AMERICAN FUNDS®
From Capital Group

Investment Insights
January 2014

The New Geography of Investing℠

Capital Idea: Consider using economic exposure to map portfolios instead of country of domicile.

In an integrated world economy, traditional investment approaches that define geographic mandates based on a company's country of domicile are becoming less relevant. Most large- and mid-sized companies have some combination of customers, suppliers and production lines in multiple countries. The country in which a company is incorporated or has its headquarters provides little information about its potential success or future stock price. Thus, the domicile approach to measuring geographic exposures – one of the primary building blocks of asset allocation – increasingly is disconnected from the fundamentals that drive companies and portfolios.

Looking at companies' and portfolios' economic exposure, using revenues as a proxy, provides better information than country of domicile. For plan sponsors and other investors who build and analyze investment programs, measuring economic exposure should be part of a broader tool kit. It will help them better understand the opportunities and risks embedded in portfolios and build investment programs aligned with participants' objectives.

Globalization has blurred geographic boundaries for investors

When the Capital organization began investing outside the United States in the 1960s, it was among the first asset managers to do so. A group of portfolio managers working in our Geneva office soon realized that clients needed a way to know if we were doing a good job, so they began compiling data about the investible universe of companies outside the U.S. This led to the creation of the Capital International (CI) indices, which later became the MSCI indices. Most market indices and investors today still follow the approach that we helped establish nearly 50 years ago: companies, and thus indices and portfolios, are defined by where the company headquarters are located, or their country of domicile.

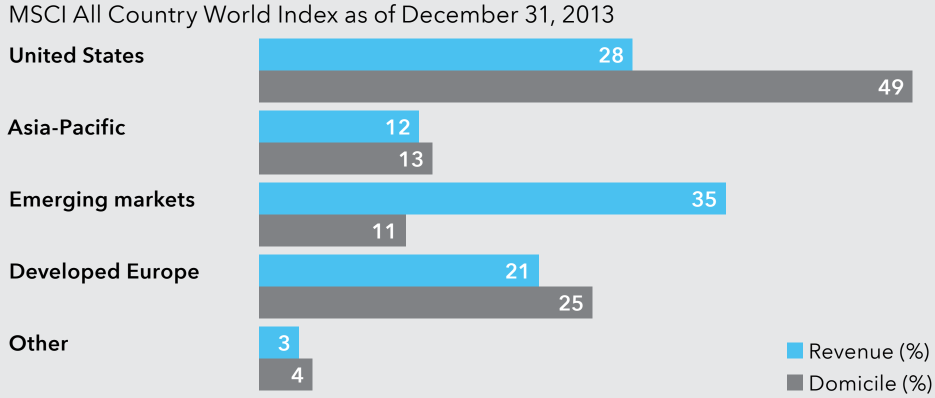
We at Capital believe the domicile approach has become far less useful in recent years. Globalization has had an enormous impact. The economic world today is structured differently than it was just two decades ago. Free trade agreements, the European Union and its common currency, economic reforms and the rise of a middle class in Asia, Latin America and parts of Africa has allowed companies to compete for customers, labor, capital and natural resources on a global basis. Average tariffs have declined from 26% in 1986 to 8% in 2010. Exports as a percentage of GDP have grown to almost a third of global activity, compared to 20% in 1994 and 15% in 1973. Economies are more closely linked than at any time in history.

The MSCI All Country World Index through the revenue lens

A look at the MSCI All Country World Index – the broadest global equity index, comprising nearly 2,500 companies – shows that, while emerging markets represent only 11% of the investible universe on a market capitalization basis by country of domicile, they account for a whopping 35% by economic exposure, or a third of all global demand. The data matches the phenomenon that our analysts have observed on the ground: about a third of demand for all companies globally is coming from these fast-growing developing economies in aggregate. It is also important to note that, although the United States accounts for 49% of the MSCI ACWI by market cap, it accounts for only 28% of revenues. Finally, Europe represents 25% of the market index by geography, it accounts for 21% of companies' revenues. Given that many European nations are among the world's oldest industrialized economies and are well integrated into the global economy, it makes sense that the region's markets and economy are globally well integrated.

The MSCI All Country World Index looks radically different when viewed through the revenue lens

MSCI All Country World Index as of December 31, 2013



The same phenomenon applies to companies. Once the purview of select multinational companies like General Electric, Coca-Cola and Unilever, a global model has become the norm for many large- and mid-sized corporations. U.S. and European companies derive almost half their sales from outside their own borders. Thus, the domicile approach to measuring and thinking about geographic exposures — one of the primary building blocks of asset allocation — arguably is less relevant and increasingly disconnected from the fundamentals that drive companies and portfolios.

