL CAP FUND

ETF Managers Trust

Ticker	Name
AIEQ	AI POWERED EQUITY ETF
BDRY	BREAKWAVE DRY BULK SHIPPING ETF
BIKR	ROGERS AI GLOBAL MACRO ETF
ETHO	ETHO CLIMATE LEADERSHIP U.S. ETF
GAMR	ETFMG VIDEO GAME TECH ETF
HACK	ETFMG PRIME CYBER SECURITY ETF
IFLY	ETFMG DRONE ECONOMY STRATEGY ETF
IPAY	ETFMG PRIME MOBILE PAYMENTS ETF
ITEQ	BLUESTAR ISRAEL TECHNOLOGY ETF
MJ	ETFMG ALTERNATIVE HARVEST ETF
RISE	ETF MANAGERS GROUP COMMODITY TR I
SILJ	ETFMG PRIME JUNIOR SILVER ETF

ETF Securities

Ticker	Name
BCD	ETFS BLOOMBERG ALL COMMODITY LONGER
BCI	ETFS BLOOMBERG ALL COMMODITY STRAT K-1
GLTR	ETFS PHYSICAL PRECIOUS METAL BASKET SHAR
PALL	ETFS PHYSICAL PALLADIUM SHARES
PPLT	ETFS PHYSICAL PLATINUM SHARES
SGOL	ETFS GOLD TRUST
SIVR	ETFS PHYSICAL SILVER SHARES

ETF Series Solutions

Ticker	Name
ACSI	AMERICAN CUSTOMER SATISFACTION ETF
AIQ	AI POWERED INTERNATIONAL EQUITY ETF
ALFA	ALPHA CLONE ALTERNATIVE ALPHA ETF
BEMO	APTUS BEHAVIORAL MOMENTUM ETF
BOON	NYSE PICKENS OIL RESPONSE ETF

ETF Series Solutions *(continued)*

Ticker	Name
BVAL	BRAND VALUE ETF
CHGX	CHANGE FINANCE US LARGE CAP FOSSIL FUEL
CNCR	LONCAR CANCER IMMUNOTHERAPY
DMDV	S&P DEVELOPED MKTS HIGH DIVID VALUE ETF
DVP	DEEP VALUE ETF
EEMD	AAM S&P EMERGING MKT HIGH DIV VALUE ETF
FTVA	APTUS FORTIFIED VALUE ETF
GOAU	US GLOBAL GO GOLD & PRECIOUS METAL MINER
JETS	U.S. GLOBAL JETS ETF
KNG	CBOE VEST S&P 500 DIV ARISTOCRATS TARGET
LSLT	SALT LOW TRUBETA US MARKET ETF
MAGA	POINT BRIDGE GOP STOCK TRACKER ETF
MSUS	LHA MARKET STATE U.S. TACTICAL ETF
MXDE	NATIONWIDE MAXIMUM DIVERSIFICATION EMERG
MXDU	NATIONWIDE MAX DIVER U.S. CORE EQUITY
OCIO	CLEARSHARES OCIO ETF
OPER	CLEARSHARES ULTRA-SHORT MATURITY ETF
OSCV	OPUS SMALL CAP VALUE PLUS ETF
RBIN	NATIONWIDE RISK-BASED INTL EQUITY ETF
RBUS	NATIONWIDE RISK-BASED U.S. EQUITY ETF
RVRS	REVERSE CAP WEIGHTED US LARGE CAP ETF
SLT	SALT TRUBETA HIGH EXPOSURE ETF
SMCP	ALPHAMARK ACTIVELY MANAGED SMALL CAP ETF
SPDV	AAM S&P 500 HIGH DIVIDEND VALUE ETF
TCTL	PREMISE CAPITAL FRONTIER ADVANTAGE DIV T
USAI	AMERICAN ENERGY INDEPENDENCE ETF
VALX	VALIDEA MARKET LEGENDS ETF
VBND	VIDENT CORE U.S. BOND STRATEGY FUND
VIDI	VIDENT INTERNATIONAL EQUITY FUND
VUSE	VIDENT CORE US EQUITY ETF

Commission-free ETFs

ETFs Series Trust I

Ticker	Name
AMZA	INFRACAP MLP ETF
EMEM	VIRTUS GLOVISTA EMERGING MARKETS ETF
PFFR	INFRACAP REIT PREFERRED ETF
UTES	REAVES UTILITIES ETF
VGFO	VIRTUS WMC GLOBAL FACTOR OPPORTUNITIES
VPC	ETFIS VIRTUS PRIVATE CREDIT STRATEGY ETF
VRAI	ETFIS REAL ASSET INCOME ETF

Exchange Listed Funds Trust

Ticker	Name
AMOM	QRAFT AI-ENHANCED U.S. LARGE CAP MOMENTUM ETF
HONR	INSIGHTSHARES PATRIOTIC EMPLOYERS ETF
HYLD	PERITUS HIGH YIELD ETF
PPTY	PPTY U.S. DIVERSIFIED REAL ESTATE ETF
PRID	INSIGHTSHARES LGBT EMPLOYMENT EQUALITY
QRFT	QRAFT AI-ENHANCED U.S. LARGE CAP ETF

Exchange Traded Concepts

Ticker	Name
BERN	BERNSTEIN U.S. RESEARCH FUND
BRGL	BERNSTEIN GLOBAL RESEARCH FUND
EKAR	INNOVATION SHARES NEXTGEN VEHICLES TECH
EMQQ	EMQQ EMERG MKTS INTERNET ECOMMERCE ETF
FLAG	EXCH TRADED CONCEPTS TR WEATHERSTORM
HTUS	HULL TACTICAL US ETF
KLDW	KNOWLEDGE LEADERS DEVELOPED WORLD ETF
KOIN	INNOVATION SHARES NEXTGEN PROTOCOL ETF
UTRN	VESPER US LARGE CAP SHORT-TERM REVERSAL ETF
ROBO	ROBO GLOBAL ROBOTICS & AUTOMATION INDEX
YYY	YIELDSHARES HIGH INCOME ETF

Fidelity

Ticker	Name
FBND	FIDELITY TOTAL BOND ETF
FCOM	FIDELITY MSCI TELECOMMUNICATION SERVICES
FCOR	FIDELITY CORPORATE BOND ETF
FDEM	FIDELITY TARGETED EMERGING MARKETS FACTOR ETF
FDEV	FIDELITY TARGETED INTL FACTOR ETF
FDHY	FIDELITY HIGH YIELD FACTOR ETF
FDIS	FIDELITY MSCI CONSUMER DISCRETIONARY IND
FDLO	FIDELITY LOW VOLATILITY FACTOR ETF
FDMO	FIDELITY MOMENTUM FACTOR ETF
FDRR	FIDELITY DIVIDEND ETF FOR RISING RATES
FDVW	FIDELITY HIGH DIVIDEND ETF
FENY	FIDELITY MSCI ENERGY INDEX ETF
FHLC	FIDELITY MSCI HEALTH CARE INDEX ETF
FIDI	FIDELITY INTERNATIONAL HIGH DIVIDEND ETF
FIDU	FIDELITY MSCI INDUSTRIALS INDEX ETF
FIVA	FIDELITY INTERNATIONAL VALUE FACTOR ETF
FLDR	FIDELITY LOW DURATION BOND FACTOR ETF
FLTB	FIDELITY LIMITED TERM BOND ETF
FMAT	FIDELITY MSCI MATERIALS INDEX ETF
FNCL	FIDELITY MSCI FINANCIALS INDEX ETF
FOAL	FIDELITY QUALITY FACTOR ETF
FREL	FIDELITY MSCI REAL ESTATE INDEX ETF
FSMD	FIDELITY SMALL MID FACTOR ETF
FSTA	FIDELITY MSCI CONSUMER STAPLES INDEX ETF
FTEC	FIDELITY MSCI INFORMATION TECHNOLOGY IND
FUTY	FIDELITY MSCI UTILITIES INDEX ETF
FVAL	FIDELITY VALUE FACTOR ETF
ONEQ	FIDELITY NASDAQ COMP IDX FD

First Trust

Ticker	Name
AIRR	FIRST TRUST RBA AMERICAN INDUSTRIAL RENA
BICK	FIRST TRUST BICK INDEX
CARZ	FIRST TRUST NASDAQ GLOBAL AUTO INDEX FUND
CIBR	FIRST TRUST NASDAQ CYBERSECURITY ETF

Commission-free ETFs

First Trust *(continued)*

Ticker	Name
DALI	FIRST TRUST DORSEY WRIGHT DALI 1 ETF
DDIV	DORSEY WRIGHT MOMENTUM & DIVID ETF
DVLU	DORSEY WRIGHT MOMENTUM & VALUE ETF
DVOL	DORSEY WRIGHT MOMENTUM & LOW VOL ETF
DWPP	FIRST TRUST DORSEY WRIGHT PEOPLE'S PORT
EDOW	FIRST TRUST DOW 30 EQUAL WEIGHT ETF
EMLP	FIRST TRUST NORTH AMERICAN ENERGY INFRA
ERM	EQUITYCOMPASS RISK MANAGER ETF
FAAR	FIRST TRUST ALTERNATIVE ABSOLUTE RETURN
FAB	FIRST TRUST MULTI CAP VALUE ALPHADEX FD
FAD	FIRST TRUST MULTI CAP GROWTH ALPHADEX
FAN	FIRST TRUST GLOBAL WIND ENERGY ETF
FAUS	FIRST TRUST AUSTRALIA ALPHADEX FUND
FBT	FIRST TRUST NYSE ARCA BIOTECH
FBZ	FIRST TRUST BRAZIL ALPHADEX FUND
FCA	FIRST TRUST CHINA ALPHADEX FUND
FCAL	FIRST TRUST CALIFORNIA MUNI HI INCM ETF
FCAN	FIRST TRUST CANADA ALPHADEX FUND
FCEF	FIRST TRUST CEF INCOME OPPORTUNITY ETF
FCG	FIRST TRUST NATURAL GAS ETF
FCTR	FIRST TRUST LUNT U.S. FACTOR ROTATION ETF
FCVT	FIRST TRUST SSI STRATEGIC CONVERTIBLE
FDD	FIRST TRUST STOXX EURO SEL DIV INCM FD
FDIV	FIRST TRUST STRATEGIC INCOME ETF
FDL	FIRST TRUST MORNINGSTAR DIV
FDM	FIRST TRUST TR DJ SELECT MICRO CAP
FDN	FIRST TRUST DJ INTERNET IDX
FDNI	FIRST TRUST DOW JONES INTL INTERNET ETF
FDT	FIRST TRUST DEVELOPED MARKETS EX-US ALPH
FDTS	FIRST TRUST DEV MKTS EX-US SMALL CAP ALP
FEM	FIRST TRUST EMERGING MARKETS ALPHADEX FD
FEMB	FIRST TRUST EMERGING MKTS LCL CURR BD ETF
FEMS	FIRST TRUST EMG MKTS SMALL CAP ALPHADEX
FEP	FIRST TRUST EUROPE ALPHADEX FUND
FEUZ	FIRST TRUST EUROZONE ALPHADEX ETF

First Trust *(continued)*

Ticker	Name
FEX	FIRST TRUST LARGE CAP CORE ALPHADEX FUND
FFR	FIRST TRUST FTSE EPRA/NAREIT DEV MKT RL
FGD	FIRST TRUST DJ GLB SEL DIV
FGM	FIRST TRUST GERMANY ALPHADEX FUND
FHK	FIRST TRUST HONG KONG ALPHADEX FUND
FID	S&P INTL DIVIDEND ARISTO
FIW	FIRST TRUST WATER ETF
FIXD	FIRST TRUST TCW OPPORTUNISTIC FIXED INCM
FJP	FIRST TRUST JAPAN ALPHADEX FUND
FKO	FIRST TRUST SOUTH KOREA ALPHADEX FUND
FKU	FIRST TRUST UNITED KINGDOM ALPHADEX FUND
FLN	FIRST TRUST LATIN AMERICA ALPHADEX FUND
FMB	FIRST TRUST MANAGED MUNICIPAL ETF
FMF	FIRST TRUST MORNINGSTAR MNGD FUT STRG FD
FMHI	FIRST TRUST MUNICIPAL HIGH INCOME ETF
FMK	FIRST TRUST MEGA CAP ALPHADEX FUND
FNI	FIRST TRUST CHINDIA ETF
FNK	FIRST TRUST MID CAP VALUE ALPHADEX FUND
FNX	FIRST TRUST MID CAP CORE ALPHADEX FUND
FNY	FIRST TRUST MID CAP GROWTH ALPHADEX FUND
FPA	FIRST TRUST ASIA PACIFIC EX-JAPAN ALPHADEX
FPE	FIRST TRUST PREFERRED SEC & INC ETF
FPEI	FIRST TRUST INSTITUTION PFD SECURITY & INCM
FPX	FIRST TRUST US EQUITY OPPORTUNITIES ETF
FPXE	IPOX EUROPE EQUITY OP
FPXI	FIRST TRUST INTERNATIONAL IPO ETF
FRI	FIRST TRUST S&P REIT INDEX FUND
FSMB	FIRST TRUST SHORT DURATION MANAGED MUNICIPAL ETF
FSZ	FIRST TRUST SWITZERLAND ALPHADEX FUND
FTA	FIRST TRUST LARGE CAP VALUE ALPHADEX FD
FTAG	FIRST TRUST IDXX GLOBAL AGRICULTURE
FTC	FIRST TRUST EXCHANGE-TRADED ALPHADEX FD
FTCS	FIRST TRUST CAPITAL STRENGTH ETF
FTGC	FIRST TRUST GLOBAL TACTICAL COMMODITY ST
FTHI	FIRST TRUST BUYWRITE INCOME ETF

Commission-free ETFs

First Trust *(continued)*

Ticker	Name
FTLB	FIRST TRUST HEDGED BUYWRITE INCOME ETF
FTLS	FIRST TRUST LONG/SHORT EQUITY ETF
FTRI	FIRST TRUST INDXX GLOBAL NAT RES INC ETF
FTSL	FIRST TRUST SENIOR LOAN FUND
FTSM	FIRST TRUST ENHANCED SHORT MATURITY
FTXD	FIRST TRUST NASDAQ RETAIL ETF
FTXG	FIRST TRUST NASDAQ FOOD & BEVERAGE ETF
FTXH	FIRST TRUST NASDAQ PHARMACEUTICALS ETF
FTXL	FIRST TRUST NASDAQ SEMICONDUCTOR ETF
FTXN	FIRST TRUST NASDAQ OIL & GAS ETF
FTXO	FIRST TRUST NASDAQ BANK ETF
FTXR	FIRST TRUST NASDAQ TRANSPORTATION ETF
FUMB	FIRST TRUST ULTRA SHORT DURATION MUNICIPAL ETF
FV	FIRST TRUST DORSEY WRIGHT FOCUS 5 ETF
FVC	FIRST TRUST DORSEY WRIGHT DYNAMIC FOCUS 5
FVD	FIRST TRUST VAL LINE DIV FD
FVL	FIRST TRUST VALUE LINE 100
FXD	FIRST TRUST CONS DISC ALPHADEX
FXG	FIRST TRUST CONS STAPLES ALPHADEX
FXH	FIRST TRUST HEALTH CARE ALPHADEX
FXL	FIRST TRUST TECHN ALPHADEX
FXN	FIRST TRUST ENERGY ALPHADEX
FXO	FIRST TRUST FINANCIAL ALPHADEX
FXR	FIRST TRUST INDU/PR DUR ALPHADEX
FXU	FIRST TRUST UTILITIES ALPHADEX
FXZ	FIRST TRUST MATERIALS ALPHADEX
FYC	FIRST TRUST SMALL CAP GROWTH ALPHADEX FD
FYT	FIRST TRUST SMALL CAP VALUE ALPHADEX FD
FYX	FIRST TRUST SMALL CAP CORE ALPHADEX FUND
GRID	FIRST TRUST NASD CL EDGE SM GRID INFRA
HDMV	FIRST TRUST HORIZON MANAGED VOL DEV INTL
HUSV	FIRST TRUST HORIZON MANAGED VOL DOMESTIC
HYLS	FIRST TRUST TACTICAL HIGH YIELD
IFV	FIRST TRUST DORSEY WRIGHT INTL FOCUS 5

First Trust *(continued)*

Ticker	Name
LDSF	FIRST TRUST LOW DURATION STRATEGIC FOCUS ETF
LEGR	FIRST TRUST INDXX INNOVATIVE TRANS & PROC
LGOV	FIRST TRUST IV LONG DURATION OPPORTUNITIES ETF
LMBS	FIRST TRUST ETF IV LOW DUR OPP ETF
MCEF	FIRST TRUST MUNICIPAL CEF INCOME OPPTY
MDIV	FIRST TRUST ETF VI MULTI ASSET DIV INC
NFTY	FIRST TRUST INDIA NIFTY 50 EQUAL WEIGHT
NXTG	FIRST TRUST INDXX NEXTG ETF
PRME	FIRST TRUST HEITMAN GBL PRIME REAL ESTATE
QABA	FIRST TRUST NASDAQ ABA CMNTY BK
QCLN	FIRST TRUST NASD CLEAN EDGE GR ENER
QQEW	FIRST TRUST NASDAQ 100 EQUAL WEIGHTED
QQXT	FIRST TRUST NASD-100 EX-TECH
QTEC	FIRST TRUST NASDAQ 100 TECHNOLOGY
RDVY	FIRST TRUST RISING DIVIDEND ACHIEVERS
RFAP	FIRST TRUST RIVERFRONT DYNAMIC ASIA PACI
RFDI	FIRST TRUST RIVERFRONT DYNAMIC DEV INTL
RFEM	FIRST TRUST RIVERFRONT DYNAMIC EMG MKTS
RFEU	FIRST TRUST RIVERFRONT DYNAMIC EUROPE
RNDM	FIRST TRUST DEVELOPED INTL EQ SEL ETF
RNDV	FIRST TRUST US EQUITY DIVIDEND SELECT ETF
RNEM	FIRST TRUST EMERGING MARKETS EQUITY SEL
RNLC	FIRST TRUST LARGE CAP US EQUITY SELECT
RNMC	FIRST TRUST MID CAP US EQUITY SELECT ETF
RNSC	FIRST TRUST SMALL CAP US EQUITY SELECT
ROBT	FIRST TRUST NDAQ A I AND ROBOTICS ETF
SDVY	FIRST TRUST SMID CAP RISING DIV ACH ETF
SKYY	FIRST TRUST CLOUD COMPUTING ETF
TDIV	FIRST TRUST ETF VI FT NASDAQ TECH DIV
TERM	EQUITYCOMPASS TACTICAL RISK MANAGER ETF
TUSA	FIRST TRUST TOTAL US MARKET ALPHADEX ETF
UCON	FIRST TRUST TCW UNCONSTRAINED PLUS BOND

