

# The new model index fund:

Why exchange-traded funds are gathering fans

*Exchange-traded funds are making an appearance in Australia, providing investors with a new generation of index-tracking and highly liquid investments.*

*MARTIN GOLD and PAUL ALI describe the structure and benefits of ETFs.*

#### MARTIN GOLD ASIA

is a consultant,  
MFAS Investment  
Advisors.

DR PAUL ALI is  
director, MFAS  
Investment Advisors,  
and a post-doctoral  
Fellow at the TC Beirne  
School of Law,  
University of  
Queensland.

Exchange-traded funds (ETFs) are “hybrid” mutual funds that deliver the coverage of index-tracking unit trusts with the tradeability of listed investment companies, while overcoming the main drawbacks of those two vehicles for investors.

They are also challenging the rationale for index-tracking mutual funds, given their extremely low operating expenses, trading liquidity, and more efficient tax structures.

ETFs are a global phenomenon that originated in Canada. The first ETF (called TIPS) was listed on the Toronto Stock Exchange in 1989, and tracked the shares of 35 of the largest companies listed on the TSE. In 1993

SPDRs or “Spiders” were listed on the American Stock Exchange, tracking the US S&P 500 index. The first Asian ETF (TraHK) was listed on the Hong Kong Stock Exchange in November 1999 and Barclays Global Investors launched the first European ETFs in April 2000.

There are now 114 ETFs traded in a total of 11 different countries or international exchanges. The market value of ETFs worldwide now exceeds \$US75 billion. As of 1 April 2001, the largest ETF sponsors – Bank of New York, Barclays Global Investors and State Street Global Advisors – controlled over 97% of these assets. The S&P 500 SPDR is the world’s largest ETF valued at \$US28.2 billion (see Table 1).

TABLE 1 Top 10 US ETFs

Rank	Action	Symbol	Net assets \$US millions	Total index share assets
1	S&P 500 SPDR	SPY	\$28,206	39.7%
2	Nasdaq-100 Index Tracking Stock	QQQ	\$25,848	35.5%
3	S&P 400 MidCap SPDR	MDY	\$3,986	5.5%
4	DJIA DIAMONDS	DIA	\$2,499	3.4%
5	iShares S&P 500	IVV	\$2,438	3.3%
6	Select sector SPDR-Technology	XLK	\$1,306	1.8%
7	Select Sector SPDR-Financial	XLF	\$838	1.2%
8	iShares Russell 2000	IWM	\$801	1.1%
9	iShares MSCI-Japan	EWJ	\$625	0.9%
10	iShares Russell 3000	IWV	\$510	0.7%

What is a “real” ETF?

While index-linked ETFs are gaining popularity, other exchange-traded instruments are becoming more prevalent. Merrill Lynch offers a passive “basket” instrument in the form of its HOLDRS series (these are arguably not funds because they are structured as US Grantor Trusts giving investors a direct interest in the securities rather than a fund).

HOLDRS are a basket of stocks selected by the sponsor to represent a specialised strategy (for example, a basket of leading global companies or utilities stocks). Such baskets may not necessarily be weighted according to capitalisation.

ETFs are generally characterised by an index-tracking objective, a dual trading facility (see Figure 2), portfolio transparency, and low operating costs.

Like conventional index-tracking unit trusts, sector and broadly-based index-linked ETFs comprise all of the shares of the relevant index, or fewer, using “sampling” techniques (where the fund invests in a sample of shares which have a similar investment profile).

In the case of Barclays’ iShares, the ETF (although normally fully invested) must invest at least 90% of assets in physical shares with the balance invested in index futures.

However, in practice, physical holdings represent closer to 100% of the portfolio, with very little exposure to cash to minimise index underperformance due to “cash drag”. Also, futures are used only sparingly, given that brokers only deliver stocks and cash for in-kind transactions.

Generally, ETFs are not actively managed; instead, re-balancing is used to keep the investment portfolio closely correlated with the relevant index (ETFs, like other index funds, are essentially self re-balancing, with portfolio changes occurring when there is a change in the index constituents).

ETFs are not market-timer strategies; therefore, cash buffers are not kept and holdings are not altered during, or in anticipation of, market declines. However, ETFs are often used as market timing tools – for example, to make a bet on US technology shares, an investor could buy the iShare DJ Technology.

An exchange-traded basket is a passive portfolio of securities that does not track a specific index or market – for example, HOLDRS. These instruments hold 20 or 50 of the largest and most liquid US-listed companies involved in a sector or market.

Like index-linked ETFs, exchange traded baskets are primarily passive portfolios that change only where a significant event occurs (that is, either because of de-listing, a merger or removal by the trustee).

How ETFs work

ETFs solve the drawbacks associated with conventional unlisted trusts and listed investment companies. In a conventional unit trust, investors redeem their units off-market directly with the fund. The trustee is required to buy back the units for cash.

This has two major drawbacks. First, the net asset value (NAV) of a unit trust is typically calculated daily after the close of trading. Consequently, investors’ transactions are

generally executed only once a day after the close of the market. Second, the trustee may be forced to sell portfolio stocks to pay redemptions. This can trigger capital gains tax liabilities for all investors, not just those exiting the fund.

An ETF, like a listed investment company, avoids the requirement to pay cash redemptions to investors. Investors who wish to exit can sell their shares on the stock exchange, where pricing and trading are continuous. However, in common with other stocks, investment company shares can trade at significant discounts or premiums to NAV because of influences such as market liquidity, perceptions of management and economic factors.

In addition, market conditions can affect the ability of investors to transact large parcels of shares without incurring significant market impact costs (reflected in the bid/ask spread).

