

The Making of an Emerging Market

CLAUDE B. ERB
is a managing director at First Chicago NBD Investment Management Company in Chicago.

CAMPBELL R. HARVEY
is professor of finance at Duke University in Durham, North Carolina, and a research associate at the National Bureau of Economic Research in Cambridge, Massachusetts.

TADAS E. VISKANTA
is a vice president at First Chicago NBD Investment Management Company in Chicago.

The development of a journal like *Emerging Markets Quarterly* is an important event for emerging markets investors in many ways. It means that emerging markets as an asset class has advanced enough to warrant its own practitioner journal. It is also a warning sign, however, that the world of emerging markets is changing.

Emerging markets as an asset class has historically been sold to investors on two main arguments. The first is that emerging countries should provide higher expected returns due to higher economic growth. The second is that a portfolio of emerging markets is an excellent portfolio diversifier.

We feel that these arguments are still valid, with some caveats. The dynamism of the emerging markets is forcing us to revisit what really constitutes an emerging market. This has a profound effect on how investment managers should define and manage their emerging market portfolios.

WHY SHOULD EMERGING MARKETS PRODUCE HIGHER RETURNS?

The International Finance Corporation (IFC) defines an emerging market based on the level of per capita GDP measured in a common currency. This is a sound basis for distinguishing between differing levels of economic development. This measure is commonly used in the economic growth literature to help explain cross-country growth, but it does not tell the entire story.

Cross-sectional economic growth is not only a function of the level of economic development. It is also affected by a whole host of other, mostly qualitative factors.

These include political stability, economic freedom, and fiscal balance. Erb, Harvey, and Viskanta [1997] have found that publicly available measures of country risk are good proxies for these factors.

It is possible to explain a majority of variation in the economic growth of a cross-section of countries by simply using per capita GDP, a measure of country credit, and the subsequent change in the level of country credit.¹ Exhibit 1 shows that for the period for which we have a consistent set of cross-sectional data, we can explain nearly 60% of the variance in economic growth. All three explanatory variables have t-statistics greater than four. The basic message is that growth is likely to be highest in relatively poor but stable countries.

The key point to derive from these results is that it takes many factors to explain economic growth. Not surprisingly, this also helps explain financial market returns. Financial theory tells us that there should be a link between economic growth and financial returns.

Exhibit 2 repeats the regression of the previous table, but substitutes total returns in U.S. dollars as the dependent variable. The explanatory power is not as strong in this example, only 27% R-squared, which is due in part to the greater volatility of equity market returns relative to economic growth. We see that the signs on all the variables are the same, and are statistically significant except for the change in the country risk variable.

These tests give us an important insight into why emerging markets should provide higher expected returns. It is the combination of potential development and the qualitative elements, embodied in country risk

measures, that drive economic and financial returns.

ECONOMIC DEVELOPMENT AND "EMERGENCE"

We need to recognize that the markets we generally identify as "emerging" have already passed some initial developmental hurdles.² Exhibit 3 shows the distribution of countries with recognized equity markets according to three different measures of country risk. This shows that equity markets arise for the most part in high-rating/low-risk countries. This process of progressing up the rating scale provides investors with a powerful return opportunity. Exhibits 1 and 2 showed that changes in perceptions of risk help explain economic growth and equity market returns.

Perhaps a more fundamental question is how a country goes from emerging to developed status. This is especially important in a benchmark-driven investment climate. The criteria of the rating firms may not dynamically capture the thinking of the markets as a whole.

An apt analogy is that of the growth/value crite-

EXHIBIT 1 EXPLAINING CROSS-SECTIONAL ECONOMIC GROWTH

Dependent Variable: Growth in Real GDP per Capita
1980-1992

INDEPENDENT VARIABLES:	COEFFICIENT	STD. ERROR	T-STATISTIC
Constant	0.40	0.24	1.69
Log (Real GDP Per Capita: 1979)	-0.17	0.03	-5.67
Log (IICCR 79:09)	0.33	0.07	4.44
Log (IICCR 92:09/ IICCR 79:09)	0.55	0.08	7.03
Observations	61		
R-Squared	0.61		
Adjusted R-Squared	0.59		
S.E. of Regression	0.17		
F-Statistic	29.67		
Prob. (F-Statistic)	0.00		

REAL GDP PER CAPITA — PENN WORLD TABLES V 5.6.
IICCR: INSTITUTIONAL INVESTOR COUNTRY CREDIT RATING.
STANDARD ERRORS USE A HETEROSCEDASTICITY-CONSISTENT (WHITE)
COVARIANCE MATRIX.

