

Step 4c: Investing in ETFs

ETFs offer the lowest MERs available, but require a bit more effort and a few more steps to enter your orders. You can purchase ETFs through any discount brokerage, but by letting you buy the cheapest ETFs with no commission to pay when purchasing, Questrade becomes the hands-down winner in terms of low costs when investing. The ETFs themselves are offered by third parties: Blackrock (iShares) and Vanguard are the leaders in Canada, though several other companies offer low-cost index and specialized ETFs. Because they can be purchased over the public stock exchanges, similar instructions will also apply to TD Direct Investing and other brokerages, with the same products available.

With a minimum of \$5,000, Questrade accounts have no on-going fees⁵¹. In the TD instructions I made a special note to select a cash account – unfortunately Questrade only has margin⁵² accounts available. This means you will have to be careful to not borrow money to invest that you don't intend to; though the advantage is you don't need to worry as much about accidentally rounding up and over-

⁵¹ The minimum is \$1,000, and the account fees charged between \$1,000 and \$5,000 can be avoided by making at least one trade every three months.

⁵² A margin account is like a cash account combined with a line of credit: you can borrow against the value of your stocks and bonds in the account to invest further. For example, if you had \$100,000 of your own money in the account, you might be permitted to borrow an additional \$50,000 to buy even more stocks. Borrowing to invest adds significant risk and is only recommended for advanced investors. Though margin accounts are the only option at Questrade, you do not have to borrow anything.

buying ETFs in a non-registered account because you can borrow the difference. The main thing to notice is that “buying power” is how much they will let you borrow and is not the same as the amount of cash you have to invest. Also, even if you have cash in one currency (e.g. CAD), if you buy in another one (e.g. USD) you may end up taking out a loan in that currency rather than converting.

The ETF marketplace is constantly shifting as new funds are released, and MERs change due to competitive pressures. Indeed, Vanguard only entered Canada at the end of 2013; in 2014 iShares lowered the MER on XIC (and other funds) to make it more competitive than Vanguard's VCE, which Vanguard matched in October 2014. Be sure to check the errata page or other up-to-date online sources for your ETF ticker symbols and MERs.

Table of Exchange-Traded Funds

ETF Name	Ticker/ Exchange	Category	Management Fees and Alternatives
High Quality Canadian Bond Index	VAB / Toronto	Bond	Fees of 0.12%. Alternatives include CAB (0.12%), ZAG (0.20%), XQB (0.13%), or XBB (0.33%)
Canadian Capped Composite Index	XIC / Toronto	Canadian Equity	Fees of 0.05%. Alternatives include VCN (0.05%), VCE (0.05%), ZCN (0.05%)
US Total Market Index	VUN / Toronto	US Equity	Fees of 0.15%. Alternatives include S&P 500 funds XUS (0.10%), ZSP (0.10%) VFV (0.16%)
Developed Excluding North America Index	XEF / Toronto	International Equity	Fees of 0.20%. Alternatives include ZEA (0.20%), VIU (0.20%)

The first step is to create an account⁵³ with Questrade by visiting: <http://www.questrade.com/account/online>

When you create your account the options are not all displayed in the first view; if you want a non-registered account (“individual margin” at Questrade) as well as a TFSA and RRSP, you’ll need to click on the “packaged” tab. Below the choice of account is a section where you can choose from a variety of selections for “options”. At this point you will want to select “none” for all accounts.

⁵³ If you’re opening an account you can use my referral code, called a QPass: 356624159378948. This will give you a cash bonus between \$25 and \$250 depending on how much you deposit, and will also give me a \$25 bonus.

You can transfer money in by making a bill payment at your bank. My experience was that it took four days for the transfer to go through and for my account to get activated.

