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Market Commentary

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The European Value Premium

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The ongoing euro currency crisis has led to substantial declines in European asset prices. Measured relative to operating cash flow, European corporate assets are now selling at a 30% discount to the average of the rest of the world. While some portion of this differential can be explained by a weaker macroeconomic outlook, most of it is attributable to an increase in expected returns. Even if one assumes near-zero real earnings growth, the expected returns on European corporate assets exceed those available elsewhere in the world over an assumed five-year holding period.

In reality, earnings growth is actually likely to be quite high for the many European businesses well-positioned to increase their sales and physical presence in world's fastest-growing economies. In an integrated global economy, the geography of a firm's headquarters or manufacturing facility often says very little about the geography of its sales and earnings. Soaring discretionary incomes have led consumers in many fast-growing developing economies to become more quality-conscious, which has boosted sales of European luxury goods. At the same time, European industrials have seen substantial growth in Asia thanks to large infrastructure and capital goods investment. In many cases, Europe offers investors the potential to generate high risk-adjusted returns by paying low multiples to buy exposure to developing country growth rates.

Prices, Fundamentals, and Investment Opportunities

Valuation ratios measure the relationship between the price of an asset and its "fundamentals," such as earnings, book value, or cash flow. Differences in valuation ratios across assets or through time must be explained by differences in expected growth rates, differences in expected returns, or some combination of the two. A decline in the price of a stock or stock market index means either that future cash flows are expected to be lower than previously anticipated or expected returns are higher.[1] Similarly, a gap in the price-to-earnings (P/E) ratio between two stocks must be explained by differences in future earnings growth or expected returns. Stocks with low prices relative to fundamentals are called "value stocks" while those with high valuation ratios are called "growth stocks" due to the higher earnings growth they must generate to justify the higher current price.[2]

The problem for investors is that it is not easy, in real time, to judge whether the observed variation in asset prices is caused by changes in expected returns or growth rates. This is especially true when attempting to

[1] Campbell, J. and Vuolteenaho, T. (2004), "Bad Beta, Good Beta," *American Economic Review*.
[2] Fama, E. and French, K. (1992), "The Cross-Section of Expected Stock Returns," *Journal of Finance*.

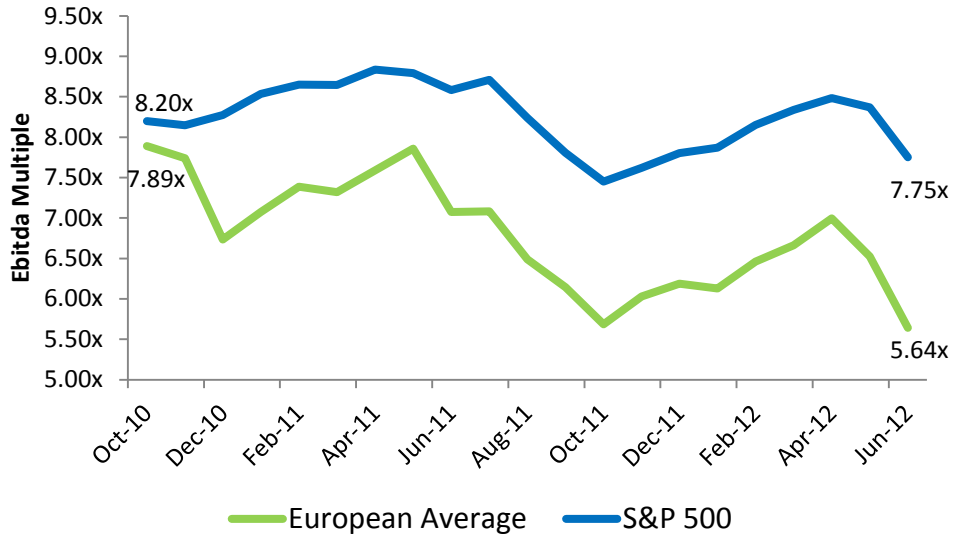
measure the *magnitude* of the change in the price of the asset relative to the *magnitude* of the change in fundamentals. Most times, the price of the asset adjusts to news about future cash flows in the anticipated direction – i.e. the price rises on news that earnings are likely to be higher in the future – but it is not clear if the price adjustment been greater than, less than, or exactly proportional to the change in future earnings. This uncertainty creates unique opportunities for investors to generate large risk-adjusted returns.[3]

