International Equity

Quarterly Report | Third Quarter 2022



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Composite Performance

Total Return (%) — Periods Ended September 30, 20221

	3 Months	YTD	1 Year	3 Years ²	5 Years ²	10 Years ²	Since Inception ^{2,3}
HL International Equity (Gross of Fees)	-7.17	-29.59	-26.41	1.10	1.50	5.72	7.54
HL International Equity (Net of Fees)	-7.32	-29.93	-26.87	0.47	0.86	5.07	6.76
MSCI All Country World ex-US Index ^{4,5}	-9.80	-26.18	-24.79	-1.07	-0.34	3.48	4.44
MSCI EAFE Index ^{5,6}	-9.29	-26.76	-24.75	-1.38	-0.36	4.15	4.13

The Composite performance returns shown are preliminary; ²Annualized Returns; ³Inception Date: December 31, 1989; ⁴The benchmark index: ⁵Gross of withholding taxes: ⁶Supplemental index.

Past Performance does not guarantee future results. Invested capital is at risk of loss. Please read the above performance in conjunction with the footnotes on the last page of this report. All performance and data shown are in US dollar terms, unless otherwise noted

Portfolio Positioning (% Weight)

Sector	HL Intl.	ACWI ex-US	Under / Over
Health Care	13.4	9.8	
Cash	3.5	_	
Industrials	14.9	12.0	
Cons Staples	12.1	9.4	
Info Technology	12.9	10.7	
Materials	9.5	8.2	-
Financials	20.5	20.7	ı
Comm Services	4.3	6.0	
Utilities	1.6	3.4	
Real Estate	0.0	2.4	
Energy	2.5	6.2	
Cons Discretionary	4.8	11.2	
			-8 -4 0 4 8

Geography	HL Intl.	ACWI ex-US		U	nder / Over		
Cash	3.5	-					
Europe ex-EMU	24.2	20.7					
Other ⁷	1.4	_					
Pacific ex-Japan	9.4	8.0					
Europe EMU	19.6	19.1					
Frontier Markets ⁸	0.0	_					
Japan	13.7	14.1					
Middle East	0.0	0.5					
Canada	4.1	8.3					
Emerging Markets	24.1	29.3					
			-8	-4	0	4	8

Includes companies classified in countries outside the index. Includes countries with less-developed markets outside the index.

Sector and geographic allocations are supplemental information only and complement the fully compliant International Equity Composite GIPS Presentation. Source: Harding Loevner International Equity Model; MSCI Inc. and S&P. MSCI Inc. and S&P do not make any express or implied warranties or representations and shall have no liability whatsoever with respect to any GICS data contained herein.

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Market Review

International equity markets fell sharply in the quarter as investors parsed inflation data and speculated on the future direction of central bank policy.

Improving US core inflation measures in July, which conjured the possibility of an earlier-than-expected end to the Federal Reserve's monetary tightening, lifted spirits, and the MSCI All Country World Index (ACWI) ex-US Index rallied nearly 10% in four weeks through mid-August. Bond prices surged as well, sending the yield on the US 10-year Treasury down almost 100 basis points (bps) from its mid-June high. Accordingly, growth stocks hugely outperformed value stocks in the month. But the brightening of sentiment proved fleeting. While headline inflation continued to moderate due to oil and gas prices coming down off their previous highs, underlying measures indicated that price increases were becoming entrenched, and, more worryingly, expectations of future inflation were rising, introducing the specter of a wage-price spiral. Stock markets turned tail and resumed their retreat. The MSCI ACWI ex-US Index finished the quarter down 9.8%, bringing its year-to-date decline to 26.2%. Bond markets also relapsed, with the Bloomberg Global-Aggregate Index falling 7%.

MSCI ACWI ex-US Index Performance (USD %)

Sector	3Q 2022	Trailing 12 Months
Communication Services	-16.4	-31.7
Consumer Discretionary	-13.0	-32.2
Consumer Staples	-6.4	-16.4
Energy	-6.1	-4.3
Financials	-7.8	-17.7
Health Care	-10.9	-23.2
Industrials	-8.1	-28.3
Information Technology	-12.0	-39.0
Materials	-7.7	-20.7
Real Estate	-14.4	-29.5
Utilities	-10.8	-15.3
Geography	3Q 2022	Trailing 12 Months
Canada	-7.7	-12.4
Emerging Markets	-11.4	-27.8
Europe EMU	-10.5	-30.1
Europe ex-EMU	-9.8	-18.1
Japan	-7.5	-29.0
Middle East	-1.7	-21.4
Pacific ex-Japan	-8.8	-18.7
MSCI ACWI ex-US Index	-9.8	-24.8

Source: FactSet (as of September 30, 2022). MSCI Inc. and S&P.

The Fed increased short-term interest rates twice in the quarter with a pair of jumbo sized 75 bp hikes, all the while acknowledging that the chances of a "soft landing" for the US economy were receding. All the major central banks except for the Bank of Japan followed with their own 50-75 bp hikes, including the European Central Bank, the Bank of England, and the Reserve Bank of Australia. Even the Swiss National Bank ended its almost eight-year dalliance with negative borrowing rates. The rapid pace of rate increases, coupled with the energy crisis emanating from the war in Ukraine, weighed heavily on the economic outlook. The Organization for Economic Co-operation and Development (OECD) slashed its global GDP growth forecast for next year to 2.2%, down from 2.8% three months earlier. In Europe, Russia's decision to strangle the continent's natural gas supply sent countries scrambling to fill storage facilities ahead of winter and all but ensured a continental recession.

Fully half of the negative US dollar returns to the Index this quarter were the result of weaker currencies as the US dollar reached a 20-year high.