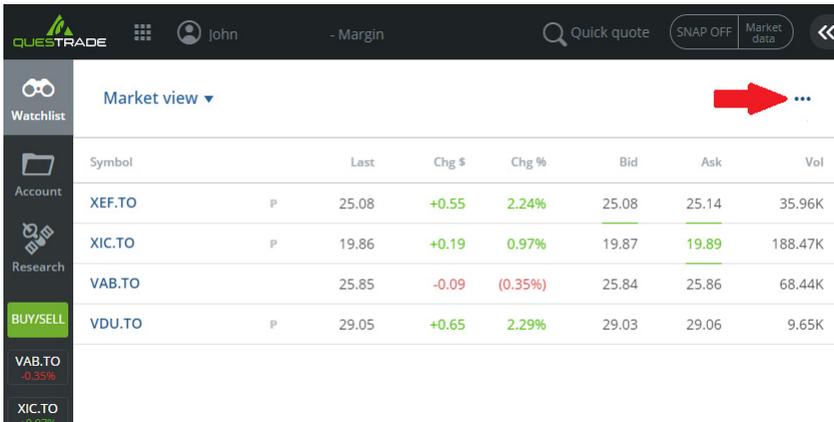
At Questrade there are several *platforms* to choose from, including conventional web-based ones as well as stand-alone applications for your computer, tablet, or smartphone. Some are more advanced and have fees to subscribe to, but the only one you will need is the main web-based portal. From the main Questrade page, click on the blue “log in” button to bring up the selection of platforms:



Then click on the Log in to Questrade button to log into that platform. Or go directly to:
<https://login.questrade.com/>

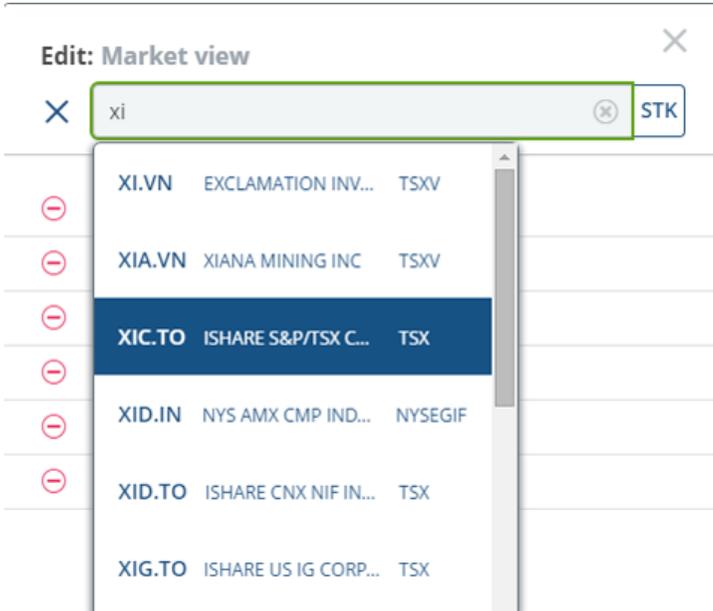
For your first log-in, they will walk you through a tutorial with the option to download a quick reference file. It's a good idea to go through that, as they will cover the particulars of the platform in more detail than I can possibly present here. This will later be available under “My resources” on the left menu of your Questrade home page when you first log in. You will also have to agree to the terms and conditions of accessing data for the exchanges that you will use to buy and sell ETFs. These agreements are pretty standard across all brokerages.

Then you will face your Questrade home page, with some high-level information about your account, and many options for collecting your statements, seeing your performance, etc. The main option to look at is the “trading” option at the top (with a duplicate button in the middle of the page). Once on your trading page, you will by default will start on a watch list pre-populated with some popular stocks.



Symbol	Last	Chg \$	Chg %	Bid	Ask	Vol
XEF.TO	25.08	+0.55	2.24%	25.08	25.14	35.96K
XIC.TO	19.86	+0.19	0.97%	19.87	19.89	188.47K
VAB.TO	25.85	-0.09	(0.35%)	25.84	25.86	68.44K
VDU.TO	29.05	+0.65	2.29%	29.03	29.06	9.65K

You can remove those by clicking on the “...” icon in the top-right corner of the pane and choosing “edit this watchlist”. I suggest adding the ETFs you will decide to use to your watch list. Just click “add symbol” and start typing the ticker symbol into the box that opens up, and it will provide suggestions. Note that for ETFs that trade on the Toronto exchange you will have to add a .TO suffix to the symbol, though you may see that automatically as you start typing the ticker. American stocks generally don't need suffixes.



If you start typing the ticker for the ETF or stock you're interested in, you may see it in the auto-complete list after just a few letters. This is one of the few places you will see the spelled-out name of the fund in Questrade.

