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Investing Abroad: Weighing the Decision Between Foreign Ordinaries and ADRs

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Investing outside of one's home country is a common and effective way to diversify a portfolio. Investors must make an important choice between using foreign ordinary shares or American Depository Receipts (ADRs) to achieve this diversification. Both security types share the same foreign company risk, but there are some key differences between the two. In this paper we clarify the implications of each choice in the context of a Parametric Custom Core® portfolio benchmarked against the MSCI EAFE℠ Index.

While ADRs are a convenient way to invest in foreign stocks, investors should be aware of imperfect coverage and mismatch of market trading hours, which lead to higher expected tracking error. ADRs help smaller investors gain exposure to international indexes with relative ease, while accounts with over $10 million in assets may benefit from certain cost and tax advantages of ordinaries.

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Foreign ordinaries are simply shares listed on foreign exchanges. An American investor is usually required to open a custodial account in each foreign market in order to hold these securities. Some foreign exchanges require shares to be traded in round lots—100 shares, for example—increasing minimum purchase sizes. Foreign ordinaries and their dividends are also denominated in foreign currencies, which can require foreign exchange when buying or selling securities or repatriating dividend payments.

ADRs were created to solve many of these operational issues for the domestic investor. An ADR represents a fixed number of shares of non-US companies held by a US depository bank. ADRs are listed on US stock exchanges or traded on the over-the-counter (OTC) market and pay dividends in US dollars. However, ADRs share the same economic, political, and currency risks as their underlying ordinary securities. This arises from the arbitrage that takes place between the respective prices of an ADR and a foreign ordinary. A broker looking to trade an ADR compares it to the USD equivalent of the ordinary share, then takes advantage of any arbitrage opportunity between the two so they converge toward relative parity. Prices of ADRs and their underlying ordinaries tend to move in concert and at close range.

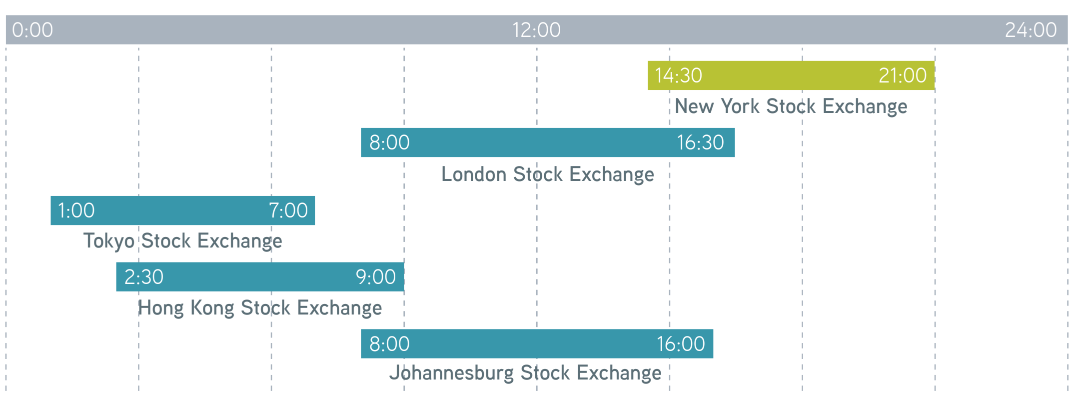
A key distinction between ADRs and ordinaries is that their closing prices depend on the trading hours of their respective local markets. The longer the time between market closes, the more opportunity there is for the prices of the two instruments to diverge as investor sentiment and foreign rates change. Loss-harvesting trades for ADR portfolios are commonly executed within the first two hours of US trading—near the close of European markets—to reduce this impact. It's also important to note that while listed ADRs can be traded at the US market close, OTC ADRs can't be traded on the close and instead are 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, 10/31/2019