Commission-free ETFs

FlexShares

Ticker	Name
ASET	FLEXSHARES REAL ASSETS ALLOCATION INDEX
BNDX	FLEXSHARES CORE SELECT BOND FUND
ESG	FLEXSHARES STOXX US ESG IMPACT IDX FD
ESGG	FLEXSHARES STOXX GLOBAL ESG IMPACT IDX
GQRE	FLEXSHARES GLOBAL QUALITY RL EST INDX FD
GUNR	FLEXSHARES GLOBAL UPSTREAM NATURAL RES
HYGV	FLEXSHARES HIGH YIELD VALUE-SCORED BOND
IQDE	FLEXSHARES INT QUALITY DIV DEFENSIVE
IQDF	FLEXSHARES INTERNATIONAL QUALITY DIV
IQDY	FLEXSHARES INT QUALITY DIV DYNAMIC
LKOR	FLEXSHARES CREDIT-SCORED US LONG CORP
MBSD	FLEXSHARES DISCIPLINED DURATION MBS IDX
NFRA	FLEXSHARES STOXX GLOBAL BROAD INFRA INDX
QDEF	FLEXSHARES QUALITY DIVIDEND DEFENSIVE IN
QDF	FLEXSHARES QUALITY DIVIDEND INDEX FUND
QDYN	FLEXSHARES QUALITY DIVIDEND DYNAMIC INDEX
QLC	FLEXSHARES US QUALITY LARGE CAP
RAVI	FLEXSHARES READY ACCESS VARIABLE INCOME
SKOR	FLEXSHARES CREDIT-SCORED US CORPORATE
TDTF	FLEXSHARES IBOXX 5-YR TRGT DURATION TIPS
TDTT	FLEXSHARES IBOXX 3-YR TRGT DURATION TIPS
TILT	FLEXSHARES MORNINGSTAR US MRKT FACTORS
TLDH	FLEXSHARES CURR HEDGED MORNINGSTAR DM
TLEH	FLEXSHARES CURR HEDGED MORNINGSTAR EM
TLTD	FLEXSHARES MRNGST DEV MKT EX US FACT
TLTE	FLEXSHARES MRNGST EMG MKT FACT TILT

Franklin LibertyShares

Ticker	Name
FLAU	FRANKLIN FTSE AUSTRALIA ETF
FLAX	FRANKLIN FTSE ASIA EX JAPAN ETF
FLBL	FRANKLIN LIBERTY SENIOR LOAN ETF
FLBR	FRANKLIN FTSE BRAZIL ETF
FLCA	FRANKLIN FTSE CANADA ETF
FLCH	FRANKLIN FTSE CHINA ETF

Franklin LibertyShares *(continued)*

Ticker	Name
FLCO	FRANKLIN LIBERTY INVESTMENT GRADE CORP
FLEE	FRANKLIN FTSE EUROPE ETF
FLEH	FRANKLIN FTSE EUROPE HEDGED ETF
FLFR	FRANKLIN FTSE FRANCE ETF
FLGB	FRANKLIN FTSE UNITED KINGDOM ETF
FLGR	FRANKLIN FTSE GERMANY ETF
FLHK	FRANKLIN FTSE HONG KONG ETF
FLHY	FRANKLIN LIBERTY HIGH YIELD CORP ETF
FLIA	FRANKLIN LIBERTY INTERNATIONAL AGGR BND
FLIN	FRANKLIN FTSE INDIA ETF
FLIO	FRANKLIN LIBERTY INTL OPPORTUNITIES ETF
FLIY	FRANKLIN FTSE ITALY ETF
FLJH	FRANKLIN FTSE JAPAN HEDGED ETF
FLJP	FRANKLIN FTSE JAPAN ETF
FLKR	FRANKLIN FTSE SOUTH KOREA ETF
FLLA	FRANKLIN LATIN AMERICA ETF
FLLV	FRANKLIN LIBERTY U.S. LOW VOLATILITY ETF
FLMB	FRANKLIN LIBERTY MUNICIPAL BOND ETF
FLMI	FRANKLIN LIBERTY INTERMEDIATE MUNI OPP
FLMX	FRANKLIN FTSE MEXICO ETF
FLOD	FRANKLIN LIBERTYQ GLOBAL DIVIDEND ETF
FLOE	FRANKLIN LIBERTYQ EMERGING MARKETS ETF
FLOG	FRANKLIN LIBERTYQ GLOBAL EQUITY ETF
FLOH	FRANKLIN LIBERTYQ INTL EQUITY HEDGED ETF
FLOL	FRANKLIN LIBERTYQ U.S. EQUITY ETF
FLOM	FRANKLIN LIBERTYQ US MID CAP EQUITY ETF
FLOS	FRANKLIN LIBERTYQ US SMALL CAP EQUITY
FLRU	FRANKLIN FTSE RUSSIA ETF
FLSA	FRANKLIN SAUDI ARABIA ETF
FLSW	FRANKLIN FTSE SWITZERLAND ETF
FLTW	FRANKLIN FTSE TAIWAN ETF
FLZA	FRANKLIN SOUTH AFRICA ETF
FTSD	FRANKLIN LIBERTY SHORT DURATION US GOVT

Commission-free ETFs

Gadsen

Ticker	Name
GDG	ETF GADSEN DYNAMIC GROWTH ETF
GDMA	ETF GADSEN DYNAMIC MULTI ASSET ETF

Global X

Ticker	Name
AIQ	GLOBAL X FUTURE ANALYTICS TECH ETF
ALTY	GLOBAL X SUPERDIVIDEND ALTERNATIVES
ARGT	GLOBAL X MSCI ARGENTINA ETF
ASEA	GLOBAL X FTSE SOUTHEAST ASIA ETF
AUSF	GLOBAL X ADAPTIVE U.S. FACTOR ETF
BFIT	GLOBAL X HEALTH & WELLNESS THEMATIC ETF
BOSS	GLOBAL X FOUNDER-RUN COMPANIES ETF
BOTZ	GLOBAL X ROBOTICS & ARTIFICIAL INTEL ET
CATH	GLOBAL X S&P 500 CATHOLIC VALUES ETF
CHIC	GLOBAL X MSCI CHINA COMMUNICATIONS SERVICES ETF
CHIE	GLOBAL X CHINA ENERGY
CHIH	GLOBAL X MSCI CHINA HEALTH CARE ETF
CHII	GLOBAL X CHINA INDUSTRIALS
CHIK	GLOBAL X MSCI CHINA INGO TECH ETF
CHIL	GLOBAL X MSCI CHINA LARGE CAP 50 ETF
CHIM	GLOBAL X CHINA MATERIALS ETF
CHIQ	GLOBAL X CHINA CONSUMER
CHIR	GLOBAL X MSCI CHINA REAL ESTATE ETF
CHIS	GLOBAL X MSCI CHINA CONSUMER STAPLES ETF
CHIU	GLOBAL X MSCI CHINA UTILS ETF
CHIX	GLOBAL X CHINA FINANCIALS
CLOU	GLOBAL CLOUD COMPUTING ETF
COPX	GLOBAL X COPPER MINERS NEW
DIV	GLOBAL X SUPERDIVIDEND U.S. ETF
DRIV	GLOBAL X AUTONOMOUS & ELECTRIC VEHICLES
EBIZ	GLOBAL X E-COMMERCE ETF
EFAS	GLOBAL X MSCI SUPERDIVIDEND EAFE ETF
EMFM	GLOBAL X NEXT EMERGING & FRONTIER
FINX	GLOBAL X FINTECH ETF

Global X *(continued)*

Ticker	Name
GNOM	GLOBAL X GENOMICS & BIOTECHNOLOGY ETF
GOEX	GLOBAL X GOLD EXPLORERS ETF NEW
GREK	GLOBAL X MSCI GREECE ETF
GURU	GLOBAL X GURU INDEX ETF
GXF	GLOBAL X FTSE NORDIC 30
GXG	GLOBAL X MSCI COLOMBIA ETF
KRMA	GLOBAL X CONSCIOUS COMPANIES ETF
LIT	GLOBAL X LITHIUM & BATTERY TECH ETF
LNGR	GLOBAL X LONGEVITY THEMATIC ETF
MILN	GLOBAL X MILLENNIALS THEMATIC ETF
MLPA	GLOBAL X MLP ETF
MLPX	GLOBAL X MLP & ENERGY INFRA ETF
NGE	GLOBAL X MSCI NIGERIA ETF
NORW	GLOBAL X MSCI NORWAY ETF
PAK	GLOBAL X MSCI PAKISTAN ETF
PAVE	GLOBAL X U.S. INFRASTRUCTURE DEVELOPMENT
PFFD	GLOBAL X U.S. PREFERRED ETF
PGAL	GLOBAL X MSCI PORTUGAL ETF
QDIV	GLOBAL X S&P 500 QUALITY DIVIDEND ETF
RYLD	GLOBAL X RUSSELL 2000 COVERED CALL ETF
SCID	GLOBAL X SCIENTIFIC BETA EUROPE ETF
SCIJ	GLOBAL X SCIENTIFIC BETA JAPAN ETF
SCIU	GLOBAL X SCIENTIFIC BETA US ETF
SCIX	GLOBAL X SCIENTIFIC BETA ASIA EX-JAPAN ETF
SDEM	GLOBAL X MSCI SUPERDIVIDEND EMERGING MKT
SDIV	GLOBAL X SUPERDIVIDEND ETF
SIL	GLOBAL X SILVER MINERS NEW
SNSR	GLOBAL X INTERNET OF THINGS ETF
SOCL	GLOBAL X FUNDS GLOBAL X SOCIAL MEDIA ETF
SOIL	GLOBAL X FERTILIZERS/POTASH ETF
SPFF	GLOBAL X SUPERINCOME PFD ETF
SRET	GLOBAL X SUPERDIVIDEND REIT ETF
URA	GLOBAL X URANIUM ETF NEW
YLCO	GLOBAL X YIELDCO INDEX ETF

Commission-free ETFs

Goldman Sachs ETF Trust

Ticker	Name
GBIL	GOLDMAN SACHS ACCESS TREASURY 0-1 YEAR
GBUY	GOLDMAN SACHS MOTIF NEW AGE CONSUMER PRICING BASKET ETF
GDAT	GOLDMAN SACHS MOTIF DATA DRIVEN WORLD PRICING BASKET ETF
GDNA	GOLDMAN SACHS MOTIF HUMAN EVOLUTION PRICING BASKET ETF
GEM	GOLDMAN SACHS ACTIVEBETA EMERGING MKT
GFIN	GOLDMAN SACHS MOTIF DATA FINANCE REIMAGINED PRICING ETF
GHYB	GOLDMAN SACHS ACCESS HI YLD CORPORATE BD
GIGB	GOLDMAN SACHS ACCESS INV GRADE CORP BD
GMAN	GOLDMAN SACHS MOTIF MANUFACTURING REVOLUTION ETF
GSEU	GOLDMAN SACHS ACTIVEBETA EUROPE EQTY ETF
GSEW	GOLDMAN SACHS EQUAL WEIGHT U.S. LG CAP
GSIE	GOLDMAN SACHS ACTIVEBETA INTL ETF
GSJY	GOLDMAN SACHS ACTIVEBETA JAPAN EQTY ETF
GSLC	GOLDMAN SACHS ACTIVEBETA U.S. LG CAP EQY
GSSC	GOLDMAN SACHS U.S. SM CAP EQY
GTIP	GOLDMAN SACHS ACCESS INFL PRTC USD BOND ETF
GVIP	GOLDMAN SACHS HEDGE INDUSTRY VIP ETF
JUST	GOLDMAN SACHS JUST U.S. LARGE CAP EQUITY

GraniteShares ETF Trust

Ticker	Name
BAR	GRANITESHARES GOLD SHARES
COMB	GRANITESHARES BLOOMBERG COMMODITY BRD
COMG	GRANITESHARES S&P GSCI COMMODITY BRD STR
HIPS	GRANITESHARES HIPS US HIGH INCOME ETF
PLTM	GRANITESHARES PLATINUM TRUST

Hartford Funds

Ticker	Name
HMOP	HARTFORD MUNICIPAL OPPORTUNITIES ETF
HTAB	HARTFORD SCHRODERS TAX-AWARE BOND ETF
HTRB	HARTFORD TOTAL RETURN BOND ETF

Hartford Funds *(continued)*

Ticker	Name
LVIN	HARTFORD MULTIFACTOR LOW VOLATILITY INTE
LVUS	HARTFORD MULTIFACTOR LOW VOLY US EQTY
ROAM	HARTFORD MULTIFACTOR EMERGING MKTS ETF
RODM	HARTFORD MULTIFACTOR DEVELOP MKT (EX-US)
ROGS	HARTFORD MULTIFACTOR GLOBAL SM CAP ETF
RORE	HARTFORD MULTIFACTOR REIT ETF
ROUS	HARTFORD MULTIFACTOR US EQUITY ETF

Horizons ETF Trust

Ticker	Name
DAX	HORIZONS ETF TRUST I HORIZONS DAX GERMAN
HSPX	HORIZONS ETF TRUST I
QYLD	HORIZONS ETF TRUST I HORIZONS NASDAQ-100

Hoya

Ticker	Name
HOMZ	ETF SER SOLUTIONS HOYA CAPITAL HOUSING ETF

Huntington

Ticker	Name
HECO	ECOLOGICAL STRATEGY ETF
HUSE	US MARKET ROTATION STRATEGY ETF

iM Global

Ticker	Name
DBMF	IM DBI MANAGED FUTURES STRATEGY ETF

Impact Shares

Ticker	Name
NACP	IMPACT SHARES NAACP MINORITY
SDGA	IMPACT SHARES SUSTAINABLE DEVELOPMENT GOALS GLOBAL EQUITY ETF
WOMN	IMPACT SHARES YWCA WOMENS EMPOWERMENT ETF

Commission-free ETFs

IndexIQ ETF Trust

Ticker	Name
AGGE	IQ ENHANCED CORE BOND U.S. ETF
AGGP	IQ ENHANCED CORE PLUS BOND U.S. ETF
CLRG	IQ CHAIKIN U.S. LARGE CAP ETF
CPI	IQ REAL RETURN ETF
CROP	IQ GLOBAL AGRIBUSINESS SMALL CAP ETF
CSML	IQ CHAIKIN U.S. SMALL CAP ETF
GRES	IQ GLOBAL RESOURCES ETF
HFXE	IQ 50 PERCENT HEDGED FTSE EUROPE ETF
HFXI	IQ 50 PERCENT HEDGED FTSE INTERNATIONAL
HFXJ	IQ 50 PERCENT HEDGED FTSE JAPAN ETF
HYLV	IQ S&P HIGH YIELD LOW VOLATILITY BD ETF
IQIN	IQ 500 INTERNATIONAL ETF
MCRO	IQ HEDGE MACRO TRACKER
MMIN	IQ MACKAY SHIELDS MUNICIPAL INSURED ETF
MMIT	IQ MACKAY SHIELDS MUNICIPAL INTERMEDIATE
MNA	IQ MERGER ARBITRAGE ETF
QAI	IQ HEDGE MULTI-STR TRACK
QED	IQ HEDGE EVENT-DRIVEN TRACKER ETF
QGTA	IQ LEADERS GTAA TRACKER ETF
QLS	IQ HEDGE LONG/SHORT TRACKER ETF
QMN	IQ HEDGE MARKET NEUTRAL TRACKER ETF
ROOF	IQ US REAL ESTATE SMALL CAP ETF
SDAG	IQ SHORT DURATION ENHANCED CORE BOND US ETF

Innovator

Ticker	Name
BAPR	INNOVATOR S&P 500 BUFFER ETF APRIL
BJAN	INNOVATOR S&P 500 BUFFER ETF JANUARY
BJUL	INNOVATOR S&P 500 BUFFER ETF JULY
BJUN	INNOVATOR S&P 500 BUFFER ETF JUNE
BOCT	INNOVATOR S&P 500 BUFFER ETF OCTOBER
BOUT	INNOVATOR IBD BREAKOUT OPPORTUNITIES ETF
EJUL	INNOVATOR MSCI EMERGING MARKETS POWER BUFFER ETF
EPRF	INNOVATOR S&P INV GRADE PREFERRED ETF

Innovator (continued)

