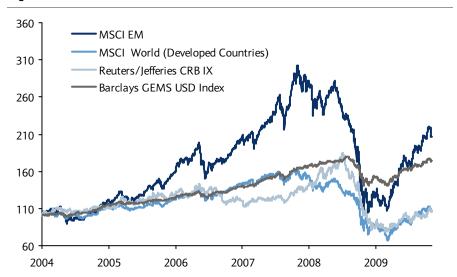


# Advanced emerging markets – A reassessment of an asset class

Please note Figure 9 has been updated from the previous version of this report.

- Things have changed in emerging markets. Emerging economies may not have fully decoupled, but global influence has moved from the slow-growing G7 to booming China contributing to EM growth outperformance. And most EM weathered the crisis remarkably well despite some initial scepticism.
- Behind this success lie two fundamental developments: 1) Gains in inflation credibility; and 2) fiscal consolidation, and reduced external vulnerability. As a result, emerging economies enjoyed unprecedented room for countercyclical policies for the first time since the inception of the asset class. These policy gains are likely to be permanent: while the crisis cast doubt on the myth of self-adjusting free markets, it showed the merits of solid fiscal and monetary policies.
- Global investors should take notice. Driven by the China engine, economic Sharpe ratios in EM are likely to improve further relative to the lagging G4. And, as usual when facing a regime change, historical data will capture only imperfectly the nature of the top EM performers.
- As the global portfolio continues to catch up with this underrepresented asset class, it is time to increasingly look at a group of Advanced Emerging Markets (AEM) halfway toward graduation to the developed leagues in a different light and against a different benchmark.

Figure 1: Value of \$100 invested in Jan 2004



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## The 2009 milestone

The spectacular growth of emerging markets in recent years has attracted significant attention from investors worldwide. But the ability of many EM countries (primarily in EM Asia and Latin America) to weather remarkably well the most severe financial crisis in seventy years changes dramatically, in our view, the nature of this asset class. In particular, the passing of such a demanding test suggests that as the developed economies recover from the financial crisis – which could take years – the *relative* ex-ante Sharpe ratios of a subset of EM assets should be more attractive than anytime in the recent past. That is, EM-Asia and LatAm have been able to reduce their economic "betas" to G7 countries without having to give up much of their "alphas," the opposite of what has happened in most developed countries.

The ability of EM to weather the recent crisis dramatically changes the nature of the asset class...

This view is predicated on three critical (and, in our view, permanent) changes. First is the elimination of structural "amplifiers" of external shocks, most notably, the dependence on external finance and the associated currency mismatches. As the political economy incentives behind pro-cyclical good-times policies were partially controlled, the proceeds of the bonanza were saved (in the form of deleveraging and accumulation of foreign assets). The successful response to the global financial crisis simply confirmed the effectiveness of these large liquid war chests – as well as the absence of skeletons in the books of EM Asian and LatAm's corporates and governments. Second, after the hard lessons from the chronic inflation of the 80s and financial stress of the 90s, local political systems embraced macroeconomic stability (most notably, through fiscal responsibility and independent central banks) as a source of prosperity. Last but not least, we believe that China, whose economy is now large enough to have an effect on EM-Asia and LatAm that rivals that of the developed world, can sustain high levels of growth in the coming five years (*China's global significance: Economy vs markets*, 27 September 2009).

...this is based on three key changes: The elimination of structural amplifiers of external shocks, the embracing of macrostability, and China

Ultimately, these structural changes gave many EM countries the ability to enact countercyclical policies in bad times for the first time since the creation of the EM label - a capability that marked the divide between developed and EM countries in the past.

This allowed EM to undertake countercyclical policies for the first time

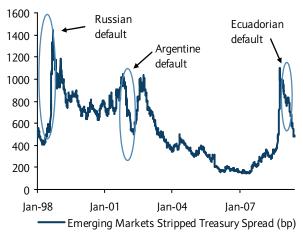
Figure 1 shows the response of EM assets prices (in dollars) relative to global equities and commodity prices. While in previous global downturns EM dollar performance was an important drag on the world's equity returns, during this episode the gap between MSCI World (which includes only developed countries) and AC World (which includes both developed and EM countries) has been negligible, and during more recent months has been a

Figure 2: The crisis brought no skeletons

Source: Barclays Capital



Figure 3: No contagion from EM



Source: Barclays Capital

EM assets for the most part exhibited similar risk to developed markets and higher returns drag as MSCI AC world bounced back more strongly. Moreover, the return of EM currencies, inclusive of money market interest rates, has been notable not only for its low beta during the crisis but also for its high alpha during the pre-crisis years. Even relative to high-yield and investment grade corporates in the US, the recent relative performance of the EM sovereigns has been positive (Figure 2). This suggests that far from the highly speculative investments one used to associate with this asset class, EM assets exhibited for the most part risk similar to developed markets and higher returns than their global counterparts.