Fully half of the negative US dollar returns to the ACWI ex-US Index this quarter were the result of weaker currencies as the US dollar reached a 20-year high as measured by the DXY Index. The cumulative depreciation exacerbates the inflationary impacts of higher imported energy prices and makes it harder for debtor countries and companies to service their US dollar debts.

Every region and sector fell in the quarter. European markets dropped sharply, affected by the unfolding energy crisis.

China's dimming economic prospects due to its severe property slowdown and COVID-19 lockdowns dragged on Emerging Market (EMs) returns, fully offsetting positive returns from India, Indonesia, and Brazil. The UK stock market fell in a spectacular paroxysm induced by new Prime Minister Liz Truss's announcement of an aggressive fiscal stimulus package of tax cuts and greater borrowing. UK sovereign bonds ("gilts") were sent tumbling, and the British pound fell to a record low against the US dollar. The Bank of England, caught unawares, hastily announced it would buy bonds "on whatever scale necessary" to stabilize markets, effectively abandoning its earlier commitment to begin reducing the size of its balance sheet.

Among sectors, Communication Services fared the worst on concerns over slowing advertising spending. Real Estate suffered a triple whammy of high debt levels, rising financing costs, and weakening economic conditions. Financials were bifurcated between poorly performing insurance stocks—their investment portfolios temporarily impacted by suddenly volatile bond

Companies held in the portfolio at the end of the quarter appear in bold type; only the first reference to a particular holding appears in bold. The portfolio is actively managed therefore holdings shown may not be current. Portfolio holdings should not be considered recommendations to buy or sell any security. It should not be assumed that investment in the security identified has been or will be profitable. To request a complete list of holdings for the past year, please contact Harding Loevner. A complete list of holdings at September 30, 2022 is available on page 10 of this report.

prices—and resurgent banks, which continued to see their lending margins expand with rising interest rates. Even amid growing pessimism about the economic cycle, Industrials and Energy managed smaller declines than the overall market.

The outperformance of growth stocks in July fizzled out with the broader market's decline so that by the end of the quarter the factor edge in favor of growth had been erased. Shares of higher-quality companies—those with more resilient cashflows and less leverage—again offered no safe harbor, except in the sharp declines in the final two weeks of the quarter. Year to date, value stocks, less negatively correlated to interest rates, have outperformed by a wide margin: The performance gap between the cheapest and the most expensive cohort of stocks remains more than 13 percentage points.

Performance and Attribution

The International Equity Composite fell 7.2% in the quarter, gross of fees, less than the 9.8% decline for the MSCI ACWI ex-US Index.

Few stocks in our portfolio managed to eke out positive gains, though there were a few bright spots. Within Consumer Staples, strong half-year results from Brazilian brewer **Ambev**, including impressive volume and price growth, and Canadian convenience store operator **Couche-Tard**'s better-than-expected fuel margins and merchandise sales augmented the contribution of our extra weight in the resilient sector. Our cosmetics holdings—**L'Oréal** of France and **Shiseido** of Japan—partially offset those share price gains, dragged down by weak Chinese consumer demand.

Good returns in Health Care stocks—especially our pharmaceutical stocks—helped relative performance. Shares of Swiss pharmaceutical giant **Roche** jumped after positive trial results for an Alzheimer's drug from Biogen boosted hopes for a competing drug Roche has in development. The prospective demand for effective Alzheimer's treatments is so large that even shares of Swiss contract drug manufacturer **Lonza** rose on the news. Another of our Swiss Health Care stocks, hearing aid manufacturer **Sonova**, weighed on returns after the company warned of weakening consumer sentiment in the US.

Our Asian banks, including **DBS Group** of Singapore and India's **ICICI Bank** and **HDFC Bank**, moved higher in lockstep with rising short-term policy interest rates. Our insurance stocks, however, fell, as their balance sheets suffered from falling bond prices. Hong Kong-based **AIA Group** and mainland-based **Ping An Insurance** are also contending with lingering COVID-19 restrictions that inhibit their ability to win new insurance business. **Allianz** also detracted from returns, tarnished by regulatory fines levied on its US asset management arm and having experienced client redemptions. Our Industrials holdings, led by Sweden's **Atlas Copco**, **Epiroc**, and **Alfa Laval**, accounted for nearly a fifth of our outperformance despite a drag from our Japanese holdings in the sector.

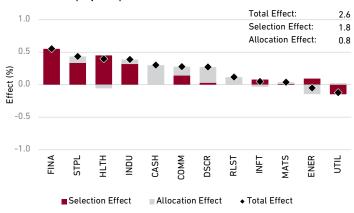
Viewed geographically, we outperformed in every major region except Japan. Within EMs, in addition to the positive contribution from our Indian banks, Chinese drugmaker CSPC Pharmaceutical eked out a gain, handsomely outperforming its home market after reporting strong revenue growth despite the impact from lockdowns on new patient volumes. Our European holdings, both inside and outside the eurozone, also fared well. Our Japanese stocks were the only relative laggards, hurt by capital goods makers Komatsu and Daifuku, along with Shiseido.

Through the first nine months of the year, the International Equity Composite declined 29.6%, gross of fees, trailing the MSCI All Country World ex US Index, which declined 26.2%. The write-downs of our two Russian holdings, **Lukoil** and **Yandex**, in

Third Quarter 2022 Performance Attribution

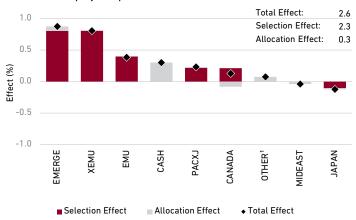
Sector

International Equity Composite vs. MSCI ACWI ex-US Index



Geography

International Equity Composite vs. MSCI ACWI ex-US Index



Includes companies classified in countries outside the Index. Source: FactSet; Harding Loevner International Equity Composite; MSCI Inc. and S&P. The total effect shown here may differ from the variance of the Composite performance and benchmark performance shown on the first page of this report due to the way in which FactSet calculates performance attribution. This information is supplemental to the Composite GIPS Presentation.

the first quarter explain more than half of that underperformance, while about another 40% is attributable to our inability to find enough value stocks among the high-quality growth companies we favor to overcome the market's disdain for pricey stocks.