We believe that revenues are the best measure of economic exposure

We believe an alternative way to look at portfolios is to consider economic exposure. A company has exposure to other economies in many ways: its asset base, cost base, suppliers, and most importantly, its end customers. All of these variables are important because they are key inputs in the fundamental analysis of a company. After looking at various measurement tools, for purposes of aggregate portfolio analysis, we found that revenues provide the best available measure of a company's current and prospective business opportunities. (See discussion on Page 9 on the case for revenues.)

We realize that for many decades, a company's country of domicile had a large influence on that security's returns. Starting in the late 1990s, industry- and company-specific factors began to have a far greater influence on a security's price than the country of domicile, studies show.* In smaller markets, including several emerging markets, the country of domicile still continues to be a factor in the total return of securities. Studies show that macroeconomic policies and foreign investor sentiment often play important roles in these economies. Yet, even in these markets, a company's country of domicile is becoming a less important factor with each passing year as policies become more predictable, business cycles become smoother, exports grow to be a greater portion of many companies' revenues and domestic investors play a bigger role than they have historically.

Another important factor to consider is that home bias, or the inclination to invest a greater proportion of assets in one's home country, remains strong among most investors around the world. Even among many large pension plan sponsors, a greater portion of assets remains invested in their home countries. For one, it avoids currency risk; for another, it is more familiar territory.

Broadening the tool kit to include economic exposure

We do not expect that investors entirely discard portfolio analysis by country of domicile or sector. But we do believe that they should consider loosening the traditional boundaries on mandates that are based solely on a company's country of domicile. In 2012, for example, it may have been more pertinent for an investor to ascertain how much exposure the portfolio had to the European consumer rather than the level of investment in Europe-based companies. Similarly, figuring out a portfolio's exposure to consumer demand in China and India may be more useful than understanding its investments in China-based companies. Understanding economic exposure will allow investors to look at companies that are benefiting from the rapid growth of the middle class in developing economies, or the development of new technologies and health care solutions, regardless of where the companies are domiciled. This approach also addresses other important questions: are traditional country funds or sector funds appropriate? Or does it make more sense to invest in broad mandates that are defined by investment objective or investment themes?

*_Global Equity Allocation: Analysis of Issues Related to Geographic Allocation of Equities._ MSCI, March 2012.

Tools to measure economic exposure by region and country are starting to become available. MSCI has begun to systematically construct and provide data series based on economic exposure. We believe it is the best-constructed data set currently available to analyze portfolios and market indexes based on economic exposure. We have started to use the MSCI data series in analyzing our portfolios. Without such tools, investors focused solely on analysis based on country of domicile risk overlooking investments in companies that are well positioned to benefit from potential growth opportunities in the fast-growing developing economies or, for that matter, firms that may be too exposed to certain economies, creating unintended imbalances in portfolios.

Fundamental analysis remains as the foundation

Portfolio construction at Capital Group is done one company at a time. When our analysts research companies, they look at all the aspects of the firm. Revenues are one component of a multilayered fundamental analysis that includes not just the financial metrics but the company's management, position in the industry, product lines, cost structures and the competitive landscape, among other factors. The guiding principle is whether the company can maintain or grow earnings over the medium- to long term and hence deliver value to shareholders via capital appreciation, dividend growth, or both.

For the purposes of defining the parameters of a strategy or understanding a portfolio's real exposures and risks, we believe that analysis of a portfolio's economic exposure should be an integral part of a broader tool kit. Revenue-based analysis, although somewhat of a blunt tool, nevertheless provides another important component of portfolio analysis that traditional domicile-based methodologies do not capture.

In the paper, we examine the broad MSCI All Country World Index and some of its subsets. We also analyze a few of our funds by economic exposure to illustrate the information that revenue analysis can provide.

So, in summary, we believe that:

- Plan sponsors, advisors and other investors should be flexible and think outside the traditional asset allocation framework defined by country of domicile and style boxes as these parameters are increasingly becoming less relevant in a globalized world.
- Economic exposure, or revenue-based analysis, is a much better tool for understanding the risks and opportunities embedded in portfolios than country of domicile.
- Broad mandates such as global equity, or those defined by objectives such as capital appreciation or dividend growth, provide a superior framework for defining portfolios and as the building blocks of an asset allocation program. These types of mandates are less constrained by the domicile approach to investing.