Ticker	Name
FFTY	INNOVATOR IBD 50 ETF
IJUL	INNOVATOR MSCI EAFE POWER BUFFER ETF
LDRS	INNOVATOR IBD ETF LEADERS ETF
LOUP	INNOVATOR LOUP FRONTIER TECH ETF
LVHB	INNOVATOR LUNT LOW VOL/HIGH BETA TACTIC
PAPR	INNOVATOR S&P 500 POWER BUFFER ETF APRIL
PJAN	INNOVATOR S&P 500 POWER BUFFER ETF JANUARY
PJUN	INNOVATOR S&P 500 POWER BUFFER ETF JUNE
POCT	INNOVATOR S&P 500 POWER BUFFER ETF OCTOBER
UAPR	INNOVATOR S&P 500 ULTRA BUFFER ETF APRIL
UJAN	INNOVATOR S&P 500 ULTRA BUFFER ETF JANUARY
UJUN	INNOVATOR S&P 500 ULTRA BUFFER ETF JUNE
UOCT	INNOVATOR S&P 500 ULTRA BUFFER ETF OCTOBER

Invesco

Ticker	Name
ADRA	INVESCO BLDRS ASIA 50 ADR INDEX FUND
ADRD	INVESCO BLDRS DEVELOPED MARKETS 100 ADR
ADRE	INVESCO BLDRS EMERGING MARKETS 50 ADR IN
ADRU	INVESCO BLDRS EUROPE 100 ADR INDEX FUND
BAB	INVESCO TAXABLE MUNICIPAL BOND ETF
BKLN	INVESCO SENIOR LOAN ETF
BSAE	INVESCO BULLETSHARES 2021 USD EMERGING MKTS DEBT
BSBE	INVESCO BULLETSHARES 2022 USD EMERGING MKTS DEBT ETF
BSCJ	INVESCO BULLETSHARES 2023 USD EMERGING MKTS DEBT ETF
BSCJ	INVESCO BULLETSHARES 2019 CORPORATE BOND
BCK	INVESCO BULLETSHARES 2020 CORPORATE BOND
BCL	INVESCO BULLETSHARES 2021 CORPORATE BOND
BSCM	INVESCO BULLETSHARES 2022 CORPORATE BOND
BSCN	INVESCO BULLETSHARES 2023 CORPORATE BOND
BSCO	INVESCO BULLETSHARES 2024 CORPORATE BOND
BSCP	INVESCO BULLETSHARES 2025 CORPORATE BOND
BSCQ	INVESCO BULLETSHARES 2026 CORPORATE BOND

Commission-free ETFs

Invesco (continued)

Ticker	Name
BSCR	INVESCO BULLETSHARES 2027 CORPORATE BOND
BSDE	INVESCO BULLETSHARES 2024 USD EMERGING MKTS DEBT ETF
BSJJ	INVESCO BULLETSHARES 2019 HI YLD CORP BD
BSJK	INVESCO BULLETSHARES 2020 HI YLD CORP BD
BSJL	INVESCO BULLETSHARES 2021 HI YLD CORP BD
BSJM	INVESCO BULLETSHARES 2022 HI YLD CORP BD
BSJN	INVESCO BULLETSHARES 2023 HI YLD CORP BD
BSJO	INVESCO BULLETSHARES 2024 HI YLD CORP BD
BSJP	INVESCO BULLETSHARES 2025 HI YLD CORP BD
CGW	INVESCO S&P GLOBAL WATER INDEX ETF
CLTL	INVESCO TREASURY COLLATERAL ETF
CQQQ	INVESCO CHINA TECHNOLOGY ETF
CSD	INVESCO S&P SPIN-OFF ETF
CUT	INVESCO MSCI GLOBAL TIMBER ETF
CVY	INVESCO ZACKS MULTI-ASSET INCOME ETF
CZA	INVESCO ZACKS MID-CAP ETF
DBA	INVESCO DB AGRICULTURE FUND
DBB	INVESCO DB BASE METALS FUND
DBC	INVESCO DB COMM TRK IND FD
DBE	INVESCO DB ENERGY FUND
DBO	INVESCO DB OIL FUND
DBP	INVESCO DB PRECIOUS METAL FD
DBS	INVESCO DB SILVER FUND
DBV	INVESCO DB G10 CUR HVST
DEF	INVESCO DEFENSIVE EQUITY ETF
DGL	INVESCO DB GOLD FUND
DJD	INVESCO DOW JONES INDUSTRIAL AVG DIV ETF
DWAQ	INVESCO DWA NASDAQ MOMENTUM PORTFOLIO
DWAS	INVESCO DWA SMALL CAP MOMENTUM ETF
DWIN	INVESCO DWA TACTICAL MULTI-ASSET INCM
DWTR	INVESCO DWA TACTICAL SECT ROTATION
EEB	INVESCO BRIC ETF
EELV	INVESCO S&P EMERGING MARKETS LOW VOLATIL
EEMO	INVESCO S&P EMERGING MARKETS MOMENTUM

Invesco (continued)

Ticker	Name
EQAL	INVESCO RUSSELL 1000 EQUAL WEIGHT ETF
EQWL	INVESCO RUSSELL TOP 200 EQUAL WEIGHT ETF
EWCO	INVESCO S&P 500 EQUAL WEIGHT COMMUNICATIONS SVCS ETF
EWEM	INVESCO MSCI EMERGING MARKETS EQUAL COUN
EWMC	INVESCO S&P MIDCAP 400 EQUAL WEIGHT ETF
EWRE	INVESCO S&P 500 EQUAL WEIGHT REAL ESTATE
EWSC	INVESCO S&P SMALLCAP 600 EQUAL WEIGHT
FRN	INVESCO FRONTIER MARKETS ETF
FXA	INVESCO CURRENCYSHARES AUS DOL TR
FXB	INVESCO CURRENCYSHARES BR POUND ST TR
FXC	INVESCO CURRENCYSHARES CAN DOL TR
FXCH	INVESCO CURRENCYSHARES CHINESE RENMINBI
FXE	INVESCO CURRENCYSHARES EURO TR
FXF	INVESCO CURRENCYSHARES SWISS FR TR
FXS	INVESCO CURRENCYSHARES SWEDISH KR TR
FXSG	INVESCO CURRENCYSHARES SINGAPORE DOLLAR
FXY	INVESCO CURRENCYSHARES JAPANESE YEN
GHII	INVESCO S&P HIGH INCOME INFRASTRUCTURE
GSY	INVESCO ULTRA SHORT DURATION ETF
GTO	INVESCO TOTAL RETURN BOND ETF
HAO	INVESCO CHINA SMALL CAP ETF
IDHD	INVESCO S&P INTL DEV HI DIV LOW VOL
IDHQ	INVESCO S&P INTERNATIONAL DEVELOPED QUAL
IDLB	INVESCO FTSE INTERNATIONAL LOW BETA
IDLV	INVESCO S&P INTERNATIONAL DEVELOPED LOW
IDMO	INVESCO S&P INTERNATIONAL DEVELOPED MOME
IEMD	INVESCO EMERGING MARKETS DEBT DEFENSIVE
IEMV	INVESCO EMERGING MARKETS DEBT VALUE ETF
IHYD	INVESCO CORPORATE INCOME DEFENSIVE ETF
IHYV	INVESCO CORPORATE INCOME VALUE ETF
IIGD	INVESCO INVESTMENT GRADE DEFENSIVE ETF
IIGV	INVESCO INVESTMENT GRADE VALUE ETF
IMFC	INVESCO MULTI-FACTOR CORE FIXED INCOME
IMFD	INVESCO MULTI-FACTOR DEFENSIVE CORE FIXED INCOME ETF

Commission-free ETFs

Invesco (continued)

Ticker	Name
IMFI	INVESCO MULTI-FACTOR INCOME ETF
IMFP	INVESCO MULTI-FACTOR CORE PLUS FIXED INC
IPKW	INVESCO INT BUYBACK ACHIEV PTF ETF
ISDX	INVESCO STRATEGIC DEVELOPED EX-US ETF
ISDS	INVESCO STRATEGIC DEVELOPED EX-US SM CO ETF
ISEM	INVESCO STRATEGIC EMERGING MARKETS ETF
IUS	INVESCO STRATEGIC US ETF
IUSS	INVESCO STRATEGIC US SMALL COMPANY ETF
KBWB	INVESCO KBW BANK PORTFOLIO
KBWD	INVESCO KBW HIGH DIVIDEND YIELD FIN ETF
KBWP	INVESCO KBW PPTY & CASULTY INS ETF
KBWR	INVESCO KBW REGIONAL BANKING PORT
KBWY	INVESCO KBW PREMIUM YIELD EQUITY REIT
LDRI	INVESCO LADDERRITE 0-5 YEAR CORP BD
LVL	INVESCO S&P GLOBAL DIVIDEND OPPORTUNITIE
NFO	INVESCO INSIDER SENTIMENT ETF
PBD	INVESCO GLOBAL CLEAN ENERGY ETF
PBDM	INVESCO PUREBETA FTSE DEV EX-NA ETF
PBE	INVESCO DYNAMIC BIOTECHNOLOGY & GENOME
PBEE	INVESCO PUREBETA FTSE EMERGING MKT ETF
PBJ	INVESCO DYNAMIC FOOD & BEVERAGE ETF
PBND	INVESCO PUREBETA US AGGREGATE BOND ETF
PBP	INVESCO S&P 500 BUYWRITE ETF
PBS	INVESCO DYNAMIC MEDIA ETF
PBSM	INVESCO PUREBETA MSCI USA SMALL CAP ETF
PBTP	INVESCO PUREBETA 0-5 YR US TIPS ETF
PBUS	INVESCO PUREBETA MSCI USA PORTFOLIO
PBW	INVESCO WILDERHILL CLEAN ENERGY ETF
PCEF	INVESCO CEF INCOME COMPOSITE ETF
PCY	INVESCO EMERGING MARKETS SOVEREIGN DEBT
PDBC	INVESCO DB OPTIMUM YLD DIV CMMDTY NO K
PDN	INVESCO FTSE RAFI DV MKT EX-US SMALL-MID
PDP	INVESCO DWA MOMENTUM PORTFOLIO
PEJ	INVESCO DYNAMIC LEISURE & ENTERTAINMENT

Invesco (continued)

Ticker	Name
PEY	INVESCO HIGH YLD EQUITY DIV ACHIEVER
PEZ	INVESCO DWA CONSUMER CYCLICALS MOMEN
PFI	INVESCO DWA FINANCIAL MOMENTUM PORTF
PFIG	INVESCO FUNDAMENTAL INVESTMENT GRADE
PFM	INVESCO DIV ACH ETF
PGF	INVESCO FINANCIAL PREFERRED ETF
PGHY	INVESCO GLOBAL SHORT TERM HIGH YIELD BON
PGJ	INVESCO GOLDEN DRAGON CHINA ETF
PGX	INVESCO PREFERRED ETF
PHB	INVESCO FUNDAMENTAL HIGH YIELD CORPORATE
PHDG	INVESCO S&P 500 DOWNSIDE HEDGED ETF
PHO	INVESCO WATER RES ETF
PICB	INVESCO INTERNATIONAL CORPORATE BOND ETF
PID	INVESCO INTL DIV ACH
PIE	INVESCO DWA EMERGING MARKETS MOMENTUM
PIN	INVESCO INDIA ETF
PIO	INVESCO GLOBAL WATER ETF
PIZ	INVESCO DWA DEVELOPED MKTS MOMENTUM
PJP	INVESCO DYNAMIC PHARMACEUTICALS ETF
PKB	INVESCO DYNAMIC BUILDING & CONSTRUCTION
PKW	INVESCO BUYBACK ACHIEVERS
PLW	INVESCO 1-30 LADDERED TREASURY ETF
PMR	INVESCO DYNAMIC RETAIL ETF
PNQI	INVESCO NASD INTERNET
PPA	INVESCO AEROSPACE & DEFENSE ETF
PRF	INVESCO FTSE RAFI US 1000 ETF
PRFZ	INVESCO FTSE RAFI US 1500 ETF
PRN	INVESCO DWA INDUSTRIALS MOMENTUM POR
PSCC	INVESCO S&P SMCP CONS STP ETF
PSCD	INVESCO S&P SMALLCAP CONSUMER DISCRETION
PSCE	INVESCO S&P SMALLCAP ENERGY ETF
PSCF	INVESCO S&P SMALLCAP FINANCIALS ETF
PSCH	INVESCO S&P SMALLCAP HEALTH CARE ETF
PSCI	INVESCO S&P SMALLCAP INDUSTRIALS ETF

Commission-free ETFs

Invesco (continued)

Ticker	Name
PSCM	INVESCO S&P SMALLCAP MATERIALS ETF
PSCT	INVESCO S&P SMALLCAP INFORMATION TECHNOL
PSCU	INVESCO S&P SMALLCAP UTILITIES ETF
PSI	INVESCO DYNAMIC SEMICONDUCTORS ETF
PSJ	INVESCO DYNAMIC SOFTWARE ETF
PSL	INVESCO DWA CONSUMER STAPLES MOMENTUM
PSMB	INVESCO BALANCED MULTI-ASSET ALLOC
PSMC	INVESCO CONSERVATIVE MULTI-ASSET ALL
PSMG	INVESCO GROWTH MULTI-ASSET ALLOC
PSMM	INVESCO MODERATELY CONSERV MULTI ASSET
PSP	INVESCO GLOBAL LISTED PRIVATE EQUITY ETF
PSR	INVESCO ACTIVE U.S. REAL ESTATE FUND
PTF	INVESCO DWA TECHNOLOGY MOMENTUM ETF
PTH	INVESCO DWA HEALTHCARE MOMENTUM ETF
PUI	INVESCO DWA UTILITIES MOMENTUM ETF
PVI	INVESCO VRDO TAX-FREE WEEKLY ETF
PWB	INVESCO DYNAMIC LARGE CAP GROWTH ETF
PWC	INVESCO DYNAMIC MARKET ETF
PWV	INVESCO DYNAMIC LARGE CAP VALUE ETF
PWZ	INVESCO CALIFORNIA AMT-FREE MUNICIPAL BD
PXE	INVESCO DYNAMIC ENERGY EXPL & PRODUCTION
PXF	INVESCO FTSE RAFI DEVELOPED MARKET EX-US
PXH	INVESCO FTSE RAFI EMERGING MARKETS ETF
PXI	INVESCO DWA ENERGY MOMENTUM ETF
PXJ	INVESCO DYNAMIC OIL & GAS SERVICES ETF
PXQ	INVESCO DYNAMIC NETWORKING ETF
PYZ	INVESCO DWA BASIC MATERIALS MOMENTUM
PZA	INVESCO NATIONAL AMT-FREE MUNICIPAL BOND
PZD	INVESCO CLEANTECH ETF
PZT	INVESCO NEW YORK AMT-FREE MUNICIPAL BOND
QQQ	INVESCO QQQ TRUST SERIES 1
RCD	INVESCO S&P 500 EQUAL WEIGHT CON DISCRET
RFG	INVESCO S&P MIDCAP 400 PURE GROWTH ETF
RFV	INVESCO S&P MIDCAP 400 PURE VALUE ETF
RGI	INVESCO S&P 500 EQUAL WEIGHT INDUSTRIALS

Invesco (continued)

Ticker	Name
RHS	INVESCO S&P 500 EQUAL WEIGHT CON STAPLES
RPG	INVESCO S&P 500 PURE GROWTH ETF
RPV	INVESCO S&P 500 PURE VALUE ETF
RSP	INVESCO S&P 500 EQUAL WEIGHT ETF
RTM	INVESCO S&P 500 EQUAL WEIGHT MATERIALS
RYE	INVESCO S&P 500 EQUAL WEIGHT ENERGY ETF
RYF	INVESCO S&P 500 EQUAL WEIGHT FINANCIALS
RYH	INVESCO S&P 500 EQUAL WEIGHT HEALTH CARE
RYJ	INVESCO RAYMOND JAMES SB-1 EQUITY ETF
RYT	INVESCO S&P 500 EQUAL WEIGHT TECHNOLOGY
RYU	INVESCO S&P 500 EQUAL WEIGHT UTILITIES
RZG	INVESCO S&P SMALLCAP 600 PURE GROWTH ETF
RZV	INVESCO S&P SMALLCAP 600 PURE VALUE ETF
SEA	INVESCO SHIPPING ETF
SPGP	INVESCO S&P 500 GARP ETF
SPHB	INVESCO S&P 500 HIGH BETA ETF
SPHD	INVESCO S&P 500 HIGH DIVIDEND LOW VOLATI
SPHQ	INVESCO S&P 500 QUALITY ETF
SPLV	INVESCO S&P 500 LOW VOLATILITY ETF
SPMO	INVESCO S&P 500 MOMENTUM ETF
SPMV	INVESCO S&P 500 MINIMUM VARIANCE ETF
SPVM	INVESCO S&P 500 VALUE MOMENTUM ETF
SPVU	INVESCO S&P 500 ENHANCED VALUE ETF
TAN	INVESCO SOLAR ETF
TAO	INVESCO CHINA REAL ESTATE ETF
USEQ	INVESCO RUSSELL 1000 ENHANCED EQU WT
USLB	INVESCO RUSSELL 1000 LOW BETA EQUAL WEIG
UUP	INVESCO DB US \$ IND BULL FD
VRIG	INVESCO VARIABLE RATE INVESTMENT GRADE
VRP	INVESCO VARIABLE RATE PREFERRED ETF
XLG	INVESCO S&P 500 TOP 50 ETF
XMHQ	INVESCO S&P MIDCAP QUALITY ETF
XMLV	INVESCO S&P MIDCAP LOW VOLATILITY ETF
XMMO	INVESCO S&P MIDCAP MOMENTUM ETF
XMVM	INVESCO S&P MIDCAP VALUE MOMENTUM ETF