In the watch list view you can then see the current prices for your ETFs of interest. From here you can get right into buying and selling. Click one of the symbols, and you'll be taken to a page with more detailed information and buttons to buy and sell. Alternatively, you can click on the buy/sell button on the left menu bar and then enter the symbol again – but if you start from your watch list and the detailed view page, you will be less prone to making a typo and buying the wrong thing.

After pressing buy or sell, a pop-up will appear where you can enter your order information:

The screenshot displays a trading interface for XEF.TO. At the top, there are navigation options: 'Margin', 'John', 'SMAP OFF', 'Quick quote', and 'Market data'. The main header shows 'XEF.TO ISHARES MSCI EAFE IMI ETF (TSX)' with a price of 25.08 and a change of +0.55 (+2.24%). Below this, there are sections for 'Level 1' (Bid: 25.08, Ask: 25.14), 'Chart' (with 1D, 3M, 1Y views), and 'BUY/SELL' buttons. A detailed view shows 'P/E 0.00', 'Yield 2.04%', 'Div 0.2493', 'Ex-date 29-12-2015', 'Venues T A C O P', and 'Security type Stock'. An order entry popup is open, showing 'Buy/Sell' options, 'Quantity' (6), 'Order type' (Limit), 'Limit price' (25.14), 'Duration' (Day), and 'Account' (-Margin). A 'BUY/SELL' button is highlighted in green in the top right of the popup.

In this screenshot, the detailed view for XEF.TO was brought up first, then the order entry popup was launched by clicking the buy/sell button in the top-right of that page.

At this point I would like to say that the downside to the low costs of Questrade is that this interface is not the friendliest one for novice investors. The symbol is displayed, but not the full name for the security⁵⁴, so it's harder to double-check to see if an error was made. Also, the amount of cash you have available in your account is not displayed within the order entry window. That said, the minor inconvenience is offset by the savings on commissions, which can really add up – and if that doesn't work for you, there are instructions for buying ETFs in TD later.

Anyway, in this window you see a fair bit of information. First is some information on the current price of the ETF. The **last price** is displayed underneath the symbol, \$25.08 in this screenshot. To the right are the **bid price** (\$25.08) and **ask price** (\$25.14) which represent the best current orders other people have put in. That is, someone has put in a *bid* to buy shares at \$25.08, and someone else is *asking* \$25.14 to sell their shares. The difference between these two values is known as the spread, and for liquid ETFs it will typically be just a few pennies. So if you want to buy shares, you will have to either pay the ask price and buy right away, or enter your own bid and hope someone else comes along willing to sell for less than the current ask. By far the best, least stressful approach is to just pay the ask price and get your order filled instantly, especially if it is just a few cents per share.

Associated with those bids and asks are the number of shares available for purchase or sale at those prices, known as the bid size (*bid sz* and *ask sz* in the

⁵⁴ Though if you start typing the ticker symbol into the top box again, the auto-complete list that pops up will show you the fund name, and if you start from the detailed quote page you will see it there, in the background of the buy/sell pop-up.

screenshot). The size is in terms of “board lots” (100 shares), so an ask size of 80 means that 8,000 shares are available at the price of \$25.14. On the stock market shares can be traded individually, but are typically grouped together into packages of 100, known as a “board lot.” For very popular securities (the technical term is *liquid*) there will be enough people selling “odd lots” (amounts other than 100-unit board lots) that you don't have to try to round your order off to 100-share increments. All of the recommended ETFs should have enough liquidity that you can buy or sell in odd lots and not have significant problems getting your order filled. If you dabble in more esoteric names though, this may not be the case. And from time-to-time, even liquid names can experience troubles filling odd lots, which is why using limit orders is important to protect yourself.

If for some reason your order is large, or the ask is “thin” you may be looking to buy or sell more shares than are available in the current ask. In that case, there is a whole line-up of buyers and sellers behind the best prices. For example, someone may be offering 8,000 shares at \$25.14 each, and someone else 2,000 shares at \$25.25 each, and another 1,000 shares at \$25.50. If you were looking to buy 10,500 shares all at once you would exhaust all of those offered at \$25.14, buy another 2,000 at \$25.25, and then another 500 at \$25.50. In practice this scenario is rare for ETFs and you will find that your order gets filled within a few cents of the current ask.