Figure 2: Visualization of global trading schedule overlap



Source: Bloomberg, 10/31/2019

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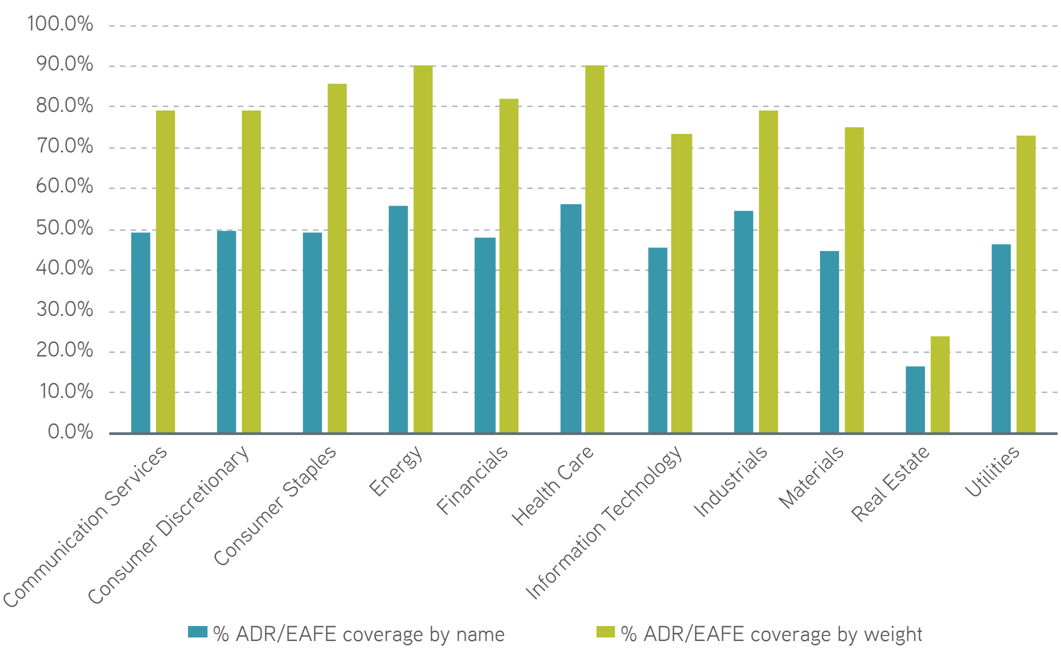
ADR coverage

One shortcoming of the ADR marketplace is that not every foreign ordinary stock has an equivalent ADR. Coverage is relatively robust In the case of the MSCI EAFE Index; 85% of its market cap and 60% of its names are 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 their volume is lower. Our portfolio managers and traders regularly monitor the spreads and volumes of ADRs. Parametric limits its investments to ADRs with trading spreads at or below 2% and average 20-day trading volumes of at least $100,000. This universe of investable ADRs represents approximately 79% of the MSCI EAFE market cap and 47% of its names.

In nearly 20 years of managing ADR portfolios at Parametric, there has been a large increase in the popularity and availability of investable ADRs. This has allowed us to more easily build portfolios that track benchmarks and maximize after-tax benefits. While ADR coverage remains at around 85% by market cap, investable ADR coverage has jumped from 75% in 2016 to 79% in 2019 in terms of benchmark wait. We see this increase at the sector and country level as well: Out of the 11 Global Industry Classification Standard sectors, all but Real Estate have ADR coverage above 70% by weight and 40% by name—a significant improvement from when Financials and Industrials had coverage below 70% in 2016. The improvement has been even more profound at the country level: In 2016, 14 EAFE countries had less than 50% coverage by name and six had less than 50% ADR coverage by weight. Now only seven countries have less than 50% ADR coverage by name, and only 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.

Figure 3: Global ADR coverage by sector



Sources: Bloomberg, FactSet, 10/31/2019. For illustrative purposes only. Not a recommendation to buy or sell any security.