Investing by economic exposure: implications for investors

Rob Lovelace, portfolio manager

Over time, we have learned that country of domicile is a less effective way of measuring a portfolio's exposure. Sometimes people ask me to explore establishing a fund invested in those U.S. companies that do business abroad. "Why take the risks of investing internationally when I can get, say, 40% exposure to non-U.S. revenues by investing in U.S.-based companies?" they ask. The straightforward answer, for one, would be that the decision-making and the outcome are not aligned.

For an investor who would invest only in the U.S., there are areas of the markets, such as the European luxury goods makers or the luxury auto companies, that have an opportunity globally that is not tapped by the U.S. companies. Similarly, several of the largest pharmaceutical and mining companies are not domiciled in the U.S.

If you look at potential investments in the fast-growing developing economies, some of the best opportunities are in branded consumer goods companies, technology companies and health care companies. Yet, all three of those industries are heavily underrepresented among companies listed in the emerging markets index. Why wouldn't you want to invest in the best company wherever it happens to be based? Why would you use country of domicile as a filter for determining what to invest in?

One of the other questions on investing in global markets surrounds corporate governance. In my view, there is risk in investing in U.S. companies from a regulatory or accounting standpoint as well, and there are very high-quality companies outside the U.S. that are audited by the best firms that we view them as quite safe investments.

Implications of using a revenue-based approach

1. Changes in company reporting of financial data
2. Screens used to define mandates
3. Move toward objective-based investing

In my opinion, there are three main implications of shifting away from a traditional approach based on country of domicile. One, we need to think about changing how companies report financial data. That may be the easiest one. Reporting on a revenue basis is one obvious way to do it. But currently companies do not report with enough detail for us to consistently do this. My hunch is pressure will be put on companies by investors and accounting professionals, and we will begin to get better reports, which will give us better data – but it will be a multiyear process. We did it on our own, but it took a lot of time and effort. You may see dual reporting for a while: we will report in the traditional context of country of domicile, and in this new way. But my belief is that, a decade from now, we will have developed more sophisticated ways to get at this.

The second implication would be regarding the screens we use to define mandates. What is a U.S. fund or a U.S. mandate? I think we need to rethink this.

Third, this is going to push the industry toward more objective-based investing. In other words, what investment themes are we trying to get at? Are we focusing on dividends, growth of dividends, income, or some aspect of economic change? I think that is going to begin to swing the pendulum back toward objective-based investing after a long move toward geography-based investing.

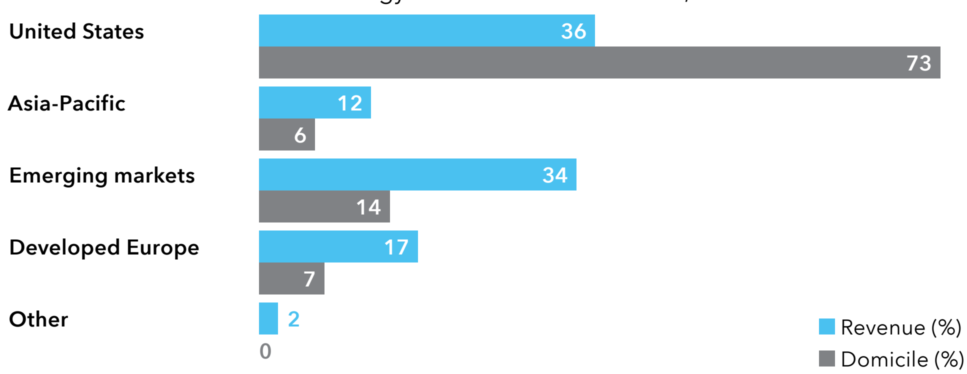
A look at market indexes and portfolios through the revenue lens

The technology sector

The technology sector provides valuable information. The chart below shows that, as represented in the MSCI ACWI Information Technology Index, 73% of the market capitalization of technology companies is in the United States on the basis of domicile, but only slightly more than one-third of their revenues come from the U.S. Developing economies account for a third of the global demand for technology products and services. All of it may not be end-consumer demand, since a majority of the manufacturing of technology products happens in Asia, and some of the revenues are of intermediate products such as semiconductor chips. But these intermediate products also represent important sources of revenue for several technology giants such as Samsung, Intel and Qualcomm.

