



# Depository Receipt Indices & International Investing: Using Exchange-Traded Funds



BNY MELLON  
DEPOSITARY RECEIPTS

**Oxford**  
METRICA



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## EXECUTIVE SUMMARY

The paper reviews the benefits of using Depositary Receipt based Exchange Traded Funds to access international equities. The evidence is strong. Here are the ten key ideas in the paper:

1. The U.S. share of global market capitalisation is shrinking; down to 42% from 55% a decade ago.
2. There are considerable benefits for U.S. investors to increase the weight in international equities.
3. Depositary Receipts are demonstrably the most efficient and transparent means of accessing international equities in a domestic package.
4. BNY Mellon provides a framework of 136 Depositary Receipt Indices that track and monitor every aspect of the international equity universe.
5. There are now over 2,500 international companies that have Depositary Receipts in issue.
6. The DR Composite Index is tested as a proxy against the MSCI ACWI (ex U.S.). Not only is it an excellent proxy for the world index, but it has a more manageable set of equities.
7. Exchange-Traded Funds have recently passed the milestone of \$1 trillion in assets under management.
8. Exchange-Traded Funds have all the benefits of stocks combined with the diversification of mutual funds.
9. There are now 18 Depositary Receipt-based Exchange-Traded Funds and this number is expected to expand in the coming years.
10. The combination of the transparency of Depositary Receipts, with the index construction technology of BNY Mellon and the facility of Exchange-Traded Funds provides the investor an exciting new way to access international equity investing.

# Depository Receipt based Exchange-Traded Funds: A new opportunity in international investing

## FOREWORD

I am pleased to introduce our latest white paper on Depository Receipts (DRs). Over the last decade we at Oxford Metrica have been researching and monitoring all aspects of performance and developments in DR markets worldwide.

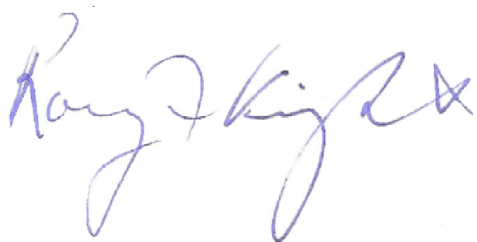
DRs continue to provide a convenient vehicle for international diversification and growth in a domestic package. Thus U.S. investors are able to invest in global equities as U.S. products that are listed on a regulated U.S. exchange or traded over the counter.

The parallel development of a comprehensive set of well constructed and monitored DR Indices by BNY Mellon and the emergence of the Exchange-Traded Fund (ETF) as an investment vehicle has given rise to an exciting new opportunity in international investing - the DR based ETF. This provides a cost effective transparent means for U.S. investors to take advantage of an expanding universe of global equities.

The need to consider seriously the increase in exposure to international equities has never been greater for both individual and institutional investors.

This paper aims to introduce the main DR based ETFs and the DR Indices that underlie these products. We hope you find the exposition helpful.

Importantly, we want to acknowledge the insights provided to us by Greg Webster and Noah Hamman at AdvisorShares who have been highly innovative in this segment of the ETF market, including launching the first actively managed DR ETF, the WCM/BNY Mellon Focused Growth ADR ETF (NYSE:AADR), which is profiled in this paper.



Dr Rory Knight  
Chairman

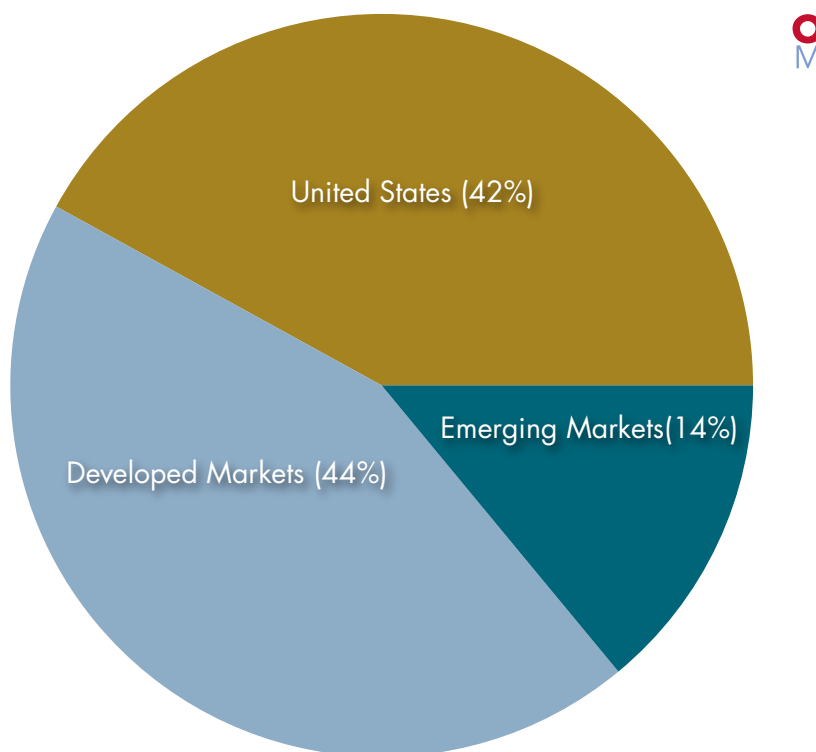
Dr Rory Knight is Chairman of Oxford Metrica. He was previously Dean of Templeton College, Oxford University's business college.