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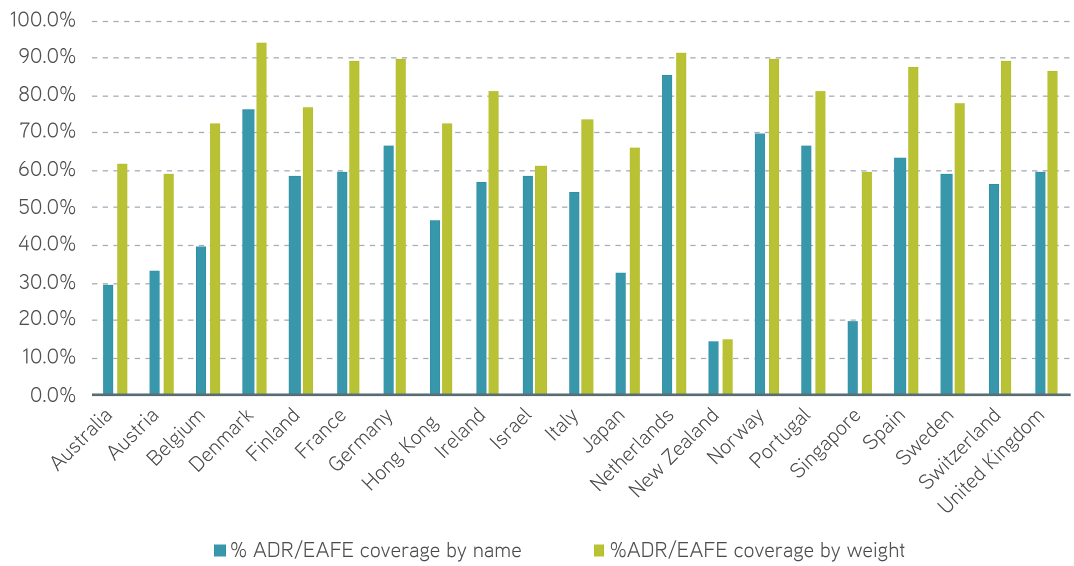
Figure 4: Global ADR coverage by country



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Implementation costs

ADRs are in general less complex to trade than foreign ordinaries. While trading commissions are typically higher for ADRs, overall portfolio implementation costs end up being roughly equivalent to using foreign ordinaries after factoring in country-specific fees and taxes. This type of result should be expected when a free market exists between foreign ordinaries and their corresponding ADRs. For accounts holding less than $10 million in assets, where 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 in commissions. Commissions for ADR-based accounts 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 basis points and can be as low as 10 basis points for larger accounts. The Q4 2019 reduction of transaction-based pricing to zero for many custodians also serves to reduce the trading costs for many clients.

Exchange fees

The SEC charges a nominal fee of one-eighth of a basis point based on the size of an equity trade. Most overseas exchange fees are also nominal, but some can be more substantial; exchange fees in Ireland can amount to over 10 basis points. 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.

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Depository and custodial fees

ADRs and foreign ordinaries are subject respectively to depository and custodial fees. Depository banks charge ADR holders a nominal fee of around one to three cents per share. These fees are typically deducted from dividends; the depository banks may instead charge fees to brokers that are passed on to investors. Custodial fees on foreign ordinaries are usually flat charges, which means lower effective fees for larger accounts. We normally advise our clients with portfolios under $10 million to consider ADRs over ordinary investing, since the custody fees of the latter can overwhelm the benefit of investing in local shares. It's possible for an advisor to negotiate a custody fee that makes investing in locals make sense at a lower portfolio value.

Transaction taxes

ADRs are exempt from foreign financial taxes, while ordinary shares are not. Financial transaction taxes are a form of indirect tax that varies widely by country and transaction type. The United Kingdom charges a stamp duty on security sales and a stamp duty reserve tax on security purchases. Hong Kong, Ireland, and Switzerland are examples of foreign jurisdictions with long-standing financial transaction taxes. Other countries have adopted financial transaction taxes with varying degrees of scope and rates.

