



# Norbert's Gambit

A better way to buy U.S. dollars in  
an RBC Direct Investing RRSP

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US-listed ETFs are the most tax-efficient way to invest in foreign equities within your RRSP account. The funds also tend to have lower annual fees than Canadian-listed ETFs. However, they must be bought and sold in US dollars, and if you have to exchange your Canadian dollars for greenbacks, it can be extremely costly. Many discount brokerages charge about 1.5%—or a whopping \$150 on a \$10,000 conversion. If you’re going to use US-listed ETFs, you need to find a way to mitigate these high costs.

If you need to convert loonies to US dollars, we’ll show you a technique that can save you hundreds of dollars per transaction. At RBC Direct Investing, there is no need to even pick up the phone: the entire process can be completed online.

Norbert’s gambit works exactly the same at RBC Direct Investing for both registered and non-registered accounts. Follow the procedure outlined below, but select your Investment Account (CAD) when purchasing DLR and your Investment Account (USD) when selling DLR.U and buying a US-listed ETF.

### Understanding Foreign Exchange Quotes

Before we work through an example together, let’s go over the basics of foreign exchange quotes. If you call up your discount brokerage and ask for a quote to convert your Canadian dollars to US dollars, they may respond with a number like 1.045. This means they will give you 1 US dollar for every 1.045 Canadian dollars you provide them with. A common way of writing this is:

$$\text{USD/CAD} = 1.045$$

The first currency in the pair is called the *base currency*, and it is equal to 1. The second is called the *quoted currency*: it tells you how many units you must pay to buy 1 unit of the base currency. For example, assuming you wanted to sell \$25,660 Canadian dollars and buy US dollars, the calculation would go like this:

$$\begin{aligned} \text{US dollars received} &= \frac{\$25,660 \text{ CAD}}{1.045} \\ &= \mathbf{\$24,555 \text{ USD}} \end{aligned}$$

In other words, when the brokerage quotes you 1.045 to convert your \$25,660 Canadian dollars to US dollars, just divide \$25,660 by 1.045 to determine how many US dollars they are offering.

### Putting them on the spot

How do you know whether your brokerage is offering you a fair exchange rate? You could visit the [OANDA](#) or [CanadianForex](#) websites to lookup the [spot exchange rate](#), which can be considered your benchmark. Suppose the spot exchange rate for USD/CAD conversion is 1.030 (look in the ask column). Using the same process as above, divide \$25,660 by 1.030 to determine how many US dollars you would receive if you were able to get the best possible exchange rate:

$$\begin{aligned} \text{US dollars received} &= \frac{\$25,660 \text{ USD}}{1.030} \\ &= \mathbf{\$24,913 \text{ USD}} \end{aligned}$$

The difference between these two outcomes is the approximate cost of converting currencies through your discount brokerage:

$$\begin{aligned} \text{Conversion cost} &= \$24,913 \text{ USD} \\ &\quad - \$24,555 \text{ USD} \\ &= \mathbf{\$358 \text{ USD}} \end{aligned}$$

This transaction would have resulted in a cost of about 1.44%:

$$\begin{aligned} &= (\$24,555 / \$24,913) - 1 \\ &= -0.01437 \\ &= \mathbf{1.44\%} \end{aligned}$$

Not only is that cost high, it’s also hidden: most investors making this transaction would have had little idea they were being charged. Brokerages almost never post their currency exchange spreads, and customer service reps have been known to tell clients there is no fee for exchanging currency. This is only true in the most literal sense: a wide currency spread isn’t a “fee” for the service. It’s simply a high price.

## Introducing Norbert's gambit

Savvy DIY investors have long used a technique called "Norbert's gambit" to sidestep these steep currency conversion costs. The name comes from [Norbert Schlenker](#), an investment advisor in B.C. who was the first to popularize it.

Here's an analogy that might help you understand the idea. Imagine you live in Windsor, Ontario, and you want to exchange \$100 Canadian, which at today's spot rate is worth \$95 US. But your local bank offers you only \$93 US, because it will keep the other \$2 as its profit. So you come up with a bright idea: you go to your local Walmart and buy an item for \$100. Then you drive across the border into Detroit, where there is another Walmart that sells the same items for the equivalent amount of US dollars. You take your newly purchased item to the customer service desk and return it for a refund of \$95 US. Now you've received a fair exchange on your money and sidestepped the bank's \$2 fee.