Commission-free ETFs

Invesco (continued)

Ticker	Name
XRLV	INVESCO S&P 500 EX-RATE SENSITIVE LOW VO
XSHD	INVESCO S&P SMALLCAP HI DIV LOW VOL
XSHQ	INVESCO S&P SMCAP QUALITY PORTFOLIO
XSLV	INVESCO S&P SMALLCAP LOW VOLATILITY ETF
X SVM	INVESCO S&P SMALLCAP VALUE MOMENTUM ETF

iShares

Ticker	Name
AAXJ	ISHARES MSCI ALL COUNTRY ASIA EX JAPAN
ACWF	ISHARES EDGE MSCI MULTIFACTOR GLOBAL ETF
ACWI	ISHARES MSCI ACWI ETF
ACWV	ISHARES EDGE MSCI MIN VOLATILITY GLOBAL
ACWX	ISHARES MSCI ACWI EX US ETF
AGG	ISHARES CORE US AGGREGATE BOND ETF
AGT	ISHARES MSCI ARGENTINA AND GLOBAL EXPOSU
AGZ	ISHARES AGENCY BOND ETF
AIA	ISHARES ASIA 50 ETF
AMCA	ISHARES RUSSELL 1000 PURE U.S. REVENUE
AOA	ISHARES CORE AGGRESSIVE ALLOCATION ETF
AOK	ISHARES CORE CONSERVATIVE ALLOCATION ETF
AOM	ISHARES CORE MODERATE ALLOCATION ETF
AOR	ISHARES CORE GROWTH ALLOCATION ETF
AXJV	ISHARES EDGE MSCI MIN VOL ASIA EX JAPAN
BGRN	ISHARES GLOBAL GREEN BOND ETF
BKF	ISHARES MSCI BRIC ETF
BYLD	ISHARES YIELD OPTIMIZED BOND
CEMB	ISHARES JP MORGAN EMERG MKTS CORP BD ETF
CIU	ISHARES INTERMEDIATE-TERM CORPORATE BOND
CLY	ISHARES LONG-TERM CORPORATE BOND ETF
CLYH	ISHARES INT RATE HDGD LONG-TERM CORP BD
CMBS	ISHARES CMBS ETF
CMDY	ISHARES BLOOMBERG ROLL SELECT COMMODITY
CMF	ISHARES CALIFORNIA MUNI BOND ETF
CNYA	ISHARES MSCI CHINA A ETF

iShares (continued)

Ticker	Name
COMT	ISHARES COMMODITIES SELECT STRATEGY ETF
CRBN	ISHARES MSCI ACWI LOW CARBON TARGET ETF
CRED	ISHARES BROAD USD INVTMT GRADE CORP BD
CSJ	ISHARES SHORT-TERM CORP BD ETF
DEFA	ISHARES ADAPTIVE CUR HEDGED MSCI EAFE
DEWJ	ISHARES ADAPTIVE CUR HEDGED MSCI JAPAN
DEZU	ISHARES ADAPTIVE CUR HEDGED MSCI EUROZONE
DGRO	ISHARES CORE DIVIDEND GROWTH ETF
DIVB	ISHARES U.S. DIVIDEND & BUYBACK ETF
DSI	ISHARES MSCI KLD 400 SOC IDX FD
DVY	ISHARES SELECT DIVIDEND ETF
DVYA	ISHARES ASIA/PACIFIC DIVIDEND ETF
DVYE	ISHARES EMERGING MARKETS DIVIDEND ETF
DYNF	BLACKROCK U.S. EQUITY FACTOR ROTATION ETF
EAGG	ISHARES ESG US AGGREGATE BOND ETF
ECH	ISHARES MSCI CHILE ETF
ECNS	ISHARES MSCI CHINA SMALL-CAP ETF
EDEN	ISHARES MSCI DENMARK ETF
EEM	ISHARES MSCI EMERGING MARKETS ETF
EEMA	ISHARES MSCI EMERGING MARKETS ASIA ETF
EEMS	ISHARES MSCI EMERGING MARKETS SMALL-CAP
EEMV	ISHARES EDGE MSCI MIN VOL EMERGING MKTS
EFA	ISHARES MSCI EAFE ETF
EFAV	ISHARES EDGE MSCI MIN VOL EAFE ETF
EFG	ISHARES MSCI EAFE GROWTH ETF
EFNL	ISHARES MSCI FINLAND ETF
EFV	ISHARES MSCI EAFE VALUE ETF
EIDO	ISHARES MSCI INDONESIA ETF
EIRL	ISHARES MSCI IRELAND ETF
EIS	ISHARES MSCI ISRAEL ETF
EMB	ISHARES J.P. MORGAN USD EMERGING MKTS BD
EMBH	ISHARES INTEREST RATE HEDGED EMRG MKTS
EMGF	ISHARES FACTORSELECT MSCI EMERGING ETF
EMHY	ISHARES EMERGING MARKETS HIGH YIELD ETF
EMIF	ISHARES S&P EMG MKT INFRA ETF

Commission-free ETFs

iShares (continued)

Ticker	Name
EMXC	ISHARES MSCI EMERGING MARKETS EX CHINA
ENOR	ISHARES MSCI NORWAY ETF
ENZL	ISHARES MSCI NEW ZEALAND INVEST ETF
EPHE	ISHARES MSCI PHILIPPINES ETF
EPOL	ISHARES MSCI POLAND ETF
EPP	ISHARES MSCI PACIFIC EX JAPAN ETF
EPU	ISHARES MSCI ALL PERU ETF
ERUS	ISHARES MSCI RUSSIA ETF
ESGD	ISHARES MSCI EAFE ESG OPTIMIZED ETF
ESGE	ISHARES MSCI EM ESG OPTIMIZED ETF
ESGU	ISHARES MSCI USA ESG OPTIMIZED ETF
ESML	ISHARES MSCI USA SMALL-CAP ESG OPTIMIZED
EUFN	ISHARES MSCI EUROPE FINANCIAL ETF
EUMV	ISHARES EDGE MSCI MIN VOL EUROPE ETF
EUSA	ISHARES MSCI USA EQUAL WEIGHTED ETF
EWA	ISHARES MSCI AUSTRALIA ETF
EWC	ISHARES MSCI CANADA ETF
EWD	ISHARES MSCI SWEDEN ETF
EWG	ISHARES MSCI GERMANY ETF
EWGS	ISHARES MSCI GERMANY SMCAP ETF
EWH	ISHARES MSCI HONG KONG ETF
EWI	ISHARES MSCI ITALY ETF
EWJ	ISHARES MSCI JAPAN ETF
EWJE	ISHARES MSCI JAPAN EQUAL WEIGHTED ETF
EWJV	ISHARES MSCI JAPAN VALUE ETF
EWK	ISHARES MSCI BELGIUM ETF
EWL	ISHARES MSCI SWITZERLAND ETF
EWM	ISHARES MSCI MALAYSIA ETF
EWN	ISHARES MSCI NETHERLANDS ETF
EWO	ISHARES MSCI AUSTRIA ETF
EWP	ISHARES MSCI SPAIN ETF
EWQ	ISHARES MSCI FRANCE ETF
EWS	ISHARES MSCI SINGAPORE ETF
EWT	ISHARES MSCI TAIWAN ETF
EWU	ISHARES MSCI UNITED KINGDOM ETF

iShares (continued)

Ticker	Name
EWUS	ISHARES MSCI UNITED KINGDOM SM CAP ETF
EWV	ISHARES MSCI MEXICO ETF
EWY	ISHARES MSCI SOUTH KOREA ETF
EWZ	ISHARES MSCI BRAZIL ETF
EWZS	ISHARES MSCI BRAZIL SMALL-CAP ETF
EXI	ISHARES GLOBAL INDUSTRIALS ETF
EZA	ISHARES MSCI SOUTH AFRICA ETF
EZU	ISHARES MSCI EUROZONE ETF
FALN	ISHARES FALLEN ANGELS USD BOND ETF
FIBR	ISHARES EDGE US FIXED INCOME BALANCED RI
FILL	ISHARES MSCI GLOBAL ENERGY PRODUCERS
FLOT	ISHARES FLOATING RATE BOND ETF
FM	ISHARES MSCI FRONTIER 100 FUND
FOVL	ISHARES FOCUSED VALUE FACTOR ETF
FXI	ISHARES CHINA LARGE-CAP ETF
GBF	ISHARES GOVERNMENT/CREDIT BOND ETF
GHYG	ISHARES US & INT HIGH YLD CORP BOND ETF
GNMA	ISHARES GNMA BOND ETF
GOVT	ISHARES U.S. TREASURY BOND ETF
GSG	ISHARES S&P GSCI COMMODITY
GVI	ISHARES INTERMEDIATE GOVMNT/CREDIT BOND
HAUD	ISHARES CURRENCY HEDGED MSCI AUSTRALIA
HAWX	ISHARES CURRENCY HEDGED MSCI ACWI EX U.S
HDV	ISHARES CORE HIGH DIVIDEND ETF
HEEM	ISHARES CURRENCY HEDGED MSCI EMERG ETF
HEFA	ISHARES CURRENCY HEDGED MSCI EAFE
HEWC	ISHARES CURRENCY HEDGED MSCI CANADA ETF
HEWG	ISHARES CURRENCY HEDGED MSCI GERMANY
HEWI	ISHARES CURRENCY HEDGED MSCI ITALY ETF
HEWJ	ISHARES CURRENCY HEDGED MSCI JAPAN
HEWL	ISHARES CURRENCY HEDGED MSCI SWITZERLAND
HEWP	ISHARES CURRENCY HEDGED MSCI SPAIN ETF
HEWU	ISHARES CURRENCY HEDGED MSCI UK ETF
HEWW	ISHARES CURRENCY HEDGED MSCI MEXICO ETF
HEWY	ISHARES CURRENCY HEDGED MSCI SOUTH KOREA

Commission-free ETFs

iShares (continued)

Ticker	Name
HEZU	ISHARES CURRENCY HEDGED MSCI EUROZONE
HJPX	ISHARES CURRENCY HEDGED JPX-NIKKEI 400
HSCZ	ISHARES CURRENCY HEDGED MSCI EAFE SM CAP
HYDB	ISHARES EDGE HIGH YIELD DEFENSIVE BOND
HYG	ISHARES IBOXX \$ HIGH YIELD CORP BOND
HYGH	ISHARES INT RATE HEDGED HIGH YLD BD ETF
HYXE	ISHARES IBOXX \$ HI YLD X-OIL & GAS CP BD
HYXU	ISHARES GLOBAL EX USD HIGH YLD CORP BD ETF
IAGG	ISHARES INTERNATIONAL AGGREGATE BOND FD
IAI	ISHARES U.S. BROKER-DEALER & SECURITIES
IAK	ISHARES U.S. INSURANCE ETF
IAT	ISHARES U.S. REGIONAL BANKS ETF
IAU	ISHARES GOLD TRUST
IAUF	ISHARES GOLD STRATEGY ETF
IBB	ISHARES NASDAQ BIOTECHNOLOGY ETF
IBCD	ISHARES IBONDS MAR 2020 TERM CORP EX-FIN
IBCE	ISHARES IBONDS MAR 2023 TERM CORP EX-FIN
IBDC	ISHARES IBONDS MAR 2020 TERM CORPORATE
IBDD	ISHARES IBONDS MAR 2023 TERM CORPORATE
IBDK	ISHARES IBONDS DEC 2019 TERM CORPORATE
IBDL	ISHARES IBONDS DEC 2020 TERM CORPORATE
IBDM	ISHARES IBONDS DEC 2021 TERM CORPORATE
IBDN	ISHARES IBONDS DEC 2022 TERM CORPORATE
IBDO	ISHARES IBONDS DEC 2023 TERM CORPORATE
IBDP	ISHARES IBONDS DEC 2024 TERM CORPORATE
IBDQ	ISHARES IBONDS DEC 2025 TERM CORPORATE
IBDR	ISHARES IBONDS DEC 2026 TERM CORPORATE
IBDS	ISHARES IBONDS DEC 2027 TERM CORP ETF
IBDT	ISHARES IBONDS DEC 2028 TERM CORP ETF
IBHA	ISHARES IBONDS 2021 TERM HIGH YIELD & INCOME ETF
IBHB	ISHARES IBONDS 2022 TERM HIGH YIELD & INCOME ETF
IBHC	ISHARES IBONDS 2023 TERM HIGH YIELD & INCOME ETF

iShares (continued)

Ticker	Name
IBHD	ISHARES IBONDS 2024 TERM HIGH YIELD & INCOME ETF
IBHE	ISHARES IBONDS 2025 TERM HIGH YIELD & INCOME ETF
IBMH	ISHARES IBONDS SEP 2019 TERM MUNI BD ETF
IBMI	ISHARES IBONDS SEP 2020 TERM MUNI BD ETF
IBMJ	ISHARES IBONDS DEC 2021 TERM MUNI BD ETF
IBMK	ISHARES IBONDS DEC 2022 TERM MUNI BD ETF
IBML	ISHARES IBONDS DEC 2023 TERM MUNI BOND
IBMM	ISHARES IBONDS DEC 2024 TERM MUNI BD ETF
IBMN	ISHARES IBONDS DEC 2025 TERM MUNI BD ETF
IBMO	ISHARES IBONDS DEC 2026 TERM MUNI BD ETF
IBMP	ISHARES IBONDS DEC 2027 TERM MUNI BOND ETF
IBMQ	ISHARES IBONDS DEC 2028 TERM MUNI BOND ETF
ICF	ISHARES COHEN & STEERS REIT ETF
ICLN	ISHARES GLOBAL CLEAN ENERGY ETF
ICOL	ISHARES MSCI COLOMBIA ETF
ICSH	ISHARES LIQUIDITY INCOME ETF
ICVT	ISHARES CONVERTIBLE BOND ETF
IDEV	ISHARES CORE MSCI INTERNATIONAL DEV MKTS
IDNA	ISHARES GENOMICS IMMUNOLOGY & HEALTHCARE ETF
IDRV	ISHARES SELF-DRIVING EV & TECH ETF
IDU	ISHARES U.S. UTILITIES ETF
IDV	ISHARES INTERNATIONAL SELECT DIVIDEND
IECS	ISHARES EVOLVED US CONSUMER STAPLES ETF
IEDI	ISHARES EVOLVED US DISCRETIONARY SPENDING
IEF	ISHARES 7-10 YEAR TREASURY BOND ETF
IEFA	ISHARES CORE MSCI EAFE ETF
IEFN	ISHARES EVOLVED U.S. FINANCIALS ETF
IEHS	ISHARES EVOLVED U.S. HEALTHCARE STAPLES
IEI	ISHARES 3-7 YEAR TREASURY BOND ETF
IEIH	ISHARES EVOLVED US INNOVATIVE HEALTHCARE
IEME	ISHARES EVOLVED US MEDIA AND ENTERTAINMT
IEMG	ISHARES CORE MSCI EMERGING MARKETS ETF

Commission-free ETFs

iShares (continued)

Ticker	Name
IEO	ISHARES U.S. OIL & GAS EXPL & PROD
IETC	ISHARES EVOLVED U.S. TECHNOLOGY ETF
IEUR	ISHARES CORE MSCI EUROPE ETF
IEUS	ISHARES MSCI EUROPE SMALL CAP ETF
IEV	ISHARES EUROPE ETF
IEZ	ISHARES U.S. OIL EQUIPMENT & SERVICES
IFEU	ISHARES EUROPE DEV REAL ESTATE ETF
IFGL	ISHARES INTERNAT DEV RL EST ETF
IFRA	ISHARES U.S. INFRASTRUCTURE ETF
IGE	ISHARES NORTH AMERICAN NATURAL RES ETF
IGEB	ISHARES EDGE INVTMNT GRADE ENHANCED BD
IGF	ISHARES GLOBAL INFRASTRUCTURE ETF
IGM	ISHARES NORTH AMERICAN TECH ETF
IGN	ISHARES NORTH AMERICAN TECH-MULTIMEDIA
IGOV	ISHARES INTL TREAS BD ETF
IGRO	ISHARES INTERNATIONAL DIVIDEND GROWTH ETF
IGV	ISHARES NORTH AMERICAN TECH-SOFTWARE
IHAK	ISHARES CYBERSECURITY & TECHNOLOGY ETF
IHE	ISHARES U.S. PHARMACEUTICALS ETF
IHF	ISHARES U.S. HEALTHCARE PROVIDERS ETF
IHI	ISHARES U.S. MEDICAL DEVICES ETF
IJH	ISHARES CORE S&P MIDCAP ETF
IJJ	ISHARES S&P MID-CAP 400 VALUE ETF
IJK	ISHARES S&P MID-CAP 400 GROWTH ETF
IJR	ISHARES CORE S&P SMALL-CAP ETF
IJS	ISHARES S&P SMALL-CAP 600 VALUE ETF
IJT	ISHARES S&P SMALL-CAP 600 GROWTH ETF
ILF	ISHARES LATIN AMERICA 40 ETF
ILTB	ISHARES CORE 10 YEAR USD BOND ETF
IMTB	ISHARES CORE 5-10 YEAR USD BOND ETF
IMTM	ISHARES EDGE MSCI INTL MOMENTUM FACTOR
INDA	ISHARES MSCI INDIA ETF
INDY	ISHARES INDIA 50 ETF
INTF	ISHARES EDGE MSCI MULTIFACTOR INTL ETF
IOO	ISHARES GLOBAL 100 ETF

iShares (continued)

