

# Beta Bets

## Using passive investments for active risk management

BY SCOT BLYTHE

In less than a decade, the passive investment universe in Canada has changed dramatically. Ten years ago, advisors were limited to a few bank no-load index funds that covered large-cap stocks in Canada, the U.S. and international markets. There were a few ETFs covering largely the same territory.

Since then, the marketplace has blossomed with passive investment vehicles. That's true, literally, in the U.S., where index investing pioneer Howard Atkinson thinks there will be as many new ETFs launched this calendar year as already exist.

The proliferation has been more modest in Canada, as might be expected, given the country's sanguine northern demeanour. All the same, Barclays Global Investors is fleshing out its line of sector and market capitalization indexes, so that advisors can slice and dice gold and mining exposures against technology, if they prefer, or add to large-cap indexes small-cap Canadian and U.S. exposures. Claymore has brought fundamentally based ETFs to Canada, which offer an alternative to market-cap weighting, and Pro-Financial has followed with mutual funds based on the same fundamentally weighted indexes.

Horizons BetaPro also added to the mix, with bear and bull market

ETFs to go alongside their bear and bull market mutual funds.

This series has examined building better beta by using fundamental indexes. It has also looked at completing the beta set with iShares. Bull and bear ETFs offer another variant: using selective beta to create alpha.

Bull and bear ETFs add a third dimension to investing, by allowing advisors to take a view on the market and execute efficiently. The BetaPro ETFs provide leverage — on the long side and on the short side — of 200% without risking the loss of more than the capital invested. There are no margin calls; the ETFs are rebalanced daily.

### BULLISH GROWTH

The bull and bear ETFs have proven surprisingly popular in a very short time, and not just in the retail marketplace.

"If you look at HXU and HXD as a pair, they've been trading at the same volume on a daily basis as XIU," notes Atkinson, who is president of BetaPro Management. "The gold pair has been trading at more than one and a third times XGD and the financials pair have been trading at roughly half their respective iShares. So the volume is quite high."

The high trading volumes are indicative of a quick ramp up in

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assets since the ETFs began trading earlier this year.

"We are pleasantly surprised. We did not forecast for asset growth or trading volume to be quite this high, at this point. I think where this is coming from is the institutional space," says Atkinson. "We had lunch with an institutional hedge fund manager recently and said 'we just don't get it. You can employ leverage, you can use futures to go short.' That answer is ease of use. They don't have to worry about special accounts, they don't have to worry about margin calls. They don't have to worry about borrowing securities and having them called away."

Of course, this ease of use has to be considered in the context of cost. While the basic large-cap ETFs come in at around 25 basis points, the Horizons products are more expensive. In fact, they come in at about twice the MER of a specialty ETF but they also have twice the exposure. "If you look at the MER, it's 1.15%," says Atkinson, "Halve that to be 57.5%, look at the sector ETFs versus Barclay's at 55, so the exposure you're getting is pretty much in line with what the market is charging."

At the same time, the bear ETFs have a positive carry. They earn interest on the collateral for the forward contract as well as interest from the short sales, which is reduced by the dividends that must be paid on the underlying dividends and by the MER. In a flat market, the interest is more than the MER and the dividends.

With the bull market ETF, there is a cost. While interest is earned from the collateral, interest must also be paid on the leveraged exposure. Dividends are also earned, but then there's the MER to be paid, leaving a negative carry. (See second chart)

The interest "accrues daily and it's inside the forward agreement with National Bank," Atkinson explains. "So if there's interest earned, either actual or implied through the futures, it accrues to the NAV every day and the NAV is adjusted each day. So, on the bear product you have the positive carry, on the bull product, those are just money market rates."

The bull and bear ETFs lend themselves to a variety of strategies. One is simply equitization, as with any other ETF, allowing

an active investor to park money quickly in the market or in a sector while scouting for individual names to invest in.

"I can think of one institution that was long financials using HFU and long gold HGU," says Atkinson. "They're really invoking the cash equitization. They want to get long a sector. They want to do it quickly and they're worried about the security names later. Or in many cases, they don't end up with the securities."

This falls under the classification of beta efficiency, getting exposure to the market with half the capital normally required. The other half could be invested in the money market, or some other safe alternative. Says Atkinson: "Because you only need half the capital to get 100% exposure, you can liberate half your capital to make other investments." (See first chart)

### BETA EFFICIENCY

But beta efficiency can also lead to portable alpha. The idea is to gain beta exposure, but to beat the benchmark with a skilled active manager, or an alternative asset class, such as real estate.

