Investing Abroad: Weighing the Decision Between Foreign Ordinaries and ADRs

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Investing outside of one's home country is an effective and common way to diversify a portfolio. But it requires investors to make an important choice between foreign ordinary shares or American Depository Receipts (ADRs). While both securities share the same foreign company risk, there are some key differences between the two. In this paper we work to clarify the implications of each choice in the context of a Parametric Custom Core® portfolio benchmarked against the MSCI EAFE Index.

Key takeaways

» ADRs can be a convenient way to invest in foreign stocks. However, investors should be aware of imperfect coverage and mismatch of market trading hours, which lead to higher expected tracking error.

» While ADR coverage remains at around 87% by market cap, investable ADR coverage has jumped from 75% in 2016 to 81% in 2022.

» Trading commissions are typically higher for ADRs, but overall portfolio implementation costs end up being roughly equal to those for foreign ordinaries after factoring in country-specific fees and taxes.

» There are two sources of tracking error for a passive ADR portfolio: the first from imperfect coverage and the second from the *timing-pricing effect*, which is the premium (or discount) on an ADR resulting from the mismatch in trading hours between local and US exchanges.

PARAMETRIC

The timing of foreign ordinaries vs. ADRs

Foreign ordinaries are simply shares listed on foreign exchanges. While these shares trade similarly to how US stocks trade on US exchanges, the fact that they're listed on an exchange in a foreign country adds a number of complications for US investors, who are typically required to open custodial accounts in each foreign market to hold their foreign securities. Some foreign exchanges require these investors to trade shares in round lots—10 or 100 or 1,000 shares, for example—increasing minimum purchase size. In addition, foreign ordinaries are priced and pay dividends in foreign currencies, which can require converting foreign exchange units when buying or selling or repatriating dividend payments.

ADRs were created to solve many of these operational issues for domestic investors. An ADR represents a fixed number of shares of non-US companies that are held by a US depository bank. ADRs are listed on US stock exchanges or traded on the over-the-counter (OTC) market, and they pay dividends in US dollars. However, ADRs share the same economic, political, and currency risks as their underlying ordinary securities, and their prices tend to move in concert with one another as a result. This arises from the arbitrage that takes place between the prices of an ADR and a foreign local. When a broker looks to trade an ADR, they aim to find the best price for the share in question and compare the US-dollar-denominated ADR to the USD equivalent of the local share. They then take advantage of any arbitrage opportunity between the ADR and local pricing, such that the two should converge toward relative parity.

There's no wrong choice between ordinaries and ADRs, but there are some differences worth discussing. While ADRs can be a convenient way to invest in foreign stocks, investors should be aware of imperfect coverage—discussed later in this paper—and mismatch of market trading hours, which lead to higher expected tracking error. On the other hand, foreign ordinaries have perfect coverage, but this should be weighed against the administrative complexity of investing locally. ADRs help smaller investors gain exposure to international indexes with relative ease of implementation. On the other hand, accounts with over $10 million in assets may benefit from certain cost and tax advantages of implementation in ordinaries.

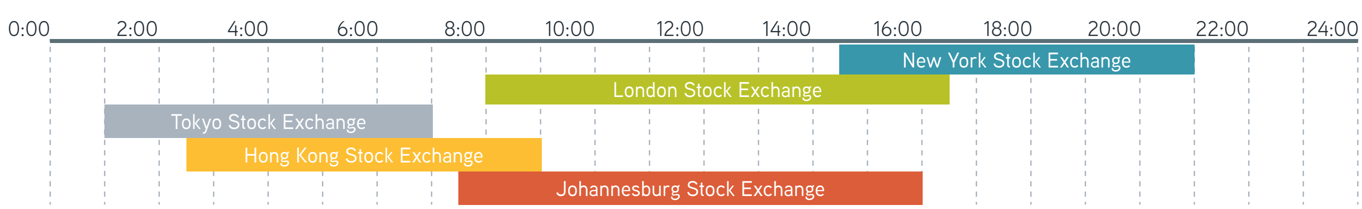
Another key distinction between ADRs and ordinaries is that their respective closing prices depend on the trading hours of their local markets. Like MSCI EAFE, ordinary shares are priced based upon the close of the local foreign markets, whereas ADRs are priced based upon US trading hours. The longer the time between the close of these markets, the more opportunity there is for the prices of the two instruments to diverge, since both investor sentiment and foreign rates are subject to change. To reduce this impact, managers commonly execute loss-harvesting trades for ADR portfolios within the first two hours of US trading, near the close of the European markets. It's also important to note that while listed ADRs can be traded at US market close, OTC ADRs can't and are instead traded in the last 15 to 20 minutes before the close. Figures 1 and 2 provide the overlap between different global regions and US trading hours to illustrate the timing-pricing effect present in ADRs.