Ticker	Name
IPAC	ISHARES CORE MSCI PACIFIC ETF
IPFF	ISHARES INTERNATIONAL PREFERRED STOCK
IQLT	ISHARES EDGE MSCI INTL QUALITY FACTOR
IRBO	ISHARES ROBOTICS ARTIFICIAL INTELLIGENCE
ISCF	ISHARES EDGE MSCI MULTIFACTOR INTL SMCAP
ISHG	ISHARES 3 YEAR INTERNATIONAL TREA ETF
ISTB	ISHARES CORE 1-5 YEAR USD BOND ETF
ISZE	ISHARES EDGE MSCI INTL SIZE FACTOR ETF
ITA	ISHARES U.S. AEROSPACE & DEFENSE ETF
ITB	ISHARES U.S. HOME CONSTRUCTION ETF
ITOT	ISHARES CORE S&P TOTAL US STOCK MKT ETF
IUSB	ISHARES CORE TOTAL USD BOND MARKET ETF
IUSG	ISHARES CORE S&P U.S. GROWTH ETF
IUSV	ISHARES CORE S&P U.S. VALUE ETF
IVE	ISHARES S&P 500 VALUE ETF
IVLU	ISHARES EDGE MSCI INTL VALUE FACTOR ETF
IVV	ISHARES CORE S&P 500 ETF
IVW	ISHARES S&P 500 GROWTH ETF
IWB	ISHARES RUSSELL 1000 ETF
IWC	ISHARES MICRO-CAP ETF
IWD	ISHARES RUSSELL 1000 VALUE ETF
IWF	ISHARES RUSSELL 1000 GROWTH ETF
IWL	ISHARES RUSSELL TOP 200 ETF
IWM	ISHARES RUSSELL 2000 ETF
IWN	ISHARES RUSSELL 2000 VALUE ETF
IWO	ISHARES RUSSELL 2000 GROWTH ETF
IWP	ISHARES RUSSELL MID-CAP GROWTH ETF
IWR	ISHARES RUSSELL MID-CAP ETF
IWS	ISHARES RUSSELL MID-CAP VALUE ETF
IWW	ISHARES RUSSELL 3000 ETF
IWX	ISHARES RUSSELL TOP 200 VALUE ETF
IWY	ISHARES RUSSELL TOP 200 GROWTH ETF
IXC	ISHARES GLOBAL ENERGY ETF
IXG	ISHARES GLOBAL FINANCIALS ETF
IXJ	ISHARES GLOBAL HEALTHCARE ETF

Commission-free ETFs

iShares (continued)

Ticker	Name
IXN	ISHARES GLOBAL TECH ETF
IXP	ISHARES GLOBAL TELECOM ETF
IXUS	ISHARES CORE MSCI TOTAL INTL ETF
IYC	ISHARES U.S. CONSUMER SERVICES ETF
IYE	ISHARES U.S. ENERGY ETF
IYF	ISHARES U.S. FINANCIALS ETF
IYG	ISHARES U.S. FINANCIAL SERVICES ETF
IYH	ISHARES U.S. HEALTHCARE ETF
IYJ	ISHARES U.S. INDUSTRIALS ETF
IYK	ISHARES U.S. CONSUMER GOODS ETF
IYLD	ISHARES MORNINGSTAR MULTI-ASSET INCOME
IYM	ISHARES U.S. BASIC MATERIALS ETF
IYR	ISHARES U.S. REAL ESTATE ETF
IYT	ISHARES TRANSPORTATION AVERAGE ETF
IYW	ISHARES U.S. TECHNOLOGY ETF
IYY	ISHARES DOW JONES U.S. ETF
IYZ	ISHARES U.S. TELECOMMUNICATIONS ETF
JKD	ISHARES MORNINGSTAR LARGE-CAP ETF
JKE	ISHARES MORNINGSTAR LARGE-CAP GROWTH
JKF	ISHARES MORNINGSTAR LARGE-CAP VALUE
JKG	ISHARES MORNINGSTAR MID-CAP ETF
JKH	ISHARES MORNINGSTAR MID-CAP GROWTH
JKI	ISHARES MORNINGSTAR MID-CAP VALUE
JKJ	ISHARES MORNINGSTAR SMALL-CAP ETF
JKK	ISHARES MORNINGSTAR SMALL-CAP GROWTH
JKL	ISHARES MORNINGSTAR SMALL-CAP VALUE
JPMV	ISHARES EDGE MSCI MIN VOLATILITY JAPAN
JPXN	ISHARES JPX-NIKKEI 400 ETF
JXI	ISHARES GLOBAL UTILITIES ETF
KSA	ISHARES MSCI SAUDI ARABIA ETF
KXI	ISHARES GLOBAL CONSUMER STAPLES ETF
LEMB	ISHARES J.P. MORGAN EM LOCAL CURRENCY BD
LLQD	ISHARES 10+ YEAR INVEST GRADE CORP BOND
LQD	ISHARES IBOX \$ INVT GRADE CORP BOND
LQDH	ISHARES INTEREST RATE HEDGED CORP BD ETF

iShares (continued)

Ticker	Name
LQDI	ISHARES INFLATION HEDGED CORPORATE BOND
LRGF	ISHARES EDGE MSCI MULTIFACTOR USA ETF
MBB	ISHARES MBS ETF
MCHI	ISHARES MSCI CHINA ETF
MEAR	ISHARES SHORT MATURITY MUNICIPAL BOND ETF
MIDF	ISHARES EDGE MSCI MULTIFACTOR USA MID CAP ETF
MLQD	ISHARES 5-10 YEAR INVEST GRADE CORP BD
MTUM	ISHARES EDGE MSCI USA MOMENTUM FACTOR
MUB	ISHARES NATIONAL MUNI BOND ETF
MXI	ISHARES GLOBAL MATERIALS ETF
NEAR	ISHARES SHORT MATURITY BOND ETF
NYF	ISHARES NEW YORK MUNI BOND ETF
OEF	ISHARES S&P 100 ETF
PFF	ISHARES U.S. PREFERRED STOCK ETF
PICK	ISHARES MSCI GLOBAL METALS & MINING PRO
QAT	ISHARES MSCI QATAR ETF
QLTA	ISHARES AAA - A RATED CORPORATE BOND
QUAL	ISHARES EDGE MSCI USA QUALITY FACTOR ETF
REET	ISHARES GLOBAL REIT ETF
REM	ISHARES MORTGAGE REAL ESTATE ETF
REZ	ISHARES RESIDENTIAL REAL ESTATE ETF
RING	ISHARES MSCI GLOBAL GOLD MINERS ETF
RXI	ISHARES GLOBAL CONSUMER DISCRETIONARY
SCJ	ISHARES MSCI JAPAN SMALL-CAP ETF
SCZ	ISHARES MSCI EAFE SMALL-CAP ETF
SDG	ISHARES MSCI GLOBAL IMPACT ETF
SHV	ISHARES SHORT TREASURY BOND ETF
SHY	ISHARES 1-3 YEAR TREASURY BOND ETF
SHYG	ISHARES 0-5 YEAR HIGH YIELD CORP BOND
SIZE	ISHARES EDGE MSCI USA SIZE FACTOR ETF
SLOD	ISHARES 0-5 YEAR INVESTMENT GRADE CORP B
SLV	ISHARES SILVER SHARES
SLVP	ISHARES MSCI GLOBAL SILVER MINERS ETF
SMIN	ISHARES MSCI INDIA SM CAP ETF

Commission-free ETFs

iShares *(continued)*

Ticker	Name
SMLF	ISHARES EDGE MSCI MULTIFACTOR USA SM-CAP
SMMD	ISHARES RUSSELL 2500 ETF
SMMV	ISHARES EDGE MSCI MIN VOL USA SMALL-CAP
SOXX	ISHARES PHLX SEMICONDUCTOR ETF
STIP	ISHARES 0-5 YEAR TIPS BOND ETF
SUB	ISHARES SHORT-TERM NATIONAL MUNI BD ETF
SUSA	ISHARES MSCI USA ESG SELECT ETF
SUSB	ISHARES ESG 1-5 YEAR USD CORPORATE BOND
SUSC	ISHARES ESG USD CORPORATE BOND ETF
SUSL	ISHARES ESG MSCI USA LEADERS ETF
TFLO	ISHARES TREASURY FLOATING RATE BOND
THD	ISHARES MSCI THAILAND ETF
TIP	ISHARES TIPS BOND ETF
TLH	ISHARES 10-20 YEAR TREASURY BOND ETF
TLT	ISHARES 20+ YEAR TREASURY BOND ETF
TOK	ISHARES MSCI KLD 400 SOCIAL ETF
TUR	ISHARES MSCI TURKEY ETF
UAE	ISHARES MSCI UAE ETF
URTH	ISHARES MSCI WORLD ETF
USHY	ISHARES BROAD USD HIGH YIELD CORP BD ETF
USMV	ISHARES EDGE MSCI MIN VOLATILITY USA ETF
USRT	ISHARES CORE U.S. REIT ETF
VEGI	ISHARES MSCI GLOBAL AGRICULTURE PRODUCE
VLUE	ISHARES EDGE MSCI USA VALUE FACTOR ETF
WOOD	ISHARES GLOBAL TIMBER & FORESTRY ETF
WPS	ISHARES INTERNATIONAL DEV PROPERTY
XT	ISHARES EXPONENTIAL TECHNOLOGIES ETF

Janus Henderson

Ticker	Name
JMBS	MORTGAGE BACKED ETF
JSMD	SMALL/MID CAP GROWTH ALPHA ETF
JSML	SMALL CAP GROWTH ALPHA ETF
OLD	THE LONG-TERM CARE ETF

Janus Henderson *(continued)*

Ticker	Name
ORG	THE ORGANICS ETF
SLIM	THE OBESITY ETF
VNLA	SHORT DURATION INCOME ETF

John Hancock

Ticker	Name
JHCS	JOHN HANCOCK MULTIFACTOR MEDIA & COMMUNICATIONS ETF
JHEM	JOHN HANCOCK MULTIFACTOR EMERGING MARKETS ETF
JHMA	JOHN HANCOCK MULTIFACTOR MATERIALS ETF
JHMC	JOHN HANCOCK MULTI CONSUMER DISCRET ETF
JHMD	JOHN HANCOCK MULTIFACTOR DEVELOPED INTL
JHME	JOHN HANCOCK MULTIFACTOR ENERGY ETF
JHMF	JOHN HANCOCK MULTIFACTOR FINANCIALS ETF
JHMH	JOHN HANCOCK MULTIFACTOR HEALTHCARE ETF
JHMI	JOHN HANCOCK MULTIFACTOR INDUSTRIALS ETF
JHML	JOHN HANCOCK MULTIFACTOR LARGE CAP ETF
JHMM	JOHN HANCOCK MULTIFACTOR MID CAP ETF
JHMS	JOHN HANCOCK MULTIFACTOR CONS STAPLE
JHMT	JOHN HANCOCK MULTIFACTOR TECHNOLOGY ETF
JHMU	JOHN HANCOCK MULTIFACTOR UTILITIES ETF
JHSC	JOHN HANCOCK MULTIFACTOR SMALL CAP ETF

J.P. Morgan

Ticker	Name
BBEU	JPMORGAN BETABUILDERS EUROPE ETF
BBJP	JPMORGAN BETABUILDERS JAPAN ETF
BBRE	JPMORGAN BETABUILDERS MSCI U.S. REIT ETF
BBSA	JPMORGAN BETABUILDERS 1-5 YEAR U.S. AGGREGATE BOND ETF
BBUS	JPMORGAN BETABUILDERS U.S. EQUITY ETF
JAGG	JPMORGAN U.S. AGGREGATE BOND ETF
JCPB	JPMORGAN CORE PLUS BOND ETF
JDIV	JPMORGAN U.S. DIVIDEND ETF
JIGB	JPMORGAN CORP BOND RESEARCH ENHANCED ETF

Commission-free ETFs

J.P. Morgan *(continued)*

Ticker	Name
JMIN	JPMORGAN U.S. MINIMUM VOLATILITY ETF
JMOM	JPMORGAN U.S. MOMENTUM FACTOR ETF
JMUB	JPMORGAN MUNICIPAL ETF
JMST	JPMORGAN ULTRA SHORT MUNICIPAL INCOME ETF
JPED	JPMORGAN EVENT DRIVEN ETF
JPEM	JPMORGAN DIVERSIFIED RETURN EMRG MKTS EQ
JPEU	JPMORGAN DIVERSIFIED RETURN EUROPE EQ
JPGB	JPMORGAN GLOBAL BOND OPPORTUNITIES ETF
JPGE	JPMORGAN DIVERSIFIED RTN GLB EQT
JPHF	JPMORGAN DIVERSIFIED ALTERNATIVES ETF
JPHY	JPMORGAN DISCIPLINED HIGH YIELD ETF
JPIN	JPMORGAN DIVERSIFIED RETURN INTL EQ ETF
JPLS	JPMORGAN LONG/SHORT ETF
JPMB	JPMORGAN USD EMERGING MKTS SOVEREIGN BD
JPME	JPMORGAN DIVERSIFIED RETURN U.S. MID CAP
JPMF	JPMORGAN MANAGED FUTURES STRATEGY ETF
JPSE	JPMORGAN DIVERSIF RETURN U.S. SM CAP EQ
JPST	JPMORGAN ULTRA-SHORT INCOME ETF
JPUS	JPMORGAN DIVERSIFIED RETURN U.S. EQUITY
JQUA	JPMORGAN U.S. QUALITY FACTOR ETF
JVAL	JPMORGAN U.S. VALUE FACTOR ETF

KraneShares

Ticker	Name
IVOL	KRANESHARES QUADRATIC INTEREST RATE VOLATILITY & INFLATION HEDGE ETF
KARS	KRANESHARES ELEC VEHICLES FUTURE MOBILITY
KBA	KRANESHARES BOSERA MSCI CHINA
KCCB	KRANESHARES CCBS CHINA CORP HI YLD BD US
KCNY	KRANESHARES E FD CHINA COMMERCIAL PAPER
KEMP	KRANESHARES MSCI ALL CHINA INDEX ETF
KEMQ	KRANESHARES EMERG MKTS CONSUMER TECH
KEMX	KRANESHARES MSCI EMERGING MARKETS EX CHINA INDEX ETF
KFYP	KRANESHARES ZACKS NEW CHINA ETF
KGRN	KRANESHARES MSCI CHINA ENVIRONMENT INDEX

KraneShares *(continued)*

Ticker	Name
KLCD	KRANESHARES LARGE CAP QUALITY DIVIDEND INDEX ETF
KMED	KRANESHARES EMERGING MARKETS HEALTHCARE INDEX ETF
KSCD	KRANESHARES SMALL CAP QUALITY DIVIDEND INDEX ETF
KURE	KRANESHARES MSCI ALL CHINA HEALTH CARE
KWEB	KRANESHARES CSI CHINA INTERNET ETF
OBOR	KRANESHARES MSCI ONE BELT ONE ROAD INDEX

Legg Mason ETF Investment Trust

Ticker	Name
CACG	CLEARBRIDGE ALL CAP GROWTH ETF
INFR	LEGG MASON GLOBAL INFRASTRUCTURE ETF
LRGE	CLEARBRIDGE LARGE CAP GROWTH ESG ETF
LVHD	LEGG MASON LOW VOLATILITY HIGH DIV ETF
LVHE	LEGG MASON EMRG MKTS LOW VOL HG DIV
LVHI	LEGG MASON INTL LOW VOLT HIGH DIV
SQLV	LEGG MASON SMALL-CAP QUALITY VALUE ETF
WBND	LEGG MASON WESTERN ASSET TOTAL RETURN ETF
WINC	LEGG MASON WESTN ASSET SHORT DURATION INCOME ETF
YLDE	CLEARBRIDGE DIVIDEND STRATEGY ESG ETF

Loncar

Ticker	Name
CHNA	LONCAR CHINA BIOPHARMA ETF

Merk

Ticker	Name
OUNZ	VANECK MERK GOLD TRUST

Metaurus Equity Component Trust

Ticker	Name
IDIV	U.S. EQUITY CUMULATIVE DIV FUND SER 2027
XDIV	U.S. EQUITY EX-DIVIDEND FUND SER 2027

Commission-free ETFs

MFAM

Ticker	Name
MFMS	RBB FD INC MFAM SMALL-CAP GROWTH ETF

Natixis

Ticker	Name
LSST	NATIXIS SHORT DURATION INCOME ETF
MVIN	NATIXIS SEEYOND INTL MINIMUM VOLATILITY

NETLease

Ticker	Name
NETL	CORP REAL ESTATE ETF

Northern Lights Fund Trust

Ticker	Name
BIBL	INSPIRE 100 ETF
BLES	INSPIRE GLOBAL HOPE ETF
FFHG	FORMULAFOLIOS HEDGED GROWTH ETF
FFSG	FORMULAFOLIOS SMART GROWTH ETF
FFTG	FORMULAFOLIOS TACTICAL GROWTH ETF
FFTI	FORMULAFOLIOS TACTICAL INCOME ETF
GUDB	SAGE ESG INTERMEDIATE CREDIT ETF
IBD	INSPIRE CORPORATE BOND IMPACT ETF
ISMD	INSPIRE SMALL/MID CAP IMPACT ETF

Northern Lights Fund Trust (continued)

Ticker	Name
WLDR	AFFINITY WORLD LEADERS EQUITY ETF
SECT	MAIN SECTOR ROTATION ETF

Nuveen

Ticker	Name
NUAG	NUVEEN ENHANCED YIELD US AGGREGATE BND
NUBD	NUVEEN ESG U.S. AGGREGATE BOND ETF
NUDM	NUVEEN ESG INTERNATIONAL DEVELOPED MKT
NUEM	NUVEEN ESG EMERGING MARKETS EQUITY ETF
NULC	NUVEEN ESG LARGE CAP ETF