To the right of the price information in this screenshot is a small clock icon, indicating that the quotes are delayed by 15 minutes. In the top-right of the screen is a toggle for “snap quotes” – if I toggled that to “snap on” then it would replace the clock icon with a refresh button, giving me an up-to-the-second quote each time I hit refresh.

After the information about the recent trading are boxes where you can enter your order information. The first is the **quantity**: this represents how many shares you wish to buy. Figuring out how many shares you want is one additional step you must make when looking at ETFs over mutual funds (where you simply enter the dollar value, down to the penny, that you wish to invest). The math is straightforward: take how much you have, subtract an appropriate margin of safety so you don't try to buy more than you have funds available, divide by the price per share you will use as your limit, and round down. Note that this quantity is in actual shares, not board lots, so in the screenshot I am looking to buy 6 individual units of XEF. You can type directly into the box or use the plus and minus buttons to adjust your order size – options within your account preferences will let you set how many shares your quantity moves by for each press of those buttons (default of 10 shares per press).

Under order type you can see several options. Ignore most of them, you will *always* want to select a **limit order**. What a limit order does is enter a maximum price for what you are willing to pay for your shares (or a minimum price you will sell at). Your brokerage will get you the best available price when your order fills, but a limit order protects you against over-paying in the rare case that the market becomes illiquid. In the earlier example of moving up through the *ask* offers, a limit order would set a ceiling to how much you paid to fill your demand. For instance, if you set a limit of \$25.25 then you would buy the shares on offer at \$25.14, then those at \$25.25, and then stop, leaving part of the order unfilled until either more people came willing to sell at your price (which then became the best *bid*) or the order expired. You would not pay up to the \$25.50 (or higher!) level.

Continuing with the options in the screenshot, the account drop-down should be fairly self-explanatory:

whether you will be buying in your TFSA, RRSP, or non-registered (margin) accounts. The limit price is where you enter the maximum price you will pay. Next, duration lets you select how long you wish your order to be good for. Day is the default, which means the brokerage will look for shares (or buyers for your shares) to fill your limit order up until the stock market closes for the day. If any part of your order is unfilled, it will be discarded. For buying liquid ETFs where you are looking to buy the market without over-thinking it (so you don't have a particular price point you will wait for), a day order is all you will need. A GTD, or good-til-date, order lets you enter a date in the future; your order will be valid for each day up until your cut-off. GTC stands for good-til-cancelled. The other options are not something you will ever need (indeed, many brokerages don't offer the GTEM/IOC/FOK options that Questrade does, and they get along fine). Finally, you have the buttons for buy and sell.

The Toronto and major American markets are open 9:30am – 4:00pm most weekdays (with exceptions for national and provincial holidays). Ideally, you will enter your orders while the markets are open so that you can see that your orders will fill (usually within a minute) and know what price you will get more accurately, which affects how many shares you can get for a given amount of money. Life is not always ideal, and many people only have time on the evenings or weekends to set up their investments. In that case, you must bear in mind that the last, bid, and ask prices will be out of date for your ETFs. When the market opens the next business day, the price you may pay will be different. *Usually* there is less than a 1% difference, but there will be a few volatile days which

will see larger changes. If you want to ensure your purchase goes through when entering an order after-hours, you may want to add a buffer of about 1% to your limit price.

Now to put it together: to have your buy order fill quickly the *ask* price is what you will pay (and when selling, the *bid* price). Set a limit order to prevent unpleasant surprises, though you may need to allow for a buffer if putting in your orders after-hours to ensure that you do get your order filled the following day. Once you have your limit price set, you can take a buffer for commissions and fees (\$10 will do it), and then find how many shares you can afford to buy at that price.

Let's say I had \$3500 to invest in XEF at prices from the example screenshot. I would start by giving myself a buffer for potential fees⁵⁶, and work my scenario out with \$3490. The ask price is \$25.14, so $\$3490 / \$25.14 = 138.823$ shares. I can't buy fractional shares, and rounding *off* (to 139) would mean I would invest more money than I conservatively had available, which would be a particular problem in a TFSA or RRSP where I had maxed out my contribution room. So I will round *down* to 138 shares. I will enter an order to buy 138 shares with a limit price of \$25.14, and leave all the other fields alone, including a *day* duration.