Perspective and Outlook

Within the space of three months, markets have lurched from consensus that the fight against inflation will soon be won, toward a despairing view that slaying inflation will require sustained punishment by high interest rates. As practiced observers of both markets and policymakers, we have not put much belief in either narrative or tried to predict which outcome will ultimately drive the markets. (For a recapitulation of our view on market prognostication, see Edmund Bellord and Simon Hallett's "Macro Do's and Don'ts" on page 8.)

Instead, we have intensified our efforts to reconfirm the long-term business prospects of the companies we own and those qualified by our analysts for investment. We aim to build a portfolio of companies that is resilient to changes in the economic environment, knowing full well that we can't predict which environment they will face tomorrow. We are continuously questioning whether they have as defensible a competitive position, as resilient a business model, and as robust a balance sheet as we had previously thought. We seek to uncover unseen vulnerabilities to worsening or new threats. Such threats could be economic in nature, such as a reversion to persistent inflation following two generations of disinflation. They could be financial, such as a shift from negative to positive real interest rates. Or they could be geopolitical, including risks of widening military conflicts with potentially cataclysmic effects on the global economy.

The risk China will invade Taiwan seems low to us. Nevertheless, we don't presume to be experts in US-Sino relations. And even a low probability risk must be prepared for when the event can have catastrophic consequences.

This last one is no longer simply academic. The global economy has already been dramatically affected by the Ukrainian conflict, including by the still-unfolding energy crisis in Europe. Nancy Pelosi's August visit to Taiwan, coming as it did in the wake of the West's strikingly unified response to Russia's invasion of Ukraine, and China's military exercises launched in response offered stark reminders of China's long-term goal of taking back control of Taiwan on its own terms. The risk that Taiwan could be the fuse to ignite an armed conflict pitting the US and its allies against a confident China determined to achieve reunification is one that we may need to push higher up the list of risks we must build our portfolio to withstand. The esoteric concept of "de-globalization" comes into sharper focus when we imagine entire markets being

lost to some of the world's most successful—and important—companies, or supply chains permanently severed (rather than temporarily interrupted, as with COVID-19) or assets—financial as well as physical—being seized or destroyed.

We have viewed that risk as both low and distant in time, and still view it as low. Several factors (such as China's unsettled domestic economic situation and the unified Western response to and military debacle encountered by Russia in Ukraine) substantially reduce the likelihood of imminent invasion. Nevertheless, as Hallett and Bellord note, there is good reason we don't presume to be experts in US-Sino relations. And even a low probability risk must be considered when the event can have catastrophic consequences if preparations aren't made.

Beyond geopolitical risks, the threat from inflation remains at the fore. Few securities analysts working today are experienced in examining companies' resilience to persistent inflation, since for the last 40 years the trend in developed economies has been toward disinflation. We have a leg up since many of our analysts have covered companies in developing countries where inflation has been a persistent concern. Moreover, for at least the past 15 years our valuation models have explicitly incorporated inflation assumptions for every company we cover.

A further complication of analysis under inflationary conditions is that the growth of intangible assets has made it hard to parse the effects of today's inflation on sustainability of profits. In prior inflationary periods, what distinguished winners from losers was pricing power—that is, whether a company could pass higher input costs through to its customers without affecting its unit sales. Another important but secondary factor was whether companies were earning a high enough return to replenish their capital stock. With long asset lives for productive assets, companies would discover that high inflation rendered the replacement cost of assets they were retiring substantially higher than their original cost. Replacement costs could far outrun the cash set aside (or borrowed) for the purpose. Financial statements were not much help in discerning true profitability or cashflow sufficiency because accounting principles approximate replacement cost by using original cost-based depreciation charges.

Today, the value of intellectual property (IP), such as embedded research and development costs, plays a far larger role in fostering the profits of the most rapidly growing companies, and this secondary effect is more difficult to quantify, since there is too little visibility into the accounting inputs to those intangible costs. Also, compared with the ability to renew physical plant and equipment, the ability to renew IP is more vulnerable to the high employment mobility of younger, more educated digital workers. These contemporary twists mean that pricing power may no longer be the paramount measure of a company's inflation resilience; instead, its bargaining power over its IP suppliers (including its employees) has in some cases become more critical.

If 40 years have passed since analysts needed to worry about inflation, it's only been a decade since analysts and portfolio managers last operated in an environment where they needed to take account of positive real interest rates. Although short-term rates are still far below headline inflation in most countries, in the developed world real yields on long sovereign bonds have tipped into positive territory. After a period during which there were almost no limits to the demand for borrowing for just about any purpose, however productive or not, positive real long-term interest rates should at least lead to a more efficient allocation of capital.

Shares of UK insurers that manage portfolios for large pension funds fell heavily in the few days following the dramatic increase in long-term interest rates. Might similar vulnerabilities exist elsewhere, waiting to be exposed?