European Corporate Assets Currently Sell at Huge Discounts

The euro zone crisis has impacted the real economy in three ways: (1) the strains in the banking system have reduced credit availability for households and nonfinancial businesses; (2) the required fiscal adjustment in some euro zone countries has reduced aggregate demand; and (3) ongoing concerns about a catastrophic outcome like disintegration of the currency union have reduced the confidence of consumers and business managers, which has, in turn, reduced household and business outlays and caused portfolios to be weighted towards highly liquid, low-risk assets. The deterioration in the macroeconomic outlook has led directly to substantial declines in the prices of European corporate assets.

A useful metric to measure the absolute and relative decline in European asset prices is the ratio of total enterprise value (market value of equity and interest-bearing liabilities net of cash) to trailing twelve month's earnings before interest, taxes, depreciation, and amortization (Ebitda). The "Ebitda multiple" must predict cash flows (growth in gross cash earnings), expected returns on invested capital, or both. The basic intuition is that the observed variation in Ebitda multiples can be explained in one of two ways: (1) if future cash flow growth is expected to be high then prices will be high relative to current cash flow, which causes Ebitda multiples to be high; (2) alternatively, if expected returns (risk premia) are high, then current prices have to decline relative to current cash flows to generate the anticipated increase in returns. This causes Ebitda multiples to be low.

Figure 1: U.S. and European Ebitda Multiples, 2010-2012



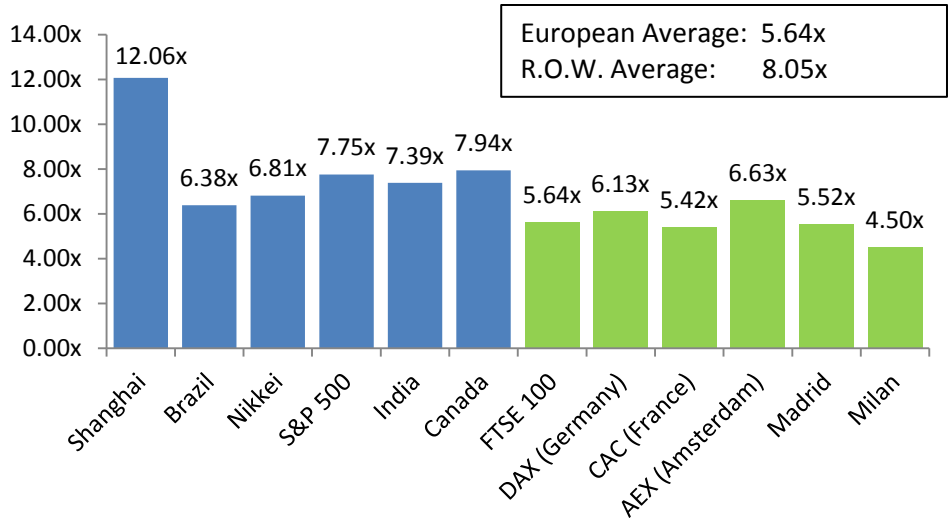
Source: Capital IQ Monthly Data

Figure 1 depicts the variation in the Ebitda multiple on the S&P 500 and an arithmetic average of the six major European stock indexes. In October 2010, European corporate assets sold at just a 4% discount to those in the U.S., with an Ebitda multiple of 7.9x in Europe compared to 8.2x for the S&P 500. By June 2012,

[3] Campbell and Vuolteenaho (2004).

the price discount had widened to 27% as the average European multiple fell to just 5.64x compared to 7.75x in the U.S. The multiple on the S&P 500 is not particularly high, either historically or relative to other indexes. Figure 2 provides a comparison of the Ebitda multiple on 12 major stock market indexes as of June 2012. The average Ebitda multiple on the six major non-European indexes in June 2012 was 8.05x, which means European corporate assets are priced at a 30% discount relative to the average of the rest of the world.

