Original Research for Inquisitive Investors

Value vs. Glamour:

A Long-Term Worldwide Perspective

THE BRANDES INSTITUTE

BRANDES.COM/INSTITUTE
BRANDESINSTITUTE@BRANDES.COM

Table of Contents

Value vs. Glamour: A Long-Term Worldwide Perspective

Over the long term, the value premium was evident across valuation metrics, regions and market capitalizations.

Executive Summary

- Over the long term, value stocks delivered better results than glamour stocks.
- Value outperformance, or the value premium, was evident across different valuation measures, including price-to-book, price-to-earnings and price-to-cash flow ratios.
- The value premium was also evident in different regions and among large- and small-cap stocks.

Preface

In this updated "Value vs. Glamour" study, the Brandes Institute set out to further explore the historical performance of stocks based on their fundamental characteristics. Consistent with the work of noted academics, our results showed that over the long term, unpopular value stocks outperformed their more popular glamour counterparts. In other words, the value premium was evident.

Value stocks are often associated with companies experiencing hard times, operating in mature industries or facing adverse circumstances, while glamour stocks are typically affiliated with fast-growing companies, often from dynamic industries with a relatively high profile.

In our last study from 2012, we examined the returns for both U.S. and non-U.S. stocks, and found that the value premium was evident across valuation metrics, geography and market capitalizations. In this update, we expanded the study through 2014, including the remarkable upturn of U.S. stocks and the volatile trajectory of emerging-market equities over the past couple of years.

Key Findings

Using data from 1980-2014, our study showed that over the long term, the value premium was evident across valuation metrics, regions and market capitalizations.[1]

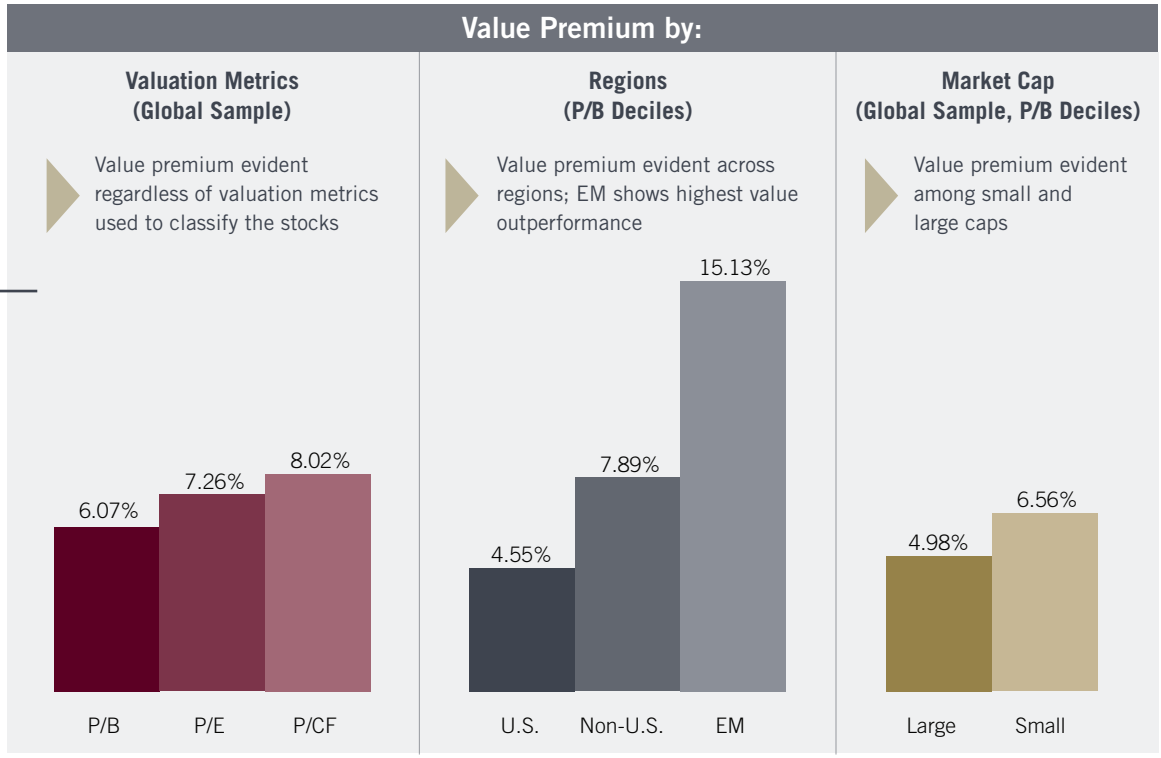
In Exhibit 1, on the following page, we subtracted the returns of decile 1 glamour stocks from the returns of decile 10 value stocks. The chart illustrates that value stocks outperformed glamour in all segments, with a regional perspective displaying the biggest return discrepancies. The value premium in emerging markets was triple the premium in the United States and almost double that in non-U.S. developed markets as measured by their price-to-book ratios.

THE BRANDES INSTITUTE

[1] Consistent with the previous versions of this study, stocks were first divided into deciles based on their fundamentals (e.g., price-to-book (P/B), price-to-cash flow (P/CF), price-to-earnings (P/E)). Aggregate performance of each decile was tracked over the next five years. This process was then repeated each year. Please see the Background and Methodology for a greater explanation of the study's methodology.