The journey to sustained higher interest rates, if indeed that is where we are headed, is bound to be bumpy. Nowhere has the effect been more dramatic than in currency markets, where real interest rate differentials between countries are upsetting settled relationships. As the Fed makes the biggest splashes, the US dollar has been rising dramatically against most other currencies. The Japanese authorities, on the other hand, have stoutly resisted the general move to higher interest rates and, even accounting for Japan's lower inflation, are still abiding negative real rates. The yen, as a result, has been the year's weakest major currency, falling by more than 20% relative to the US dollar. This depreciation, which would have been called a "maxi-devaluation" in the Bretton Woods days of fixed exchange rates, has hurt returns for dollar-based investors in Japanese stocks, but Japanese share prices have been resilient in local (yen) terms. We discuss our holdings in the country below.

Outside of Japan, the violent shift to positive long-term real rates is exposing vulnerabilities built up over decades of easy money. The most concerning vulnerability exposed (so far) has been the weaknesses hidden in some underfunded UK corporate pension plans that had built up opaque and contorted derivative and collateral structures predicated on well-behaved long-term interest rates. Their struggles to meet ensuant margin calls were the catalyst for the intervention by the Bank of England in its domestic bond market. Shares of UK insurers that manage portfolios for large pension funds fell heavily in the few days following the dramatic increase in long-term interest rates. Might similar vulnerabilities exist elsewhere, waiting to be exposed? As always, our preference for transparency and insistence on financial strength at our companies is designed to keep our portfolios relatively sheltered from this kind of distress.

Portfolio Highlights

While heightened risk aversion fed by war in Ukraine, dramatic currency movements, and interest rate hikes has roiled stock markets, we see far more underlying business resiliency than what is reflected in share prices. We continue to add to our investments in Japan, where many companies with global revenues benefit from the yen's weakness. The chart below shows our historical weighting to Japan over the past 12 years. Recent additions have brought us close to the benchmark weight.

Overall, a weak yen is likely to be a modest net positive for our Japanese companies' earnings by boosting their global competitiveness. These companies typically have leading global positions in their industries and generate much of their revenue outside their domestic market; in the short run, this results in a large translation gain for their yen-denominated earnings.

HL International Equity Strategy Japan Weight



Source: FactSet, MSCI Inc.

Offsetting higher foreign revenues are rising imported costs for inputs such as energy and other raw materials along with semiconductors. Producer prices in Japan, which are heavily reliant on imported inputs, rose 9% year over year in August, versus a 3% rise in Japanese consumer prices. In contrast, Japanese labor costs rose only 1.8% in the year to July and in foreign currency terms have fallen sharply, potentially giving our Japanese companies an enduring edge over their global competitors if they can, through cultural affinity, continue to retain talent without ballooning costs.

Japanese labor costs rose only 1.8% in the year to July and in foreign currency terms have fallen sharply, potentially giving our Japanese companies an enduring edge over their global competitors.

Our four Japanese Industrials holdings on average generate more than two-thirds of their sales outside of Japan and, based on latest estimates, appear to be on track to deliver positive 2022 earnings growth. Our biggest concern for these companies is that weaker global growth may erode the demand for capital goods.

Our most recent Japanese investment, Shimano, the world's leading manufacturer of bicycle components with roughly a 70% global share of the high-end drivetrain and braking system market, has an even higher share of foreign sales, almost 90%. More than half of its sales come from Europe and North America, where customers pay a premium for its products. Sales are receiving a boost from the growing market for electric bikes, where Shimano components also dominate the top end. Yen weakness has provided it an additional fillip, resulting in year-over-year sales and profits growth of 15% and 22%, respectively, in the first half of this year. For Shimano and the four industrial companies, the weaker exchange rate is making them much more potent in competing against European and US manufacturers, so long as they can contain their domestic costs.

Japanese drugmakers Chugai Pharmaceutical and Shionogi are also enjoying an earnings boost from the weaker yen, as they on average generate a majority of their sales from abroad, mainly in the form of royalties. Hematology testing systems maker Sysmex anticipates growth in 2023, helped by a large share of foreign revenues (84%), despite lower Chinese volumes, suppressed by that country's lingering lockdowns. Despite making 69% of its sales abroad, cosmetics maker Shiseido has not been so lucky due to its high direct exposure to the Chinese market (a third of revenues) and indirect exposure though domestic sales to Chinese tourists. To the extent that China's consumer slowdown is a consequence of the lockdowns and assuming travel restrictions eventually lift, we expect Shiseido's revenues to recover in time.

NITORI, a furniture and home accessories retailer, is our only Japanese holding where yen weakness is an unmitigated negative since it sells goods to domestic consumers that it primarily makes in China or Vietnam. The cost in yen to produce its merchandise is therefore rising, pressuring Nitori's margins.

In the first half of the year, Nitori held the line on retail prices while investing in ways to cut its operating costs, which at least has been easier than for peers given its vertical integration across manufacturing, distribution, and online and brick-and-mortar points of sale. Recently, management indicated it will hike prices on selected products by as much as 20%, having seen competitors do the same and noting Japanese shoppers' reluctant acceptance of increases across consumer categories.

Within the Financials sector, incremental purchases and relative performance over the year have increased our holdings by over a third so that we now hold the index weight in banks and remain overweight insurance. Banks and life insurance companies are among the businesses that should benefit the most from higher interest rates. Rising rates tend to increase net interest margins for banks, and they augment the returns from new fixed income investments for life insurance companies while reducing the capital they need to set aside today to meet future claims. The Financials sector has performed relatively well this year—notwithstanding the potential for loan losses a global recession might inflict on banks—outperforming all other sectors except Energy.