## INTRODUCTION

United States based investors have considerable incentives to seek to invest in international equities. This is so because increasingly the significant global growth opportunities are presenting themselves outside of the U.S. This is the return seeking motive. Equally important is the risk diversification motive. Investing in international equities is considerably more than spreading or averaging risk. Carefully applied, the overall risk of a U.S. equity portfolio can be reduced by selectively adding International equities. The reduction of risk is possible due to the lack of correlation between U.S. equities and international equities.

The extent of the international equity opportunity is shown in Figure 1 which presents the world equity market capitalisation by region and type of market.

Figure 1: U.S. market a shrinking slice of world market capitalisation (2009)



As of September 2009 the U.S. market constituted 42% of the world market capitalisation as measured by the Morgan Stanley Capital International All Country World Index (MSCI ACWI). This proportion is down from around 55% at the start of the decade. Curiously the Developed Markets share has remained constant at around 44% throughout the decade. The reduction in the U.S. share has for the most part been displaced by an increase in the Emerging Markets to its current share of 14%.

Surprisingly U.S. investors on average hold only 17% of their equities in foreign stocks. This home bias phenomenon has persisted for many decades.

A number of explanations have been put forward for the home bias, including; a lack of information about a daunting number of possible stocks to invest in; currency risks; political risks; the lack of consistent regulatory and reporting requirements across countries, and the perceived safety of familiar domestic markets.

Surprisingly U.S. investors on average hold only 17% of their equities in foreign stocks. This home bias phenomenon has persisted for many decades.

Figure 2: The universe of international equities is expanding (8,462)

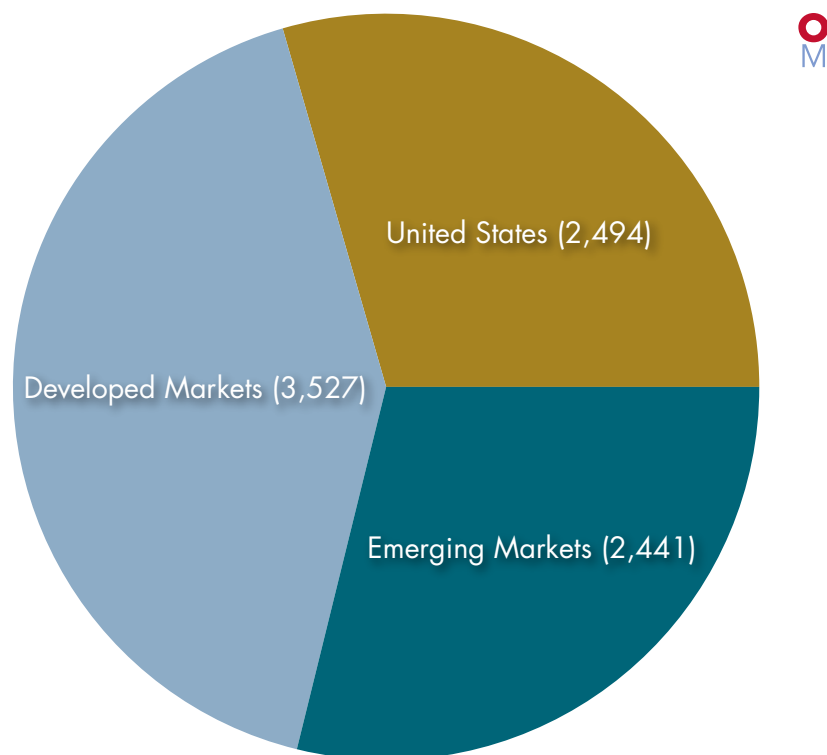


Figure 2 shows the total number of equities available in the global market. This total is 8,462 which is based on those included in the MSCI ACWI. This index provides a useful proxy and includes the majority of stocks traded on major exchanges around the world. The market capitalisation of this universe was approximately \$27 trillion at September 30, 2009. The availability of nearly 6,000 international stocks presents a considerable challenge to any individual investor, despite or even because of the developments in information technology. The task is to say the least daunting.

An attractive alternative is to invest in the DRs.