Figure 2: Ebitda Multiples on Major Stock Market Indexes as of June 2012



Source: Capital IQ

Are these Price Declines Consistent with Fundamentals?

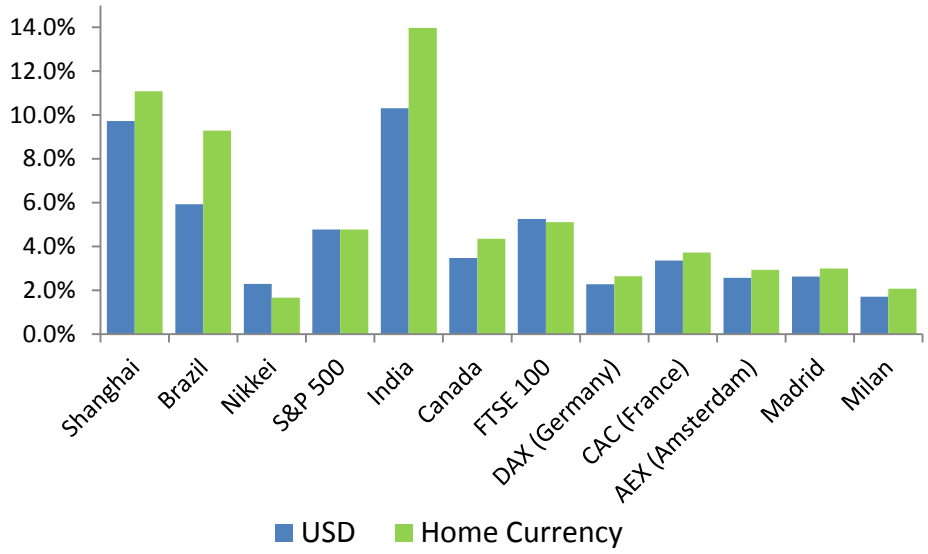
To measure whether the steep price discounts on European assets are justified by differences in expected growth rates, we use the International Monetary Fund's April 2012 *World Economic Outlook* to estimate earnings growth rates and then "back out" the gross returns implied by current Ebitda multiples. We assume earnings for companies located in each country grow at the same rate as the IMF forecast for that economy's GDP. Over the long-run, the relationship between GDP and corporate earnings is stationary (mean-reverting) no matter what measure of earnings is chosen.[4] The durability of this relationship suggests that the anticipated growth rate of nominal GDP should be a good proxy for expected earnings growth over sufficiently long holding periods.

Figure 3 (below) provides the expected nominal GDP growth rates for the countries in which the 12 major stock market indexes are located. The growth rates are reported both in terms of U.S. dollars as well as in the home currency. Not surprisingly, China and India have the fastest expected growth rates (9.7% and 10.3%, respectively, in USD terms), while the slowest growth rates are expected in the four euro zone economies (between 1.7% for Italy and 3.4% for France in nominal USD terms).

The reciprocal of the Ebitda multiple (Ebitda-to-enterprise value) is the cash flow or Ebitda yield. It measures gross cash earnings as a percentage of the market value of total invested capital, which makes it a reasonable approximation for the single period gross cash return on invested capital. When moving to multiple periods, the expected gross return on invested capital can be calculated as an internal rate of return: for each combination of Ebitda yields and expected earnings growth rates there is a unique internal rate of return that serves as the implied discount rate on all future cash flows. As the WEO growth forecast extends only to 2017, we estimate this internal rate of return over an assumed five year holding period.

[4] Cornell, B. (2010), "Economic Growth and Equity Investing," *Financial Analysts Journal*.