EXHIBIT 2 EXPLAINING CROSS-SECTIONAL EQUITY MARKET RETURNS

Dependent Variable: Log of Total U.S.\$ Equity Market
Returns (Unhedged) — 1980-1992

INDEPENDENT VARIABLES:	COEFFICIENT	STD. ERROR	T-STATISTIC
Constant	-1.78	1.51	-1.18
Log (Real GDP Per Capita: 1979)	-0.61	0.19	-3.26
Log (IICCR 79:09)	2.06	0.53	3.89
Log (IICCR 92:09/ IICCR 79:09)	0.39	0.26	1.52
Observations	28		
R-Squared	0.35		
Adjusted R-Squared	0.27		
S.E. of Regression	0.52		
F-Statistic	4.32		
Prob. (F-Statistic)	0.01		

TOTAL U.S.\$ EQUITY MARKET RETURNS (UNHEDGED) — MSCI AND IFCCG.
REAL GDP PER CAPITA — PENN WORLD TABLES V 5.6.
IICCR: INSTITUTIONAL INVESTOR COUNTRY CREDIT RATING.
STANDARD ERRORS USE A HETEROSCEDASTICITY-CONSISTENT (WHITE)
COVARIANCE MATRIX.

EXHIBIT 3 COUNTRY RISK AND EQUITY MARKETS (PERCENTAGE OF COUNTRIES WITH EQUITY MARKETS)*

RISK RANGE	IICCR	EMCRR	ICRGC
100-90	100%	100%	100%
89-80	100%	88%	84%
79-70	100%	50%	52%
69-60	75%	73%	39%
59-50	45%	60%	11%
49-40	80%	46%	0%
39-30	59%	5%	0%
29-20	35%	0%	0%
19-10	8%	0%	—
9-0	0%	0%	—
# of Countries	135	178	129

DATA AS OF SEPTEMBER 1996.
IICCR: INSTITUTIONAL INVESTOR COUNTRY CREDIT RATING.
EMCRR: EUROMONEY COUNTRY CREDIT RATING.
ICRGC: INTERNATIONAL COUNTRY RISK GUIDE COMPOSITE RATING.
*INCLUDES ALL MARKETS COVERED BY MSCI AND THE IFC.

ria in the U.S. market. Although there are well-defined measures for parsing stocks into growth and value indexes, i.e., book value/price, they do not necessarily provide us with "pure" indexes that distill the essence of the growth and value criteria.

We think the same case can be made in the emerging markets. Current emerging market indexes by construction capitalize weight those markets that are the least "emerging," that is, those countries that are more highly developed, safer, and slower-growing.

We illustrate this by looking at the investable equity markets and identifying currently defined emerging and developed markets. Exhibit 4 lists the countries with recognized equity markets and ranks them according to different measures of country risk. Although the lists are primarily sorted by developed/emerging status, one other observation stands out.³

It seems that emerging markets are beginning to overlap with developed markets. Countries like Taiwan, South Korea, Malaysia, Chile, and the Czech Republic seem to be creeping into the ranks of the developed markets. This has an effect on the potential returns to a benchmarked emerging markets portfolio. It also affects the other desirable characteristic of the emerging markets, their relatively low correlation with the rest of the world.

The emerging markets are far more diverse than the developed markets. To illustrate this look again at Exhibit 4. The spread between the highest- and lowest-risk countries within the developed and emerging markets backs up this notion. The spread in the developed world between Switzerland and Hong Kong in the *Euro money* ratings is 16.4 (98.8 – 82.4), while the spread in the emerging markets between Taiwan and Nigeria is 59.3 (90.4 – 31.1). The emerging markets are far more diverse than is commonly recognized, and need to be dealt with in a portfolio context accordingly.