The ETF dual trading structure  
ETFs operate a dual trading structure that combines the favourable attributes of open-ended unit trusts and listed investment vehicles. ETFs thus provide investors with two modes of investment and redemption.

Investors can buy or sell an ETF shares at any time during a trading day like any other stock. Large investors can also create ETF shares by depositing a portfolio of shares with the trustee that closely resembles its published portfolio holdings (ie, the relevant index or basket).

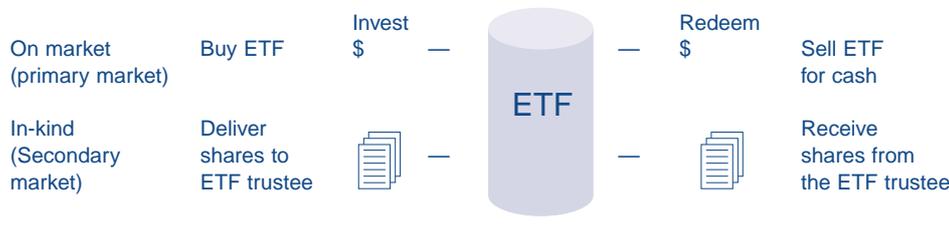
These “in-kind” deposits and redemptions must be made in large quantities and occur through “authorised participants” (brokers set up to transact directly with the fund).

Investments and redemptions can therefore be made by transferring shares in-kind to and from the ETF, or by trading the ETF on the stockmarket through a broker (see Figure 2). In practice, in-kind creations/redemptions are only effected by institutional investors given the minimum in-kind transaction size (\$5 million or more). In-kind transactions occur less frequently than those on the primary market, however it is the existence of this mechanism that ensures that ETFs trade

FIGURE 1 Features of ETFs contrasted with other instruments

Instrument	Index tracking	On market & in kind trading	Portfolio transparency?	Low expense objective?	Multiple market makers
ETF	✓	✓	✓	✓	✓
Index fund	✓	✗	✓	✓	n/a
Active fund	✗	✗	✗	✗	n/a
Listed company	✗	✗	✗	✗	n/a
Basket	✗	✓	✓	✓	✓
Active ETF	✗	✓	✗	✗	✗

FIGURE 2 Dual trading structure



close to NAV. Authorised participants can arbitrage between the ETF share and its portfolio where the ETF share trades at a premium or discount to the NAV of its portfolio.

ETF investors can turn in their ETF shares and receive the underlying shares, or sell their ETF shares on the stock exchange without forcing the sale of the underlying share portfolio.

This avoids triggering a capital gains tax liability for all investors (although an in-kind redemption is still a taxable event for the exiting investor). For institutional investors, the ETF's in-kind creation and redemption mechanism avoids the market impact usually associated with trading large parcels on-market.

A significant advantage afforded by the ETF structure is the efficiency of the portfolio strategy. Since ETFs do not have to anticipate cashflows from investors, an ETF's portfolio is normally fully invested. ETFs can thereby minimise the "cash drag" on performance experienced by conventional index funds that keep a cash buffer to meet investor redemptions.

For US investors, ETFs also give investors control over their individual capital gains tax positions in the case of in-kind transactions. In-kind redemptions are not considered a taxable event in the US, providing ETFs with a key advantage over other funds.

The in-kind investment structure means that, like on-market transactions in ETFs, the taxation position of individual investors should not be affected by the in-kind transactions of other investors, although the exiting investors may incur a taxable gain or loss.

**Active ETFS**

Active ETFs, that is, ETFs with actively managed portfolios, have been launched recently in Germany and Australia. In the US, the Securities and Exchange Commission has delayed approval of active ETFs to consider the logistical concerns that may inhibit the effective operation of these funds.

***Transparency is critical to investors and institutional market participants.***

These regulatory concerns centre on ensuring that a transparent and informed market exists for trading active ETFs. The normal operation of ETFs depends on continuous disclosure of portfolio holdings (primarily indexes or publicised stock baskets) that are quoted and calculated in real time.

Transparency is critical to investors and institutional market participants who can transact in-kind to arbitrage between the ETF shares and any significant discount or premium to NAV.

An active ETF represents a conundrum for the sponsor because it needs to disclose holdings (and possibly trades) in real time to ensure that the market is appropriately

informed, and the ETF continues to trade at, or near, NAV. An active ETF sponsor would therefore be required to continually disclose its active positions to the market. This could result in other participants "front-running" on trades that may render the active decisions ineffective (that is, security prices may move in response to the trading activities of other investors who take advantage of anticipated portfolio trades).

Why would an investor invest in the fund if it can transact on its own account based on the sponsor's announcements? On the other hand, the sponsor is unlikely to want to give the public at large insights into its proprietary trading strategies.

From a more practical perspective, active ETFs may also undermine the rationale for the vehicle because trading activity may adversely impact on investors.

**CONCLUSION**

Index-linked and basket ETFs are likely to render conventional index funds obsolete because they deliver a passive strategy with significantly lower operating costs.

Importantly, ETFs also offer investors a more tax-efficient structure, providing taxation control that is lost when investing through a conventional unit trust.

In contrast to conventional index funds that do not offer distribution incentives, the growth of ETFs seems to be assured by intermediaries who can earn commissions from distributing and transacting these index funds for clients.

*The authors acknowledge the contribution of Justin Wood, CEO, of Barclays Global Investors in the preparation of this paper.*

A service for JASSA contributors

**JASSA REPRINTS**

Authors may order reprints of their articles as published in JASSA.

For details of costs and quantities, contact the publisher at:

**Hardie Grant Magazines** 12 Claremont Street, South Yarra, VIC. 3141  
Phone: 03 9827 8377 Fax: 03 9827 8766