But, while higher interest rates are positive for business, extreme volatility in bond markets is not, given banks' and insurers' role as counterparties to complex derivative contracts and holders of collateral against leveraged positions of more prosaic instruments. In balancing sentiment in the short term, fear of as yet unseen exposures can outweigh the greed of longer-term benefits of higher yields. The insurance sector fell victim recently to extreme volatility in the gilts market. While shares of our own insurance holdings such as AIA Group, Ping An Insurance, and Allianz have likely been dented by negative marks in their investment portfolios, we view this and their pandemic-related disruptions (in the case of AIA Group and Ping An Insurance) and regulatory compliance lapses (Allianz) to be transitory. We value their low leverage and the low sensitivity of their product sales to the economic cycle.

Harding Loevner's Quality, Growth, and Value rankings are proprietary measures determined using objective data. Quality rankings are based on the stability, trend, and level of profitability, as well as balance sheet strength. Growth rankings are based on historical growth of earnings, sales, and assets, as well as expected changes in earnings and profitability. Value rankings are based on several valuation measures, including price ratios.

Macro Do's and Don'ts

By Edmund Bellord, Asset Allocation Strategist, and Simon Hallett, CFA, Vice Chairman

One of our more acid-tongued colleagues likes to observe that "just because we don't do macro, it doesn't mean the macro cannot do us." The observation is a challenge to our bottom-up investment philosophy and merits a response. What does his comment really mean? Is he correct?

By "not doing macro," he means that we try not to allow our judgments about macroeconomic variables—GDP growth, inflation, and real interest rates—or geopolitical events to dictate our views on individual companies. By "macro does us," he means that when the market's risk tolerance and underlying assumptions change because of unexpected shifts in the macroeconomic environment, the consequential price movements can dominate a portfolio's periodic absolute and relative returns. Although the injury may be only temporary, it is hard to avoid getting swept up in the general fervor. That's a problem if it leads to reflexive and hasty reactions. It is precisely to avoid getting whipsawed in this way that we devote much of our efforts to restraining our inherent behavioral biases. But even with the sturdiest of behavioral guardrails designed to curb our responsiveness, the sudden jump in portfolio volatility and tracking error feels no less jarring.

Our investment approach centers on analysis of the prospects for specific companies and the industries in which they operate. As a result, the portfolios we construct are a mosaic of company-centric views, with the final picture coming into focus only after all of the pieces are assembled. Sometimes our bottom-up investment process leads us to sidestep systemic issues. In the years before the Global Financial Crisis, for instance, we became disenchanted with the traditional banking industry. We didn't like how the increased price transparency that came with the migration of services online diminished banks' bargaining power over their borrowers and depositors, or how rising levels of consumer debt portended that growth could be weaker, and rivalry and risk-taking fiercer. That was enough to lead us largely to steer clear of banking stocks. Although in hindsight our portfolio positioning appeared to anticipate the subsequent dislocations, in fact we had no overarching view on systemic financial stability.

There is no question it would be nice to have clear foresight on GDP, inflation, and real rates. Like it or not, economic growth is the lifeblood of industrial economies, and, despite its ever-shifting relationship to equity returns, is closely associated with aggregate earnings. Similarly, inflation and real rates are both barometers and agents of economic transformation that always could and frequently do alter

the path of economic growth. And there is strong reason to believe that macro-level dislocations are likely to be an order of magnitude greater than the mispricings that occur at the security level. Given the periodic importance of such dislocations, this raises the question: Why don't we attempt to shape our portfolios more explicitly by directly forecasting economic variables or geopolitical events? The question is particularly vexing given the current importance of the inflation outlook for equities.

Tetlock's conclusion was that expert predictions about geopolitical crises were no better than guesses. The only contribution that expertise seemed consistently to confer was a perverse boost in confidence regarding one's (ineffective) forecasts.

The standard response typically trotted out is that forecasting is exceptionally hard, or as the Danish physicist Niels Bohr is alleged to have quipped, "Prediction is very difficult, especially about the future." Nowhere is this more true than with geopolitical events, which by all accounts appear to defy anyone's ability to anticipate them with anything approaching consistency. The political scientist Philip Tetlock tackled this issue head-on in a multidecade study described in his 2015 book, Superforecasting: The Art and Science of Prediction. Tetlock's conclusion was that expert predictions about geopolitical crises were no better than guesses. What's more, the only contribution that expertise seemed consistently to confer was a perverse boost in confidence regarding one's (ineffective) forecasts.

The record for macroeconomic forecasting is not quite as wretched; at least there are frameworks and models on which to hang one's thinking. But it's still one of those endeavors where you're doing very well if you're right a little more often than you're wrong. Even so, it is not as though the ground-level forecasting of cashflows, business prospects, and competitive forces is easy. So perhaps the real question is why we consider the latter sensible but the former a fool's errand, at least for fundamental equity investors such as us.

The answer in large part comes down to the size of the opportunity set, or the number of times you get to apply your investing edge. Even the most skilled forecasters, whatever their forecasting game, have but the tiniest of edges and so the surest way to increase their chances of success is to apply that minute edge as many times as possible. In a global investment universe, there are roughly 8,000 equity

securities, each operating in its own industry and geography with their own sets of return drivers, compared with a relative handful of forecastable macroeconomic variables. Given equal forecasting skill, you are going to have a far higher likelihood of some overall success by applying that skill across many securities rather than over a few economic statistics. Even allowing for the fact that not every security's return is entirely idiosyncratic, there are still far more independent and durable drivers of individual security returns than there are of macroeconomic trends, which may allow you to get the micro right without so much as taking a swing at the macro.

Even if you were one of the few hyper-skilled and hyper-accurate macro forecasters, a portfolio of stocks would be a poor way to capitalize on views about inflation or economic growth. Although there's a relationship between the macroeconomy and stock returns, that relationship is neither simple nor determinate. In practical terms, stocks are a terribly inefficient way to express a view on macroeconomic variables. Better to bet on currencies, yields curves, and commodity prices directly, all of which are far more closely tethered to the outlook for growth, inflation, and real rates.