FIGURE 1: OVERLAP OF DIFFERENT REGIONS WITH US TRADING HOURS

Region	Overlap
Asia Pacific	None
Middle East and North Africa	First 60 to 90 minutes
Europe	First two hours
Americas	Entire day

Source: Bloomberg, 12/31/2022. For illustrative purposes only.

FIGURE 2: VISUALIZED GLOBAL TRADING SCHEDULE OVERLAP (UTC)



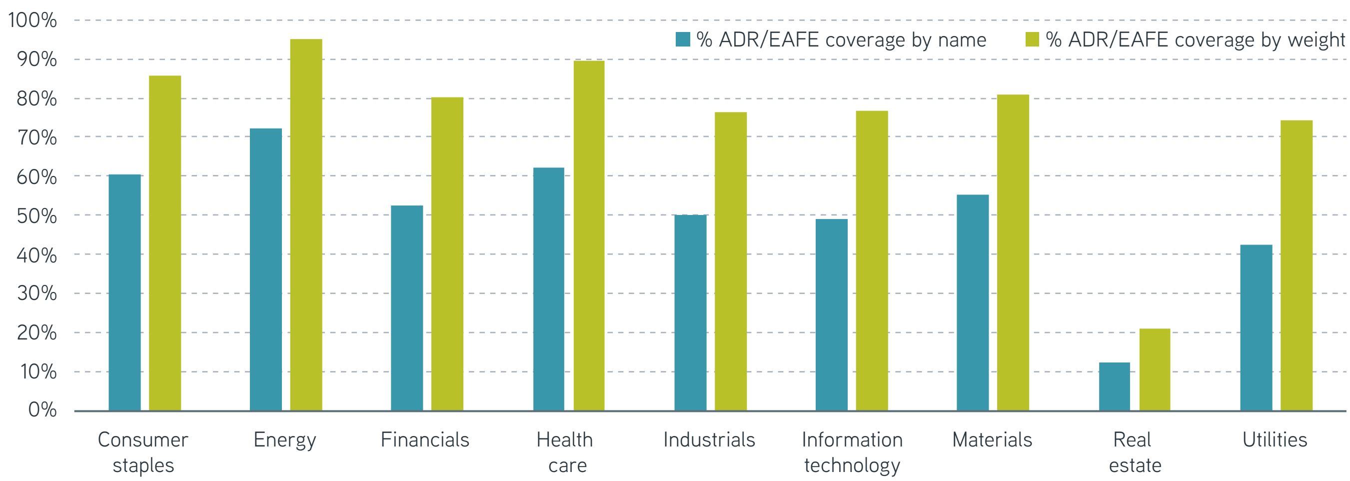
Source: Bloomberg, 12/31/2022. For illustrative purposes only.

The availability of ADRs

One shortcoming of the ADR marketplace is that not every foreign stock has an equivalent ADR. In the case of the MSCI EAFE Index, coverage is relatively robust, with 87% of the index's market cap and 66% of its names represented in ADRs. Some ADRs are thinly traded and come with wide bid-ask spreads. The spreads of ADRs are higher than their corresponding locals, while the volume of the ADRs is lower. Our portfolio managers and traders regularly monitor the spreads and volumes of ADRs. Parametric limits its investments to those ADRs with trading spreads less than 2% and average 20-day trading volumes of at least $100,000, resulting in a universe of investable ADRs representing approximately 81% of MSCI EAFE Index's market cap and approximately 52% of its names.

