ADRs vs. Ordinaries

As interest in international investing has increased over the past several decades, ongoing debate has centered around the best way for U.S. investors to achieve exposure in foreign markets. Listings of foreign stocks on U.S. exchanges through American Depositary Receipt (ADR) programs have expanded over the years with approximately 2,300 foreign companies now available as ADRs[(1)]. ADRs in general offer good liquidity and the ability to execute and settle transactions in U.S. markets and in U.S. currency. Still, some investors believe that investing in foreign markets through direct investment in foreign stocks in their home country ("ordinary" shares) offers meaningful advantages relative to the use of ADRs. We disagree.

The table below highlights annualized return, risk and correlation figures for the BNY Mellon Classic ADR Index[(2)] and the Morgan Stanley All Country World ex USA Index (MSCI ACWI ex US)[(3)]. All data is calculated through 12/31/18 and covers periods of 3, 5, 7 and 10 years.

INTERNATIONAL INDEX COMPARISON

BNY Mellon Classic ADR Index[(2)] and MSCI ACWI ex US Index[(3)]

Annualized Total Returns	BNY Mellon Classic ADR	MSCI ACWI ex US
3 year	4.1%	4.5%
5 year	0.6%	0.7%
7 year	5.3%	4.8%
10 year	6.0%	6.6%
Annualized Standard Deviation	**BNY Mellon Classic ADR**	**MSCI ACWI ex US**
3 year	10.8%	10.5%
5 year	11.1%	10.8%
7 year	12.1%	11.7%
10 year	17.9%	17.4%
R Squared	**MSCI ACWI ex US vs. BNY Mellon Classic ADR**	
3 year	0.98	
5 year	0.99	
7 year	0.98	
10 year	0.99	

Data as of 12/31/18
Source: Renaissance Research, FactSet, MSCI, BNY Mellon

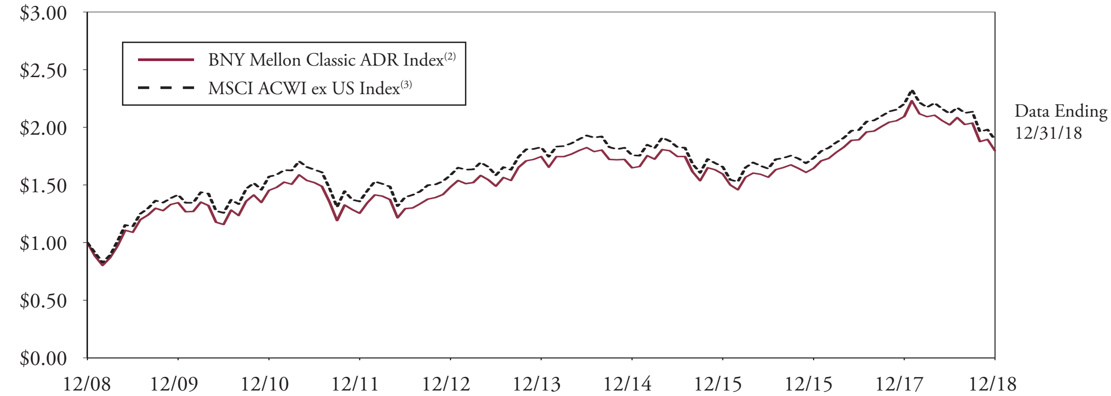
A close look at the data reveals negligible differences in return and risk characteristics between the ADR[(2)] and MSCI[(3)] indices over time. Chart A, on the following page, further illustrates the similar returns between the two indices. In our view, this suggests that any supposed advantage from investing in ordinaries rather than ADRs is likely to be overstated. For the U.S. investor,

(1) Source: Renaissance Research, BNY Mellon. Data calculated as of 12/31/18 using all ADRs trading on the NYSE, NYSE AMEX, NASDAQ and OTC markets. Private placement ADRs are excluded.
(2) The BNY Mellon Classic ADR Index is a free float-adjusted capitalization weighted U.S. dollar total return index that includes all U.S. Exchange-listed or OTC traded Depositary Receipts with the exception of Grey Market Securities, New York Shares and Global Registered Shares.
(3) The MSCI ACWI ex US Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets, excluding the United States. The MSCI ACWI ex US consists of 46 country indexes comprising 22 developed and 24 emerging market country indexes.

investment in foreign securities through ADRs can offer comparable opportunities as ordinary share indices, with significant advantages in terms of trading and operational efficiency.