While this response to the US financial crisis is remarkable given the size of the shock, it should not be ignored that the US crisis also led to financial crises in several countries in EMEA, which included traditional large capital outflows and collapse of the value of the local currency. The distinction is important because it highlights that in more recent years, the "contagion" to EM assets of other EM crises seems to have declined significantly. The Asian crisis and the Russian default triggered a sell-off across EM assets (Figure 3), but spill-overs from the Argentine default in 2001 and Brazil's Lula effect in 2002 were modest, short-lived and restricted to LatAm. More recently, Ecuador's 2008 default was virtually ignored by EM credit. And during this crisis EM assets have also been able to shrug off the contagion risks from the EMEA crisis.

No more within-EM contagion: A leaner, more symmetric distribution of returns The response to the EMEA crisis is noteworthy as it illustrates a key difference in the nature of the tail risks that EM assets now face. Due to contagion, in the past the typical tail risk for EM assets was associated with any other EM crisis, which on average has been occurring every five years. With this risk diminished substantially, the new tail risk of EM assets is associated with global crises, like the current one. This implies that the EM tail risks may have declined from a one-in-five-years emerging market crisis event to a one-in-fifty-years global crisis event. In this light, the negative tail of the 2004-09 distribution of returns should be seen as an upper bound of the real tail. Moreover, even if crises in core markets become more frequent, they should not be a source of differentiated risk between EM and non-EM.

Even including the Lehman Brothers tail, risk-adjusted EM returns since 2005 look appealing in relative terms From a longer-term perspective, the post-Lehman Brothers sell-off was the materialization of the global tail risk of an otherwise-solid EM outperformance. Indeed, most of the losses from September 2008 to March 2009 were undone in nearly the same time, preserving the longer-run EM outperformance over their global counterparts (Figure 4). Even including the Lehman Brothers tail, risk-adjusted EM returns since 2005 look appealing in relative terms. In line with the high beta-high alpha pattern suggested by Figure 1, equity (measured against the MSCI World index of stocks from developed economies) and, to a lesser extent, FX (measured against a basket of dollar shorts as captured by the inverse of the DXY total return index) showed significant outperformance in the period since January 2005.

Figure 4: EM assets: Betas and alphas (based on m/m total returns), Jan 05 – Oct 09

	EM med	dians	EN	IEA	As	ia	LatAm			
	FX	<b>Equity</b>		Equity	FX	Equity	FX	Equity		
β	0.67	1.52	1.11	1.40	0.60	1.54	0.55	1.52		
α	0.42%	1.0%	0.52%	0.91%	0.43%	0.56%	0.73%	1.80%		
$R^2$	0.27	0.61	0.53	0.78	0.44	0.74	0.24	0.73		

Note: Median values from country-by-country regressions against a short DXY position (FX) and MSCI World total returns. The equity sample includes the top ten EM markets based on market cap. Source: Bloomberg, Barclays Capital

Furthermore, from a global perspective, rather than the distribution of EM returns taken in isolation, what matters is the contribution of EM products to the risk-return mix of the global book. A quick aggregation exercise illustrates the benefits of a globally diversified equity portfolio, and the additional benefits of an EM overweight: higher returns at the expense of a minor (or no) increase in volatility (Figure 5).