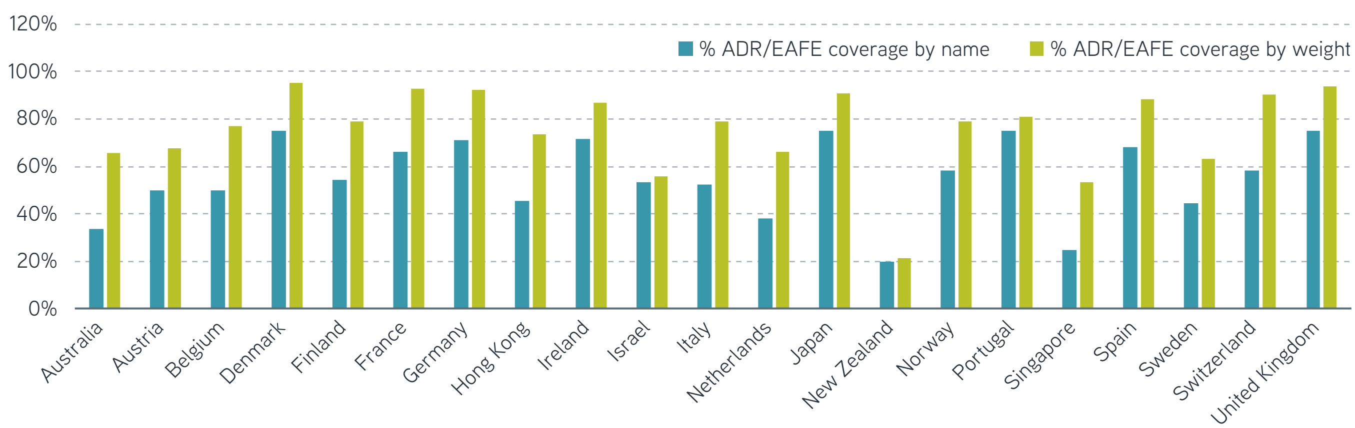
In our more than 20 years of managing ADR portfolios, we've seen a large increase in the popularity and availability of investable ADRs. This has allowed us to more easily build portfolios that track the benchmark and maximize potential after-tax benefits. We've also seen an increase in the investable ADR universe:

FIGURE 3: GLOBAL ADR COVERAGE BY SECTOR



Sources: Bloomberg, FactSet, 12/31/2022. For illustrative purposes only. Not a recommendation to buy or sell any security. It is not possible to invest directly in an index.

FIGURE 4: GLOBAL ADR COVERAGE BY COUNTRY



Sources: Bloomberg, FactSet, 12/31/2022. For illustrative purposes only. Not a recommendation to buy or sell any security. It is not possible to invest directly in an index.

While ADR coverage remains at around 87% by market cap, investable ADR coverage has jumped from 75% in 2016 to 81% in 2022. We see this increase at the sector and country levels as well. Out of the nine Global Industry Classification Standard (GICS) sectors, all but one, real estate, has ADR coverage above 70% by weight and 40% by name. This is in comparison to 2016, when there were two additional sectors—financials and industrials—below 70% coverage. The improvement has been even more significant at the country level. Fourteen countries had less than 50% coverage by name in 2016, and six had less than 50% ADR coverage by weight. Only six countries have less than 50% ADR coverage by name as of 2022, and only one country, New Zealand, has less than 50% investable ADR coverage by weight. Figures 3 and 4 show the current coverage of investable ADRs by sector and country.

The costs of foreign ordinaries vs. ADRs

ADRs are generally less complex to trade than foreign ordinaries. While trading commissions are typically higher for ADRs, overall portfolio implementation costs end up being roughly equal to those for foreign ordinaries after factoring in country-specific fees and taxes. Investors should expect this type of result when a free market exists between foreign ordinaries and their corresponding ADRs. For accounts holding less than $10 million in assets, in which custody fees can be higher, the relative simplicity of ADR implementation is likely the best fit. The slight cost advantage of ordinaries over ADRs conversely becomes more meaningful as the account grows.

Trading commissions

Accounts that invest in foreign ordinaries pay an average of five basis points (bps) in commissions. For ADR-based accounts, commissions may be asset-based, transaction-based, or included within a bundled fee arrangement. Commissions for ADR accounts with $250,000 and above in assets average about 20 bps and are typically lower for larger accounts, approximately 10 bps. The reduction of transaction-based pricing to zero for many custodians also serves to reduce the trading costs for many clients.