The U.S. investor is of course able to invest directly in stock markets abroad. However, as noted above, due to a lack of information and a perception that there are attendant costs in investing abroad, there is a real deterrent to investing significantly in foreign markets directly.

An attractive alternative is to invest in the DRs. These instruments represent U.S. packaged versions of the foreign stock that are available for investment in the U.S. as U.S. securities traded in U.S. markets.

DR investing represents an efficient, transparent and cost effective way of diversifying internationally with the benefits of investing in U.S. securities. As a perfect substitute for their local market counterparts DRs enjoy a wider pool of liquidity and an extended trading day as advantages.

This paper covers three major features that have converged to make it much easier for investors to venture further into international equities:

1. The use of Depositary Receipts
2. The use of DR Indices as benchmarks
3. The use of DR-based Exchange-Traded Funds to access international equities

The next section introduces the BNY Mellon family of DR Indices, section 3 introduces ETFs using these DR Indices. Section 4 provides a case study of a unique actively-traded DR ETF. The penultimate section identifies the advantages

of using DR Indices in international investing, and the final section provides a summary and conclusion.

**DR INDICES: WINDOWS ON THE WORLD**

The U.S. investor faces a daunting task regarding the sheer number of potential stocks from which to chose. The MSCI ACWI is a useful source of information but it is overwhelming and of course attendant with all the frictions of international investment.

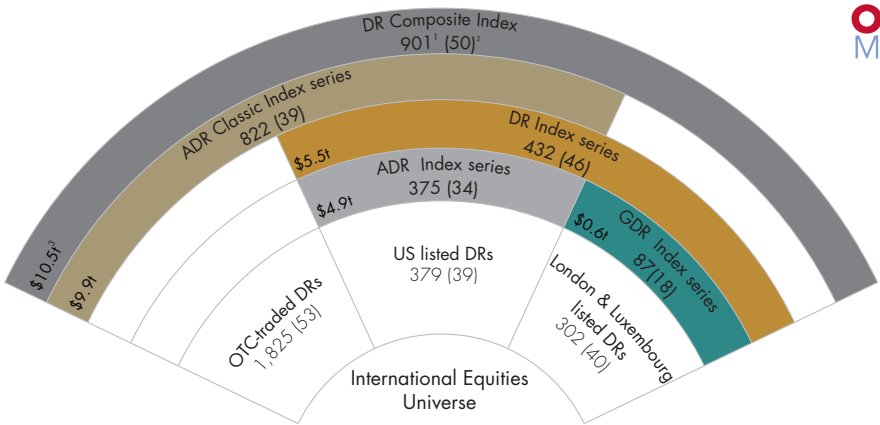
Most importantly a more manageable set of companies that proxy for the world index.

BNY Mellon has over many years developed a comprehensive set of indices based interestingly on international equities that have DRs listed or traded over the counter (OTC).

The advantage of these indices is that being based entirely on DRs, all of the shares are considered to be local securities and by and large, they represent the better performing international stocks, usually with better than average information available.

The indices are carefully compiled and continuously "scrubbed" - adjusted for corporate actions such as stock splits and dividends etc.. Most importantly, the constituencies of these indices represent a more manageable set of companies that proxy for the world index.

Figure 3: BNY Mellon’s family of DR Indices (as at September 1, 2010)



<sup>1</sup> No. of stocks

<sup>2</sup> No. of countries

<sup>3</sup> Market Capitalisation at November 30, 2010 \$ trillion



In Figure 3 the full set of BNY Mellon's DR Indices is set out hierarchically. Each grouping represents a set of indices referred to here as a series.

There are now more than 2,000 companies around the world that have active Depository Receipt programmes available.

Firstly, notice that the DR Composite Index reduces the 6,000 international stocks in the MSCI equivalent to 901 stocks from 50 different countries. It will be shown that together with all the advantages of a more manageable set of higher quality stocks, the index operates as an excellent proxy of the full universe without the disadvantages of dealing with so many stocks. In short the coverage is comprehensive of the international equity opportunity set.

Turning now to the diagram and bearing in mind that the DRs are drawn from the international equities universe, which we will define as the approximately 6,000 non-U.S. shares in the MSCI ACWI discussed in the previous section.

There are now more than 2,500 companies around the world that have active Depository Receipt programmes available. Figure 3 shows the break down among three major categories of DRs. OTC-traded DRs number 1,825 from 53 countries. U.S.-listed DRs are those traded on U.S. stock exchanges, these number 379 from 39 countries. The third category represents those DRs listed on the London or Luxembourg Stock Exchanges of which there are 302 from 40 countries.

The BNY Mellon family of DR indices is based on these three sets of DRs in combinations depicted on the diagram in Figure 3. This gives rise to five separate series of indices, each with a composite index of its own and a number of subsidiary indices.