EMERGING MARKETS IN A PORTFOLIO CONTEXT

We have already argued that the emerging markets as a whole should produce higher expected returns than the developed markets. We can extend this analysis one step further and say that within the emerging markets there should be certain countries that should have higher expected returns.

An analysis of the returns to a strategy that divides the emerging market universe into two halves

based on a country risk measure helps illustrate the point. Exhibit 5 shows that the high-risk countries have outperformed the low-risk countries since 1985 by some 3.5% per quarter. This is obviously not a risk-free strategy, because there are periods when the high-risk countries underperform, like 1986-1987. On average, one should expect to see higher-risk markets outperform over the long run, for example, countries newly added to the IFC index.⁴

This phenomenon reaches beyond returns and into the other price moments. As noted earlier, the diversification benefits of international investing in general, and the emerging markets in particular, have been a key selling point. But some caution needs to be exercised. Just as with returns, one should not expect continued low correlations for those markets that have already developed.

Exhibit 6 shows the expected correlations with the MSCI All-Country World index for the fifty-one countries recognized by MSCI and the IFC. The developed markets lie within a relatively narrow band of correlations, with even some emerging markets beginning to intercede. Again, note that the spread in expected correlations is higher for the emerging markets than it is for the developed markets. The far left-hand side of the graph shows that only in the highest-risk countries should we expect to see low correlations with the rest of the world.

When we examine some historical data, this high-risk/low-risk dichotomy is well illustrated. Exhibit 7 shows a number of efficient frontiers that combine the MSCI World index, which includes only the developed markets, with various versions of emerging market portfolios.⁵ These include equal- and capitalization-weighted versions of the IFC Global Index and the high- and low-risk emerging market portfolios discussed earlier. By overweighting high-risk markets, we obtain potentially large return and diversification benefits. In fact, the capitalization-weighted version of the low-risk portfolio lies on top of the IFC Global composite index. Investors need to ask themselves how this should affect their own portfolios.

EMERGING MARKET PORTFOLIO CONSTRUCTION

Although country risk measures are by no means the only method to divide the emerging markets universe

EXHIBIT 4

DEVELOPED AND EMERGING COUNTRY RISK RATINGS

INSTITUTIONAL INVESTOR		EUROMONEY		ICRG COMPOSITE	
Switzerland	91.9	Switzerland	98.9	Norway	90.0
Japan	91.9	United States	98.4	Singapore	90.0
Germany	90.9	Netherlands	97.9	Switzerland	89.5
United States	90.7	United Kingdom	96.1	Austria	89.0
Netherlands	89.2	France	95.7	Japan	89.0
United Kingdom	88.1	Singapore	95.7	Denmark	88.5
France	87.1	Germany	95.7	Belgium	88.0
Austria	86.0	Austria	95.2	Ireland	88.0
Singapore	83.7	Norway	95.0	Netherlands	88.0
Norway	83.1	Denmark	94.8	Taiwan	86.0
Denmark	80.7	Japan	94.0	Portugal	85.5
Belgium	79.6	Belgium	93.4	United States	85.0
Canada	79.4	Ireland	92.3	Finland	84.0
Taiwan	77.5	New Zealand	92.0	Germany	84.0
Ireland	74.5	Canada	91.8	Hong Kong	84.0
Sweden	74.2	Finland	91.5	South Korea	84.0
Spain	73.6	Australia	91.4	New Zealand	84.0
Finland	73.1	Taiwan	90.4	Australia	83.5
Italy	72.4	Sweden	90.0	Canada	83.5
South Korea	72.1	Italy	87.8	Czech Republic	83.0
Australia	71.7	South Korea	84.3	Sweden	83.0
New Zealand	71.6	Spain	83.7	Chile	82.0
Portugal	69.2	Hong Kong	82.4	Italy	82.0
Malaysia	67.7	Portugal	80.2	Malaysia	82.0
Hong Kong	65.3	Malaysia	80.2	France	81.5
Thailand	63.2	Chile	77.4	United Kingdom	81.0
Czech Republic	62.0	Thailand	77.2	Spain	80.0
Chile	61.2	Czech Republic	73.7	Thailand	80.0
China	57.2	Greece	72.8	Hungary	78.0
Indonesia	52.2	China	71.3	Poland	78.0
Greece	50.3	Indonesia	70.8	Greece	76.0
Colombia	46.7	Hungary	67.2	South Africa	75.0
India	46.3	India	63.7	Argentina	73.0
South Africa	46.3	Colombia	62.4	China	73.0
Hungary	44.7	South Africa	62.3	Jordan	73.0
Poland	44.0	Philippines	61.5	Indonesia	72.0
Mexico	41.6	Mexico	60.3	Morocco	70.0
Turkey	41.1	Turkey	57.5	India	69.0
Philippines	40.5	Argentina	57.3	Mexico	69.0
Morocco	39.3	Poland	57.1	Philippines	68.5
Argentina	38.9	Brazil	56.8	Egypt	67.5
Brazil	38.3	Morocco	50.7	Peru	65.5
Egypt	35.1	Pakistan	49.3	Brazil	65.0
Sri Lanka	33.7	Jordan	47.8	Sri Lanka	65.0
Jordan	33.1	Peru	47.6	Venezuela	65.0