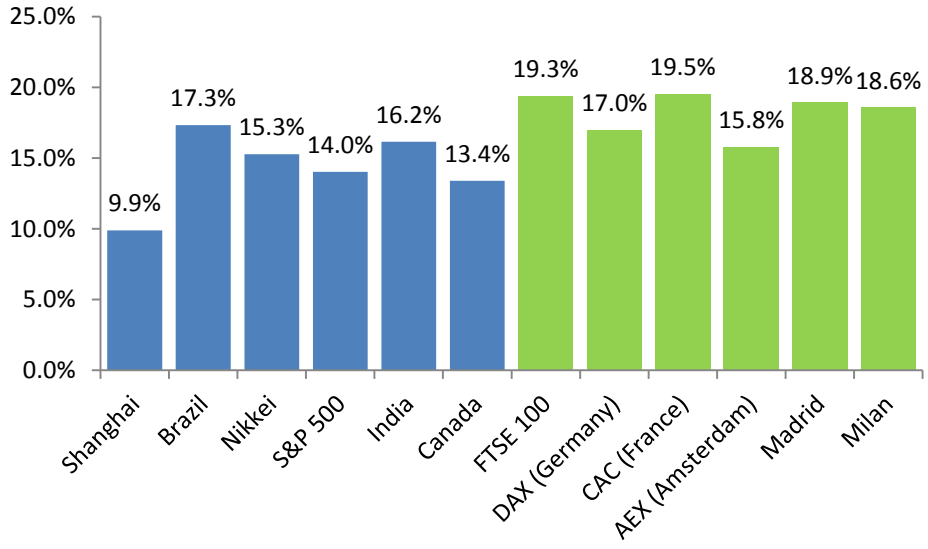
Figure 3: Forecast Nominal GDP Growth Rates, 2012-2017[5]



Source: IMF, April 2012 WEO

Figure 4 provides the estimate of the expected gross cash returns on invested capital (before taxes and capital expenditures) available to debt and equity investors in each of the 12 major stock markets in USD terms. The average expected return on the six European markets is 18.2%, compared to 14.3% for the six other markets. This means that the expected gross cash return on corporate assets in Europe is 3.8% per year greater than in the rest of the world, on average. Figure 5 repeats the estimation procedure using home currency nominal returns instead of USD returns. The results are qualitatively the same: the average expected gross cash return on European stock market indexes (18.3%) is 3.5% per year greater than in the rest of the world (14.7%), on average.

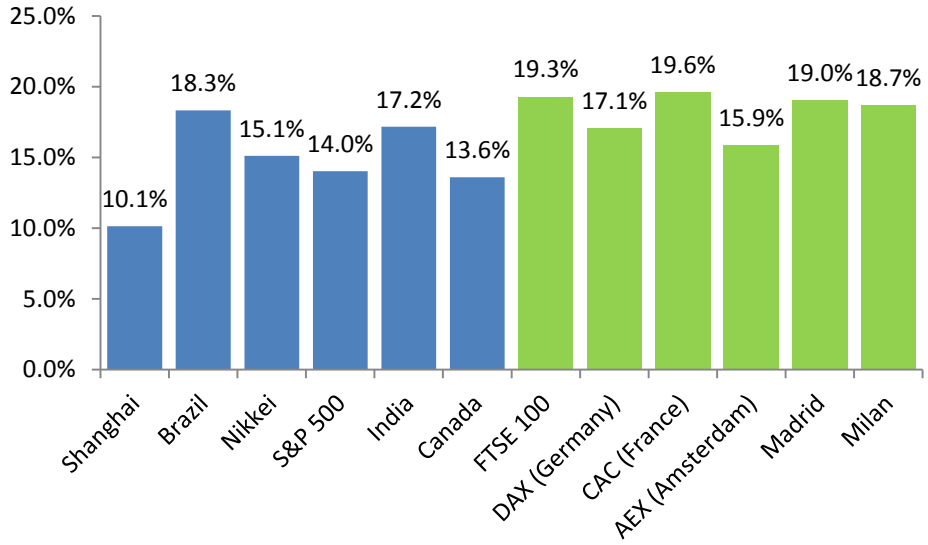
Figure 4: Expected Annualized Gross Cash Returns on Invested Capital (in USD)



[5] The GDP growth rate assigned to each stock market index is the IMF estimate for the country in which the stock market index is located. For example, the China growth forecast is used for the Shanghai index.