The U.S. accounts for a lower percentage of demand for technology products compared to its representation in the ACWI Information Technology Index

MSCI ACWI Information Technology Index as of December 31, 2013

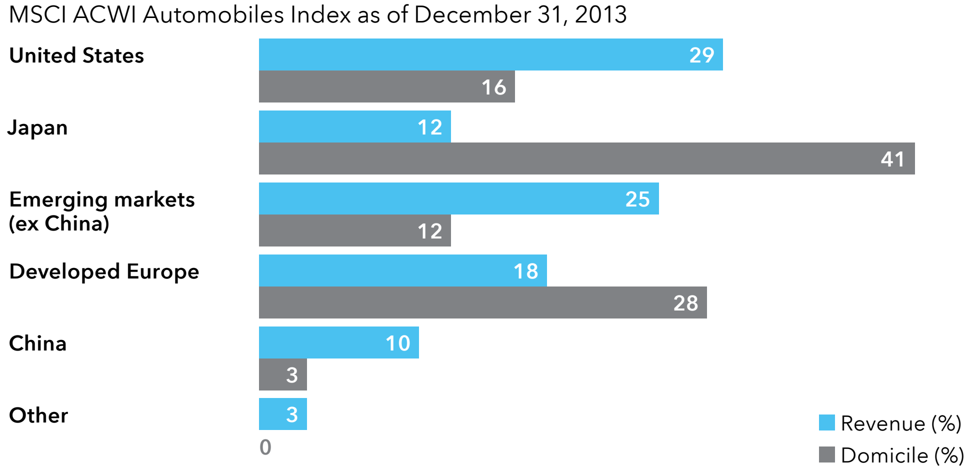


Automobiles

Data on the automobile industry confirm what we know anecdotally and from the sales figures of the major auto companies. The Japanese automakers represent a large part of the country's stock market and more than 40% of the global auto industry's market capitalization. However, less than 15% of global auto revenues come from Japan. The emerging markets, meanwhile, don't have a very big auto industry but account for more than a third of global demand for cars and other automobiles.

Emerging markets account for a third of global demand for autos

MSCI ACWI Automobiles Index as of December 31, 2013

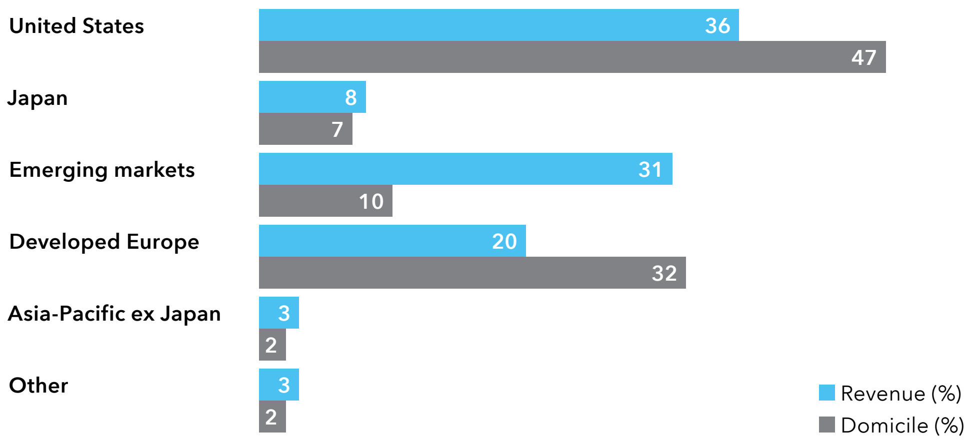


New Perspective Fund®

An analysis of New Perspective Fund shows that the fund has substantial investments in Europe at about 32% of assets when measured by the traditional regional metric of company domicile, but far less by economic exposure, at 20%. On the other hand, the fund has only 10% of its assets invested in the emerging markets by country of domicile, but 31% of assets on the basis of revenue. Many of the investments in the fund are in export-oriented European companies that derive a large part of their revenues from Asia. These include luxury consumer goods companies, automobile manufacturers and pharmaceutical companies.