EXHIBIT 4

CONTINUED

INSTITUTIONAL INVESTOR		EUROMONEY		ICRG COMPOSITE	
Zimbabwe	32.5	Zimbabwe	46.1	Colombia	63.0
Venezuela	32.0	Egypt	45.7	Pakistan	61.5
Peru	30.0	Venezuela	45.4	Russian Federation	61.0
Pakistan	29.2	Sri Lanka	43.0	Zimbabwe	60.0
Russian Federation	21.4	Russian Federation	42.6	Turkey	57.0
Nigeria	15.2	Nigeria	31.1	Nigeria	50.0

*AS OF SEPTEMBER 1996.

INSTITUTIONAL INVESTOR — COUNTRY CREDIT RATING.

EUROMONEY — COUNTRY RISK RATING.

ICRG COMPOSITE — INTERNATIONAL COUNTRY RISK GUIDE COMPOSITE RATING.

EMERGING COUNTRIES (AS CATEGORIZED BY THE IFC) IN BOLDFACE.

into more homogenous blocks, they are intuitive and simple. All investors in the emerging markets, whether plan sponsors or dedicated emerging market managers, should note that the selection of the emerging markets universe and weighting scheme are crucial to expected returns.

A few concepts come out of this research that should be examined by emerging markets investors.

EMERGING STATUS

Many of the emerging markets have progressed to the point of becoming near developed markets. Although these markets are heavily weighted in the

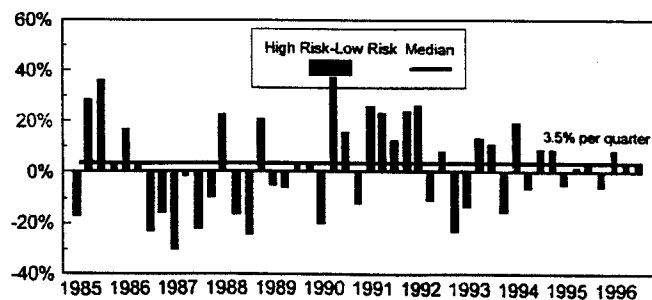
commonly used indexes, and are the most liquid markets, they may have a place in your portfolio.