Chart A—Growth of a Dollar

BNY Mellon Classic ADR Index and
MSCI ACWI ex US Index



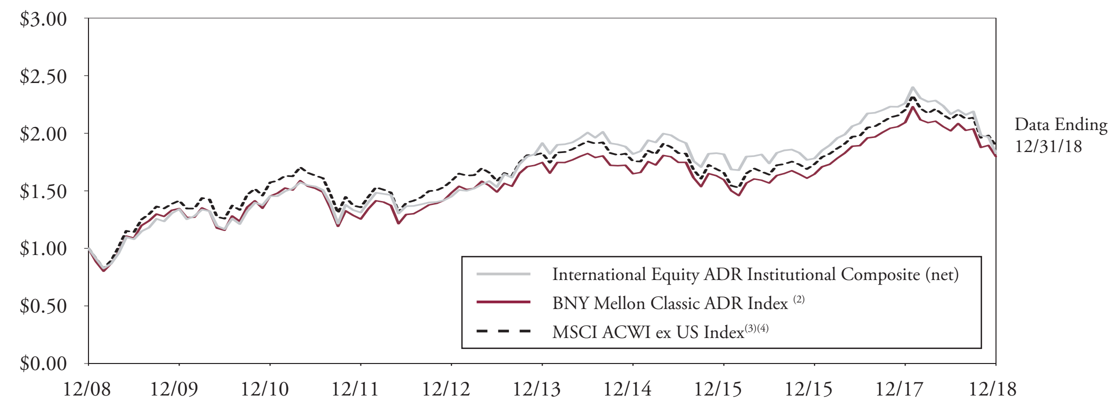
For the period 12/31/08–12/31/18
Source: Renaissance Research, FactSet, Bloomberg, MSCI, BNY Mellon

Why Renaissance?

Renaissance has extensive experience utilizing ADRs to actively invest in international equity markets for more than 20 years. Using a disciplined approach blending quantitative and qualitative techniques, Renaissance has produced competitive long-term results against both the BNY and the MSCI ACWI ex US Index (Chart B), while taking advantage of the cost and operational efficiencies ADRs offer.

Chart B—Growth of a Dollar

Renaissance International Equity ADR Strategy vs.
BNY Mellon Classic ADR Index and MSCI ACWI ex US Index



For the period 12/31/08–12/31/18
Source: Renaissance Research, FactSet, Bloomberg, MSCI, BNY Mellon

(1) Source: Renaissance Research, BNY Mellon. Data calculated as of 12/31/18 using all ADRs trading on the NYSE, NYSE AMEX, NASDAQ and OTC markets. Private placement ADRs are excluded.
(2) The BNY Mellon Classic ADR Index is a free float-adjusted capitalization weighted U.S. dollar total return index that includes all U.S. Exchange-listed or OTC traded Depositary Receipts with the exception of Grey Market Securities, New York Shares and Global Registered Shares.
(3) The MSCI ACWI ex US Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets, excluding the United States. The MSCI ACWI ex US consists of 46 country indexes comprising 22 developed and 24 emerging market country indexes.
(4) Primary benchmark—all other benchmarks are supplemental information.

The opinions stated in this presentation are those of the authors as of the date listed on this presentation and are subject to change at any time due to changes in market or economic conditions.