Exhibit 1: Strong Evidence of the Value Premium

The Value Premium Exists Across Valuation Metrics, Regions and Market Capitalizations

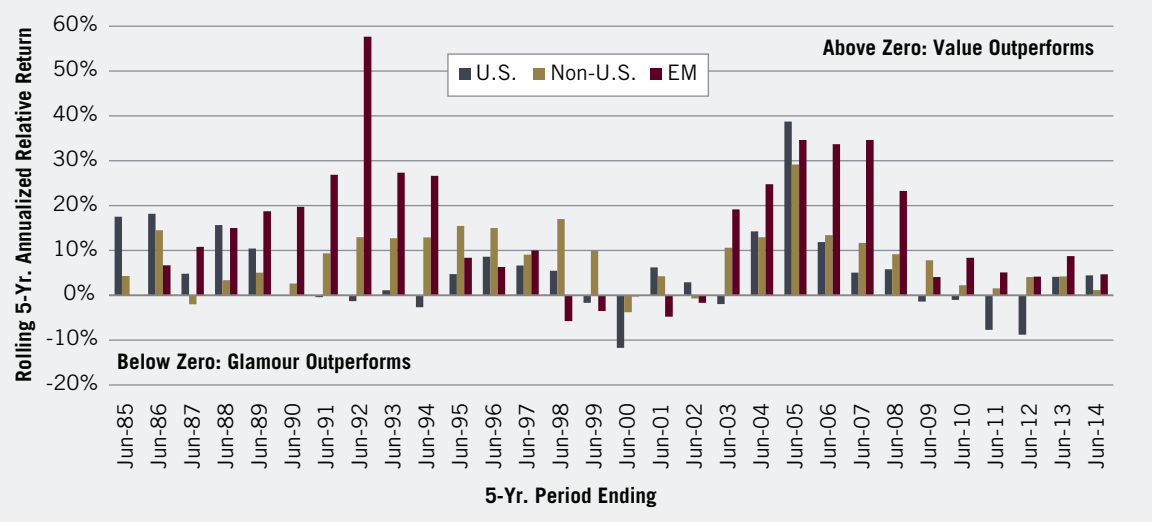


Source: Worldscope via FactSet, The Brandes Institute, as of 6/30/2014. Past performance is not a guarantee of future results.

Exhibit 2 provides a closer look into how value and glamour stocks performed year over year in the United States, non-U.S. developed markets and emerging markets. Using the same approach of subtracting decile 1 returns from decile 10 returns, the chart shows that while value stocks had periods of underperformance, such as in 2011 and 2012, over the long term they outperformed glamour stocks in more periods and in longer stretches.

Exhibit 2: Value Outperformed Glamour in More Periods and in Longer Stretches

Rolling 5-Year Annualized Relative Performance, P/B Deciles



Source: Worldscope via FactSet, The Brandes Institute as of 6/30/2014. Past performance is not a guarantee of future results. Rolling periods represent a series of overlapping, smaller time periods within a single, longer-term time period. For example, over a 20-year period, there is one 20-year rolling period, eleven 10-year rolling periods, sixteen 5-year rolling periods, and so forth.

Background and Methodology

Introduction

Benjamin Graham and David Dodd argued that out-of-favor stocks were sometimes underpriced.

In their 1934 book *Security Analysis*, Benjamin Graham and David Dodd argued that out-of-favor stocks were sometimes underpriced in the marketplace, and that investors cognizant of this phenomenon could capture strong returns. Conversely, the duo theorized, prices for widely popular stocks often were buttressed by high expectations and could be vulnerable if these expectations proved too enthusiastic.

The philosophy espoused by Graham and Dodd is now widely known as value investing, and the unpopular value stocks they advocated often are associated with companies experiencing hard times, operating in mature industries, or facing similarly adverse circumstances. Alternatively, typically fast-growing glamour companies frequently function in dynamic industries with a relatively high profile. This stark contrast in attributes leads to a natural question: *which stocks have performed better, value or glamour?*

While this is not a simple inquiry, we believe historical analysis may shed light on the relative performance of value stocks and glamour stocks—largely because their divergent traits often manifest in their respective valuation metrics. Specifically, value shares typically feature low price-to-book (P/B), price-to-earnings (P/E), or price-to-cash flow (P/CF) ratios, while glamour stocks generally are characterized by valuation metrics at the opposite end of the spectrum. As a result, these metrics can be used to split a sample of equities into either the value or the glamour camp—and subsequently track each group's performance over time.

This approach to the value vs. glamour question is not novel. As early as 1977, academic studies used share-price and earnings-per-share data to classify stocks into the value or glamour categories and compare historical performance. Through the 1980s, 1990s, and 2000s, additional studies broadened the analysis to include book-value and cash-flow metrics.

In 1994, academics Josef Lakonishok, Andrei Shleifer, and Robert Vishny (LSV) published "Contrarian Investment, Extrapolation, and Risk," a seminal entry in the value vs. glamour canon. Using data from 1968 through 1994, LSV classified U.S. stocks as value or glamour based on their P/B, P/CF, and P/E ratios, as well as their sales growth. The researchers concluded that, for a broad range of definitions, value stocks consistently outperformed glamour stocks by wide margins.

Understanding LSV

In their study, LSV focused on companies traded on the New York Stock Exchange (NYSE) or the American Stock Exchange (AMEX) from April 1968 through April 1989. To incorporate a variety of definitions of value and glamour, the researchers classified stocks using each of the following criteria:

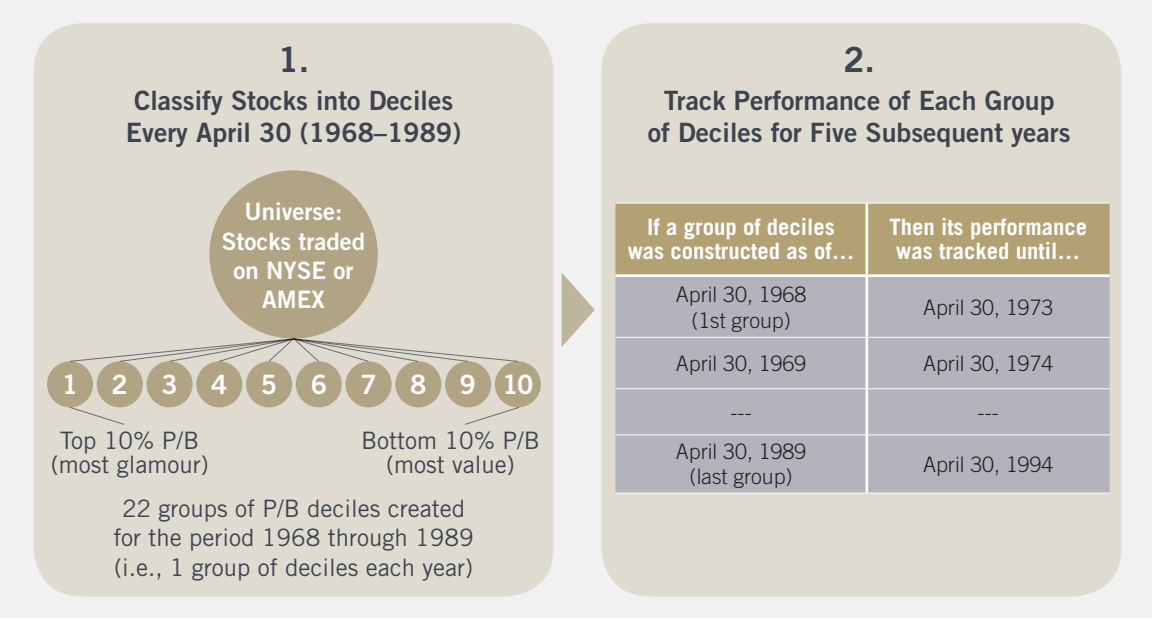
- Price-to-book
- Price-to-cash flow
- Price-to-earnings
- Sales growth over the preceding five years
- Select pairings of the variables above

LSV's methodology—illustrated in Exhibit 3 on the next page—can be condensed into two basic steps. First, the sample of companies as of April 30, 1968 was divided into deciles based on one of the criteria above.

Second, the aggregate performance of each decile was tracked every year for the next five years on April 30. These steps were repeated every April 30 from 1969 through 1989.

Exhibit 3: Understanding LSV

Methodology – Example Using P/B Ratios

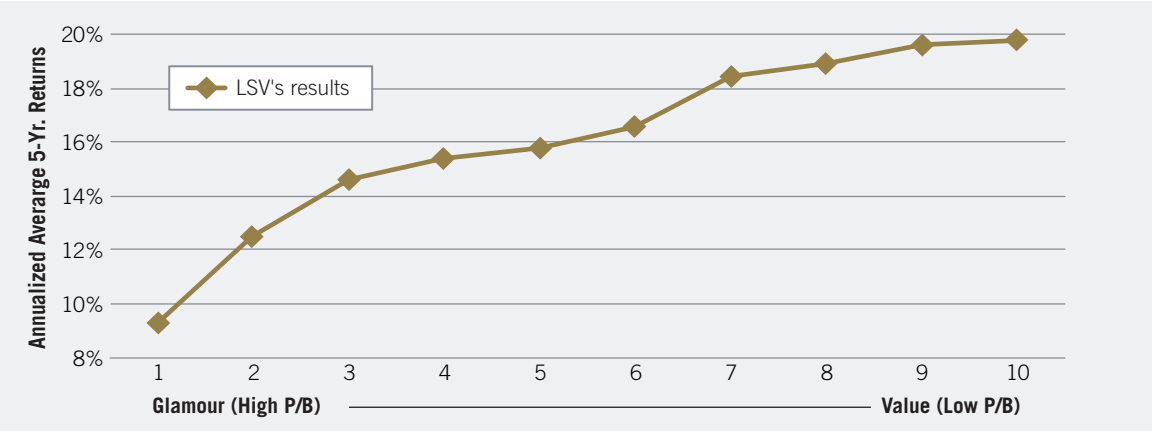


LSV found the performance of value stocks outpaced the performance of their glamour counterparts.

LSV then averaged the performance data across the decile groups to compare value and glamour. As the chart below indicates, LSV found the performance of value stocks outpaced the performance of their glamour counterparts. For instance, the average annualized five-year return for decile 1—those stocks with the highest P/B ratios—was 9.3%, while the return for the low-P/B decile 10 was 19.8%.

Exhibit 4: LSV Results: Value Outpaced Glamour

Rolling 5-Year Annualized Returns of P/B Deciles, 1968–1994



Source: Lakonishok, Shleifer, and Vishny. "Contrarian Investment, Extrapolation, and Risk." Journal of Finance 49 (December 1994). Past performance is not a guarantee of future results.

Lakonishok, Shleifer and Vishny repeated this analysis for other criteria mentioned above (e.g., P/E, P/CF and select pairings of the criteria) and found that for each of these, value stocks outperformed glamour stocks by wide margins.

We were interested in applying LSV's methodology to markets outside the United States.

Brandes Institute: Adjusting LSV's Study and Extending to Markets Outside the United States

Given the compelling results of LSV's work, we sought to update and extend the study. However, we recognized certain limitations in the original study, including that LSV's sample may have not accurately reflected a typical large investor's universe. The sample contained many stocks with prohibitively small market capitalizations.

In addition, we were interested in applying LSV's methodology to markets outside the United States. Some critics of the study have argued that the results for U.S. stocks simply could be the product of random chance. Would a worldwide examination of value stocks and glamour stocks counter this contention?

To accommodate our objectives, we made a number of adjustments to LSV's study—summarized in Exhibit 5 below. We built a global sample which included the United States *plus* 22 developed countries outside the United States (see Appendix A for the list of countries in our global sample). In addition, amid the increasing importance of emerging markets on the world's economy, we also extended our study to include this vast region.

We excluded the smallest 50% of companies in each region to exclude micro-cap stocks and to yield a sample that more accurately represented a truly investable universe. This resulted in a sample size of 4,577 companies for our global sample and 3,139 companies for our emerging-market sample as of June 30, 2009 (the construction date of our most recent groups of deciles).