COUNTRY WEIGHTINGS

There seems to be a real benefit to overweighting less-developed, higher-risk countries. Capitalization weighting offsets some of these benefits. A popular method used to get around this is to group the emerging markets into tiers, usually two or three, based on a criteria, sometimes market capitalization or GDP per capita, and then equal weight countries within the tiers. This allows the investor to continue to invest in more

EXHIBIT 5

WITHIN EMERGING MARKET UNIVERSE HIGH-RISK COUNTRIES OUTPERFORM



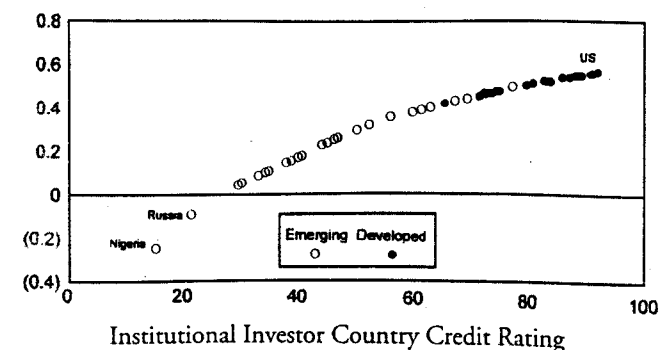
PORTFOLIOS ARE CAPITALIZATION WEIGHTED BY COUNTRY.
HIGH-RISK PORTFOLIO = COUNTRIES WITH LOW II COUNTRY CREDIT RATINGS.

DATA: IFC GLOBAL INDEXES (1985:01-1996:09) IN U.S. DOLLARS.

EXHIBIT 6

COUNTRY RISK AND CORRELATIONS — EMERGING MARKETS HAVE LOWER EXPECTED CORRELATIONS

Expected Correlation with MSCI AC World

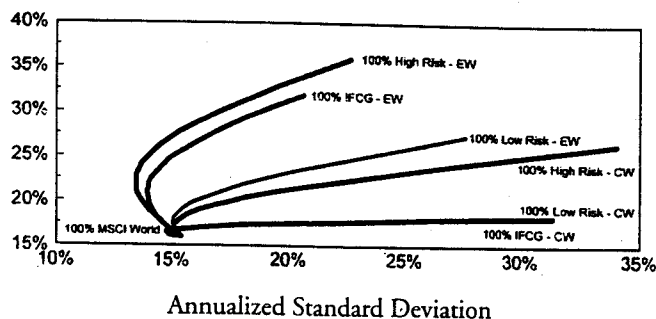


ERR, HARVEY, AND VISKANTA MODEL (SEE EHV [1997]).

EXHIBIT 7

HISTORICAL EFFICIENT FRONTIERS: HIGH-RISK COUNTRIES BEST GLOBAL PORTFOLIO DIVERSIFIER

Average Annual Return



QUARTERLY DATA: MSCI WORLD (DEVELOPED) AND IFCG INDEXES, (1985:01-1996:09).

ALL RETURNS IN U.S. DOLLARS (UNHEDGED).

EW = EQUAL WEIGHTED, CW = CAPITALIZATION WEIGHTED.

mature, liquid markets, while taking advantage of the benefits of higher-risk markets.

ACTIVE RETURNS

Although a risk-based strategy has relatively low turnover, it is still an active strategy. Other active strategies that seem to have merit, according to research by Bekaert et al. [1997], include value-based strategies and size-based strategies.

CONCLUSIONS

Emerging markets have progressed to a viable stand-alone asset class. However, the nature of emerg-

ing markets has changed. Investors need to carefully assess the characteristics of each emerging market and how these characteristics change through time.

Our analysis suggests that the making of an emerging market is much more complex than the World Bank definition of per capita GDP. In particular, the evolution of a country's risk characteristics will greatly impact its role in active portfolio strategies.

ENDNOTES

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¹Note that the most important variable for explaining measures of country credit is GDP per capita.

²Recognition comes in the form of inclusion by one of the major emerging market index providers, i.e., IFC, Morgan Stanley Capital International, or Barings.

³Unfortunately, the progression for *Institutional Investor* and *Euromoney* is not monotonic. This is due in large part to the distribution of oil-rich countries, which by and large do not have recognized equity markets, in the middle of the country credit scale.

⁴In January 1997, the IFC added Egypt, Morocco, and Russia to its IFC Global indexes.

⁵An earlier version can be seen in EHV [1995].

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