The **ADR Index series** includes 375 listed DRs from 34 countries with a market capitalisation at November 30, 2010 of \$4.91 trillion. The **GDR Index series** consists of 87 equities from 18 countries. Combining these two indices gives rise to the so called **DR Index series**, which is made up entirely of listed DRs of both the American and Global varieties. This series includes 432 stocks from 46 countries with a combined market capitalisation of \$5.5 trillion.

The **ADR Classic Index series** is derived from the combined set of both U.S. listed and OTC DRs to form a series that includes 822 equities from 39 countries with a \$9.9 trillion market capitalisation.

Finally, drawing on all three sets of DRs identified, the **DR Composite Index** comprises 901 equities from 50 countries with a market capitalisation of \$10.5 trillion. The BNY Mellon family of indices provides an extraordinarily rich resource to the international U.S. investor.

Firstly, it provides a series of carefully constructed indices to monitor the performance of an important set of significant international equities in U.S. dollar terms. These equities in aggregate constitute an important proxy for the global equity market entirely composed of U.S. registered securities.

Secondly, each series is comprised of a large number of regional, country and sector-based indices, which allows the investor to observe and monitor various important components of the world equity markets. In short, the indices provide windows on the world.

Thirdly and possibly most importantly, the indices are increasingly forming the basis of both passive and active investment management strategies. Thus the indices are being made available increasingly through Exchange-Traded Funds

and the indices are forming the “back bone” for many investment securities, either as benchmarks of performance or as investment vehicles themselves. Figure 4 shows the performance of the main composite index of each of the series identified in figure 3.

Figure 4: BNY Mellon’s performance versus the MSCI ACWI(ex U.S.)



The MSCI ACWI (ex U.S.) is provided as a benchmark in this analysis. Note that in figure 4 each index is set to the value of 100 at December 1, 2009 and thus represents the value of \$100 invested in each index on that date, tracked daily over the subsequent year.

The BNY Mellon DR indices are forming the “back bone” for many investment securities

It is interesting to note that the MSCI index despite some fluctuation ends the year on almost exactly the same value that is started. The exact index value at the start of trade on December 1, 2010 is 100.1 for the MSCI. This means that the \$100 invested on December 1, 2009 earned 1 cent over the ensuing year. The value of the portfolio was subject to considerable variation during the period, with a volatility of 3% on an annualised basis using daily returns. The Index value reached a low of 83 in May and a high of 108 in November.

Another features worth noting is that the DR group represented by GDRs were the best performing grouping, although with significant volatility, it turned in a 6% performance for the year, ending on an index value of 106.

Interestingly the Composite DR Index tracks almost perfectly the MSCI ACWI (exU.S.). This is a very helpful feature of the index, because it demonstrates the extent to which the full set of DRs provides full coverage of the international equity universe. This point is made clear in the following analysis.

Figure 5: DR Composite Index tracking error to the MSCI ACWI (ex U.S.)

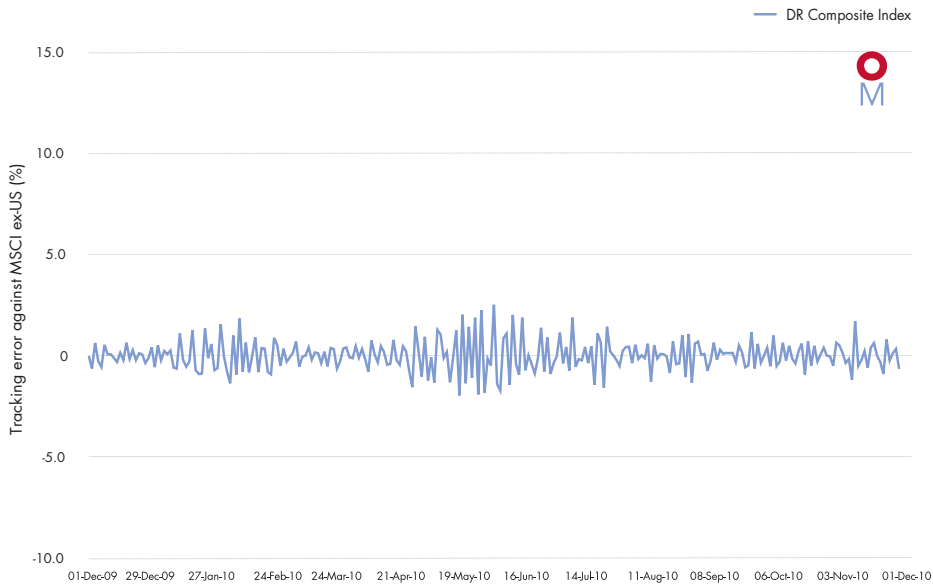


Figure 5 shows the daily tracking error between the DR Composite Index and the MSCI ACWI (ex U.S.). It is clear that the tracking error although not constant is not statistically significant and is very small indeed. This illustrates the power of the DR Composite Index to act as a proxy for the international equities universe.

