

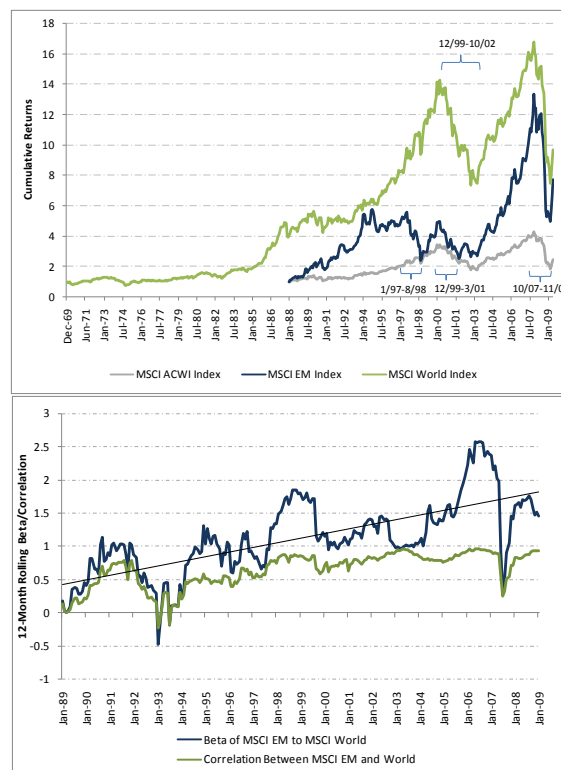
Introduction

The ongoing shakeout in global markets has had far-reaching consequences for equities across the world. For developed market investors seeking diversification through emerging markets at the aggregate level, the recent performance has been disappointing due to the dominance of overall negative market effects, which is consistent with what we have observed in past crises. The good news for developed market investors is that diversification possibilities did exist over the recent period for developed market investors willing to invest more granularly (for instance, in certain countries, regions, and styles), and able to at least partially hedge out market risk.

Seeking Diversification During the Recent Crisis

Both developed and emerging markets have been hit hard by the recent global crisis, with the latter squeezed by the global credit crunch and lower worldwide consumer demand for exports. Figure 1 shows the dramatic drop in the MSCI Emerging Markets (EM) Index in the last part of 2008, after a period of rapid gains in 2002-2007. Last year, both the MSCI World (reflecting developed markets) and MSCI EM Indices experienced their greatest annual loss since inception.

Figure 1: The MSCI World and MSCI EM Indices – Performance and Correlation



Past periods of market turmoil also witnessed drastic declines in emerging market stock price levels simultaneous with developed market crises. During the Internet tech collapse, for instance, the MSCI World and MSCI EM Indices plunged simultaneously. The high correlation between

these indices during crises fits in with the overall rise in their correlations over the past two decades (Figure 2).

However, increasing betas have not completely spelled the death knell for diversification via emerging markets. We find substantial diversification possibilities for sub-groupings of emerging markets (i.e., those based on countries, regions, and styles) if investors were able to at least partially hedge out market risk.¹ In Figure 2, we first look at regions and countries. Figure 2 summarizes historical monthly correlations between the MSCI World Investable Market Index (IMI), which includes developed large, mid, and small caps, with regional MSCI Emerging Market Investable Market Indices.

Figure 2: Diversification for Developed Market Investors Has Been Limited at the Regional Level (Correlations with MSCI World, USD Returns)

	Historical (Jan 1997-Aug 2007)	Recent (Sept 2007-May 2009)
MSCI Emerging Markets IMI	0.78	0.95
MSCI EM Europe IMI	0.60	0.92
MSCI EM Asia IMI	0.66	0.93
MSCI EM Latin America IMI	0.74	0.91

Historically, emerging markets in Europe have provided the greatest amount of diversification for developed market investors. In the recent crisis, however, all regions experienced a prominent increase in correlations across the board.

Next we remove the aggregate Emerging Market component for each regional index in Figure 3 (by subtracting the return to the MSCI EM Index), and here the picture changes. MSCI EM Latin America IMI, in particular, has recently experienced negative correlation with the MSCI World Index net of the MSCI EM Index return.

Figure 3: But Diversification Has Been Available at the Regional Level Using Market Hedges (Correlations with MSCI World, USD Returns)

	Historical (Jan 1997-Aug 2007)	Recent (Sept 2007-May 2009)
MSCI EM Europe IMI	0.13	0.64
MSCI EM Asia IMI	-0.11	0.00
MSCI EM Latin America IMI	0.19	-0.10

Similarly, when we drill down to individual countries without removing the market return, we find some, albeit limited, opportunities for diversification using country indices. But again, more distinct opportunities show up when the market effect is removed. Countries including Korea, Malaysia, the Philippines, Israel, Morocco, and South Africa provided significant opportunities for diversification over the last 21 months (see Figure 5).