New Perspective Fund has much less exposure to Europe by revenue than by domicile

New Perspective Fund as of December 31, 2013

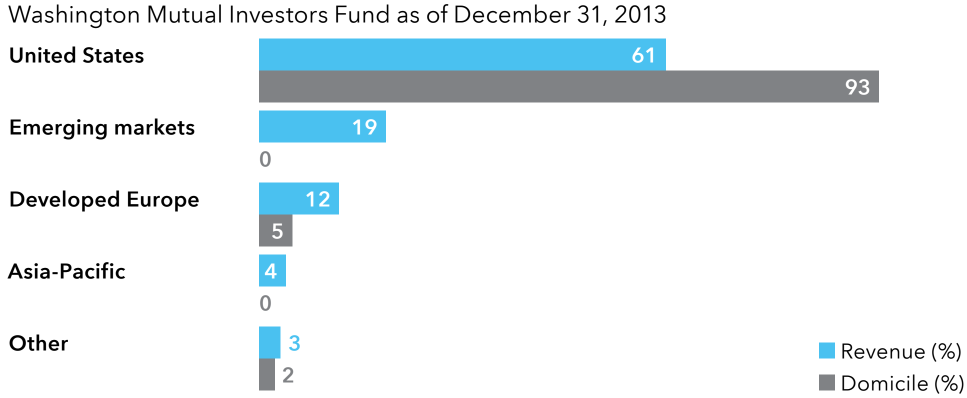


Washington Mutual Investors Fund®

Looking at a domestic U.S. fund by country of domicile, Washington Mutual is invested in companies that derive 12% of their revenues from Europe and 19% from the emerging markets. Only 61%, or less than two-thirds, of the revenues came from the U.S., compared to a portfolio weighting of 93% of assets in the U.S. by country of domicile as of the end of 2013.

Washington Mutual has more than a third of its exposure outside the U.S. when measured by the revenues of the companies it is invested in

Washington Mutual Investors Fund as of December 31, 2013

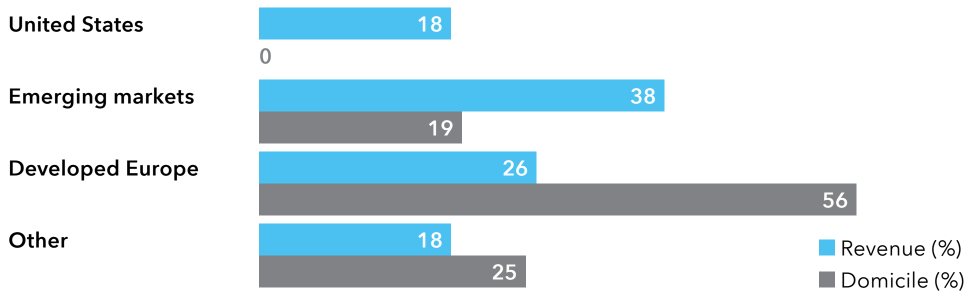


EuroPacific Growth Fund®

An analysis of the EuroPacific Growth Fund shows that while the fund does not have any investments in the United States, it has about 18% of economic exposure to the U.S. by revenue. This was probably a positive factor in 2013 as the U.S. was among the most vibrant of the major economies.

EuroPacific Growth Fund has more exposure to the emerging markets than Europe when measured by revenue

EuroPacific Growth Fund as of December 31, 2013



When we compared the fund to the MSCI ACWI ex U.S. index on the basis of economic exposure, we also found that the fund has more investments in the U.S. and India relative to the index, and fewer investments than the index in Japan and China.

EuroPacific Growth Fund has far less exposure to Japan compared to the index when measured by revenue

EuroPacific Growth Fund as of December 31, 2013

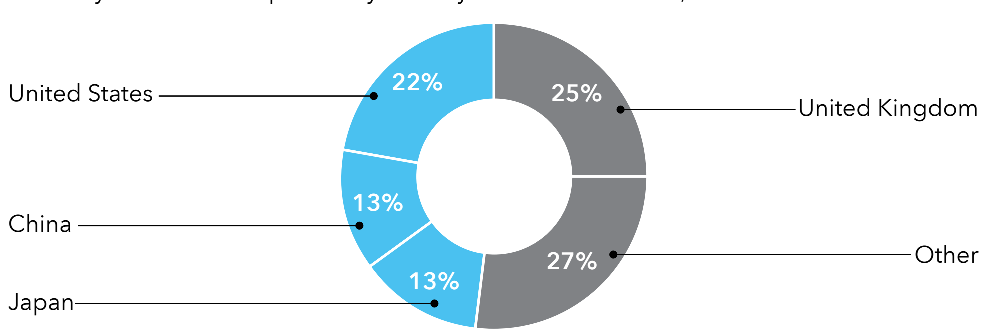
	Economic exposure (%)				Economic exposure (%)		
Top five countries	Portfolio	Benchmark	Difference	Bottom five countries	Portfolio	Benchmark	Difference
United States	15.3	11.8	3.6	Australia	1.2	2.7	-1.5
India	3.7	2.2	1.4	Korea	2.8	4.4	-1.7
Hong Kong	1.5	0.5	0.9	Brazil	2.0	4.2	-2.2
Other countries	3.1	2.2	0.9	Japan	10.7	13.3	-2.6
South Africa	1.5	1.0	0.5	China	9.1	13.9	-4.9