This illustrates the power of the DR Composite Index to act as a proxy for the international equities universe.

Figure 6 shows the tracking error between each index and the MSCI ACWI (ex U.S.) on a cumulative basis for the same period. The exposition shows clearly how the DR Composite Index tracks the MSCI closely. On a cumulative basis the error is around 1% per annum. Obviously the other indices will tend to exhibit different performance behaviour as they are smaller sub-sets of the Composite Index.

Table 1: Performance metrics for the 12 months ended November 30, 2010

Metric	ADR Index	ADR Classic	GDR Index	DR Index	Composite DR Index	MSCI AC (ex U.S.)
Annual Return	-4%	-3.4%	6%	-5.4%	-0.7%	0.1%
Variance in Return (daily return p.a.)	5%	5%	5%	5%	5%	3%
Beta (vs MSCI ex U.S.)	0.95	0.95	1.10	0.97	0.95	1
Correlation	74%	79%	86%	78%	81%	100%
Cumulative Tracking error	-4.08%	-3.44%	5.90%	-5.44%	-0.77%	0

Figure 6: BNY Mellon DR Indices cumulative tracking error to the MSCI (ex U.S.)

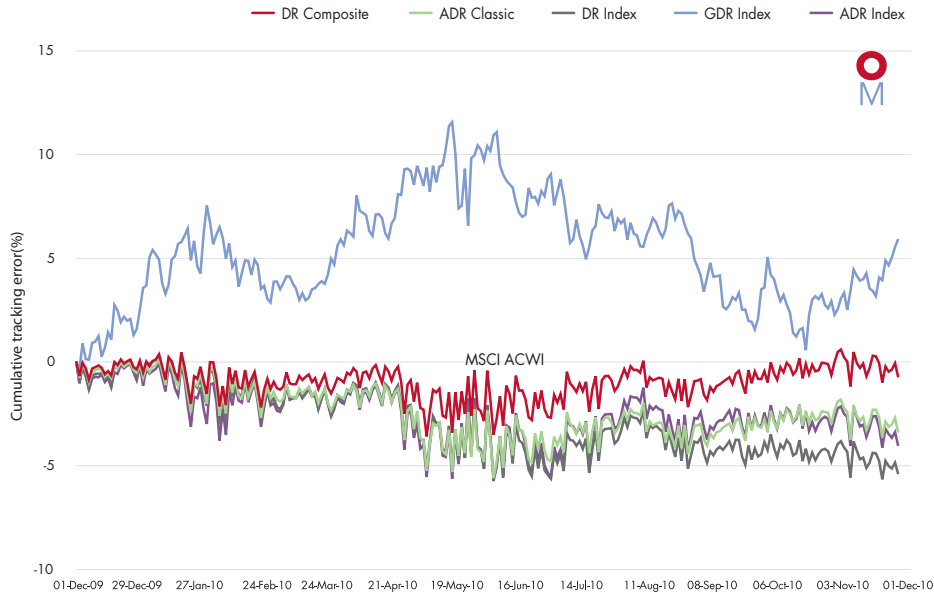


Table 1 reports the performance metrics for the various indices. Notice that the annual returns are almost all negative for the interval under examination.

A major advantage of the indices is that they provide an exhaustive and comprehensive decomposition of the world markets

The Beta statistic measures the covariance between each index and the MSCI Index. It has a relative value so that perfect co-movement would have a Beta value equal to 1, as per itself on the table. The DR Composite Index has a Beta equal to .95 which reflects its strong correlation with the MSCI Index. This is confirmed with the reported value for the correlation coefficient of 81%.

These data illustrate that the BNY Mellon indices provide an extraordinarily effective coverage of world equity markets and offer an efficient set of proxies for the larger indices.

A major advantage of the indices is that they provide an exhaustive and comprehensive decomposition of the world markets by region, countries, sectors and other useful groupings.

Table 2 provides the break down for the the five BNY Mellon Indices by the various categories they cover.

In total, there are no less than 136 indices from the three categories of DRs illustrated in Figure 3.

There are firstly five series shown as columns in Table 2, each of these has an aggregate composite Index, the performance of these was analysed above. Four of the indices have regional and market indices, two have sector indices, and two have 14 and four select indices respectively. Finally each index is broken down into the component country indices.