Exhibit 5: Adjusting LSV's Study

	LSV Study (1968–1994)	Brandes Institute Study (1980–2014)	Purpose
Sample universe	All stocks traded on NYSE or AMEX	• **U.S. sample:** Publicly-traded companies domiciled in the U.S.* • **Non-U.S. sample:** Publicly-traded companies domiciled in 22 developed countries outside the U.S.* • **Global sample:** Combination of U.S. and non-U.S. sample* • **Emerging-market sample:** Publicly-traded companies domiciled in countries not categorized as developed countries*	• To account for the growing influence of other exchanges through the 1990s (e.g., NASDAQ) • To examine if value premium was evident worldwide
Market capitalization	All companies regardless of their market capitalization	Excluded the smallest 50% of all companies in each region	To yield a sample that more accurately represented a truly "investable" universe
Analysis segmentation	n.a.	Applied the methodology to different regions and market-cap levels	To see if there are discrepancies in value premium among the segments

*Based on Worldscope database

Results: A Long-Term Worldwide Perspective

To examine the long-term performance of value and glamour stocks, we followed LSV's methodology for calculating returns. Stocks were divided into value and glamour deciles based on their P/B, P/CF and P/E ratios. For each group, decile-by-decile annualized performance, calculated in U.S. dollars, was recorded for the five years after the inception date. We constructed the groups of deciles every June 30—starting on June 30, 1980 and afterward, every subsequent June 30 through 2009. In total, we had 30 groups *each* of P/B, P/E and P/CF deciles. Annualized returns for all years were then averaged to compare value stocks with glamour stocks.

Using this methodology, our study showed the value premium existed across valuation metrics, regions and market capitalizations. In this section we will delve deeper into each segment to see how value and glamour stocks behaved from various perspectives.

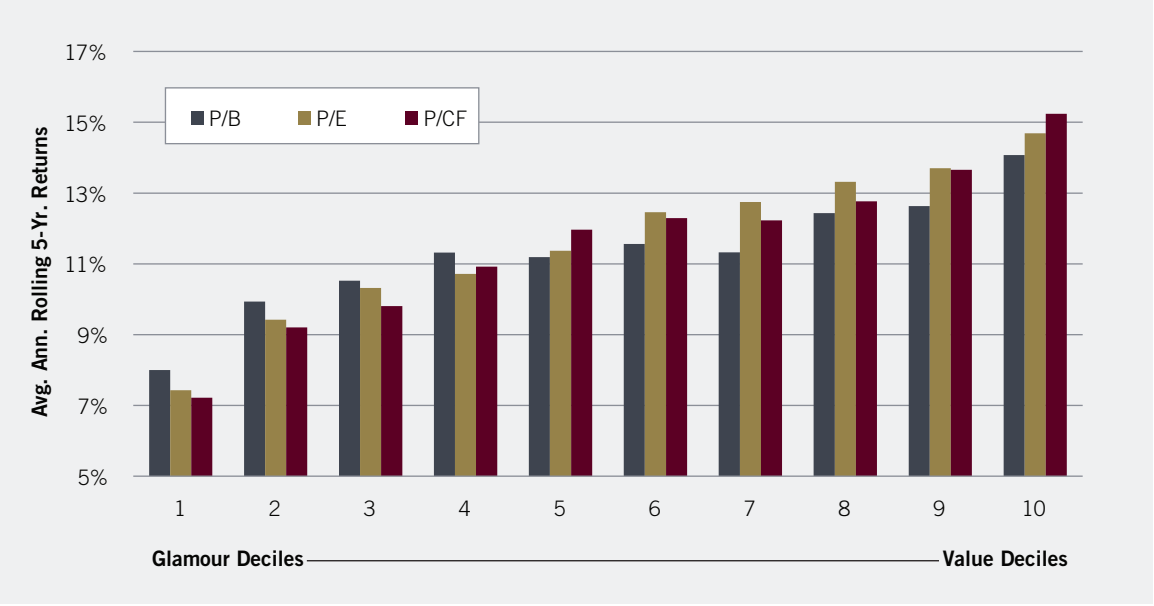
Value stocks outperformed growth stocks over the long term, regardless of the valuation metrics used to classify the stocks.

Value Premium Based on Valuation Metrics

Comparing the performance of value stocks with that of glamour stocks for the past 34 years, we arrived at a conclusion that was consistent with LSV's results: Value stocks outperformed growth stocks over the long term, regardless of the valuation metrics used to classify the stocks.

Exhibit 6: Value Outperformed Glamour Regardless of Valuation Metrics

Rolling 5-Year Annualized Returns of Valuation Deciles, Global Sample, 1980–2014



Source: Worldscope via FactSet, The Brandes Institute, as of 6/30/2014. Past performance is not a guarantee of future results.

Exhibit 6 and our regional analysis discussed below combined to counter the notion that LSV's results for value outperformance among U.S. stocks were a product of random chance.

Value Premium Across Regions

As highlighted earlier in Exhibit 1 on page 3, our analysis showed the value premium was evident in all regions observed, with the premium found in emerging markets substantially higher than those in other regions.