It's not just that there are better, more precise, and more levered ways to express macroeconomic views. It's also that trying to do so with stocks risks erasing the hard-won company-level insights that are the linchpin of our portfolios.

And it's not just that there are better, more precise, and more levered ways to express such views. It's also that trying to do so with stocks risks erasing the hard-won company-level insights that are the linchpin of our portfolios. All the companies in which we invest have track records of successfully generating cash and reinvesting it wisely. In many cases these companies have survived wars, recessions, pandemics, inflation, deflation, and geopolitical shocks. Sacrificing those financially valuable fundamental attributes in a most likely vain attempt to time a particular economic cycle not only presupposes a preternatural ability to tie economic outcomes to individual security returns but also risks the long-term health of the portfolio.

We don't do macro, so by default we allow macro to do us. There are, though, ways in which we can protect against developments that result in sudden changes in risk aversion. One is to diversify—events that damage the outlook in one industry or part of the world may have no impact, or even a beneficial one, on stock prices elsewhere. That

said, diversification cannot work during times of systemic crisis, when correlations between geographies, industries, sectors, and individual securities converge. That's where our reliance on a company's strength comes in. Two hallmarks of a company's quality are the ability of its management to prepare for a wide range of outcomes and whether it has the financial strength to survive the worst possible operating conditions.

Although we can't estimate the probability of market-moving events, we can think about the magnitude and range of potential outcomes so we may more fully understand our exposures and ensure we are sufficiently diversified to protect against them. For example, before Russia's invasion of Ukraine, many people thought about a range of outcomes that included war versus no war or disruption to energy supplies. But, given prior Western responses, few considered the potential for sanctions that would freeze all Russian assets and render them worthless, at least for the time being. Now, as we think about the financial market implications if China were to invade Taiwan, we must consider the possibility that Chinese assets could be similarly impaired.

So, what do we do about it? We certainly aren't going to try to parse Chinese troop movements or overturn our investment theses on the dozens of companies, not only in China but also throughout the global supply chain, that could be impacted by what at this point must still be considered a very low-probability event. On the other hand, thinking long and hard about the potential risks to supply lines, revenues, or the corporate structures of portfolio companies and what further levels of diversification might be in order is very much in our wheelhouse.

International Equity Holdings (as of September 30, 2022)

Communication Services	Market End	Wt. (%)
Telkom Indonesia (Telecom services)	Indonesia	1.8
Tencent (Internet and IT services)	China	2.5
Yandex (Internet products and services)	Russia	0.01
Consumer Discretionary		
Haier Smart Home (Consumer appliances mfr.)	China	1.7
Kering (Luxury goods manufacturer)	France	1.1
NITORI (Home-furnishings retailer)	Japan	0.9
Shimano (Bicycle component manufacturer)	Japan	1.1
Consumer Staples		
Ambev (Alcoholic beverages manufacturer)	Brazil	1.4
Couche-Tard (Convenience stores operator)	Canada	1.5
FEMSA (Beverages manufacturer and retail operator)	Mexico	1.7
L'Oréal (Cosmetics manufacturer)	France	3.5
Nestlé (Foods manufacturer)	Switzerland	1.5
Shiseido (Personal care products manufacturer)	Japan	1.0
Unicharm (Consumer products manufacturer)	Japan	1.5
Energy		
Lukoil (Oil and gas producer)	Russia	0.01
Royal Dutch Shell (Oil and gas producer)	UK	2.1
Woodside (Oil and gas producer)	Australia	0.4
Financials		
AIA Group (Insurance provider)	Hong Kong	2.8
Allianz (Financial services and insurance provider)	Germany	2.1
BBVA (Commercial bank)	Spain	1.4
DBS Group (Commercial bank)	Singapore	3.4
HDFC Bank (Commercial bank)	India	1.4
ICICI Bank (Commercial bank)	India	2.5
Manulife (Financial services and insurance provider)	Canada	1.2
Ping An Insurance (Insurance provider)	China	0.8
SE Banken (Commercial bank)	Sweden	2.5
Standard Chartered (Commercial bank)	UK	1.4
XP (Broker dealer and financial services)	Brazil	0.9
Health Care		
Alcon (Eye care products manufacturer)	Switzerland	1.5
Chugai Pharmaceutical (Pharma manufacturer)	Japan	1.3
CSPC Pharmaceutical Group (Pharma manufacturer)	China	1.6
Lonza (Life science products manufacturer)	Switzerland	2.1
Roche (Pharma and diagnostic equipment manufacturer)	Switzerland	3.4
Shionogi (Pharma manufacturer)	Japan	1.5
6 11.11 (1) (1)	Switzerland	1.0
Sonova Holding (Hearing aids manufacturer)	OWITE	

Industrials	Market Er	nd Wt. (%)
Alfa Laval (Industrial equipment manufacturer)	Sweden	1.5
Atlas Copco (Industrial equipment manufacturer)	Sweden	3.0
Canadian National Railway (Railway operator)	Canada	1.3
Daifuku (Material-handling equipment manufacturer)	Japan	0.9
Epiroc (Industrial equipment manufacturer)	Sweden	1.3
Fanuc (Industrial robot manufacturer)	Japan	0.8
Komatsu (Industrial equipment manufacturer)	Japan	1.2
Kubota (Industrial and consumer equipment mfr.)	Japan	1.4
Sanhua Intelligent Controls (HVAC and R parts mfr.)	China	0.9
Schneider Electric (Energy management products)	France	2.5
Information Technology		
Adyen (Payment processing services)	Netherlands	1.7
Dassault Systèmes (CAD software developer)	France	1.4
Infineon Technologies (Semiconductor manufacturer)	Germany	2.3
Keyence (Sensor and measurement eqpt. mfr.)	Japan	1.2
Samsung Electronics (Electronics manufacturer)	South Korea	3.1
SAP (Enterprise software developer)	Germany	1.2
TSMC (Semiconductor manufacturer)	Taiwan	2.1
Materials		
Air Liquide (Industrial gases supplier)	France	1.0
BHP (Mineral miner and processor)	Australia	2.8
Linde (Industrial gases supplier and engineer)	US	1.4
Novozymes (Biotechnology producer)	Denmark	0.9
Rio Tinto (Mineral miner and processor)	UK	2.0
Symrise (Fragrances and flavors manufacturer)	Germany	1.5
Real Estate		
No Holdings		
Utilities		
ENN Energy (Gas pipeline operator)	China	1.6
Cash		3.5