GIPS Compliant Presentation International Equity ADR Institutional Composite

							As of Year End or Current Quarter		
Year	International Equity ADR Institutional Composite Gross-of-Fee Return	International Equity ADR Institutional Composite Net-of-Fee Return	MSCI-ACWI ex USA Benchmark Return	Net Composite 3 Year Annualized Standard Deviation	Benchmark 3 Year Annualized Standard Deviation	Annual Asset Weighted Composite Dispersion	Number of Portfolios in Composite	Market Value of Composite (Millions)	Market Value of Firm's Assets (Millions) ***
1994*	10.80%	10.52%	-0.11%			NMF**	2	$0.9	$1,393.1
1995	15.74%	15.07%	9.94%			NMF**	4	$1.7	$1,538.1
1996	26.36%	25.60%	6.68%			1.35	6	$2.6	$1,525.4
1997	12.12%	11.32%	2.04%			0.91	17	$8.8	$1,373.3
1998	-12.04%	-12.73%	14.46%			2.65	14	$7.7	$1,390.0
1999	65.24%	64.17%	30.91%			4.60	12	$7.6	$1,211.9
2000	-16.41%	-17.07%	-15.09%			3.54	12	$6.3	$736.7
2001	-13.42%	-13.97%	-19.73%			1.25	7	$2.7	$526.7
2002	-21.94%	-22.53%	-14.95%			0.74	7	$2.0	$415.7
2003	38.05%	37.23%	40.83%			0.68	9	$3.1	$575.2
2004	23.50%	22.60%	20.91%			1.67	12	$4.7	$908.2
2005	25.66%	24.83%	16.62%			1.02	10	$3.7	$2,796.6
2006	28.61%	27.98%	26.65%			0.70	10	$6.7	$5,450.2
2007	42.10%	41.39%	16.65%			0.44	10	$8.9	$7,661.8
2008	-45.85%	-46.09%	-45.53%			0.24	14	$17.8	$4,358.6
2009	34.75%	34.09%	41.45%			1.84	26	$78.1	$4,403.0
2010	9.04%	8.39%	11.15%			0.59	25	$86.4	$3,800.2
2011	-9.28%	-9.83%	-13.71%	21.98%	22.71%	0.38	29	$78.5	$2,862.3
2012	11.32%	10.65%	16.83%	18.86%	19.26%	0.40	33	$106.0	$2,409.8
2013	32.82%	32.03%	15.29%	16.73%	16.23%	0.53	31	$106.5	$2,767.7
2014	-4.39%	-4.95%	-3.87%	12.81%	12.81%	0.24	32	$106.2	$2,986.2
2015	0.45%	-0.13%	-5.66%	12.20%	12.13%	0.49	37	$115.7	$2,703.8
2016	-1.36%	-1.95%	4.50%	12.06%	12.51%	0.30	34	$103.8	$1,762.0
2017	27.66%	26.94%	27.19%	11.42%	11.87%	0.31	27	$164.2	$2,202.4
2018	-18.83%	-19.27%	-14.20%	12.34%	11.40%	0.20	27	$136.4	$1,682.2
	FINAL 12/31/2018								

* For period July 1, 1994 through December 31, 1994.
** Not meaningful figure due to five or fewer accounts invested for the entire year.
***Firm Assets do not include UMA program assets for GIPS purposes.
As of 12/31/2018, Renaissance managed an additional $2,157.0 million in UMA programs, totaling $4,199.2 in assets under management and shown as supplemental information to the GIPS compliant presentation.

Renaissance Investment Management (RIM) claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Renaissance has been independently verified for the periods January 1, 2006 through June 30, 2017.

Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. The International Equity ADR Institutional Composite has been examined for the periods January 1, 2006 through June 30, 2017. The verification and performance examination reports are available upon request.

Firm Definition: The Renaissance Group LLC, which does business as Renaissance Investment Management (RIM), is a registered investment advisor established in 1978, with an office in Covington, KY. RIM is an affiliate of Affiliated Managers Group based in West Palm Beach, FL. RIM manages equity, tactical, balanced and fixed income assets for a variety of clients including high net worth, institutional and sub-advisory relationships. A complete list and description of the Firm's composites is available upon request.

Composite Composition: The International Equity ADR Institutional Composite portfolios consist of approximately 50-60 equities exhibiting a combination of strong earnings growth, reasonable valuation, rising earnings expectations and profitability. The initial universe begins with all American Depositary Receipts (ADRs) and U.S. listed foreign corporations. RIM created the International Equity ADR Institutional Composite as of April 1, 2005 and it includes all fee paying, fully discretionary, non-tax managed, non-wrap International Equity ADR accounts. RIM does not have non-fee paying portfolios. Returns are net of any performance-based fee arrangements where applicable. RIM will add new fully discretionary portfolios to the composite at the first full month under management. RIM will exclude terminated portfolios from the composite after the last full month they were under management. Composite dispersion is measured using an asset-weighted standard deviation of returns of the portfolios. As of July 1, 2017, the International Equity Institutional Composite has been renamed the International Equity ADR Institutional Composite.