If I was entering this order after hours, I might increase my limit price (and decrease the number of shares) so that if the market (or more directly, my desired ETF) opened higher in the morning, the order would still fill. For instance, a 1% buffer would put my limit price to

⁵⁶ There are no commissions at Questrade to buy ETFs, but there may be ECN fees; TD will have flat commissions and no possibility of ECN fees. Questrade will have commissions when you sell. In this example I am being conservative.

\$25.40, so I would only look to buy 137 shares of XEF (or in Questrade terminology, XEF.TO).

Commission-free purchases can make it easy to buy small amounts, too. In the screenshot I had entered just 6 shares, an actual transaction I made after some dividends had built up in the account and I had just over \$160 to reinvest.

Once satisfied, I would hit *buy*. This will bring up a confirmation:

Order confirmation ✕

Buy 6 XEF.TO @ 25.10 Limit

Account	- Margin
Cost of trade	6 x 25.10 = 150.60 CAD
Commission	0.021 CAD
Change in buying power	(150.5193) CAD
Change in maintenance excess	
New buying power	
New maintenance excess	

All values are estimates

Send Order
Do Not Send

Exchange and ECN fees, SEC fees and for ADRs annual custody fees may apply. Commissions may vary if your order is filled over multiple days.

[Learn more](#)

Here I can confirm all the important values before submitting it, including that the total trade value and commission (with ECN fees) is below my maximum available cash. I hit *send order*, and a small “O” symbol appears next to XEF in my watch list view, to indicate that I have an open order on that security.

I can follow the same procedure to enter the other orders to build a complete portfolio according to my asset allocation. If this is a non-registered account⁵⁷, I will look for the information on the actual price I paid or received per share, the commissions and fees, and the total number of shares after the order fills, and track that information for tax purposes.

Specifics for Investing in ETFs with TD

If I wanted to buy an ETF in TD WebBroker, after logging in I would click on order entry → stocks on the left-hand menu. This would bring up an order screen very similar to that for mutual funds in the previous section.

As before, I have several drop-down selections and boxes to fill in: first to choose the account, second to choose the action (buy or sell), then options for the ETF/security, quantity, price, etc. You don't have to enter them in order. I prefer to skip down to the symbol entry and market selection, and then use “get quote” first to confirm that I have the right security selected. For TD you won't enter the .TO suffix, instead use the drop-down menu to select whether the security trades on the Canadian or US exchanges.

⁵⁷ Or even if it's a registered account, because I like tracking things.

Investing [Help](#)

Order Stocks Step: 1 of 3 [Clear](#) [Next >>](#)

ISHARES S&P/TSX CAPPED COMPOSITE IDX 3:59:00 PM EDT ETF							
Symbol	T	Bid	Ask	Last	Change	Volume	FSI
XIC CA T	-	22.82	22.85	22.83	0.23 (1.02%)	172,003	
Bid Lots	4	Ask Lots		91			
Day High	22.835		Day Low		22.70		
Open	22.71						

CDN Markets Closed

as of 16-Apr-2014 **Cash:** CDN

[View Real-Time Balance](#)

Account: - TD Direct Investing ▼

Action: Buy ▼

Quantity: 100 [Commission Schedule](#)

Symbol: XIC Market: CA - Canadian ▼ [Get Quote](#)

Price: Market Limit Price \$ 23.07

Order good for: Day Good 'til (MMDD) [Calendar](#)

Special Instructions: All or None Stop Limit \$

[Clear](#) [Next >>](#)

Here I've entered XIC, and we can see in the quote the full name (“iShares S&P/TSX Capped Composite IDX ETF”), which matches up with the name I was expecting to see, related to a TSX index ETF). I have a message that the markets are currently closed at the bottom of the quote. Because I've come in after hours, I've decided to increase my limit price above the ask price to make sure the order fills while I'm at work tomorrow and will be unable to watch or adjust the order.

When I click next to enter the order, the TD system stops me with two warnings that I have to check off before I can proceed: a warning that my limit price is above the current ask price, and that the markets are closed for the day. These warnings were of course expected, so I check them off to clear them, hit next again, review the order details and submit my order.

Similar to Questrade, if I had started from my holdings view I could have clicked on “buy” beside one of my existing holdings and saved myself the step of typing in the ticker symbol and selecting the market.