Both ADRs and foreign ordinaries are also subject to foreign transaction taxes (FTTs) on transactions of certain securities. France and Italy respectively impose FTTs of 0.30% and 0.22% on security purchases.

ADRs versus foreign ordinaries for Custom Core investors

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. A portfolio's tracking error measures the pretax difference between the portfolio and the 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 the portfolio avoids replicating the index holdings perfectly to allow for tax management. There are two sources of tracking error for a passive ADR portfolio: the first from imperfect coverage of the index and the second from timing-pricing differences, which have a larger impact on tracking error and often lead to confusion.

Mismatches in trading hours between local and US exchanges lead to a premium or discount in ADR pricing that we refer to as the timing-pricing effect. A general proxy to estimate the timing-pricing impact is to compare the return of the MSCI EAFE Index with the return of the iShares MSCI EAFE ETF (EFA). Since EFA trades during US market hours, there's often a return difference between it and the index itself; the index returned -1.27% in July 2019, while EFA returned -1.95%. The -0.68 percentage point difference is an estimate of the timing-pricing effect for July, working out to a 68-basis-point drag on an ADR portfolio. However, ADRs positively impacted returns by 63 basis points in August of that same year.[1]

Since ADR accounts are limited to investing in liquid ADRs, the actual timing-pricing effect of the account can fall above or below this estimate. Figure 5 provides an example of the difference in ADR and foreign ordinary returns during July and August 2019.

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

Figure 5: Monthly return differences in ADRs and ordinaries at the security level

	July			August		
Security	Local return	ADR return	Difference	Local return	ADR return	Difference
Nestlé SA	3.01%	2.59%	**-0.41%**	5.07%	5.95%	**0.88%**
Roche Holding Ltd.	-4.38%	-4.42%	**-0.03%**	1.54%	1.88%	**0.34%**
Novartis AG	0.98%	0.30%	**-0.68%**	-2.62%	-1.61%	**1.02%**
Toyota Motor Corp.	4.22%	4.08%	**-0.14%**	1.36%	1.22%	**-0.13%**
HSBC Holdings PLC	-3.82%	-3.79%	**0.04%**	-9.18%	-9.35%	**-0.18%**
BP PLC	-4.30%	-4.70%	**-0.40%**	-7.32%	-5.50%	**1.82%**
Royal Dutch Shell PLC	-2.99%	-3.35%	**-0.36%**	-11.26%	-10.31%	**0.95%**
Total SA	-6.67%	-7.26%	**-0.58%**	-4.55%	-3.52%	**1.03%**
AIA Group Ltd.	-4.17%	-4.17%	**0.00%**	-5.84%	-5.84%	**0.00%**
AstraZeneca PLC	5.52%	5.16%	**-0.36%**	4.11%	4.77%	**0.66%**

Source: Bloomberg, 8/30/2019. 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 will equal the performance of the listed securities. All investments are subject to risk of loss.

A Custom Core portfolio of foreign ordinaries that tracks the MSCI EAFE Index typically holds 500 to 700 positions, with a realized tracking error of around 1%. ADR portfolios tended to hold 200 to 275 positions 10 years ago due to the size of the investable ADR universe at the time. 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 ordinaries, the impact of timing-pricing and the limitations of the investable ADR universe drives the realized tracking error of an ADR portfolio to approximately 2%. Figure 6 provides a summary of the two portfolios.

Figure 6: Custom Core portfolios: ADRs versus foreign ordinaries

	ADRs	Ordinaries
Holdings	300–400	500–700
International coverage	79% by weight, 47% by name	100% by definition
Tracking error vs. MSCI EAFE	2%	1%
Cost	Effective for accounts <$10MM	Effective for accounts >$10MM

Source: Parametric, 10/31/2019. For illustrative purposes only. Not a recommendation to buy or sell any security. All investments are subject to the risk of loss.

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

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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 differences 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.

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