Table 2: The break down of the BNY Mellon Indices into subsidiary indices

Index	ADR Index	ADR Classic	GDR Index	DR Index	Composite DR Index
Composite	1	1	1	1	1
Regions	3	3	6	4	-
Markets	4	2	1	1	-
Sectors	3	10	-	-	-
Select	14	-	-	4	-
Countries	35	19	14	8	-
Total	60	35	22	18	1

The BNY Mellon family of DR indices delivers a penetrating and transparent insight into the performance of many aspects of the world equity markets. More importantly, the family of indices gives the investor different packages of equity market exposure that represents considerable choice for informed international asset allocation.

Appendix A presents the full list of all the indices. A number of these are now providing the basis for Exchange Traded-Funds, which are the subject of the next section.

## ETFs USING DR INDICES

Exchange Traded-Funds are a relatively new financial instrument that combine the attributes of individual stocks and mutual funds. Essentially they operate like stocks because they are traded continuously on organised stock exchanges. Like mutual funds, they offer a portfolio of underlying investments.

In early December 2010 the ETF industry reached a key milestone with an all time high of \$1trillion assets under management.

The stock like feature enables investors to manage their buying and selling activities by the usual mechanisms such as stop orders and set limit orders. The advantages include transparency, continuous trading and a flexible trading structure.

Like mutual funds ETFs allow market exposure to a group of underlying investments determined by a professional fund manager.

The micro market details of the trading of ETFs are slightly different from trading stocks and table 3 below summarises the key differences with respect to stocks and ETFs as regards pricing and liquidity. One key feature is the need for there to be an authorised participant (AP) to manage the ETF.

In early December 2010 the ETF industry reached a key milestone with an all time high of \$1trillion assets under management. While this is only one tenth of the size of the mutual fund industry, it is a market that is expected to grow.

The ETF market attracts considerable attention from professional investors, institutions and hedge funds. It has witnessed a multitude of innovations in terms of the assets offered in this format. Most recently DRs have attracted much attention. Table 4 sets out the full list of ETFs that are currently active around Depository Receipts and DR Indices.

Table 3: Stocks and ETFs compared for liquidity and pricing

Market Process	ETFs	Stocks
Pricing	Shares of ETFs are created in large quantities by the ETF and authorized participant (AP). The AP will create as many shares the market demands. The creation units usually mirror the holdings in the ETF, whose underlying stocks are priced every 15 seconds. The value of these stocks is totaled to provide the intraday indicative value. Due to the arbitrage process for APs, the trading price of an ETF is normally close to the indicative value.	Shares of individual stocks are purchased and sold through major exchanges or over-the-counter. The level of demand and the corresponding availability of a stock is the primary factor behind a stock's price. The number of shares available is fixed and prices fluctuate based on investor demand.
Liquidity	The AP facilitates how many shares of the ETF are available. This allows the AP to support the supply and demand process. If an ETF seller does not have a buyer the price will not necessarily go lower. In a situation where more sellers exist than buyers, the AP can redeem shares removing them from the market and balancing the supply with the demand. The opposite would occur in a situation where more buyers are present. Rather than driving the ETF price higher, the AP will create more ETF shares to accommodate the demand.	For individual stocks, liquidity and price are based on demand. With a limited number of shares available, buyers and sellers of a stock control the price. If a shareholder wishes to sell their shares, he/she attempts to find a buyer willing to pay. If no buyer exists the seller reduces the price to find a buyer. Conversely, higher demand for the stock would push the share price higher.

Table 4 identifies 18 ETFs that are based primarily on ADR Indices. In addition to the actively managed DR ETF, which is profiled in the next section, most of the ETFs are based on a BNY Mellon DR Index series. There are eight market based DR ETFs ranging from frontier markets to developed; three regional ETFs; two country ETFs; one style based and four leveraged of which two are based on the BRIC (Brazil, Russia, India, China) group and two on China.

This pattern illustrates the effectiveness of the BNY Mellon's family of Indices, as the market has responded to the parts of the international equities universe that other indices don't reach.

If a U.S. investor intends to invest in a stock traded on a foreign exchange and no DR programme currently exists it is possible for the investor to approach a Depositary Bank to create such a programme as a service to the investor. Similarly, if an investor wishes to invest in an index on which no ETF exists it is perfectly simple to approach the depositary bank in question to create such a vehicle.

In fact a number of managed accounts use tailored versions of the DR Indices as benchmarks or as bespoke investment vehicles. The DR-based ETF is a flexible, transparent and cost effective (see expense cap) means of accessing the international equity markets.