Since March 7 we have valued our Russian holdings at effectively zero due to an inability to trade their shares and no observable indicative market prices to use as proxies.

Model Portfolio holdings are supplemental information only and complement the fully compliant International Equity Composite GIPS Presentation. The portfolio is actively managed therefore holdings shown may not be current. Portfolio holdings should not be considered recommendations to buy or sell any security. It should not be assumed that investment in the security identified has been or will be profitable. To request a complete list of portfolio holdings for the past year contact Harding Loevner.

3Q22 Contributors to Relative Return (%)

Last 12 Mos.	Contributors to Relative Return	(%)
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Largest Contributors	Sector	Avg. We HL Intl. ACW	-	Effect
DBS Group	FINA	3.1	0.2	0.54
ICICI Bank	FINA	2.3	0.2	0.51
Atlas Copco	INDU	3.0	0.2	0.29
Telkom Indonesia	СОММ	1.7	0.1	0.28
Ambev	STPL	1.3	0.1	0.24

Largest Contributors	Sector	Avg. Weig HL Intl. ACW	-	Effect
DBS Group	FINA	2.8	0.2	0.73
BHP	MATS	2.7	0.6	0.72
ICICI Bank	FINA	1.9	0.2	0.54
Telkom Indonesia	COMM	1.5	0.1	0.47
Shopify*	INFT	_	0.3	0.32

3Q22 Detractors from Relative Return (%)

Last 12 Mos. Detractors from Relative Return (%)

		Avg. We	eight	
Largest Detractors	Sector	HL Intl. ACV	VI ex-US	Effect
AIA Group	FINA	3.0	0.5	-0.35
Tencent	COMM	2.7	1.2	-0.26
Sonova Holding	HLTH	1.3	0.1	-0.25
ENN Energy	UTIL	1.7	0.1	-0.15
Ping An Insurance	FINA	1.0	0.2	-0.14

	Avg. Weight					
Largest Detractors	Sector	HL Intl. ACV	VI ex-US	Effect		
Lukoil	ENER	0.8	0.1	-1.28		
Adyen	INFT	2.1	0.2	-0.75		
Yandex	COMM	0.3	<0.1	-0.66		
Infineon Technologies	INFT	2.8	0.2	-0.61		
Sysmex	HLTH	1.3	0.1	-0.53		

^{*}Not held in the portfolio; its absence had an impact on the portfolio's return relative to the Index.

Portfolio Characteristics

Quality and Growth	HL Intl.	ACWI ex-US
Profit Margin ¹ (%)	16.0	12.9
Return on Assets ¹ (%)	8.9	5.7
Return on Equity ¹ (%)	14.8	13.9
Debt/Equity Ratio ¹ (%)	45.4	63.8
Std. Dev. of 5 Year ROE ¹ (%)	3.3	4.4
Sales Growth ^{1,2} (%)	6.7	6.2
Earnings Growth ^{1,2} (%)	12.3	10.8
Cash Flow Growth ^{1,2} (%)	8.9	8.1
Dividend Growth ^{1,2} (%)	7.9	6.0
Size and Turnover	HL Intl.	ACWI ex-US
Wtd. Median Mkt. Cap. (US \$B)	45.3	35.0
Wtd. Avg. Mkt. Cap. (US \$B)	85.1	71.3
Turnover ³ (Annual %)	14.6	_

Risk and Valuation	HL Intl.	ACWI ex-US
Alpha ² (%)	1.92	_
Beta ²	0.98	_
R-Squared ²	0.92	_
Active Share ³ (%)	84	_
Standard Deviation ² (%)	16.51	16.25
Sharpe Ratio ²	0.02	-0.09
Tracking Error ² (%)	4.6	_
Information Ratio ²	0.40	_
Up/Down Capture ²	105/97	_
Price/Earnings ⁴	14.6	11.1
Price/Cash Flow ⁴	10.8	7.5
Price/Book ⁴	2.3	1.6
Dividend Yield ⁵ (%)	2.8	3.5

Weighted median; ²Trailing five years, annualized; ³Five-year average; ⁴Weighted harmonic mean; ⁵Weighted mean. Source (Risk characteristics): eVestment Alliance (eA); Harding Loevner International Equity Composite, based on the Composite returns; MSCI Inc. Source (other characteristics): FactSet (Run Date: October 5, 2022, based on the latest available data in FactSet on this date.); Harding Loevner International Equity Model, based on the underlying holdings; MSCI Inc.

Completed Portfolio Transactions

Positions Established	Market	Sector	Positions Sold	Market	Sector
Shimano	Japan	DSCR	There were no completed sales this quarter.		