Security example – Burberry

Economic exposure analyzed at the security level is also important. Here we use Burberry as an example. A classic British company known for its raincoats and checkered scarves, Burberry is an old brand in England. But it repositioned itself as a fashionable, youth-oriented brand in the U.S. and China — markets where it has enjoyed strong growth over the past few years.

The U.S., China and Japan together account nearly 50% of sales for Burberry, a classic British company. Understanding the demand dynamics of each market is essential.

Burberry's economic exposure by country as of December 31, 2013



As of December 31, 2013, Burberry represented 1.0% of assets in New Perspective Fund and 0.2% of assets in EuroPacific Growth Fund. It was not held in Washington Mutual Investors Fund.

Notes on methodology

How we decided to use revenue-based economic exposure as an analytical tool

About three years ago, when we began looking at portfolios by economic exposure for purposes of portfolio analysis, we searched for third-party providers of this type of data and found that none existed. As a result, we decided to map out a broad investible market index by this measure to gauge the information that it would provide. We also used the data set to analyze our own portfolios.

After some analysis, we determined that for companies that provided a revenue breakdown by region but not by country, the best proxy is per capita GDP growth. For example, say a company reported that 15% of its revenues came from Asia, but further country-level revenue data was not available. In such cases, we approximated revenue at the country level using per capita GDP. Since income levels generally drive demand, we believe that per capita GDP provides a reasonable proxy.

Once we began our effort, we also checked with index provider MSCI and with a couple of the large brokerage houses. We found that they were taking a similar approach in analyzing economic exposure. Comparing data, we found that we produced remarkably similar numbers; largely because they took the same approach that we did – i.e., considered revenues to determine the economic exposure of a company, and used per capita GDP as a proxy for revenue when the data was not available at the more detailed country level.

For this paper, we have used the data set compiled by MSCI.

The breakdown of our funds, by country of domicile and by revenue, was done using only publicly traded holdings. Additionally, the analysis excludes cash (and fixed-income securities if applicable) and the percentages presented have all been rebalanced back to 100% for the funds and indexes to be comparable.

Revenues as the right metric for measuring economic exposure

Compiling, mapping and analyzing portfolio exposures using revenues poses some challenges, beginning with corporate financial disclosure. Companies provide their financial statements at varying levels of granularity: while some provide net earnings or operating profits by region, many report only revenues.

There are also variations in reporting conventions from an accounting perspective. For instance, mining companies book revenue at the mine site rather than the end market to which the commodity is shipped. Financial companies may choose to book revenues in countries that have a better tax advantage. Regional revenue reporting may capture intermediate steps in a production line. For example, Apple may purchase iPad parts in Malaysia and then ship them to China for manufacturing. Some of the intermediate supply chain may be captured as end demand in Asia, even though the final product is shipped to and sold in the United States.

While not perfect, revenues can be a good proxy for where companies do business. While few companies disclose where they source profits, most break down their revenues by region or country in their financial statements. Moreover, unlike profits or assets, the definition and composition of revenue is more consistent around the world, making comparisons easier.

A lot of information can be gleaned by looking at economic exposure through the revenue lens. For instance, in the past three years, it was important to know the extent of a portfolio's exposure to Europe's sharply decelerating economy, and less important to know what percentage of the portfolio was invested in companies domiciled in Europe. In 2013, companies with exposure to the U.S. benefited from strong consumer demand. Similarly, the penchant for luxury goods remained high in China despite the slowdown in that country's economic growth.

On a more fundamental level of analysis, products like high-end cars and luxury items can maintain and even expand profit margins in the developing economies due to the cachet of their brands. Other products such as electronics, drugs and household items may have to be sold at lower margins to gain market share in countries such as China and India. This is valuable information when assessing the cyclicality of a portfolio's exposure based on revenues.