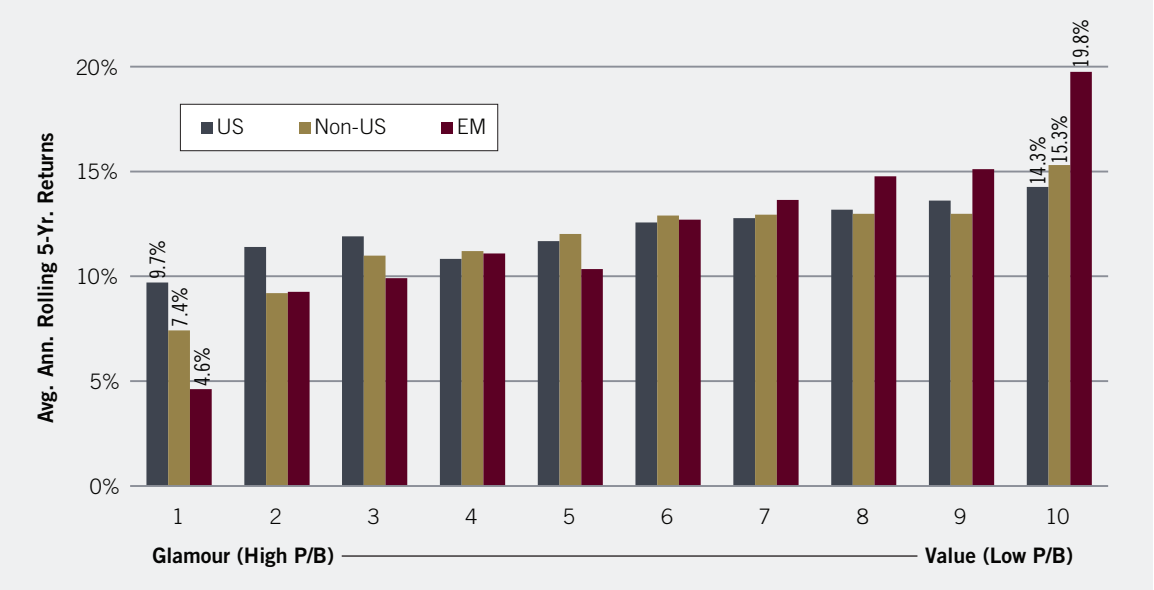
Exhibit 7 illustrates the notable outperformance of value stocks in emerging markets—both in relation to their glamour counterparts and to U.S. and non-U.S. value stocks, as measured by their P/B ratios. Within emerging markets, decile 10 value stocks delivered an average annualized rolling five-year return of 19.8%, while decile 1 glamour stocks returned 4.6%—resulting in a stark difference of 15.2%.

The U.S. market exhibited the smallest value premium among the three regions observed, with decile 10 value stocks outperformed decile 1 glamour stocks by an average annualized rolling five-year return of 4.6%—less than a third of the emerging-market value premium.

Within emerging markets, decile 10 value stocks delivered an average annualized rolling five-year return of 19.8%.

Exhibit 7: Value Outperformed Glamour in Each Region

Rolling 5-Year Annualized Returns of P/B Deciles, 1980–2014



Source: The Brandes Institute; Worldscope via FactSet, as of 6/30/2014. Past performance is not a guarantee of future results.

We also created decile sets using P/E and P/CF ratios and came to the same conclusion: The value premium was evident across all three regions, with emerging markets exhibiting the highest value premium, followed by non-U.S. developed markets and the U.S. market.[2]

Value Premium by Market Capitalization

To examine whether there is any discrepancy in the value premium between large-cap and small-cap stocks, we grouped the largest 30% of the companies in our sample in a large-cap segment and assigned the remaining 70% to a small-cap segment. This segmentation was done after removing the smallest 50% of companies from the database to eliminate stocks with prohibitively small market capitalizations from our sample.

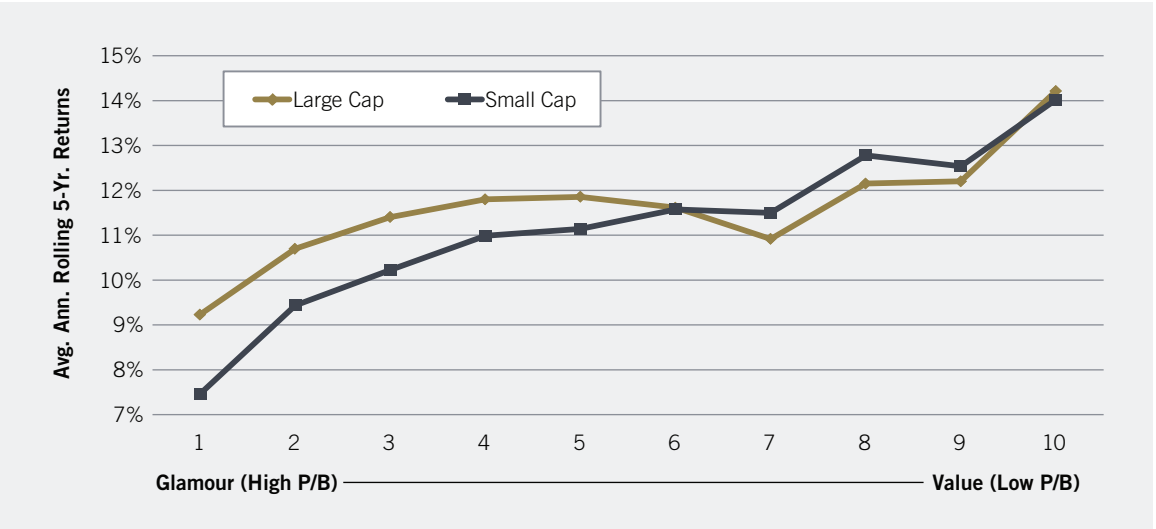
[2] See Appendix C

Using our global P/B deciles, Exhibit 8 illustrates that value stocks outperformed glamour stocks over the long term regardless of market capitalizations. Within the small-cap segment, decile 10 value stocks outperformed decile 1 glamour stocks by 6.6% on an average annualized rolling five-year return basis. The value premium was lower for the large-cap segment, where decile 10 value stocks outperformed decile 1 glamour stocks by 5.0%.

Value stocks outperformed glamour stocks over the long term regardless of market capitalizations.

Exhibit 8: Value Outperformed Glamour Regardless of Market Cap

Rolling 5-Year Annualized Returns of P/B Deciles, Global Sample, 1980–2014



Source: Worldscope via FactSet, The Brandes Institute, as of 6/30/2014. Past performance is not a guarantee of future results.