OK, we know you can't do that at a real Walmart. But you can do something similar in your brokerage account. Some stocks and ETFs trade in both Canadian and US dollars, so you can simply buy them in one currency and then sell them in the other.

## Norbert's gambit with DLR and DLR.U

The simplest way to do Norbert's gambit is with the **Horizons US Dollar Currency ETF**. This ETF—which is equivalent to holding US cash—is available in two versions. Both trade on the TSX, but the first, with the ticker symbol [DLR](#), is bought and sold in Canadian dollars, while the second, [DLR.U](#), trades in US dollars. The two versions always trade close to \$10 per share, and the difference in price between the two versions reflects the current exchange rate.

You can use these ETFs to exchange Canadian dollars for US dollars and then use the proceeds to buy US-listed ETFs.

You can use Norbert's gambit to convert US dollars to Canadian dollars as well. Just use your US dollars to buy shares of DLR.U on the US-dollar side of your account and sell the same number of shares of DLR on the Canadian-dollar side of your account.

Norbert's gambit can be confusing, so let's work through an example assuming you want to convert about \$25,660 CAD (including commissions) and use the proceeds to buy a US-listed ETF in your RRSP. We've used the [Vanguard FTSE Developed Markets ETF \(VEA\)](#) in our illustration, but you can use the same process when buying any other US-listed fund.

### 1. Get a quote for DLR and calculate how many shares you can buy for \$25,660 CAD.

#### Horizons U.S. Dollar Currency ETF ( [DLR](#) ) CDN

Last Price	Change	Bid / Size	Ask / Size	High	Low	Volume
10.25 CAD	+0.04	10.25 / 16	10.26 / 36	10.26	10.22	13,739

$$\begin{aligned}\text{Number of Shares} &= (\text{Purchase Amount} - \text{Commission}) / \text{Ask Price} \\ &= (\$25,660 - \$9.95) / \$10.26 \\ &= \mathbf{2,500 \text{ shares}}\end{aligned}$$

Whenever you are purchasing an ETF, the *ask price* is what you are interested in. The ask price is what potential sellers are willing to accept for one share of the ETF. In other words, if you were interested in buying DLR, you should expect to pay \$10.26 per share. The size indicates the number of "board lots" available at the current ask price (1 board lot is equal to 100 shares). In our example, you would be able to buy up to 3,600 shares of DLR at \$10.26 per share. Since we are planning to purchase only 2,500 shares, we would expect to receive all of them for \$10.26 per share.

### Push yourself to the limit

Whenever you buy or sell ETF shares, you can use a *market order* or a *limit order*. If you place a market order, it will be filled at the current price, whatever that happens to be. A limit order, on the other hand, allows you to specify the maximum price you will pay, or the minimum price you will accept.

We discourage investors from placing market orders at any time. A market order is like a blank cheque: you're saying to the stock exchange, "I trust you. Please write down whatever price you think is fair." Most of the time, a market order will

be filled very close to the quoted bid or ask price, but sometimes you'll get a nasty surprise. So let's be clear: you should always use limit orders when buying or selling ETFs.

When purchasing DLR, we recommend placing a limit order at the ask price. If your trade is only partially filled at a limit price of \$10.26, you can decide at that time whether to increase the limit price in order to fill the trade. (This happens frequently when making large transactions.)

**2. Place a limit order to buy 2,500 shares of DLR at the current ask price on the Canadian-dollar side of your RRSP.**

**Place Order**

Account #: 00000000 - RSP Account - CAD

Available Funds: 25,700.00 CAD

Action: Buy

# of Shares: 2500 [Calculate Shares](#)

Symbol: DLR Market: CDN [Refresh Quote](#)

Price:  Market Price  Limit Limit Price: 10.26 Stop Price:

Good Through: Day

Special Instructions:  Any Part  All or None

Pay From: Use RBC Direct Investing Account Cash

**Important Notice:** Settlement instructions for order entry are no longer available. Orders will be settled directly to or from your RBC Direct Investing account. To transfer funds between your RBC Royal Bank accounts and your RBC Direct Investing accounts in real-time, visit the *Transfer Funds* page found under the *My Portfolios* tab.