Table 4: Exchange-Traded Funds based on Depositary Receipt Indices

Symbol	ETF	BNY Mellon DR Index	Holdings	Expense Cap (bps)	Exchange
<b>Active</b>					
AADR	WCM/BNY Mellon Focused Growth	Classic	30	1.25	NYSE
<b>Market</b>					
ARDR	PowerShares BLDRS Developed Markets 100	Developed Markets 100	100	30	NYSE
ADRE	PowerShares BLDRS Emerging Markets 50	Emerging Markets 50	50	30	NYSE
EEN	Guggenheim EW Euro Pacific LDRs	Euro Pacific Select	111	35	NYSE
EEB	Guggenheim BRIC	BRIC Select	85	60	NYSE
CBQ	Claymore/BNY Mellon BRIC	BRIC Select	85	60	TSX.CA
10502	Mirae Asset Tiger BRIC	BRIC Select	85		KOSPI Korea
FRN	Guggenheim Frontier Markets	New Frontier	46	65	NYSE
<b>Regional</b>					
ADRA	PowerShares BLDRS Asia 50	Asia 50	50	30	NYSE
ADRU	PowerShares BLDRS Europe 100	Europe 100	100	30	NYSE
10501	Mirae Asset Tiger Latin America	Latin America 35	35		KOSPI Korea
<b>Country</b>					
ZCH	BMO China Equity	China Select Canadian	41	65	TSX.CA
ZID	BMO India Equity	India Select Canadian	22	65	TSX.CA
<b>Style-size</b>					
XGC	Guggenheim Int. Small Cap LDRs	Small Cap Select	80	45	NYSE
<b>Leveraged</b>					
BRIL	Direxion Daily BRIC Bull 2x	BRIC Select	85	0.95	NYSE
BRIS	Direxion Daily BRIC Bear 2x	BRIC Select	85	0.95	NYSE
CZM	Direxion Daily China Bull 2x	China Select	41	0.94	NYSE
CZI	Direxion Daily BRIC Bear 2x	China Select	41	0.95	NYSE

## ACTIVELY MANAGED DR ETFs: A CASE PROFILE

Table 5: WCM/BNY Mellon Focused Growth ADR ETF (NYSE: AADR)

Objectives	Description
How it works	The investment objective of the WCM/BNY Mellon Focused Growth ADR ETF (NYSE AADR) is long-term capital appreciation above international benchmarks such as the MSCI EAFE Index and the BNY Mellon Classic ADR Index. AADR provides a high-quality, large-cap growth portfolio for the non-U.S. universe. The portfolio is purposely very different from international benchmarks and other international funds. AADR achieves this differentiation by concentration (20–30 holdings) and a focus on traditional growth sectors such as technology, healthcare and consumer staples/discretionary. The AADR portfolio management team seeks to invest in businesses that have benefited from long-lasting global trends (tailwinds), a growing competitive advantage (a widening economic moat) and a superior corporate culture (great people). Finally, AADR recognizes the role valuation plays in investment returns and therefore seeks to pay a reasonable price for companies.

### 5 Key Attributes

Concentration	AADR has a portfolio of 20–30 high-quality growth companies which represent the best ideas generated by the portfolio management team.
Quality Emphasis	AADR defines quality growth as businesses with superior growth histories, predictable business prospects, high returns on capital, and low (or no) debt. These companies tend to be large, established multinationals.
Differentiation	AADR generally passes on businesses in leveraged, slower-growing sectors such as energy, basic materials, utilities or financials, which dominate the international indices. Instead, the focus is on traditional growth sectors like technology, consumer discretionary / staples and healthcare. Similarly, they'll tend to pass on slower-growing countries such as Japan, a dominant geographical component of widely used benchmarks.
Research	AADR is driven by a unique research process that employs a traditional fundamental equity analysis, a global sector analysis as well as a network of some 500,000 industry experts worldwide. This includes industry executives, customers, vendors and past employees.
Turnover	AADR targets 15% annual turnover, with a of 3-5 year nominal holding period.



A new phenomenon in the field of ETFs is the DR based actively managed fund. This was launched by AdvisorShares with WCM and BNY Mellon as the focused Growth fund. This is a novel approach and since each actively managed fund is unique to the manager, one can reasonably expect a proliferation of this style of instrument in the future. For these reasons the above profile is provided for illustration purposes. The key advantage of investing in such a fund is the access to an international portfolio of identifiable stocks that are all DRs with the ability to trade the package as if it were one stock. The investment manager for this fund is **AdvisorShares**.

On July 21, 2010, AdvisorShares Investments LLC launched the first actively managed international exchange-traded fund, the WCM/BNY Mellon Focused Growth ADR ETF, NYSE symbol: AADR.

AAADR looks to achieve long-term capital appreciation above the referenced BNY Mellon Classic ADR Index. BNY Mellon is the world's largest depository for American Depositary Receipts (ADRs) and will provide the primary benchmark to the Fund as well as expertise within the ADR industry to the portfolio management team. The BNY Mellon Classic ADR Index combines the over the counter (OTC) traded ADRs with exchange-listed ADRs bringing transparency to the available universe of American Depositary Receipts. The index is capitalisation-weighted and adjusted for free-float utilizing Dow Jones' current methodology.