Cross-Segment Analysis

After we established that value stocks historically outperformed glamour stocks over the long term across valuation metrics, regions and market capitalizations, we were interested to see how the results would look in a cross-segment analysis. For example, was the value premium in non-U.S. small-cap stocks higher than that in U.S. small-cap stocks? If yes, how was the value premium level different if we used P/B ratios versus P/E ratios to define the deciles?

We summarized our findings in Exhibit 9 on the next page. In this table, we subtracted the performance of decile 1 glamour stocks from the performance of decile 10 value stocks for each segment pairing to define the value premium. For example, using P/B deciles, the value premium for U.S. large-cap stocks was 3.6%, while the value premium for U.S. small-cap stocks was 4.4%.

Exhibit 9: Cross-Segment Analysis Also Shows Value Premium Evident

Relative Returns—Decile 10 Value vs. Decile 1 Glamour Stocks, 1980–2014

Region / Valuation Metrics	U.S.		Non-U.S.		EM	
	Large	Small	Large	Small	Large	Small
P/B	3.6%	4.4%	7.0%	8.2%	20.5%	14.4%
P/E	3.3%	4.0%	7.9%	8.3%	19.5%	13.8%
P/CF	3.6%	6.2%	7.7%	8.9%	17.3%	12.8%

Source: Worldscope via FactSet, The Brandes Institute, as of 6/30/2014. Past performance is not a guarantee of future results.

Two findings that we found interesting from this calculation:

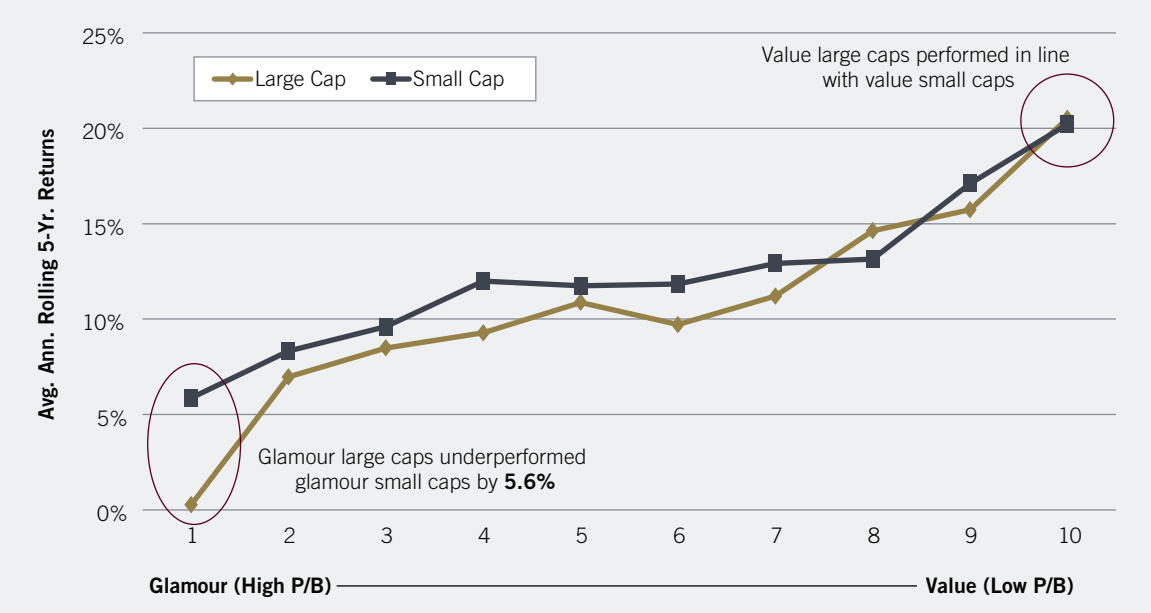
- The value premium for U.S. large-cap stocks was the lowest among all segments, regardless of the valuation metric used to define the deciles.
- Independent of the valuation metrics used, small-cap stocks exhibited a higher value premium than large-cap stocks for U.S. and non-U.S. markets. On the contrary, within emerging markets, the value premium was higher for large-cap stocks than it was for small-cap stocks.

To more closely examine the second point above, we charted the performance of large-cap and small-cap stocks for emerging markets in Exhibit 10. The chart illustrates that among emerging-market glamour stocks, large-cap stocks underperformed small-cap stocks by notable margins. Interestingly, as we went higher on the decile spectrum toward value stocks, the performance gap between large-cap and small-cap stocks narrowed. For example, within P/B decile 10, the average annualized rolling five-year return for large-cap stocks was 20.5%, compared to 20.2% for small-cap stocks—a difference of merely 0.3%.

Within emerging markets, the value premium was higher for large-cap stocks than it was for small-cap stocks.

Exhibit 10: Strong Value Premium Evident Among Emerging-Market Large Caps

Rolling 5-Year Annualized Returns of P/B Deciles, Emerging-Market Sample, 1980–2014



Source: Worldscope via FactSet, The Brandes Institute, as of 6/30/2014. Past performance is not a guarantee of future results.

Conclusion

In the 20 years since LSV published their landmark 1994 study evaluating the relative performance of value and glamour stocks, a number of events have transpired. In the late 1990s, glamour stocks' share prices rose dramatically amid a global technology-driven bull market. We also saw increased attention and investment in markets worldwide, accompanied by more robust data for various countries.

As a result of these developments, we sought to revisit conclusions drawn in LSV's 1994 study. We made several adjustments to the study, such as excluding prohibitively small companies to reflect a more accurate sample of an investable universe, and extended the reach of the study to encompass non-U.S. developed markets as well as emerging markets.

While the degree of outperformance of value stocks vs. glamour stocks varied across data sets, what strikes us as most significant was the consistency the value premium exhibited:

What strikes us as most significant was the consistency the value premium exhibited.