Contact Phone: 4161231234

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The trade should cost a total of \$25,659.95 (\$10.26 × 2,500 shares + \$9.95 commission). Check in the *Trade > Order Status* screen to ensure all 2,500 shares have been filled at \$10.26 per share.

**3. Get a quote for DLR.U.**

Horizons US Dollar Currency ETF (DLR.U) CDN

Last Price	Change	Bid / Size	Ask / Size	High	Low	Volume
9.96 USD	+0.01	9.95 / 983	9.97 / 1,213	9.96	9.95	18,037

For this trade, we are now interested in the *bid price*. The bid price is what potential buyers are willing to pay for one share of the ETF. In other words, if you were interested in selling DLR.U, you should expect to receive \$9.95 USD per share. “Size” indicates the number of shares for which there are bids at that price. The quantity is once again given in board lots of 100 shares. In our example, you would be able to sell up to 98,300 shares of DLR.U at \$9.95 USD per share. Since we are planning to sell only 2,500 shares, we would expect to receive \$9.95 USD per share for all of them.

**4. Place a limit order to sell 2,500 shares of DLR.U at the current bid price on the US-dollar side of your RRSP.**

Note that although DLR.U is traded in US dollars it is listed on the Toronto Stock Exchange, so you must still select “CDN” in the Market field. The trade will settle in US dollars.

As with the previous trade, enter a limit order at the current bid price. This will ensure there are no surprises when you confirm the trade. Check in the *Trade > Order Status* screen to ensure all 2,500 shares have been sold at \$9.95 USD per share.

You have now successfully converted about \$25,660 CAD (including the \$9.95 commission) to \$24,865 USD (including the \$9.95 commission). This works out to a conversion rate of 1.032.

$$\begin{aligned} \text{Currency conversion rate} &= (\$25,650 \text{ CAD} + \$9.95 \text{ CAD}) / (\$24,875 \text{ USD} - \$9.95 \text{ USD}) \\ &= 1.032 \end{aligned}$$

If we compare this rate to the spot rate of 1.030 from our previous example, this transaction cost us about \$48 (\$24,913 USD – \$24,865 USD). The percentage cost of this transaction was therefore **0.19%** (\$24,865 / \$24,913 – 1).

By using Norbert's gambit, you would have saved **\$310 USD** on the conversion compared with the rate quoted by your brokerage (\$24,865 USD – \$24,555 USD).

**5. Get a quote for VEA and calculate how many shares you can buy with the US-dollar proceeds from the sale of DLR.U.**

**Vanguard FTSE Developed Markets ETF ( VEA ) US**

Last Price	Change	Bid / Size	Ask / Size	High	Low	Volume
39.85 USD	+0.06	39.84 / 85	39.85 / 665	39.89	39.69	1,795,500

$$\begin{aligned}
 \text{Number of Shares} &= (\text{Proceeds from sale of DLR.U} - \text{Commissions}) / \text{Ask Price} \\
 &= [(2,500 \text{ shares} \times \$9.95) - \$9.95 - \$9.95] / \$39.85 \\
 &= 623.716 \text{ shares} \\
 &\approx 620 \text{ shares}
 \end{aligned}$$

You'll notice that we've subtracted two \$9.95 trades from proceeds of the DLR.U sale – one for the sale of DLR.U and another one for the purchase of VEA. We've also rounded down the number of shares to leave a buffer in case the market fluctuates while we are placing the trade to purchase VEA.