Corporate assets are cheapest, on average, in France, with implied discount rates on expected cash flows of 19.5%. The next cheapest stock markets are in London, Madrid, and Milan, with Brazil (17.3%) as the only non-European member of the top 5. These relative rankings remain the same in home currency terms.[6]

Figure 5: Expected Annualized Gross Cash Returns on Invested Capital (in Home Currency)



Results the Same in a Stressed Scenario

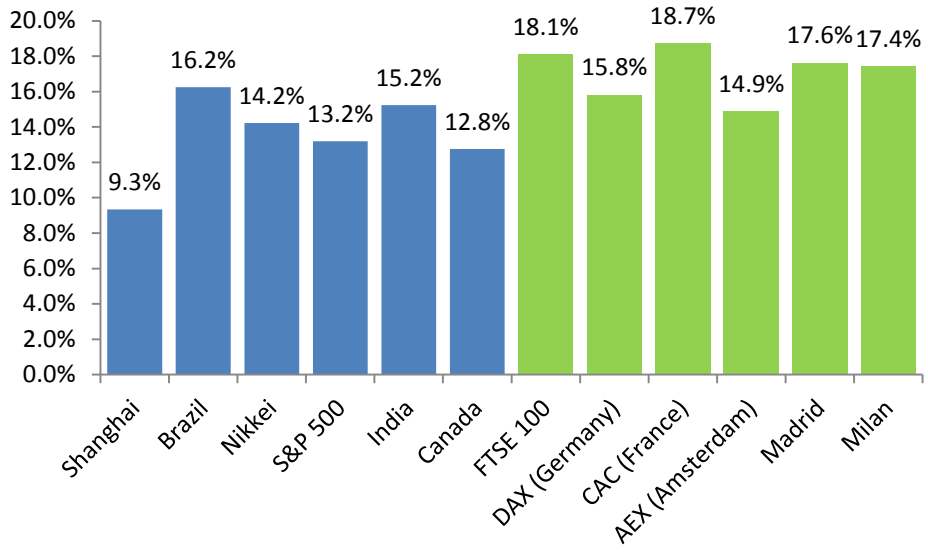
To account for even worse outcomes, we re-estimate expected returns in a "stressed" scenario where growth rates are two standard deviations below the IMF forecast.[7] The standard deviation is calculated from the realized annual growth rates for the previous 10 years and the forecast growth rates for the next five. Figure 6 reports the results. In this scenario, the Italian economy is expected to shrink in nominal USD terms by 2.0% per year for the next five years and the German and Spanish economies are expected to contract at a 1.8% and 1.7% annual rate, respectively. The results are qualitatively the same, with expected average European gross cash return in the stressed scenario (17.1%) still higher than the rest of the world's average return in the baseline scenario and 3.6% per year higher than the global average in the stressed scenario (13.5%). The results are qualitatively the same in home currency terms.

These results stem from two related factors: (1) European corporate assets are so cash-generative that the average amount of cash from operations is likely to be higher per $1 of installed capital in Europe than anywhere else for the near future; and (2) low Ebitda multiples insulate investors, to a large extent, from slow or even negative growth rates, even over a five year assumed investment period.

[6] It is important to recognize that these gross cash returns abstract from differences across countries in tax rates, prices of capital, reinvestment rates, and the marginal product of capital. In addition to taxes and investments, the expected cost of debt service must also be deducted from the gross cash returns to estimate the expected return to equity. Assuming that 50% of the capital structure is debt with an 8% coupon rate, 2% of cash is reinvested in capital, and profits are taxed at a 30% effective rate, an 18% gross cash return would translate to an 8.4% return on equity before any multiple expansion.