Nuveen (continued)

Ticker	Name
NULG	NUVEEN ESG LARGE-CAP GROWTH ETF
NULV	NUVEEN ESG LARGE-CAP VALUE ETF
NUMG	NUVEEN ESG MID-CAP GROWTH ETF
NUMV	NUVEEN ESG MID-CAP VALUE ETF
NURE	NUVEEN SHORT-TERM REIT ETF
NUSA	NUVEEN ENHANCE YLD 1-5 YR US AGGREGATE
NUSC	NUVEEN ESG SMALL-CAP ETF

Oppenheimer

Ticker	Name
ESGF	OPPENHEIMER GLOBAL ESG REVENUE ETF
ESGL	OPPENHEIMER ESG REVENUE ETF
OMFL	OPPENHEIMER RUSSELL 1000 DYN MULTFAC ETF
OMFS	OPPENHEIMER RUSSELL 2000 DYN MULTFAC ETF
OMOM	OPPENHEIMER RUSSELL 1000 MOMENTUM FCTR
OQAL	OPPENHEIMER RUSSELL 1000 QUALITY FACTOR
OSIZ	OPPENHEIMER RUSSELL 1000 SIZE FACTOR ETF
OVLU	OPPENHEIMER RUSSELL 1000 VALUE FACTOR
OVOL	OPPENHEIMER RUSSELL 1000 LOW VOL FACTOR
OYLD	OPPENHEIMER RUSSELL 1000 YIELD FACTOR
RDIV	OPPENHEIMER S&P ULTRA DIVIDEND REVENUE
REEM	OPPENHEIMER EMERGING MARKETS REVENUE
REFA	OPPENHEIMER INTERNATIONAL REVENUE ETF
RGLB	OPPENHEIMER GLOBAL REVENUE ETF
RWJ	OPPENHEIMER S&P SMALLCAP 600 REVENUE ETF
RWK	OPPENHEIMER S&P MIDCAP 400 REVENUE ETF
RWL	OPPENHEIMER S&P 500 REVENUE ETF
RWW	OPPENHEIMER S&P FINANCIALS REVENUE ETF

OSI ETF Trust

Ticker	Name
OEUR	O'SHARES FTSE EUROPE QUALITY DIVIDEND
OGIG	O'SHARES GLOBAL INTERNET GIANTS ETF
OUSA	O'SHARES FTSE U.S. QUALITY DIVIDEND ETF
OUSM	O'SHARES FTSE RUSSELL SMALL CAP QUALITY

Commission-free ETFs

Pacer

Ticker	Name
BUL	PACER US CASH COWS GROWTH ETF
CALF	PACER US SMALL CAP CASH COWS 100 ETF
COWZ	PACER US CASH COWS 100 ETF
ECOW	PACER EMERGING MARKETS CASH COWS 100 ETF
GCOW	PACER GLOBAL CASH COWS DIVIDEND
HERD	PACER CASH COWS FUND OF FUNDS ETF
ICOW	PACER DEVELOPED MARKETS INTL CASH COWS
INDS	PACER BNCHMRK INDSTRRL REAL ESTATE SCTR
PEXL	PACER US EXPORT LEADERS ETF
PTEU	PACER TRENDPILOT EUROPEAN INDEX ETF
PTLC	PACER TRENDPILOT US LG CAP ETF
PTMC	PACER TRENDPILOT US MID CAP ETF
PTIN	PACER TRENDPILOT INTL ETF
PTNQ	PACER TRENDPILOT 100 ETF
PWS	PACER WEALTHSHIELD ETF
RTL	PACER BENCHMARK RETAIL REAL ESTATE SCTR
SRVR	PACER BENCHMARK DATA & INFRASTRUCTURE RL
SZNE	PACER CFRA-STOVALL EQUAL WEIGHT SEASONAL
TRND	PACER TRENDPILOT FUND OF FUNDS ETF
VETS	PACER MILITARY TIMES BEST EMPLOYERS ETF

Pacific Global

Ticker	Name
USDY	PACIFIC GLOBAL US EQUITY INCOME ETF

Perth Mint

Ticker	Name
AAAU	PERTH MINT PHYSICAL GOLD ETF

PGIM ETF Trust

Ticker	Name
PHYL	PGIM ACTIVE HIGH YIELD BOND ETF
PQIN	PGIM QMA STRATEGIC ALPHA INTL EQUITY ETF
PQLC	PGIM QMA STRATEGIC ALPHA LARGE CAP CORE ETF

PGIM ETF Trust *(continued)*

Ticker	Name
POSG	PGIM QMA STRATEGIC ALPHA SMALL CAP GROWTH ETF
PQSV	PGIM QMA STRATEGIC ALPHA SMALL CAP VALUE ETF
PULS	PGIM ULTRA SHORT BOND ETF

PIMCO

Ticker	Name
BOND	PIMCO ACTIVE BOND EXCHANGE-TRADED FUND
CORP	PIMCO INV GRADE CORPORATE BOND INDEX ETF
HYS	PIMCO 0-5 YEAR HIGH YIELD CORP BOND ETF
LDUR	PIMCO ENHANCED LOW DURATION ACTIVE EXCH
LTPZ	PIMCO 15+ YEAR U.S. TIPS ETF
MFDX	PIMCO RAFI DYNAMIC MULTI-FACTOR INTL ETF
MFEM	PIMCO RAFI DYNAMIC MULTI-FACTOR EMER MKT
MFUS	PIMCO RAFI DYNAMIC MULTI-FACTOR US EQTY
MINT	PIMCO ENHANCED SHORT MATURITY ACTIVE ETF
MUNI	PIMCO INTERMED MUNI BOND ACTIVE ETF
SMMU	PIMCO SHORT TERM MUNI BD ACTIVE ETF
STPZ	PIMCO 1-5 YR U.S. TIPS INDX ETF
TIPZ	PIMCO BROAD U.S. TIPS ETF
TUZ	PIMCO 1-3 YR U.S. TR IDX FD ETF
ZROZ	PIMCO 25+ YEAR ZERO COUPON US TREA ETF

Principal

Ticker	Name
BTEC	PRINCIPAL HEALTHCARE INNOVATORS INDEX ETF
GDVD	PRINCIPAL ACTIVE GLOBAL DIVIDEND INC
GENY	PRINCIPAL MILLENNIALS INDEX ETF
IG	PRINCIPAL INVESTMENT GRADE CORP ACTIVE
PMOM	PRINCIPAL SUSTAINABLE MOMENTUM INDEX ETF
PREF	PRINCIPAL SPECTRUM PREFERRED SEC ACT ETF
PSC	PRINCIPAL U.S. SM CAP MULTI FACTOR INDEX
PSET	PRINCIPAL PRICE SETTERS INDEX ETF
PVAL	PRINCIPAL CONTRARIAN VALUE INDEX ETF
PY	PRINCIPAL SHAREHOLDER YIELD INDEX ETF

Commission-free ETFs

Principal *(continued)*

Ticker	Name
USI	PRINCIPAL ULTRA SHORT ACTIVE INCOME ETF
USMC	PRINCIPAL U.S. MEGA-CAP MULTI-FACTOR IDX
YLD	PRINCIPAL EDGE ACTIVE INCOME ETF

ProcureAM

Ticker	Name
UFO	PROCURE SPACE ETF

ProShares

Ticker	Name
ALTS	PROSHARES MORNINGSTAR ALT SOL ETF
CLIX	PROSHARES LONG ONLINE/SHORT STORES ETF
CSM	PROSHARES LARGE CAP CORE PLUS
EFAD	PROSHARES MSCI EAFE DIVIDEND GROWERS ETF
EMDV	PROSHARES MSCI EMRG MKTS DIV GROWERS
EMSH	PROSHARES SHORT TERM USD EMRG MKT BOND
EQRR	PROSHARES EQUITIES FOR RISING RATES ETF
EUDV	PROSHARES MSCI EUROPE DIVIDEND GROWERS
FUT	PROSHARES MANAGED FUTURES STRATEGY ETF
HDG	PROSHARES HEDGE REPLICATION ETF
HYHG	PROSHARES HIGH YIELD-INTEREST RATE HEDGE
IGHG	PROSHARES INVEST GRADE-INTEREST RATE HDG
MRGR	PROSHARES MERGER ETF
NOBL	PROSHARES S&P 500 DIVIDEND ARISTOCRATS
OILK	PROSHARES K-1 FREE CRUDE OIL STRATEGY ETF
ONLN	PROSHARES ONLINE RETAIL ETF
PAWZ	PROSHARES TR PET CARE ETF
PEX	PROSHARES GLOBAL LISTED PRIVATE EQUITY
RALS	PROSHARES RAFI LONG/SHORT
REGL	PROSHARES S&P MIDCAP 400 DIV ARISTOCRATS
RINF	PROSHARES INFLATION EXPECTATIONS ETF
SMDV	PROSHARES RUSSELL 2000 DIV GROWERS ETF
SPXB	PROSHARES S&P 500 BOND ETF
SPXE	PROSHARES S&P 500 EX-ENERGY ETF
SPXN	PROSHARES S&P 500 EX-FINANCIALS ETF

ProShares *(continued)*

Ticker	Name
SPXT	PROSHARES S&P 500 EX-TECHNOLOGY ETF
SPXV	PROSHARES S&P 500 EX-HEALTH CARE ETF
TOLZ	PROSHARES DJ BROOKFIELD GLOBAL INFRA ETF
VIXM	PROSHARES VIX MID-TERM FUTURES ETF
VIXY	PROSHARES VIX SHORT-TERM FUTURES ETF

Pyxis Capital

Ticker	Name
SNLN	HIGHLAND/IBOXX SENIOR LOAN ETF

RBB Fund, Inc.

Ticker	Name
TMFC	MOTLEY FOOL 100 INDEX ETF

Reality Shares

Ticker	Name
BCNA	REALITY SHARES NASDAQ NEXGEN ECO CHINA
BLCN	REALITY SHARES NASDAQ NEXTGEN ECONOMY
DFND	REALITY SHARES DIVCON DIVIDEND DEFENDER
DIVY	REALITY SHARES DIVS ETF
DQML	REALITY FUNDSTRAT DQM LONG ETF
GARD	REALITY SHARES DIVCON DIVIDEND GUARD ETF
LEAD	REALITY SHARES DIVCON LEADERS DIVIDEND

Renaissance

Ticker	Name
IPO	RENAISSANCE IPO ETF
IPOS	RENAISSANCE INTERNATIONAL IPO ETF

ROBO Global

Ticker	Name
HTEC	ROBO GLOBAL HEALTHCARE TECHNOLOGY & INNOVATION ETF

Commission-free ETFs

Roundhill

Ticker	Name
NERD	ROUNDHILL BITKRAFT ESPORTS & DIGITAL ENTERTAINMENT ETF

RYZZ

Ticker	Name
RYZZ	RYZZ MANAGED FUTURES STRATEGY PLUS ETF

Saba Capital Management, L.P.

Ticker	Name
CEFS	SABA CLOSED-END FUNDS ETF

Schwab

Ticker	Name
FNDA	SCHWAB FUNDAMENTAL U.S. SMALL CO INDX
FNDB	SCHWAB FUNDAMENTAL U.S. BROAD MRKT INDX
FNDC	SCHWAB FUNDAMENTAL INTL SMALL CO INDEX
FNDE	SCHWAB FUNDAMENTAL EMERG MRKTS LRG CO
FNDF	SCHWAB FUNDAMENTAL INTL LARGE CO INDEX
FNDX	SCHWAB FUNDAMENTAL U.S. LARGE CO INDEX
SCHA	SCHWAB U.S. SMALL-CAP ETF
SCHB	SCHWAB U.S. BROAD MARKET ETF
SCHC	SCHWAB INTERNATIONAL SMALL-CAP EQUITY
SCHD	SCHWAB US DIVIDEND EQUITY ETF
SCHE	SCHWAB EMERGING MARKETS EQUITY
SCHF	SCHWAB INTERNATIONAL EQUITY ETF
SCHG	SCHWAB U.S. LARGE-CAP GROWTH
SCHH	SCHWAB U.S. REIT ETF
SCHK	SCHWAB 1000 INDEX ETF
SCHM	SCHWAB U.S. MID-CAP ETF
SCHO	SCHWAB SHORT-TERM U.S. TREASURY ETF
SCHP	SCHWAB U.S. TIPS ETF
SCHR	SCHWAB INTER-TERM U.S. TREASURY ETF
SCHV	SCHWAB U.S. LARGE-CAP VALUE
SCHX	SCHWAB U.S. LARGE-CAP ETF
SCHZ	SCHWAB U.S. AGGREGATE BOND ETF

SoFi

Ticker	Name
GIGE	TIDAL SOFI GIG ECONOMY ETF
SFYX	TIDAL SOFI NEXT 500 ETF
SFY	TIDAL SOFI SELECT 500 ETF
SFYF	TIDAL SOFI 50 ETF

Spinnaker ETF Series

Ticker	Name
FFIU	FIELDSTONE UVA UNCONSTRAINED MED-TRM FIX

State Street

Ticker	Name
ACIM	SPDR MSCI ACWI IMI ETF
BIL	SPDR BLOOMBERG BARLCAYS 1-3 MON T-BIL
BWX	SPDR BLOOMBERG BARCLAYS INTL TREA BD ETF
BWZ	SPDR BLOOMBERG BARCLAYS SH TRM INTL TREA
CBND	SPDR BLOOMBERG BARCLAYS CORPORATE BOND
CJNK	SPDR ICE BOFAML CROSSOVER CORPORATE BD
CNRG	SPDR S&P KENSHO CLEAN POWER ETF
CWB	SPDR BLOOMBERG BARCLAYS CONV SECURITIES
CWI	SPDR IDX SH FDS MSCI ACWI (EX-US)
DGT	SPDR GLOBAL DOW ETF
DIA	SPDR DJIA ETF TRUST
DWFI	SPDR DORSEY WRIGHT FIXED INCOME ALLOCATI
DWX	SPDR S&P INTL DIV
EBND	SPDR BLOOMBERG BARCLAYS EMER MKTS LOC
EDIV	SPDR S&P EMER MRKTS DIV ETF
EEMX	SPDR MSCI EMERGING MARKETS FOSSIL FUEL R
EFAX	SPDR MSCI EAFE FOSSIL FUEL RESERVES FREE
EMTL	SPDR DOUBLELINE EMG MARKETS FIXED INCOME
EWX	SPDR S&P EMRG MKTS SMCP ETF
FEU	SPDR STOXX EURO 50
FEZ	SPDR EURO STOXX 50
FISR	SPDR SSGA FIXED INCOME SECTOR ROTATION ETF
FITE	SPDR S&P KENSHO FUTURE SECURITY ETF
FLRN	SPDR BLOOMBERG BARCLAYS INVT GRADE FLOAT

Commission-free ETFs

State Street *(continued)*

Ticker	Name
GAL	SPDR SSGA GLOBAL ALLOCATION ETF
GII	SPDR S&P GLOBAL INFRASTRUCTURE ETF
GLD	SPDR GOLD TRUST
GLDM	SPDR GOLD MINISHARES TRUST
GMF	SPDR IDX SH FDS S&P EMG ASIA PACIFIC
GNR	SPDR GLB NAT RES ETF
GWX	SPDR IDX SH FDS S&P INTL SM CAP ETF
GXC	SPDR IDX SH FDS S&P CHINA
HAIL	SPDR S&P KENSHO SMART MOBILITY ETF
HYMB	SPDR NUVEEN S&P HIGH YIELD MUNICIPAL BD
IBND	SPDR BLOOMBERG BARCLAYS INTL CORP BD ETF
INKM	SPDR SSGA INCOME ALLOCATION ETF
IPE	SPDR BLOOMBERG BARCLAYS TIPS ETF
ITE	SPDR BLOOMBERG BARCLAYS INT TRM TREA ETF
JNK	SPDR BLOOMBERG BARCLAYS HI YLD BD FD ETF
KBE	SPDR S&P BANK ETF
KCE	SPDR S&P CAPITAL MARKETS ETF
KIE	SPDR S&P INSURANCE ETF
KOMP	SPDR KENSHO NEW ECONOMIES COMPOSITE ETF
KRE	SPDR S&P REGIONAL BANKING ETF
LGLV	SPDR SSGA US LARGE CAP LOW VOLATILITY
LOWC	SPDR MSCI ACWI LOW CARBON TARGET ETF
MBG	SPDR BLOOMBERG BARCLAYS MORTGAGE
MDY	SPDR S&P MIDCAP 400 ETF TR
MDYG	SPDR S&P 400 MID CAP GROWTH ETF
MDYV	SPDR S&P 400 MID CAP VALUE ETF
MMTM	SPDR S&P 1500 MOMENTUM TILT ETF
NANR	SPDR S&P NORTH AMERICAN NATURAL RES
ONEO	SPDR RUSSELL 1000 MOMENTUM FOCUS ETF
ONEV	SPDR RUSSELL 1000 LOW VOLATILITY FOCUS
ONEY	SPDR RUSSELL 1000 YIELD FOCUS ETF
PSK	SPDR WELLS FARGO PFD STK
QEFA	SPDR MSCI EAFE STRATEGICFACTORS ETF
QEMM	SPDR MSCI EMERGING MKTS STRATEGICFACTORS
QUS	SPDR MSCI USA STRATEGICFACTORS ETF