¹ Instruments required for hedging market risk may have incurred non-trivial costs, depending on the type used. In this simple example, a short position would have been taken in the MSCI EM Index, for instance through the use of an Exchange-Traded-Fund or futures contract. An alternative for situations in which these instruments may be hard to access or prohibitively costly is to substitute the short position in the MSCI EM Index with a beta-adjusted short-position in the MSCI World Index.

Figure 4: Some Diversification for Developed Market Investors Has Existed at the Country Level (Correlations with MSCI World, September 2007 – May 2009, USD Returns)²

Europe	Asia	Latin America	Middle East & Africa
Czech Rep. (0.88)	China (0.82)	Brazil (0.86)	Egypt (0.89)
Hungary (0.93)	India (0.87)	Chile (0.68)	Israel (0.77)
Poland (0.88)	Indonesia (0.87)	Colombia (0.88)	Morocco (0.37)
Russia (0.85)	Korea (0.87)	Mexico (0.92)	South Africa (0.92)
Turkey (0.82)	Malaysia (0.80)	Peru (0.76)	
	Philippines (0.74)		
	Taiwan (0.83)		
	Thailand (0.85)		

Figure 5: Diversification at the Country Level Has Been Available Using Market Hedges (Correlations with MSCI World, USD Returns)

Europe	Asia	Latin America	Middle East & Africa
Czech Rep. (0.13)	China (0.03)	Brazil (0.21)	Egypt (0.21)
Hungary (0.46)	India (0.63)	Chile (-0.55)	Israel (-0.68)
Poland (0.60)	Indonesia (0.24)	Colombia (-0.27)	Morocco (-0.83)
Russia (0.75)	Korea (-0.19)	Mexico (0.48)	South Africa (-0.23)
Turkey (-0.02)	Malaysia (-0.75)	Peru (0.10)	
	Philippines (-0.45)		
	Taiwan (0.39)		
	Thailand (0.40)		

We also look at style characteristics, such as size segments and value/growth indices during the recent period. For the Large Cap, Mid Cap, Small Cap, Value, and Growth versions of the MSCI Emerging Markets IMI, we observe the same high correlations as we did with the regional and country indices. However, if we instead look at the premium earned by these characteristics, by taking a long position in one index and a dollar-equivalent short position in another, the correlations are significantly lower. In Figure 6, we observe premiums to large cap stocks and value stocks that had correlations as low as -0.44 and -0.46. Figure 6 suggests that small-cap strategies in Asian emerging market countries and European emerging market Value strategies provided the most diversification during the observed period.

² Figure 4 includes correlations for four countries in the Middle East & Africa that are not included in Figure 3.

Figure 6: Diversification at the Country Level Has Been Available for Long-Short Style Groups (Correlations with MSCI World, September 2007 – May 2009, USD Returns)

	Large	Mid	Small	Growth	Value	Small Minus Large	Value Minus Growth
MSCI Emerging Markets IMI	0.95	0.95	0.93	0.93	0.96	0.36	0.00
MSCI EM Europe IMI	0.91	0.94	0.94	0.92	0.92	-0.03	-0.44
MSCI EM Asia IMI	0.93	0.92	0.91	0.91	0.94	-0.46	0.01
MSCI EM Latin America IMI	0.90	0.92	0.88	0.89	0.91	-0.23	0.13

In sum, although the market component has dominated most other effects during the recent crisis, simple combinations of long-short portfolios could have provided the diversification opportunities desired by investors. While our stylized examples assume full shorting of the MSCI EM Index, in reality there may have been shorting constraints that prevented investors from being able to fully hedge out market risk. Even partial hedges, however, would have reduced the correlations by a non-trivial amount, depending on the index in question.

Our discussion here segues into the broader issue of how to allocate assets in a risk-aware way. Institutional investors particularly concerned about correlations during crises may want to consider alternative approaches to asset allocation. For example, in the recent MSCI Barra Research Insight, Briand, Nielsen, and Stefek (2009) highlight the potential advantages of assessing portfolio allocation along risk premia dimensions instead of traditional asset classes. In a similar vein, our results suggest taking into account the commonalities among emerging market segments (particularly during crises) to better isolate any diversification opportunities. For instance, it may not be sufficient to hire five Emerging Market managers with broad global mandates, all benchmarked to the MSCI EM Index. Instead, smart manager selection might include choosing managers in different regions, countries, or segments (i.e., Value/Growth) benchmarked to universe-appropriate indexes. In times of market uncertainty, institutional investors may want to go one step further and hedge market risk, so that their performance is not dominated by the market component.

Conclusion

In times of crises, diversification opportunities can be limited due to overall markets effects. In the most recent crisis, correlations between stocks of varying cap size, value/growth characteristics, and across all regions and industries have been quite high, if not close to one. Investors seeking diversification opportunities would have benefited from being able to at least partially hedge out market exposure and invest more granularly in regions, countries, and style groupings. With respect to the asset allocation decision, the results suggested allocations to sub-groupings, rather than to emerging markets as a whole.

References

Briand, Remy, Frank Nielsen, and Dan Stefek (2009), "Risk Premia," MSCI Barra Research Insight, January 2009.

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