[7] IMF forecasts may prove wrong but are not exceedingly optimistic. For instance, the IMF expects that the Italian economy will still be 3% smaller in 2017 than it was ten years earlier, which is a Depression-like scenario. The IMF does not expect the Spanish economy to return to its 2008 peak until 2017 and forecasts slower growth for Germany over the next five years than it has averaged since 2009.

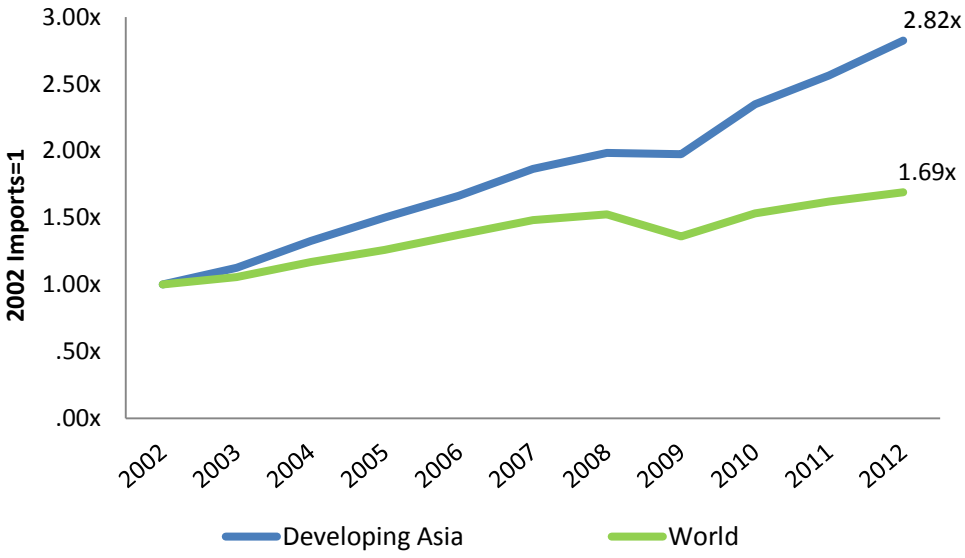
Figure 6: Annualized Gross Returns on Invested Capital under Stressed Scenario (in USD)



Country GDP Understates Corporate Earnings Growth Potential

The preceding analysis assumes that earnings growth on the constituents of a country's stock index is equal to the growth rate in that country's GDP. While this is reasonable assumption for the stock market as a whole, it understates the potential earnings growth of export-oriented businesses focused on sales in foreign markets. The geography of a company's stock listing and headquarters can be quite different from the geography of its sales. Many European businesses – particularly those inside the euro zone – compete aggressively in fast-growing foreign markets, which account for the bulk of their earnings growth.

Figure 7: Developing Asia's Imports as a Multiple of 2002 Levels



Source: IMF, WEO April 2012

According to the IMF, the fastest growing region in the world is Developing Asia, a regional grouping of 27 countries that includes China, India, and Vietnam. After expanding by more than $10 trillion over the last yen years, Developing Asia's economy is expected to grow by an additional $7.4 trillion over the next five years (in nominal USD terms). Rapid growth in domestic income is pulling in imports from the rest of the world at an accelerating rate. As shown in Figure 7 (above), in 2012, Developing Asia's imports will be 2.82x their 2002 level, an increase that is two-thirds larger than the global growth in imports over the same period (1.69x). In 2011 China's imports were equal to 22% of GDP, or over $1.6 trillion.[8] By 2017, China's total purchases of foreign goods and services are expected to exceed $2.6 trillion (in nominal USD).[9]

Many of those sales are going to be made by European firms. Table 1 provides a summary of the growth in euro zone economies' goods exports to Developing Asia. As of 2011, all five economies' goods exports were more than 3.3x their 2002 level. Added together, the five major euro zone economies exported 3.8x more to Developing Asia in 2011 than they did ten years earlier. For comparison purposes, Table 1 also includes U.S. exports to Developing Asia. The five major euro zone economies' exports to Asia grew 12.6% faster those of the U.S. over this period. This differential was much greater in the cases of Spain (38.5% faster growth), Germany (28.3%), and Holland (23.6%). Only Italy failed to generate export growth to Developing Asia in excess of that of the U.S.