For Atkinson, beta efficiency leads to true alpha and beta separation, which in turn can be used to create portable alpha.

It is like a core-satellite approach. "With \$100 you're going to get \$2,000 worth of exposure," says Atkinson. "Or you're going to get \$150 worth of exposure more accurately because you're going to

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two for one. You're going to put half the money in one of our vehicles, which is giving to give you beta and use the other half to get some sort of alpha. So you have 150% exposure. The key is to have something as low or preferably negatively correlated between the beta sources and the alpha. Total market neutrality would be perfect.

### DIRECTIONAL TRADING

Atkinson's example pairs the TSX 60 tracking ETF, HXU, with a couple of well-known small-cap resources funds. There are other ways to generate alpha. One is the Gartman trade, named after the analyst, which pairs a long on position in one sector with a short position in another. Today, were the ETFs available, a short oil and long gas position would be interesting, Atkinson says, since the historical ratio of prices has

diverged.

An advisor could also opt for market neutrality by going long an individual name, but shorting the sector. "When we talk to the hedge funds, many of them will be long single names but short the sector or short the commodity," he says.

Then there are risk management strategies. One BetaPro has modelled is to use the TSX 60 bear fund in varying proportions in hostile markets. It's not clear how much ETFs are being used to accomplish this, but Atkinson notes that the mutual fund equivalents of the bear and bull ETFs have a holding period of between 90 to 120 days.

Last year, when the TSX 60 fell 12% in a month, a 30% bear exposure would have been for a flat return.

As the loonie continues to climb, lowering the nominal value of foreign assets, perhaps a more popular version of risk management is dollar hedging. The U.S. dollar bear ETF can be used to compensate for declines in U.S.-based assets.

"We've actually had four small to mid-sized Canadian corporations who had U.S. dollar exposure use those funds to hedge U.S. dollar exposure," says Atkinson. "We've seen numerous portfolio managers use them."

Should inflation take off, a similar strategy could be deployed using the Canadian bond bear ETF. "You can dramatically shorten duration by using the bond bear products, says Atkinson. In effect, it gives you 14 years of duration," since the 10-year Canada has a duration of seven years. Duration measures a bond's sensitivity to interest rate changes. The longer the duration, the more sensitive the bond is to a 100 basis point change. With the bond bear, a doubling of duration captures twice the drop incurred by higher rates. With a 100 basis point back up in interest fees, the bear fund would earn 14%.

In fact, the bull and bond ETFs can lend themselves to a lot of hedge fund like strategies, for advisors and for money managers. For one thing, he notes, "Shorting for most investors is very difficult. The economics don't work out very well." Bear ETFs make it simpler.

Of his clients, Atkinson notes: "They could wear the uniform of a bank-owned brokerage firm or they could be an investment counselling shop or they could be hedge or mutual fund [shop] but the common denominator is they're all calling the shots on behalf of the client." **AER**

## BETA EFFICIENCY

The HBP 60 Bull + ETFs can offer equivalent market returns with half the capital assuming liberated capital is only invested in money markets.

Actual Case Study (2006):	Performance
1-year return of S&P/TSX 60 Index	17.19%
HBP 60 Bull + Fund	29.84%
Money Market	3.94%
HBP 60 Bull + Fund (50%) and Money Market (50%)	16.90%

### Note:

All fees and brokerage commissions and dividends included  
Daily rebalancing of HBP 60 Bull + Fund  
Comparison assumes 100% invested in XIU vs. 50% invested in HBP 60 Bull + Fund and 50% invested in money markets

## EARNINGS AND COSTS IN A FLAT MARKET

	HXD	HXU
Capital Investment	\$100	\$100
Notional Exposure	(\$200)	\$200
Interest accrued from investment	\$4.00	\$4.00
Interest accrued from short proceeds	n/a	(\$8.40)
Dividends	(\$3.00)	\$3.00
MER	(\$1.15)	(\$1.15)
Total carry	\$6.85	(\$2.55)

### Note:

1. Interest accrued at current CDOR  
2. Includes financing spread calculated on notional exposure  
3. Dividends based on 2x current yield