The Fund is sub-advised by WCM Investment Management which looks to invest in industry-leading non-U.S. leading organizations. WCM will invest in 20-30 holdings and have an emphasis on traditional growth sectors such as technology, healthcare and consumer staples/discretionary. The AADR portfolio management team seeks to invest in businesses that appear likely to benefit from long-lasting global trends, growing competitive advantages and a superior corporate culture. Finally, WCM recognizes the role valuation plays in investment returns and therefore seeks to pay a reasonable price for companies.

## THE ADVANTAGES OF DR INDICES FOR INTERNATIONAL INVESTING

Aspect	Comments
Investibility	A significant advantage to using the BNY Mellon DR Indices versus standard indices is the manageable size of the former. Being based on DRs as U.S. securities they trade and settle more easily. Often an index including a large number of foreign traded stocks is purer from a statistical point of view. However, practically an investible set of U.S. securities is preferable.
Tracking Error	Minimising tracking error is crucial particularly when the indices are used with derivatives and pass through notes. It is crucial to treat the groups homogeneously. The DR Indices are particularly focused on this issue and provide excellent proxies for the underlying investment universe.
Index construction	The BNY Mellon DR Indices are constructed in terms of strict and transparent policies. Typically they are market capitalisation weighted (alternative schema are available on a tailored basis), screened for pricing and liquidity. In addition the indices are available on a RIC compliant basis incorporating diversification rules.
Cost, Convenience & Accessibility	All of the benefits of DR investing are reflected in the Indices. This means that at low cost the investor in the index has access to a comprehensive coverage of world equities in a domestic package.
Corporate Actions	The data are meticulously adjusted for all corporate actions on a real time basis. This includes stock splits, dividends etc..
Calculation	Dow Jones serves as the calculation agent so that accuracy is guaranteed with an efficient and ubiquitous electronic dissemination process.
Anomalies	Certain anomalies such as the exclusion of single listed Chinese stocks such as Baidu are avoided.
Leadership	BNY Mellon as a leading Depository Bank brings its expertise in DRs to this index series in a unique way.

## SUMMARY AND CONCLUSIONS

The purpose of this paper was to introduce and review the benefits of using Depositary Receipts to access the international equity markets. In particular, the use of DR-based ETFs is identified as an effective approach to both passive and active international investing.

The ETF industry has reached the important milestone of \$1 trillion assets under management. Although this is only 10% of the value of assets under management as mutual funds, it is clear that ETFs are here to stay.

Many of the apparent concerns about investing in international equities are in fact resolved through the use of DR based ETFs.

Our expectation is that there will be an increasing demand for these instruments as international markets continue to grow in importance, especially as the U.S. dollar is likely to be under downward pressure in the medium term. Obviously these factors conspire to make the allocation of a greater percentage of equity portfolios an attractive prospect. The DR-based ETF is likely to be one of the key vehicles to achieving this.

## APPENDIX BNY Mellon DR Indices

ADR Index	Classic ADR Index	GDR Index	DR Index	Composite DR Index
Listed ADRs	Listed & OTC ADRs	London listed GDRs	Listed DRS	All DRs
Regional Asia Europe Lat Am	Regional Asia Europe Lat Am	Regional Africa Asia E. Europe E. Europe x Russ MENA Mid East	Regional Africa Asia E. Europe KIT	
Market Developed Emerging Euroland Telebras	Market Developed Emerging	Market Emerging	Market Emerging	
Sector Euro Oil & G Euro Telecom Latin Telecom	Sector Basic Materials Consumer Goods Consumer Services Financials Utilities	Health Care Industrials Oil & Gas Technology Telecoms		
Select Asia 50 BRIC Select BRIC (Can) China Select DevMkts100 EmMkts 50 LatAm Balance	Europe 100 Euro-Pac Select Int 100 Int Telecom 35 Lat Am 35 SmallCap Sel		Select Frontier Select New Frontier Russia Select	
Countries Argentina Australia Belgium Brazil Chile China Columbia Denmark Finland France Germany Greece Hungary India Indonesia Ireland Israel Italy Japan Korea Mexico Netherlands New Zealand Norway Peru Philippines Portugal Russia South Africa Spain Sweden Switzerland Taiwan Turkey UK	Countries Austria Australia Brazil China Denmark France Germany Ireland Italy Japan Mexico Netherlands Norway Russia Singapore South Africa Sweden Switzerland UK	Countries Bahrain Egypt Georgia Hungary India Kazakhstan Kuwait Lebanon Netherlands Nigeria Oman Poland Romania Russia Korea Taiwan Turkey UAE Ukraine	Countries Hungary India Israel Netherlands Russia Korea Taiwan Turkey	

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