Table 1: Goods Exports to Developing Asia as a Multiple of 2002 Goods Exports

Country	2011 Goods Exports	Growth Relative to U.S.
France	3.5x	4.7%
Germany	4.3x	28.3%
Italy	3.3x	-2.1%
Netherlands	4.1x	23.6%
Spain	4.6x	38.5%
U.S.	3.3x	-

Source: IMF Direction of Trade Statistics, May 2012 Update

European export growth is a function of their market-leading positions in industries like luxury goods and automobiles, capital equipment, chemicals, and engineering services, among others. Rapid increases in discretionary income tend to make consumers more quality-conscious. The tremendous growth in Chinese disposable household income, for example, has led to even more rapid growth in the purchases of "trading-up goods," such as premium apparel and footwear, personal care products, and luxury automobiles.[10] Luxury good sales in China are expected to increase by between 18% and 22% in 2012 alone and rise to $27 billion in 2015. China already accounts for about one-third of Gucci and Prada's global sales and is Louis Vuitton's single largest customer.[11]

At the same time, chemical firms like BASF anticipate sales in China will double by 2020 from the €6.5 billion recorded in 2011.[12] German electronics and electrical engineering firm Siemens registered €6.24 billion of sales in China in fiscal 2011 and has 29,000 employees on the ground in China. In the first quarter of 2012, German automakers Audi and BMW reported sales growth in China of 44.2% and 31.5%, respectively, driven

[8] OECD Factbook 2011: Economic, Environmental and Social Statistics.
[9] IMF, World Economic Outlook, April 2012.
[10] Silverstein, M., Fiske, N., and Butman, J. *Trading Up: Why Consumers Want New Luxury Goods--And How Companies Create Them.* Penguin Books, 2008.
[11] CNNMoney, "Slowdown in China? Not for luxury brands," April 26, 2012.
[12] AFP, "BASF sees China sales more than double by 2020," June 14, 2012.

by luxury sedan and SUV sales.[13] China became Dutch electronics manufacturer Philips second largest market in 2011 (behind the U.S.) with sales growth of 20%.[14]

In addition to these household names in luxury goods and manufacturing, Europe has a large number of smaller brands that appeal to quality-conscious emerging market consumers that operate as independent companies or are trapped inside of conglomerates. Moncler, a luxury goods manufacturer, generated revenue and operating cash flow growth of 42% and 91%, respectively, over a period of three years thanks in part to a 130% increase in sales to Asia. The internationalization of smaller European firms' marketing, sales, and operations offers the potential for similar results. In these cases, Europe may offer investors the rare opportunity to pay a low European multiple to buy exposure to a developing country growth rate.

Conclusion

Asset prices in Europe have plunged in recent months in absolute terms and relative to other markets. European corporate assets now sell at a 30% discount to assets in the rest of the world, on average. At this point, the asset price declines have been greater than can be explained by fundamentals. The average cash flow yield on European corporate assets (Ebitda/EV) generates high expected returns even in the context of zero real cash flow growth. Actual earnings growth is likely be quite high for the many European businesses well positioned to increase their sales and physical presence in the fastest growing regions in the world. European luxury goods and automobile manufacturers and industrial firms offer the goods and services to meet the domestic demand generated by rapid discretionary income growth in developing economies. Investors buying these assets may have the opportunity to pay discounted European prices for the earnings growth of emerging markets.

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[13] AP, "German Audi, BMW luxury brands rake in China sales," June 11, 2012.
[14] China Daily, "Philips elevates China's market status," May 26, 2011.