- across valuation metrics, such as price-to-book, price-to-earnings and price-to-cash flow
- across regions, as the results indicated a value premium in the United States, non-U.S. developed markets and emerging markets
- across market capitalizations, as the outperformance of value stocks to glamour stocks was evident among both large- and small-cap stock universes.

While this paper is not intended to resolve the question of *why* the value premium is evident, nor explain its persistence, we conclude with an observation made by Benjamin Graham more than 40 years ago on the divergent nature of value and glamour stocks that may offer some insight.

> "If we assume that it is the habit of the market to overvalue common stocks which have been showing excellent growth or are glamorous for some other reason, it is logical to expect that it will undervalue—relatively, at least—companies that are out of favor because of unsatisfactory developments of a temporary nature. This may be set down as a fundamental law of the stock market and it suggests an investment approach [value investing] that should prove both conservative and promising."[3]

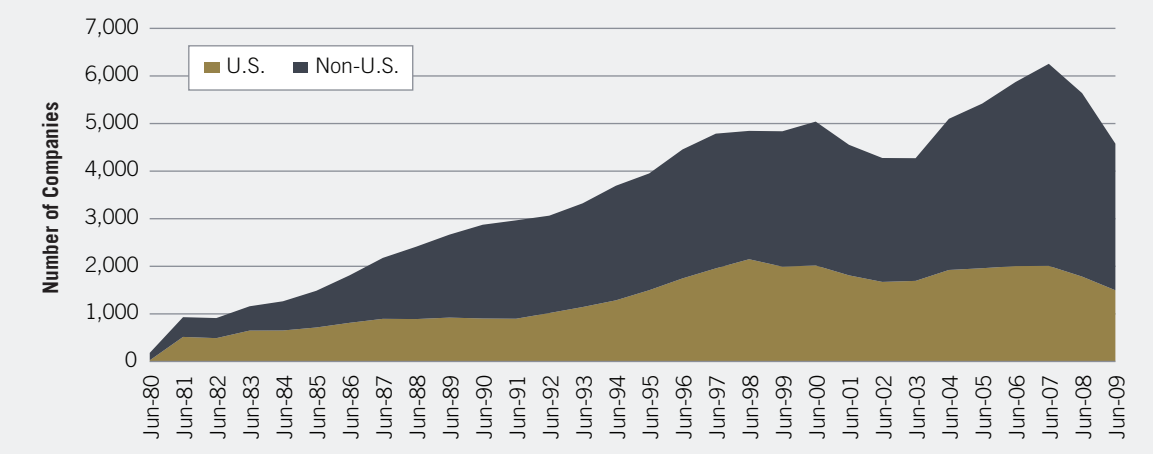
[3] Graham, Benjamin. *The Intelligent Investor* (fourth rev. ed.) New York: Harper & Row, 1973. p. 79

Appendix

Appendix A: Countries in Global Sample

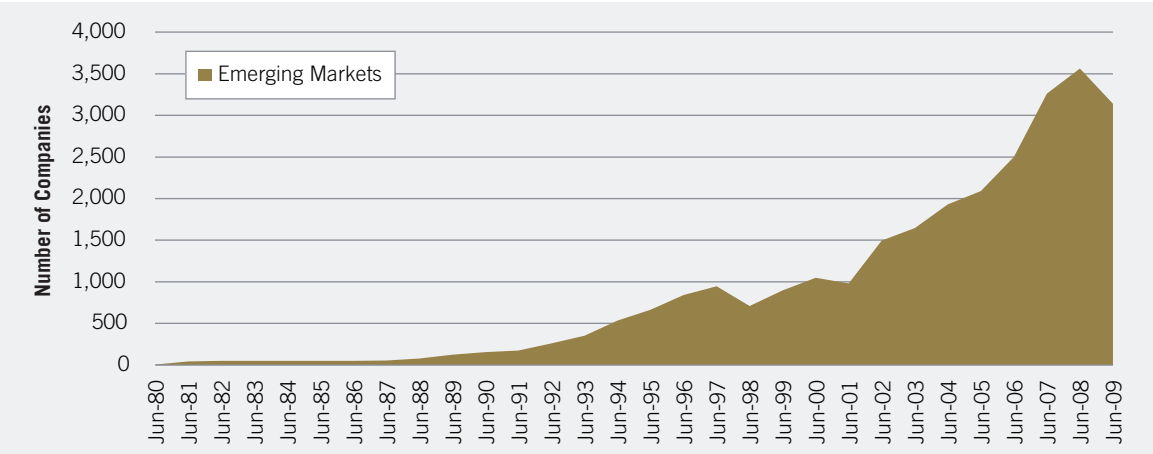
Countries in Global Sample		
Australia	Hong Kong	Portugal
Austria	Ireland	Singapore
Belgium	Israel	Spain
Canada	Italy	Sweden
Denmark	Japan	Switzerland
Finland	Netherlands	United Kingdom
France	New Zealand	United States
Germany	Norway	

Appendix B: Global Sample (U.S. and Non-U.S. Developed Markets)



Source: Worldscope via FactSet, The Brandes Institute, as of 6/30/2014. Includes the largest 50% of companies by market cap.