State Street *(continued)*

Ticker	Name
QWLD	SPDR MSCI WORLD STRATEGICFACTORS ETF
RLY	SPDR SSGA MULTI-ASSET REAL RETURN ETF
ROKT	SPDR S&P KENSHO FINAL FRONTIERS ETF
RWO	SPDR DJ GLOBAL REAL ESTATE
RWR	SPDR DJ REIT
RWX	SPDR DJ INTL REAL ESTATE
SDY	SPDR SER TR S&P DIVIDEND
SHE	SPDR SSGA GENDER DIVERSITY INDEX ETF
SHM	SPDR NUVEEN BLOOMBERG BARCLAY SH TRM
SIMS	SPDR S&P KENSHO INTELLIGENT STRUCTURES ETF
SJNK	SPDR BLOOMBERG BARCLAYS SH TRM HI YLD BD
SLY	SPDR S&P 600 SMALL CAP ETF
SLYG	SPDR S&P 600 SMALL CAP GROWTH ETF
SLYV	SPDR S&P 600 SMALL CAP VALUE ETF
SMEZ	SPDR EURO STOXX SMALL CAP ETF
SMLV	SPDR SSGA US SMALL CAP LOW VOLATILITY
SPAB	SPDR PORTFOLIO AGGREGATE BOND ETF
SPDW	SPDR PORTFOLIO DEVELOPED WORLD EX-US ETF
SPEM	SPDR PORTFOLIO EMERGING MARKETS ETF
SPIB	SPDR PORTFOLIO INTERMEDIATE TERM CORP BD
SPLB	SPDR PORTFOLIO LONG TERM CORP BOND ETF
SPLG	SPDR PORTFOLIO LARGE CAP ETF
SPMD	SPDR PORTFOLIO MID CAP ETF
SPSB	SPDR PORTFOLIO SHORT TERM CORPORATE BD
SPSM	SPDR PORTFOLIO SMALL CAP ETF
SPTL	SPDR PORTFOLIO LONG TERM TREASURY ETF
SPTM	SPDR PORTFOLIO TOTAL STOCK MARKET ETF
SPTS	SPDR PORTFOLIO SHORT TERM TREASURY ETF
SPY	SPDR S&P 500 ETF TRUST
SPYB	SPDR S&P 500 BUYBACK ETF
SPYD	SPDR PORTFOLIO S&P 500 HIGH DIVIDEND ETF
SPYG	SPDR PORTFOLIO S&P 500 GROWTH ETF
SPYV	SPDR PORTFOLIO S&P 500 VALUE ETF
SPYX	SPDR S&P 500 FOSSIL FUEL RESERVES FREE
SRLN	SPDR BLACKSTONE / GSO SENIOR LOAN ETF

State Street *(continued)*

Ticker	Name
STOT	SPDR DOUBLELINE SHORT DUR TOTAL RET TACT
SYE	SPDR MFS SYSTEMATIC CORE
SYG	SPDR MFS SYSTEMATIC GROWTH EQUITY
SYV	SPDR MFS SYSTEMATIC VALUE EQUITY
TFI	SPDR NUVEEN BLOOMBERG BARCLAYS MUNI BD
TIPX	SPDR BLOOMBERG BARCLAYS 1-10 YR TIPS ETF
TOTL	SPDR DOUBLELINE TOTAL RETURN TACTICAL
ULST	SPDR SSGA ULTRA SHORT TERM BOND ETF
VLU	SPDR S&P 1500 VALUE TILT ETF
WDIV	SPDR S&P GLOBAL DIVIDEND ETF
WIP	SPDR FTSE INTL GOV INFLATION PROTECT BD
XAR	SPDR S&P AEROSPACE & DEFENSE ETF
XBI	SPDR SER TR S&P BIOTECH
XES	SPDR SER TR S&P OIL & GAS EQUIP SVC
XHB	SPDR SER TR S&P HOMEBUILDERS
XHE	SPDR S&P HEALTH CARE EQUIPMENT ETF
XHS	SPDR S&P HEALTH CARE SERVICES ETF
XITK	SPDR FACTSET INNOVATIVE TECHNOLOGY ETF
XLB	SPDR FD MATERIALS SELECT SECT
XLC	COMMUNICATION SVCS SELECT SECTOR SPDR FD
XLE	SPDR FD ENERGY
XLF	SPDR FD FINANCIAL
XLI	INDUSTRIAL SELECT SECTOR SPDR
XLK	SPDR FD TECHNOLOGY
XLP	CONSUMER STAPLES SELECT SECTOR SPDR
XLRE	THE REAL ESTATE SELECT SECTOR SPDR FUND
XLSR	SPDR SSGA U.S. SECTOR ROTATION ETF
XLU	SPDR FD UTILITIES
XLV	HEALTHCARE SELECT SECTOR SPDR FUND
XLY	SELECT SCTR SPDR FD CONS DISCR
XME	SPDR SER TR S&P METALS & MINING
XNTK	SPDR NYSE TECHNOLOGY ETF
XOP	SPDR SER TR S&P OIL & GAS EXP & PROD
XPH	SPDR SER TR S&P PHARMACEUTICAL
XRT	SPDR S&P RETAIL

State Street *(continued)*

Ticker	Name
XSD	SPDR SER TR S&P SEMICONDUCTOR
XSW	SPDR S&P SOFTWARE & SERVICES ETF
XTH	SPDR S&P TECHNOLOGY HARDWARE ETF
XTL	SPDR S&P TELECOM ETF
XTN	SPDR S&P TRANSPORTATION ETF
XWEB	SPDR S&P INTERNET ETF
ZCAN	SPDR SOLACTIVE CANADA ETF
ZDEU	SPDR SOLACTIVE GERMANY ETF
ZGBR	SPDR SOLACTIVE UNITED KINGDOM ETF
ZHOK	SPDR INDEX SOLACTIVE HONG KONG ETF
ZJPN	SPDR SOLACTIVE JAPAN ETF

Strategy Shares, Inc.

Ticker	Name
HNDL	STRATEGY SHARES NASDAQ 7 HANDL INDEX ETF

Syntax

Ticker	Name
SSPY	SYNTAX STRATIFIED LARGE CAP ETF

Teucrium Trading, LLC

Ticker	Name
CANE	TEUCRIUM SUGAR FUND
CORN	TEUCRIUM COMMODITY TR CORN FD SHS ETF
SOYB	TEUCRIUM SOYBEAN FUND
TAGS	TEUCRIUM AGRICULTURAL FUND
WEAT	TEUCRIUM WHEAT FUND

Tidal ETF Services

Ticker	Name
AWTM	AWARE ULTRA-SHORT DURATION ENHANCED INCOME ETF

TigerShares

Ticker	Name
TTTN	TIGERSHARES CHINA-U.S. INTERNET TITANS ETF

Timothy

Ticker	Name
TPHD	TIMOTHY PLAN HIGH DIVIDEND STOCK ETF
TPLC	TIMOTHY PLAN U.S. LARGE CAP CORE ETF

Tortoise Index Solutions, LLC

Ticker	Name
TBLU	TORTOISE GLOBAL WATER ESG FUND
TCLD	TORTOISE CLOUD INFRASTRUCTURE FUND ETF
TPAY	TORTOISE DIGITAL PAYMENTS INFRASTRUCTURE FUND ETF
TPYP	TORTOISE NORTH AMERICAN PIPELINE FUND

Transamerica ETF Trust

Ticker	Name
DMRE	DELTASHARES S&P EM 100 MANAGED RISK ETF
DMRI	DELTASHARES S&P INTL MANAGED RISK ETF
DMRL	DELTASHARES S&P 500 MANAGED RISK ETF
DMRM	DELTASHARES S&P 400 MANAGED RISK ETF
DMRS	DELTASHARES S&P 600 MANAGED RISK ETF
TTAC	TRIMTABS ALL CAP US FREE CASH FLOW

Trimtabs ETF Trust

Ticker	Name
TTAI	TRIMTABS ALL CAP INTL FREE-CASH-FLOW ETF

United States Commodity Funds LLC

Ticker	Name
BNO	UNITED STATES BRENT OIL FUND LP
BUY	USCF SUMMERHAVEN SHPEI INDEX FUND
BUYN	USCF SUMMERHAVEN SHPEN INDEX FUND
CPER	UNITED STATES COPPER INDEX FUND
SDCI	USCF SUMMERHAVEN DYNAMIC COMMODITY
UGA	UNITED STATES GASOLINE FUND
UNG	UNITED STATES NAT GAS FUND
UNL	UNITED STATES 12 MONTH NAT GAS
USCI	UNITED STATES COMMODITY INDEX FUND

United States Commodity Funds LLC

Ticker	Name
USL	UNITED STATES 12 MO OIL FUND
USO	UNITED STATES OIL FUND

USAA ETF Trust

Ticker	Name
UEVM	USAA MSCI EMERG MKTS VAL MOMENTUM
UITB	USAA CORE INTERMEDIATE-TERM BOND ETF
UIVM	USAA MSCI INTL VALUE MOMENTUM BLEND IDX
ULVM	USAA MSCI USA VALUE MOMENTUM BLEND IDX
USTB	USAA CORE SHORT-TERM BOND ETF
USVM	USAA MSCI USA SM CAP VAL MOMENTUM BLEND

VanEck Securities Corporation

Ticker	Name
AFK	VANECK VECTORS AFRICA INDEX ETF
ANGL	VANECK VECTORS FALLEN ANGEL HIGH YLD BD
BBH	VANECK VECTORS BIOTECH ETF
BIZD	VANECK VECTORS BDC INCOME ETF
BJK	VANECK VECTORS GAMING ETF
BRF	VANECK VECTORS BRAZIL SMALL-CAP ETF
CBON	VANECK VECTORS CHINAAMC CHINA BOND ETF
CNXT	VANECK VECTORS CHINAAMC SME-CHINEXT ETF
CRAK	VANECK VECTORS OIL REFINERS ETF
DURA	VANECK VECTORS MORNINGSTAR DURABLE DIVIDEND ETF
EGPT	VANECK VECTORS EGYPT INDEX ETF
EMAG	VANECK VECTORS EMER MKT AGGREGATE BD ETF
EMLC	VANECK VECTORS J.P. MORGAN EM LOCAL CURR
ESPO	VANECK VECTORS VIDEO GAMING & ESPORTS ETF
EVX	VANECK VECTORS ENVIRONMENTAL SVCS ETF
FLTR	VANECK VECTORS INVESTMENT GRADE FLT RATE
FRAK	VANECK VECTORS UNCONVENTIONAL OIL & GAS
GDX	VANECK VECTORS GOLD MINERS ETF
GDXJ	VANECK VECTORS JUNIOR GOLD MINERS
GEX	VANECK VECTORS GLOBAL ALTERNATIVE ENERGY

VanEck Securities Corporation *(continued)*

Ticker	Name
GOAT	VANECK VECTORS MORNINGSTAR GLOBAL WIDE MOAT ETF
GRNB	VANECK VECTORS GREEN BOND ETF
HAP	VANECK VECTORS NATURAL RESOURCES ETF
HYD	VANECK VECTORS HIGH YIELD MUNI IDX ETF
HYEM	VANECK VECTORS EMG MKTS HIGH YLD ETF
IDX	VANECK VECTORS INDONESIA INDEX ETF
IHY	VANECK VECTORS INTERNATIONAL HIGH YIELD
ISRA	VANECK VECTORS ISRAEL ETF
ITM	VANECK VECTORS AMT-FREE INTERM MUNI IDX
KOL	VANECK VECTORS COAL ETF
LFEQ	VANECK VECTORS NDR CMG LONG/FLAT ALLOCAT
MAAX	VANECK VECTORS MUN ALLOC ETF
MLN	VANECK VECTORS AMT-FREE LONG MUNI IDX
MOAT	VANECK VECTORS MORNINGSTAR WIDE MOAT ETF
MOO	VANECK VECTORS AGRIBUSINESS ETF
MORT	VANECK VECTORS MORTGAGE REIT INCOME ETF
MOTI	VANECK VECTORS MORNINGSTAR INTL MOAT ETF
NLR	VANECK VECTORS URANIUM + NUCLEAR ENE ETF
OIH	VANECK VECTORS OIL SERVICES ETF
PEK	VANECK VECTORS CHINAAMC CSI 300 ETF
PFXF	VANECK VECTORS PREFERRED SECURITIES ETF
PPH	VANECK VECTORS PHARMA ETF
RAAX	VANECK VECTORS REAL ASSET ALLOCATION ETF
REMX	VANECK VECTORS RARE EARTH/STRATGIC METAL
RSX	VANECK VECTORS RUSSIA ETF
RSXJ	VANECK VECTORS RUSSIA SMALL-CAP ETF
RTH	VANECK VECTORS RETAIL ETF
SCIF	VANECK VECTORS INDIA SMALL-CAP IDX ETF
SHYD	VANECK VECTORS SHORT HG YLD MUNI INDX ETF
SLX	VANECK VECTORS STEEL ETF
SMB	VANECK VECTORS AMT-FREE SHORT MUNI IDX
SMH	VANECK VECTORS SEMICONDUCTOR ETF
VNM	VANECK VECTORS VIETNAM ETF

VanEck Securities Corporation *(continued)*

Ticker	Name
XMPT	VANECK VECTORS CEF MUNICIPAL INCOME ETF
YMLI	VANECK VECTORS HI INCM INFRASTR MLP ETF
YMLP	VANECK VECTORS HIGH INCOME MLP ETF

VictoryShares

Ticker	Name
CDC	VICTORYSHARES US EQ INCM ENH VLTY WTD
CDL	VICTORYSHARES US LG CAP HI DIV VOL WTD
CEY	VICTORYSHARES EMERGING MARKET HIGH DIV V
CEZ	VICTORYSHARES EMG MKT VOLATILITY WTD
CFA	VICTORYSHARES US 500 VOL WTD IDX ETF
CFO	VICTORYSHARES US 500 ENH VOL WTD IDX ETF
CID	VICTORYSHARES ITL HI DIV VOL WTD IDX ETF
CIL	VICTORYSHARES INTL VOL WTD IDX ETF
CIZ	VICTORYSHARES DEV ENH VOL WTD IDX ETF
CSA	VICTORYSHARES US SML CAP VOL WTD IDX ETF
CSB	VICTORYSHARES US SML CAP HI DIV VOL WTD
CSF	VICTORYSHARES US DISC ENH VOL WTD ETF
SEIX	VIRTUS SEIX SR LOAN ETF
VSDA	VICTORYSHARES DIVIDEND ACCELERATOR ETF
VSMV	VICTORYSHARES US MULTI-FACTOR MINIMUM VO

Virtus

Ticker	Name
BLHY	VIRTUS NEWFLEET DYNAMIC CREDIT ETF
NFLT	VIRTUS NEWFLEET MULTI-SECTOR BOND ETF

VOLSHARES

Ticker	Name
VSL	VOLSHARES LARGE CAP ETF

WBI Shares

Ticker	Name
WBIA	WBI BULLBEAR RISING INCOME 2000 ETF
WBIB	WBI BULLBEAR VALUE 2000 ETF
WBIC	WBI BULLBEAR YIELD 2000 ETF
WBID	WBI BULLBEAR QUALITY 2000 ETF
WBIE	WBI BULLBEAR RISING INCOME 1000 ETF
WBIF	WBI BULLBEAR VALUE 1000 ETF
WBIG	WBI BULLBEAR YIELD 1000 ETF
WBII	WBI BULLBEAR GLOBAL INCOME ETF
WBIL	WBI BULLBEAR QUALITY 1000 ETF
WBIT	WBI BULLBEAR TREND SWITCH US 3000 TOTAL RETURN ETF
WBIY	WBI POWER FACTOR HIGH DIVIDEND ETF

WisdomTree Investments

Ticker	Name
AGGY	WISDOMTREE YLD ENHANCED US AGGREGATE BD
AGND	WISDOMTREE NEG DUR U.S. AGG BD
AGZD	WISDOMTREE INT RT HGD U.S. AGG
AXJL	WISDOMTREE ASIA PACIFIC EX JAPAN
CEW	WISDOMTREE EMERGING CURRENCY STRATEGY
CXSE	WISDOMTREE TRUST WISDOMTREE CHINA EX-STA
CYB	WISDOMTREE CHINESE YUAN STRATEGY FUND
DDL5	WISDOMTREE DYNAMIC CUR HEDGED INT SM CAP
DDWM	WISDOMTREE DYNAMIC CUR HEDGED INT EQ
DEM	WISDOMTREE EMERGING MARKETS HI DIVIDEND
DES	WISDOMTREE U.S. SMALL CAP DIVIDEND FUND
DEW	WISDOMTREE GLOBAL HIGH DIVIDEND FUND
DFE	WISDOMTREE EURO SM CAP DIV
DFJ	WISDOMTREE JAP SM CAP DIV
DGRE	WISDOMTREE EMERGING MKTS QA DIV GR FD
DGRS	WISDOMTREE U.S. SMALLCAP QA DIV GRO FD
DGRW	WISDOMTREE TRT WISTREE U.S. QUALITY DIV
DGS	WISDOMTREE EMG MK SM CAP DV
DHDG	WISDOMTREE DYN CUR HDGD INTL QLTY DIV GR
DHS	WISDOMTREE U.S. HIGH DIVIDEND FUND

WisdomTree Investments (continued)