**6. Place a limit order to buy 620 shares of VEA on the US-dollar side of your RRSP.**

**Place Order**

Account #: 00000000 - RSP Account - USD

Available Funds: 24,903.93 USD

Action: Buy

# of Shares: 620 [Calculate Shares](#)

Symbol: VEA Market: US [Refresh Quote](#)

Price:
   
 Market Price
   
 Limit Limit Price: 39.90
   
 Stop Price:

Good Through: Day

Special Instructions:  Any Part  All or None

Pay From: Use RBC Direct Investing Account Cash

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In this example, we placed a limit order five cents above the current ask price. For more liquid (and volatile) securities, like equity ETFs, we recommend doing this in order to place a ceiling on how much you are willing to pay (while still allowing the trade to be filled reasonably quickly). It is important to understand that even though your limit order is five cents above the current ask price, you will still receive a better price if it is available at the time of the trade.

## Getting settled

After performing Norbert's gambit your holdings will look a little strange until after the trades settle: for the next three business days your account will show 2,500 shares of DLR in your Canadian holdings, and -2,500 shares of DLR in your US holdings. Note also the US holding will simply appear as DLR (not DLR.U): for some reason many brokerages do not display the suffix.

Canadian Holdings (In Canadian Dollars)							
Common Shares							
Symbol▲	**Quantity▼	**Current Price▼	**Market Value▼	Book Value▼	**\$ Gain/Loss▼	**% Gain/Loss▼	Actions
DLR	2,500	10.28	25,650.00	25,659.95	-9.95	-0.04	<a href="#">Buy</a> <a href="#">Sell</a>
<b>Sub-Total :</b>			<b>25,650.00</b>	<b>25,659.95</b>	<b>-9.95</b>	<b>CAD</b>	
<b>Total Canadian Holdings:</b>			<b>25,650.00</b>	<b>25,659.95</b>	<b>-9.95</b>	<b>CAD</b>	
US Holdings (In Canadian Dollars)							
Common Shares							
Symbol▲	**Quantity▼	**Current Price▼	**Market Value▼	Book Value▼	**\$ Gain/Loss▼	**% Gain/Loss▼	Actions
DLR	-2,500	10.25	-25,621.25	-25,631.20	-9.95	-0.04	<a href="#">Buy</a> <a href="#">Sell</a>
VEA	620	41.10	25,480.14	25,490.09	-9.95	-0.04	<a href="#">Buy</a> <a href="#">Sell</a>
<b>Sub-Total :</b>			<b>-141.11</b>	<b>-141.11</b>	<b>-19.90</b>	<b>CAD</b>	
<b>Total US Holdings:</b>			<b>-141.11</b>	<b>-141.11</b>	<b>-19.90</b>	<b>CAD</b>	

[Exchange Rate: 1 USD = 1.0300 CAD](#)

The trades will settle on the third business day after the transaction (T+3). At that time RBC Direct Investing will automatically transfer (or "journal") the shares from the Canadian-dollar side of your account to the US-dollar side. This will eliminate the short sale of DLR.U on the US-dollar side of your account so the transactions do not go "out of order" and leave you with a debit balance.

However, mistakes happen. If RBC does not journal the shares of DLR by T+3, there could be a day or so when the US-dollar side of your account will be out of order. RBC may even charge you interest for their error; at 21% per annum this is not something you can ignore. We recommend that you check your Activity Report for a couple weeks following the transactions to be sure.

Beware of holidays! Since stock market holidays in Canada do not always coincide with stock market holidays in the U.S. (think Thanksgiving), you have to be cautious when implementing Norbert's gambit, since the DLR and DLR.U trades may settle on a different day than the US-listed ETF trades.

For example, suppose you placed the following trades on October 9, 2013:

1. Buy 2,500 shares of DLR on the Canadian stock market on the Canadian-dollar side of your account
2. Sell 2,500 shares of DLR.U on the Canadian stock market on the US-dollar side of your account
3. Buy 620 shares of VEA on the US stock market on the US dollar-side of your account

If this was a typical weekend, the trades would all settle on October 14 (T+3). Because it happens to be Thanksgiving Monday for Canadians on October 14 the first two trades would actually settle the next day, on October 15. The only trade that would settle on October 14 would be the purchase of VEA.

You would owe almost \$25,000 USD on October 14, but you would not have the USD proceeds from the sale of DLR.U until the next day. RBC might charge you interest on the debit balance in your US-dollar account.





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