Exchange fees

Most exchanges will charge a fee upon trading. The US Securities and Exchange Commission (SEC) charges a very nominal fee based on the size of an equity trade, currently $110.20 per $1 million of trading. Outside the US, different exchanges will vary in the fees they charge. Most are also nominal, but some can be substantial. Exchange fees in Ireland, for example, can amount to over 10 bps. While most fees are explicit and paid directly to the exchange, fees in some countries are bundled with broker commissions and returned to the exchange later.

Depository and custodial fees

ADRs and foreign ordinaries are subject to depository and custody fees, respectively. Depository banks charge ADR holders a nominal fee, typically around one to three cents per share. Banks can either deduct these fees from the dividends or charge the fees to brokers, who pass them on to the investors. In our experience, custodial fees on foreign ordinaries are usually flat charges, which means that the larger the account value, the less the effective fee. We typically advise our clients with portfolios less than $10 million to consider ADRs over ordinary investing, since the custody fees of the latter will typically overwhelm the benefit of investing in the local shares. However, there may be cases where the advisor has negotiated a custody fee that makes investing in locals more sensible at a lower portfolio value.

Transaction taxes

In short, ADRs are exempt from foreign financial taxes, but ordinary shares are not. Financial transaction taxes are a form of indirect tax that vary widely by country and transaction type. The United Kingdom has charged a stamp duty on security sales and a stamp duty reserve tax on security purchases since 1986. Hong Kong, Ireland, and Switzerland are other examples of foreign countries with long-standing financial transaction taxes. Other countries have adopted financial transaction taxes more recently, all with varying degrees of scope and rates.

Both ADRs and foreign ordinaries are subject to foreign transaction taxes (FTTs) on transactions of certain securities identified by foreign governments. France and Italy currently impose FTTs on security purchases of 0.30% and 0.22%, respectively, as of 2022.

Choosing ADRs versus foreign ordinaries for Custom Core portfolios

The goal of a Custom Core portfolio is to track a benchmark closely on a pretax basis and outperform the benchmark on an after-tax basis. Tracking error is a measure of the pretax difference between the portfolio and its benchmark. In a Custom Core portfolio composed of foreign ordinary securities tracking a foreign ordinary benchmark, the only source of tracking error stems from the fact that a tax-managed portfolio doesn't perfectly replicate an index's holdings. But there are two sources of tracking error for a passive ADR portfolio: the first from imperfect coverage and the second from the timing-pricing effect, which is the premium (or discount) on an ADR resulting from the mismatch in trading hours between local and US exchanges.

A general proxy to estimate the timing-pricing effect is to compare the return of the MSCI EAFE with that of the iShares MSCI EAFE ETF (EFA). Since EFA trades during US market hours, we often see a return difference between MSCI EAFE and EFA. For example, MSCI returned 11.26% in November 2022, while EFA returned 13.17%. Calculating the difference in returns provides an estimate of the timing-pricing for November, totaling 1.91% over the period. This means there was a 191-bps bump on an ADR portfolio compared with a portfolio implemented with locals. The timing-pricing effect can be positive or negative over any period. While timing-pricing positively impacted ADR portfolios in November 2022 by 191 bps, it was the opposite story in December 2022, when ADRs negatively impacted returns by -189 bps.*

Comparing the returns of EFA and MSCI EAFE provides an estimate of the timing-pricing effect. Since ADR accounts are limited to liquid ADRs, the actual timing-pricing effect can fall above or below these estimates. Figure 5 provides an example of the difference in ADR and foreign ordinary returns during November and December 2022 for the 10 largest stocks in the MSCI EAFE Index. Note the wide range of security-level differences, from -3.22% to 6.45%.