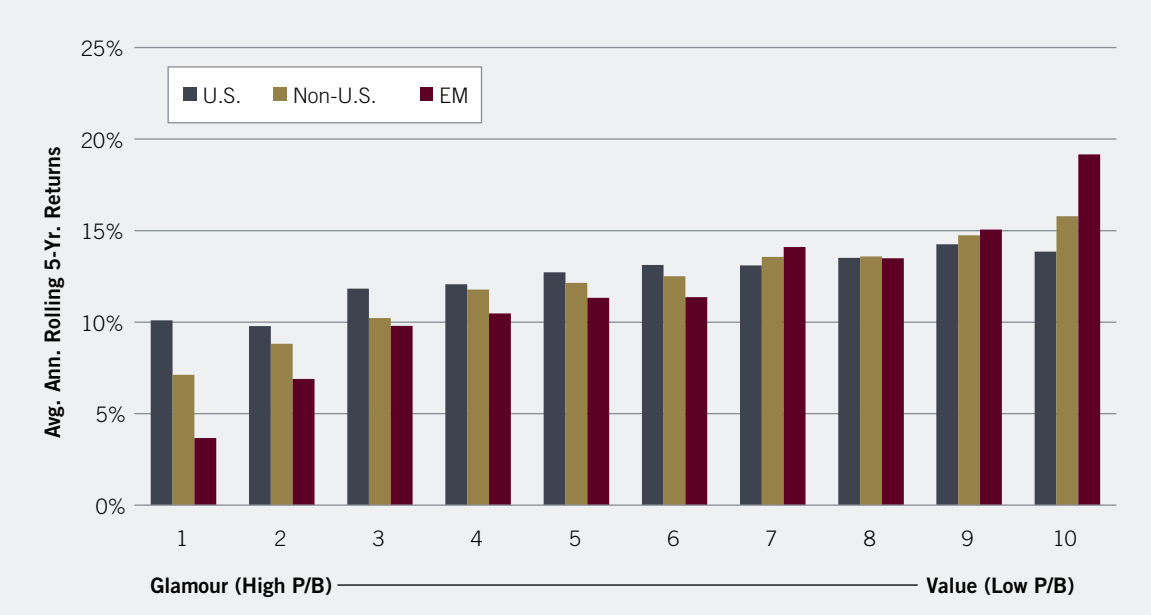
Appendix B: Emerging-Market Sample



Source: Worldscope via FactSet, The Brandes Institute, as of 6/30/2014. Includes the largest 50% of companies by market cap.

Appendix C: Findings by Regions Using P/E Deciles

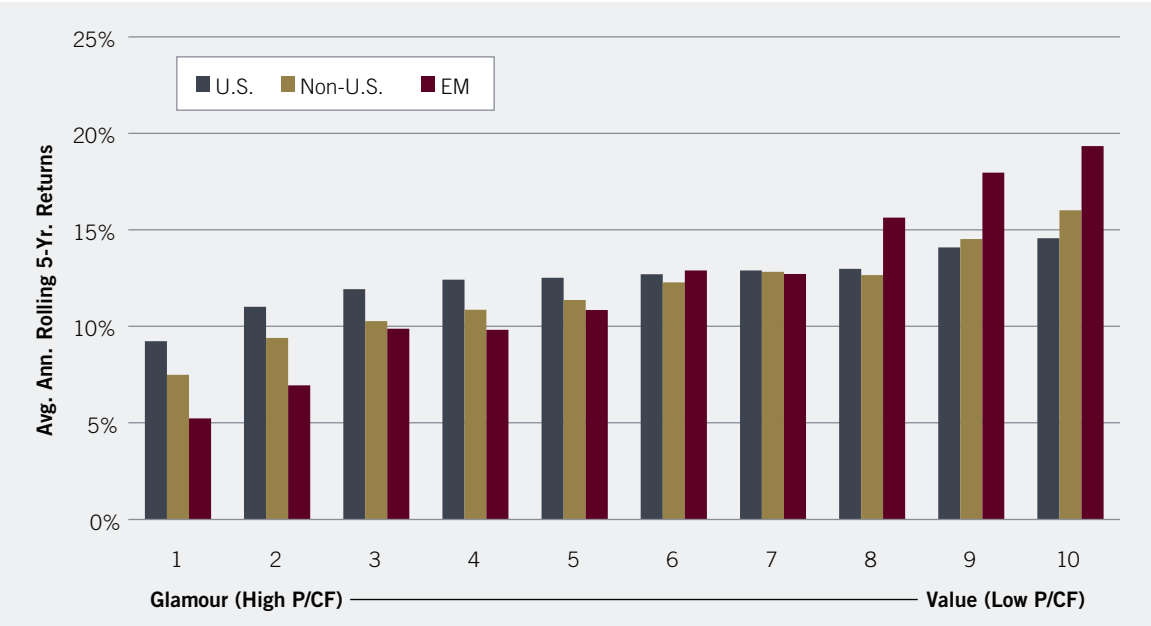
Rolling 5-Year Annualized Returns of P/E Deciles, 1980–2014



Source: The Brandes Institute; Worldscope via FactSet, as of 6/30/2014. Past performance is not a guarantee of future results.

Appendix C: Findings by Regions Using P/CF Deciles

Rolling 5-Year Annualized Returns of P/CF Deciles, 1980–2014



Source: The Brandes Institute; Worldscope via FactSet, as of 6/30/2014. Past performance is not a guarantee of future results.

DISCLOSURES

Past performance is not a guarantee of future results.

Price/Book: Price per share divided by book value per share.

Price/Earnings: Price per share divided by earnings per share.

Price/Cash Flow: Price per share divided by cash flow per share.

Stocks of small companies usually experience more volatility than mid and large sized companies. International and emerging markets investing is subject to certain risks such as currency fluctuation and social and political changes; such risks may result in greater share price volatility. Unlike Treasury securities, stocks are not backed by the full faith and credit of the United States and will experience market fluctuations. Indices are unmanaged and not available for direct investment. No investment strategy can assure a profit or protect against loss.

This material was prepared by the Brandes Institute, a division of Brandes Investment Partners®. It is intended for informational purposes only. It is not meant to be an offer, solicitation or recommendation for any products or services. The foregoing reflects the thoughts and opinions of the Brandes Institute.

THE BRANDES INSTITUTE

The Brandes Institute
11988 El Camino Real,
Suite 600,
P.O. Box 919048
San Diego
CA 92191-9048
858.755.0239
800.237.7119
Fax 858.755.0916