The portfolio is actively managed therefore holdings identified above do not represent all of the securities held in the portfolio and holdings may not be current. It should not be assumed that investment in the securities identified has been or will be profitable. The following information is available upon request: (1) information describing the methodology of the contribution data in the tables above; and (2) a list showing the weight and relative contribution of all holdings during the quarter and the last 12 months. Past performance does not guarantee future results. In the tables above, "weight" is the average percentage weight of the holding during the period, and "contribution" is the contribution to overall relative performance over the period. Contributors and detractors exclude cash and securities in the Composite not held in the Model Portfolio. Quarterly data is not annualized. Portfolio attribution and characteristics are supplemental information only and complement the fully compliant International Equity Composite GIPS Presentation. Portfolio holdings should not be considered recommendations to buy or sell any security.

International Equity Composite Performance (as of September 30, 2022)

	HL Intl. Equity Gross (%)	HL Intl. Equity Net (%)	MSCI ACWI ex-US ¹ (%)	MSCI EAFE ² (%)	HL Intl. Equity 3-yr. Std. Deviation ³ (%)	MSCI ACWI ex- US 3-yr. Std. Deviation ³ (%)	MSCI EAFE 3-yr. Std. Deviation ³ (%)	Internal Dispersion ⁴ (%)	No. of Accounts	Composite Assets (\$M)	Firm Assets (\$M)
2022 YTD ⁵	-29.59	-29.93	-26.18	-26.76	18.37	18.21	18.84	N.A. ⁶	35	18,945	44,705
2021	9.43	8.74	8.29	11.78	16.13	16.77	16.89	0.3	35	28,608	75,084
2020	21.58	20.81	11.13	8.28	17.55	17.92	17.87	0.2	37	26,325	74,496
2019	26.29	25.49	22.13	22.66	12.00	11.33	10.80	0.2	37	22,085	64,306
2018	-13.26	-13.82	-13.78	-13.36	11.79	11.40	11.27	0.2	39	16,908	49,892
2017	30.86	30.00	27.77	25.62	12.45	11.88	11.85	0.2	36	15,777	54,003
2016	6.18	5.49	5.01	1.51	13.28	12.53	12.48	0.1	40	10,316	38,996
2015	-0.46	-1.06	-5.25	-0.39	12.83	12.13	12.47	0.1	41	8,115	33,296
2014	-0.12	-0.68	-3.44	-4.48	11.98	12.78	12.99	0.2	43	9,495	35,005
2013	15.99	15.35	15.78	23.29	14.91	16.20	16.22	0.4	44	9,504	33,142
2012	19.97	19.36	17.39	17.90	17.61	19.22	19.32	0.6	40	6,644	22,658

Benchmark index: 2Supplemental index: 3Variability of the Composite, gross of fees, and the index returns over the preceding 36-month period, annualized: 4Asset-weighted standard deviation (gross of fees); 5The 2022YTD performance returns and assets shown are preliminary; 6N.A.-Internal dispersion less than a 12-month period.

The International Equity Composite contains fully discretionary, fee-paying accounts investing in non-US equity and equity-equivalent securities and cash reserves and is measured against the MSCI All Country World ex-US Total Return Index (Gross) for comparison purposes. Returns include the effect of foreign currency exchange rates. The exchange rate source of the benchmark is Reuters. The exchange rate source of the Composite is Bloomberg. Additional information about the benchmark, including the percentage of composite assets invested in countries or regions not included in the benchmark, is available upon request.

The MSCI All Country World ex-US Index 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 US. The Index consists of 46 developed and emerging market countries. The MSCI EAFE Index (Europe, Australasia, Far East) is a free float-adjusted market capitalization index that is designed to measure developed market equity performance, excluding the US and Canada. The Index consists of 21 developed market countries. You cannot invest directly in these Indexes.

Harding Loevner LP claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Harding Loevner has been independently verified for the period November 1, 1989 through June 30, 2022.

A firm that claims compliance with the GIPS standards must establish policies and procedures for complying with all the applicable requirements of the GIPS standards. Verification provides assurance on whether the firm's policies and procedures related to composite and pooled fund maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS standards and have been implemented on a firm-wide basis. The International Equity Composite has had a performance examination for the periods January 1, 1990 through June 30, 2022. The verification and performance examination reports are available upon request. GIPS® is a registered trademark of CFA Institute. CFA Institute does not endorse or promote this organization, nor does it warrant the accuracy or quality of the content contained herein.

Harding Lowner LP is an investment adviser registered with the Securities and Exchange Commission, Harding Lowner is an affiliate of Affiliated Managers Group, Inc. (NYSE: AMG), an investment holding company with stakes in a diverse group of boutique firms. A list of composite descriptions, a list of limited distribution pooled fund descriptions, and a list of broad distribution pooled funds are

Results are based on fully discretionary accounts under management, including those accounts no longer with the firm. Composite performance is presented gross of foreign withholding taxes on dividends, interest income and capital gains. Past performance does not guarantee future results. Policies for valuing investments, calculating performance, and preparing GIPS Reports are available upon request.

The US dollar is the currency used to express performance. Returns are presented both gross and net of management fees and include the reinvestment of all income. Net returns are calculated using actual fees. Actual returns will be reduced by investment advisory fees and other expenses that may be incurred in the management of the account. The standard fee schedule generally applied to separate International Equity accounts is 1.00% annually of the market value for the first \$20 million; 0.50% for the next \$80 million; 0.45% for the next \$150 million; 0.40% for the next \$250 million; above \$500 million upon request. The management fee schedule and total expense ratio for the International Equity Collective Investment Fund, which is included in the composite, are 0.67% on all assets and 0.72%, respectively. Actual investment advisory fees incurred by clients may vary. The annual composite dispersion presented is an asset-weighted standard deviation calculated for the accounts in the

The International Equity Composite was created on December 31, 1989 and the performance inception date is January 1, 1990.