** Provided for illustrative purposes only. Parametric is not affiliated with the iShares MSCI EAFE ETF. Not a recommendation to buy or sell any security. It is not possible to invest directly in an index.*

FIGURE 5: MONTHLY SECURITY-LEVEL RETURN DIFFERENCES BETWEEN ADRS AND FOREIGN ORDINARIES (TOP 10 MSCI EAFE STOCKS)

	November 2022			December 2022		
Security	Local	ADR	Difference	Local	ADR	Difference
Nestlé SA	9.46%	8.22%	1.24%	-3.07%	-1.79%	-1.28%
Roche Holding AG	-1.06%	-2.75%	1.69%	-4.24%	-2.79	-1.45%
ASML Holding NV	29.06%	22.60%	6.45%	-10.15%	-6.93	-3.22%
Novo Nordisk A/S	14.48%	12.54%	1.94%	8.62%	10.00%	-1.39%
AstraZeneca plc	15.58%	12.63%	2.94%	-0.25%	1.48%	-1.73%
Shell plc	6.09%	6.13%	-0.03%	-2.60%	-3.87%	1.27%
LVMH Moët Hennessy Louis Vuitton	21.92%	20.20%	1.72%	-5.31%	-3.92%	-1.39%
Novartis AG	10.39%	8.61%	1.78%	1.30%	2.90%	-1.61%
BHP Group Ltd.	31.33%	27.61%	3.72%	-1.19%	1.51%	-2.70%
TotalEnergies SE	13.97%	14.03%	-0.06%	1.86%	2.11%	-0.24%

Source: FactSet, 12/31/2022. The top 10 constituents by weight of the MSCI EAFE Index are presented for illustrative purposes. References to specific securities and their issuers are not intended to be and should not be interpreted as a recommendation to purchase, sell, or hold such securities. Any specific securities mentioned are not representative of all securities purchased, sold, or recommended for advisory clients. Actual portfolio holdings vary for each client, and there is no guarantee that a particular client's account will hold any or all of the securities identified. It should not be assumed that any of the securities or recommendations made in the future will be profitable or equal the performance of the listed securities. It is not possible to invest directly in an index. All investments are subject to the risk of loss.

A Custom Core portfolio that tracks MSCI EAFE and is composed of foreign ordinaries typically holds 500 to 700 positions with a realized tracking error of around 1%. ADR portfolios tended to hold 200 to 275 positions 15 years ago due to the size of the investable ADR universe. We can now construct portfolios holding 300 to 400 ADRs, which often incur a realized tracking error around 2%. While a portfolio made up of ADRs would have a similar predicted tracking error to a portfolio of foreign ordinaries, we've observed that the impact of the timing-pricing effect and imperfect coverage drives the realized tracking error of an ADR portfolio to approximately 2%. Figure 6 provides a summary of the two portfolios.

We also looked at the effect of tax management between portfolios as measured by tax alpha, which is defined as after-tax excess returns minus pretax excess returns. Bear in mind that the best environment for tax management is one with high volatility between names, in which stocks perform differently from one another. Both ordinary and ADR portfolios benefit from the volatility introduced by a portfolio made up of multiple countries and currencies. Because investors in ordinaries have more securities to choose from thanks to perfect coverage of the index, they theoretically have more opportunities to increase tax alpha within reasonable tracking-error constraints. However, we haven't seen a meaningful difference in tax alpha between portfolios that use ADRs versus foreign ordinaries, and we wouldn't guide tax-sensitive clients away from either instrument.

Conclusion

International equities are a significant portion of many investors' asset allocations. The decision between foreign ordinaries and ADRs should therefore not be taken lightly. We aim to simplify the decision-making by distilling the difference down to those with meaningful impact on a portfolio. We ultimately encourage investors to weigh how much tracking error they're willing to take on in exchange for ease of use. Those who desire less administrative complexity may be more willing to take on the additional benchmark-relative risk of ADRs. Other investors may prioritize tighter tracking error and have the level of assets necessary to make investing in foreign ordinaries more feasible. The bottom line is that while there are many differences to consider, there's no wrong answer between ADRs and foreign ordinaries—only the best fit based on investor preferences and priorities.

FIGURE 6: ADRS VERSUS FOREIGN ORDINARIES IN CUSTOM CORE PORTFOLIOS

	ADRs	Ordinaries
Holdings	300–400	500–700
International coverage	81% by weight 52% by name	100% by definition
Tracking error vs. MSCI EAFE	2%	1%
Optimal account size	< $10MM	> $10MM

Source: Parametric, 12/31/2022. For illustrative purposes only. Not a recommendation to buy or sell any security. All investments are subject to the risk of loss. Actual portfolio holdings will vary for each client's account.

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