Figure 5: EM assets in the global portfolio (based on m/m total returns)

		Equity			Credit		FX					
	MSCI World	MSCI Global	Port- folio <sup>a</sup>	US Corps	AGIPS <sup>b</sup>	Port- folio <sup>c</sup>	Short DXY	G10 comm <sup>d</sup>	Port- folio <sup>e</sup>			
Mean	0.09%	0.02%	0.17%	0.3%	0.4%	0.5%	0.13%	0.21%	0.28%			
Vol	5.4%	5.6%	6.2%	1.0%	2.0%	1.8%	2.57%	3.54%	2.66%			

Notes: MSCI World includes developed countries. MSCI Global includes developed and emerging countries. <sup>a</sup> 70% of MSCI World and 30% of MSCI EM. <sup>b</sup> Equally weighted basket of Austria, Greece, Ireland, Portugal, Spain. <sup>c</sup> equally weighted US corps, PIGS, G7 and EM. <sup>d</sup> equally weighted long AUD-CAD-NZD-NOK position. <sup>e</sup> 50% short DXY, 25% long G10 comm, and 25% long GEMS. Source: Bloomberg, Barclays Capital

# The glass half full: What's new in EM?

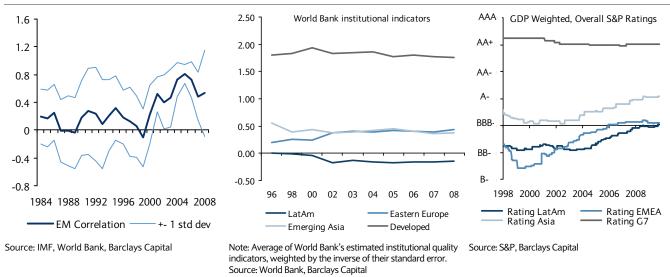
Some skepticism can be justified, evidence of decoupling is seldom found and institutional indicators record little progress Global investors can justifiably be sceptics about whether the response of EM markets was a lucky twist of fate or whether it warrants a fundamental change in the way in which they are regarded by the professional investor. After all, the well-publicized story of decoupling of EM economies is seldom found in the data: if anything, the 2000s seems to have witnessed an increase in the correlations of EM and G7 cycles (Figure 6). Moreover, the institutional indicators compiled by the World Bank record little progress in recent years (and, again, a substantial gap vis-à-vis the G7) – which may help explain why, besides the inertial nature of rating agencies, EM countries are still rated significantly lower than the G7.

Three characteristics help define EM: 1) a high dependence on external finance; 2) a poor policy track record; 3) incomplete currency convertibility

Nevertheless, we feel adamant about the fact that global investors, who traditionally treated EM as an exotic and homogenously obscure asset class, should note that a few easily identifiable, critical changes in many of these countries explain their recent resilience and outperformance better than temporarily supportive terms of trade.

Despite popular belief, emerging markets have always been a fortuitous (and highly heterogeneous) group (see Box I for a succinct primer on EM for the non-initiated). At the risk of oversimplifying, three distinct characteristics often highlighted in the specialized literature

Figure 6: Why global investors could be skeptics: No decoupling; (five-year rolling average correlation between EM and world GDP); little improvement from rating agencies; and the same institutional divide as always



 $<sup>^1</sup>$  HP filtered output growth yields remarkably similar results. Rose (2009) reports different versions of this exercise. Walti (2009) applies Mink and de Haan's (2007) synchronicity measure based on the product of output gaps: (gap,/|gap,|)\*(gap,/ |gap,|) which is equal to sign (gap, \* gap,) \*1, for the two-country or two-region case...

help define the essence of EM in the 1990s: 1) a high dependence on external finance; 2) a poor policy track record, and 3) incomplete currency convertibility. Two of these EM handicaps have been largely (and, in our view, permanently) removed in the 2000s.

Progress on both the policy and financial dependence front evolved very differently for each of the EM regions The dollar liquidity runs of the late 90s pushed emerging Asia and Latin America to a strategy of debt de-dollarization and de-leveraging (including through reserve accumulation) that dramatically improved net debt ratios and liquidity coverage.<sup>2</sup> Leaningagainst-the-wind intervention coupled with a conservative liability management have been (and continue to be) the mark of EM central bank policy in the 2000s (see Kiguel, A. and E. Levy Yeyati, "Fear of appreciation in emerging economies," Vox EU, August 29, 2009). With that, a key cyclical "amplifier" deeply rooted in EM economies in the 90s diminished dramatically. As a result, currency mismatches are virtually gone in Asia or LatAm, avoiding the negative balance sheet effects from the depreciation of the local currency, which, in turn, allowed countries to exploit exchange rate flexibility as a countercyclical shock absorber, further reducing cyclical output volatility, particularly in the downturn.<sup>3</sup>