Calculation of Performance Returns: Performance is calculated using total returns. Monthly composite performance is asset-weighted using beginning-of-period values. Rates of return are time-weighted with geometric linking of monthly returns. Valuations and returns are computed and stated in U.S. dollars. Account performance is based on total assets in the account, including cash and cash equivalents. Performance is actual performance.

RIM has chosen to present performance both gross- and net-of-fees. The gross-of-fee performance returns are presented before deduction of management and custodial fees but after the deduction of all trading expenses. Net performance is reported after the deduction of all trading costs and actual RIM management fees. These gross- and net-of-fee investment results for the Renaissance International Equity ADR Institutional Composite include reinvestment of dividends and other earnings. Clients' returns will be reduced by the advisory fee and any other expenses that may be incurred in the management of the client's investment advisory account. For example, if the gross annualized return of an account over a five-year period were 5.0%, deducting one twelfth of an annual advisory fee of 90 basis points each month on the ending monthly account balance would produce a cumulative net return of 22.7%. The cumulative gross return at 5.0% per annum over a five-year period would be 28.3%. A $1 million starting portfolio would thus have an ending net market value of $1,227,096, $56,262 less than the gross return ending value of $1,283,359. There is no minimum asset size for inclusion in the composite. RIM uses trade date accounting and income is accrued. Actual performance may differ from composite returns, depending on the size of the account, brokerage commissions, investment guidelines and/or restrictions, inception date and other factors. After-tax results will vary from the returns presented herein for those accounts that are subject to taxation. Policies for valuing portfolios, calculating performance and preparing compliant presentations are available upon request.

Standard Deviation: The three-year annualized standard deviation measures the variability of the composite and the benchmark returns over the preceding 36-month period. According to the GIPS Standards, this is not required for periods prior to 2011.

Investment Management Fees: RIM's fees are based on account size. The standard RIM fee schedule for the International Equity ADR Strategy for direct-managed accounts is as follows: All amounts – 1.00%. Investment advisory fees are described in Part 2A of RIM's Form ADV.

Benchmark: RIM compares its composite returns to the MSCI All Country World ex USA. The MSCI All Country World ex USA Index (net of foreign withholding taxes) is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global developed and emerging markets, excluding the United States. The index consists of approximately 2100 securities from 46 countries. This index is shown for comparison purposes only. We are not trying to explicitly manage to this benchmark. This index represents unmanaged portfolios whose characteristics differ from the composite portfolios; however, it tends to represent the investment environment existing during the time periods shown. This index cannot be invested in directly. The returns of this index do not include any transaction costs, management fees or other costs. The holdings of the client portfolios in our composites may differ significantly from the securities that comprise the index shown. The index has been selected to represent what RIM believes to be an appropriate benchmark with which to compare the composite performance.

Other: Performance data quoted in any Renaissance presentation represents historically achieved results, and is no guarantee of future performance. Future investments may be made under materially different economic conditions, in different securities and using different investment strategies and these differences may have a significant effect on the results portrayed. Each of these material market or economic conditions may or may not be repeated. Therefore, there may be sharp differences between the performance shown and the actual performance results achieved by any particular client. The value of an investment may fall as well as rise. Please note that different types of investments involve varying degrees of risk and there can be no assurance that any specific investment will either be suitable or profitable for a client or prospective client's investment portfolio. Investor principal is not guaranteed and investors may not receive the full amount of their investment at the time of sale if asset values have fallen. No assurance can be given that an investor will not lose invested capital. Consultants supplied with these performance results are advised to use this data in accordance with SEC guidelines. The actual performance achieved by a client portfolio may be affected by a variety of factors, including the initial balance of the account, the timing and amount of any additions to or withdrawals from the portfolio, changes made to the account to reflect the specific investment needs or preferences of the client, duration and timing of participation as a RIM client, and a client portfolio's risk tolerance, investment objectives, and investment time horizon. All investments carry a certain degree of risk, including the loss of principal and are not guaranteed by the U.S. government.

Risks of International Equity ADR Strategy: International Equity ADR Institutional Composite returns may show a high level of variability. In addition to market risk, the majority of any additional risk in these portfolios is related to specific stock selection, and RIM will have significant exposure to individual securities.

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Renaissance Investment Management

800.837.3863 ■ 513.723.4500 ■ Fax: 513.723.4512 ■ www.reninv.com