Ticker	Name
DIM	WISDOMTREE INTL MID CAP DIV
DLN	WISDOMTREE U.S. LARGE CAP DIVIDEND FUND
DLS	WISDOMTREE INTL SM CAP DIV
DNL	WISDOMTREE GLOBAL EX-US QUALITY DIV GROW
DOL	WISDOMTREE INTL LARGE CAP
DON	WISDOMTREE U.S. MIDCAP DIVIDEND FUND
DOO	WISDOMTREE INTL DIV EX FIN
DRW	WISDOMTREE GLOBAL EX USA REAL ESTATE
DTD	WISDOMTREE U.S. TOTAL DIVIDEND FUND
DTH	WISDOMTREE INTERNATIONAL HIGH DIVIDEND
DTN	WISDOMTREE U.S. DIVIDEND EX-FINANCIALS
DVEM	WISDOMTREE EMERGING MARKETS DIVIDEND FD
DWM	WISDOMTREE INTERNATIONAL EQUITY FUND
DXGE	WISDOMTREE GERMANY HEDGED EQUITY FUND
DXJ	WISDOMTREE JAPAN HEDGED EQUITY FUND
DXJS	WISDOMTREE JAPAN HEDGED SMCAP EQTY
DYB	WISDOMTREE DYNAMIC BEARISH U.S. EQUITY FD
DYLS	WISDOMTREE DYNAMIC LONG/SHORT U.S. EQUIT
EES	WISDOMTREE U.S. SMALLCAP EARNINGS FUND
ELD	WISDOMTREE EMG MKT LOC DEBT FD
EMCB	WISDOMTREE EMRGING MKTS CORPORATE BOND
EMCG	WISDOMTREE EMG MKT CONS GRW FND
EPI	WISDOMTREE INDIA ERNG FD
EPS	WISDOMTREE U.S. EARNINGS 500 FUND
EUDG	WISDOMTREE EUROPE QUALITY DIV GROWTH
EUMF	WISDOMTREE EUROPE MULTIFACTOR ETF
EUSC	WISDOMTREE EUROPE HEDGED SMALLCAP EQUIT
EXT	WISDOMTREE U.S. TOTAL EARNINGS FUND
EZM	WISDOMTREE U.S. MIDCAP EARNINGS FUND
GCC	WISDOMTREE CONTINUOUS COMMODITY INDEX
GLBY	WISDOMTREE YIELD ENHANCED GLOBAL AGGREGATE BD ETF
GULF	WISDOMTREE MIDDLE EAST DIV
HEDJ	WISDOMTREE EUROPE HEDGED EQUITY FUND
HYND	WISDOMTREE NEG DUR HI YLD BD FD

WisdomTree Investments *(continued)*

Ticker	Name
HYZD	WISDOMTREE INT RT HDG HI YLD BD FD
IHDG	WISDOMTREE INTL HEDGED QUALITY DIV GROW
IQDG	WISDOMTREE INTL QUALITY DIVIDEND GROWTH
IXSE	WISDOMTREE INDIA EX STATE OWNED ENTERPRISES ETF
JAMF	WISDOMTREE JAPAN MULTIFACTOR ETF
PLAT	WISDOMTREE MODERN TECH PLATFORMS FUND ETF
PUTW	WISDOMTREE CBOE S&P 500 PUTWRITE STRATGY
QSY	WISDOMTREE U.S. QUALITY SHAREHOLDER YIELD
RPUT	WISDOMTREE CBOE RUSSELL 2000 PUTWRITE ST
SFHY	WISDOMTREE FUND U.S. SH TM HYLDCORP BD
SFIG	WISDOMTREE FUND U.S. SH TM CORP BD
SHAG	WISDOMTREE YIELD ENHUS SH TR AGG BD
USDU	WISDOMTREE BLOOMBERG U.S. DOLLAR BULLISH
USFR	WISDOMTREE FLOATING RATE TREASURY FUND
USMF	WISDOMTREE U.S. MULTIFACTOR FUND
WBAL	WISDOMTREE BALANCED INCOME FUND
WCHN	WISDOMTREE ICBCCS S&P CHINA 500 FUND
WFHY	WISDOMTREE FUND U.S. HYLDCORP BD
WFIG	WISDOMTREE FUND U.S. CORP BD
WTMF	WISDOMTREE MANAGED FUTURES STRATEGY FD
XMV	WISDOMTREE GLOBAL EX-MEXICO EQUITY FUND
XSOE	WISDOMTREE EMERG MKTS EX-STATE-OWN ENT

Not available commission-free*

Leveraged & inverse ETFs

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AdvisorShares Investments, LLC

Ticker	Name
HDGE	RANGER EQUITY BEAR ETF
YOLO	ADVISORSHARES PURE CANNABIS ETF

Direxion

Ticker	Name
BRZU	DIREXION DAILY BRAZIL BULL 3X SHARES
CHAD	DIREXION DAILY CSI 300 CHINA A SH BEAR 1
CHAU	DIREXION DAILY CSI 300 CHINA A SH BUL 2X
CURE	DIREXION DAILY HEALTHCARE BULL 3X SHARES
CWEB	DIREXION DAILY CSI CHINA INTERNET INDEX
DFEN	DIREXION DAILY AEROSPACE & DEFENSE BULL
DPK	DIREXION DLY DEV MKT BEAR 3X SHS
DPST	DIREXION DAILY REGIONAL BANKS BULL 3X SH
DRIP	DIREXION DAILY S&P OIL GAS EXP PROD BEAR
DRN	DIREXION DLY RL EST BULL 3X SH
DRV	DIREXION DLY RL EST BEAR 3X SH
DUSL	DIREXION DAILY INDUSTRIALS BULL 3X SHARE
DUST	DIREXION DAILY GOLD MINERS INDEX BEAR 3X
DZK	DIREXION DLY DEV MRT BULL 3X SHS
EDC	DIREXION DAILY EMERGING MARKETS BULL 3X
EDZ	DIREXION DAILY MSCI EMERGING MKT BEAR 3X
ERX	DIREXION ENERGY BULL 3X
ERY	DIREXION DAILY ENERGY BEAR 3X SHARES
EUFL	DIREXION DAILY EUROPEAN FINLS BULL 2X
EURL	DIREXION DAILY FTSE EUROPE BULL 3X SHARE
EUXL	DIREXION DAILY EURO STOXX 50A BULL 3X SH
FAS	DIREXION DLY FINAN BULL 3X
FAZ	DIREXION DLY FINANCIAL BEAR 3X
GASL	DIREXION DAILY NATURAL GAS REL BULL 3X
GASX	DIREXION DAILY NAT GAS RELATED BEAR 3X

Direxion *(continued)*

Ticker	Name
GUSH	DIREXION DAILY S&P OIL GAS EXP PROD BULL
HYDD	DIREXION DAILY HIGH YIELD BEAR 2X SHARES
INDL	DIREXION DAILY MSCI INDIA BULL 3X SHARES
JDST	DIREXION DAILY JR GLD MNRS BEAR 3X
JNUG	DIREXION DAILY JR GLD MNRS BULL 3X
JPNL	DIREXION DAILY JAPAN BULL 3X SHARES
KORU	DIREXION DAILY SOUTH KOREA BULL 3X SHARE
LABD	DIREXION DAILY S&P BIOTECH BEAR 3X SHARE
LABU	DIREXION DAILY S&P BIOTECH BULL 3X SHARE
LBJ	DIREXION DAILY LATIN AMERICA BULL 3X SHS
MEXX	DIREXION DAILY MSCI MEXICO BULL 3X SHARE
MIDU	DIREXION DLY MID CAP BULL 3X SHARES
MIDZ	DIREXION DLY MID CAP BEAR 3X SHARES
NAIL	DIREXION DAILY HOMEBUILDERS & SUPPL BULL
NUGT	DIREXION DAILY GOLD MINERS INDEX BULL 3X
PILL	DIREXION DAILY PHARMACEUTICAL & MED BULL
PPDM	PORTFOLIOPLUS DEVELOPED MARKETS ETF
PPEM	PORTFOLIOPLUS EMERGING MARKETS ETF
PPLC	PORTFOLIOPLUS S&P 500 ETF
PPMC	PORTFOLIOPLUS S&P MID CAP ETF
PPSC	PORTFOLIOPLUS S&P SMALL CAP ETF
RETL	DIREXION DAILY RETAIL BULL 3X SHARES
RUSL	DIREXION DAILY RUSSIA BULL 3X SHARES
RUSS	DIREXION DAILY RUSSIA BEAR 3X SHARES
SAGG	DIREXION DAILY TOTAL BOND MKT BEAR 1X SH
SMLL	DIREXION DAILY SMALL CAP BULL 2X SHARES
SOXL	DIREXION DAILY SEMICOND BULL 3X SH
SOXS	DIREXION DAILY SEMICOND BEAR 3X SH
SPDN	DIREXION DAILY S&P 500 BEAR 1X SHARES
SPUU	DIREXION DAILY S&P 500 BULL 2X SHARES

ETFs not available commission-free

Direxion *(continued)*

Ticker	Name
SPXL	DIREXION DAILY S&P 500 BULL 3X SHARES
SPXS	DIREXION DAILY S&P 500 BEAR 3X SHARES
TECL	DIREXION DAILY TECH BULL 3X SHARES
TECS	DIREXION DAILY TECHNOLOGY BEAR 3X SHARES
TMF	DIREXION DAILY 20 PLUS YR TR BULL 3X
TMV	DIREXION DAILY 20 PLUS YR TR BEAR 3X
TNA	DIREXION DAILY SMALL CAP BULL 3X
TPOR	DIREXION DAILY TRANSPORTATION BULL 3X SH
TYBS	DIREXION DAILY 20 PLUS YR TR BEAR 1X SHS
TYD	DIREXION DAILY 7-10 YR TREA BULL 3X
TYNS	DIREXION DAILY 7-10 YEAR TREA BEAR 1X SHS
TYO	DIREXION DAILY 7-10 YR TREA BR 3X
TZA	DIREXION DAILY SMALL CAP BEAR 3X
UBOT	DIREXION DAILY ROBOTICS ARTIFICIAL INTEL
UTSL	DIREXION DAILY UTILITIES BULL 3X SHARES
WDRW	DIREXION DAILY REGIONAL BANKS BEAR 3X SH
YANG	DIREXION DAILY FTSE CHINA BEAR 3X SHS
YINN	DIREXION DAILY FTSE CHINA BULL 3X

Invesco ETFs

Ticker	Name
UDN	INVESCO DB US \$ IND BEAR FD

ProShares

Ticker	Name
AGQ	PROSHARES ULTRA SILVER
BIB	PROSHARES ULTRA NASDAQ BIOTECH
BIS	PROSHARES ULTRASHORT NASDAQ BIOTECH
BOIL	PROSHARES ULTRA BLOOMBERG NATURAL GAS
BZQ	PROSHARES ULTRASHORT MSCI BRAZIL CAPPED
CROC	PROSHARES ULTRASHORT AUD
DDG	PROSHARES SHORT OIL & GAS
DDM	PROSHARES ULTRA DOW30
DIG	PROSHARES ULTRA OIL & GAS
DOG	PROSHARES SHORT DOW30

ProShares *(continued)*

Ticker	Name
DUG	PROSHARES ULTRASHORT OIL & GAS
DXD	PROSHARES ULTRASHORT DOW30 NEW
EET	PROSHARES ULTRA MSCI EMG MKT
EEV	PROSHARES ULTRASHORT MSCI EMERGING MKTS
EFO	PROSHARES ULTRA MSCI EAFE
EFU	PROSHARES ULTRASHORT MSCI EAFE
EFZ	PROSHARES SHORT MSCI EAFE
EMTY	PROSHARES DECLINE OF THE RETAIL STORE
EPV	PROSHARES ULTRASHORT FTSE EUROPE
EUFX	PROSHARES SHORT EURO
EUM	PROSHARES SHORT MSCI EMGMKT
EUO	PROSHARES ULTRASHORT EURO
EWV	PROSHARES ULTRASHORT MSCI JAPAN
EZJ	PROSHARES ULTRA MSCI JAPAN
FINU	PROSHARES ULTRAPRO FINL SELECT SECTOR
FINZ	PROSHARES ULTRAPRO SHORT FINL SEL SECTO
FXP	PROSHARES ULTRASHORT FTSE CHINA 50
GDXS	PROSHARES ULTRASHORT GOLD MINERS
GDXX	PROSHARES ULTRA GOLD MINERS
GLL	PROSHARES ULTRASHORT GOLD
KOLD	PROSHARES ULTRASHORT BLOOMBERG NAT GAS
LTL	PROSHARES ULTRA TELECOMMUNICATIONS
MVV	PROSHARES MIDCAP 400 ULTRA
MYY	PROSHARES SHORT MIDCAP 400
MZZ	PROSHARES ULTRASHORT MCAP400
OILD	PROSHARES ULTRAPRO 3X SHORT CRUDE OIL
OILU	PROSHARES ULTRAPRO 3X CRUDE OIL ETF
PSQ	PROSHARES TRUST SHORT QQQ
PST	PROSHARES ULTRASHORT LEH 7-10 YR TYS
QID	PROSHARES ULTRASHORT QQQ
QLD	PROSHARES TRUST ULTRA QQQ
REK	PROSHARES SHORT REAL ESTATE
REW	PROSHARES ULTRASHORT TECHNOLOGY
ROM	PROSHARES ULTRA TECHNOLOGY
RWM	PROSHARES SH RUSSELL2000

ETFs not available commission-free

ProShares *(continued)*

Ticker	Name
RXD	PROSHARES ULTRASHORT HLTHCARE
RXL	PROSHARES ULTRA HEALTH C
SAA	PROSHARES ULTRA SMALLCAP600
SBB	PROSHARES SHORT SMALLCAP600
SBM	PROSHARES SHORT BASIC MATERIALS
SCC	PROSHARES ULTRASHORT CSMR SVCS NEW
SCO	PROSHARES ULTRASHORT BLOOMBERG CRUDE
SDD	PROSHARES ULTRASHORT SMALLCAP600
SDOW	PROSHARES ULTRAPRO SHORT DOW30
SDP	PROSHARES ULTRASHORT UTIL
SDS	PROSHARES ULTRASHORT S&P 500
SEF	PROSHARES SHORT FINANCIALS
SH	PROSHARES SHORT S&P 500
SIJ	PROSHARES ULTRASHORT INDUSTRIALS
SJB	PROSHARES SHORT HIGH YIELD
SKF	PROSHARES ULTRASHORT FINANCIALS
SMDD	PROSHARES ULTRAPRO SHORT MIDCAP400
SMN	PROSHARES ULTRASHORT BASIC MATERIALS
SPXU	PROSHARES ULTRAPRO SHORT S&P 500
SQQQ	PROSHARES ULTRAPRO SHORT QQQ
SRS	PROSHARES ULTRASHORT REAL ESTATE
SRTY	PROSHARES ULTRAPRO SHORT RUSSELL 2000
SSG	PROSHARES ULTRASHORT SEMICONDUCTORS
SSO	PROSHARES TRUST ULTRA S&P 500
SVXY	PROSHARES SHORT VIX SHORT-TERM FUTURES
SZK	PROSHARES ULTRASHORT CSMR GOODS
TBF	PROSHARES SHORT 20+ YR TREA
TBT	PROSHARES ULTRASHORT LEH 20 PLUS TYS
TBX	PROSHARES SHORT 7-10 YEAR TREASURY
TQQQ	PROSHARES ULTRAPRO QQQ
TTT	PROSHARES ULTRAPRO SHORT 20+ YEAR TREA
TWM	PROSHARES ULTRASHORT RUSSELL2000
UBIO	PROSHARES ULTRAPRO NASDAQ BIOTECH

ProShares *(continued)*

Ticker	Name
UBR	PROSHARES ULTRA MSCI BRAZIL CAPPED
UBT	PROSHARES ULTRA 20 PLUS YR TR
UCC	PROSHARES ULTRA CONSUMER SERVICES
UCO	PROSHARES ULTRA BLOOMBERG CRUDE OIL
UDOW	PROSHARES ULTRAPRO DOW30
UGE	PROSHARES ULTRA CONSUMER GOODS
UGL	PROSHARES ULTRA GOLD
UJB	PROSHARES ULTRA HIGH YIELD
ULE	PROSHARES ULTRA EURO
UMDD	PROSHARES ULTRAPRO MIDCAP400
UPRO	PROSHARES ULTRAPRO S&P 500
UPV	PROSHARES ULTRA FTSE EUROPE
UPW	PROSHARES ULTRA UTILITIES
URE	PROSHARES ULTRA REAL EST
URTY	PROSHARES ULTRAPRO RUSSELL2000
USD	PROSHARES ULTRA SEMICONDUCTORS
UST	PROSHARES ULTRA 7-10 YR TR
UVXY	PROSHARES ULTRA VIX SHORT-TERM FUTURES
UWM	PROSHARES ULTRA RUSSELL2000
UXI	PROSHARES ULTRA INDUSTRIALS
UYG	PROSHARES ULTRA FINANCIALS
UYM	PROSHARES ULTRA BASIC MATERIALS
WYDE	PROSHARES CDS SHORT NORTH AMERICAN HY CR
XPP	PROSHARES ULTRA FTSE CHINA 50
YCL	PROSHARES ULTRA YEN
YCS	PROSHARES ULTRASHORT YEN
YXI	PROSHARES SHORT FTSE CHINA 50
ZBIO	PROSHARES ULTRAPRO SHORT NASDAQ BIOTECH
ZSL	PROSHARES ULTRASHORT SILVER

ETFs not available commission-free

REX Shares

Ticker	Name
VMIN	REX VOLMAXX SHORT VIX FUTURES STRATEGY

United States Commodity Funds LLC

Ticker	Name
USOD	UNITED STATES 3X SHORT OIL FUND
USOU	UNITED STATES 3X OIL FUND

Virtus ETF Advisers LLC

Ticker	Name
VESH	VIRTUS ENHANCED SHORT U.S. EQUITY ETF

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