Credible monetary policies paired with fiscal discipline and reserve accumulation reduced the exposure to the global crisis The policy front also changed in EM with the consolidation of stable policy frameworks. Monetary policy credibility improved dramatically after the chronic inflation of the 80s (Figure 7), and fiscal discipline and the accumulation of reserves in good times allowed for an unprecedented policy autonomy during the crisis, which helped reduce the depth and length of recessions by limiting the scope for second-round effects. A decade ago, financial contagion would have led to the de-anchoring of inflation and exchange rate expectations, inducing defensive contractionary monetary and fiscal policies. Times have changed. Central banks in Asia and LatAm in late 2008early 2009 were able to cut interest rates drastically and sell reserves without igniting a panic-driven currency run. Similarly, many EM governments were able to come forward with fiscal packages at the cost of deteriorating fiscal balances without triggering a credit sell-off.

In addition, a coarse look at the growth performance of EM countries masks a key development that is often overlooked in the decoupling debate: the dependence of EM

Figure 7: Low inflation and better fiscal (debt/GDP) ratios

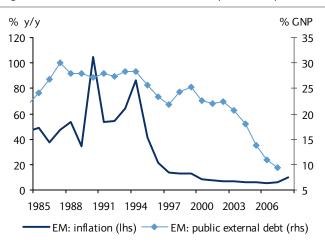
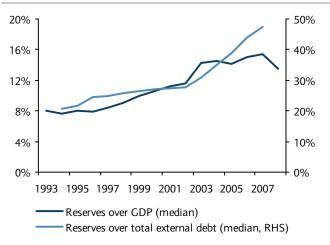


Figure 8: Saving the bonanza: Building the liquidity war chest



Source: BIS, Barclays Capital

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Source: World Bank, Barclays Capital

<sup>&</sup>lt;sup>2</sup> In Asia, where sovereign debt ratios continued to be small or non-existent, the precautionary motive for reserve accumulation could be seen as a hedge for private foreign liabilities (in fact the triggers of the Asian financial crises of the 90s). <sup>3</sup> Frankel (2005) surveys the evidence on contractionary devaluations due to currency mismatches, and Broda (2001) and Edwards and Levy Yeyati (2005) document the lower output sensitivity to negative shocks under flexible exchange rate regimes.

countries on global growth has shifted toward China (directly and through commodity prices) and away from G7 economies (see *On EM decoupling and growth convergence*, September 29, 2009, and "*Dismal Science at its Best" from Global Economics Weekly*, July 31, 2009). While this is important from a global portfolio perspective, it also highlights the Chinese miracle as a driving force behind emerging Asia's and LatAm's outperformance, and their positive growth in the post crisis landscape. This is immediately revealed by a finer look at global growth links.

The natural way to test whether EM sensitivity to global growth has declined over the years is by estimating and comparing "growth betas" since the inception of EM as an asset class. Splitting the sample into an early (1993-1999) and a late (2000-2009) period, and assuming for simplicity that trend growth remained stable within each sub-period, the specification is the following:

```
\begin{aligned} &\text{dlog}(\text{GDP}_{\text{it}}) = \alpha + \beta_1 \quad \text{dlog}(\text{GDP\_G7}_{\text{t}}) + \beta_2 \quad \text{dlog}(\text{GDP\_G7}_{\text{t}}) \quad * \quad \text{dummy}_{2001\text{-}2009} + \beta_3 \\ &\text{dlog}(\text{GDP\_China}_{\text{t}}) + \beta_4 \quad \text{dlog}(\text{GDP\_China}_{\text{t}}) \quad * \quad \text{dummy}_{2001\text{-}2009} \quad \mu_{\text{it}} \end{aligned}
```

a regression of the q/q growth rate of country i's cyclical output (relative to a log linear GDP trend) on the G7 and Chinese cycles, based on quarterly, seasonally adjusted GDP data, identifying the *late* period (2001-2009) with an interacting dummy. Such a specification also allows us to estimate EM alphas (as the constant of the regression).

The dependence of EM countries on global growth has shifted toward China, away from G7 The results of this simple analysis (summarized in figure 9) are particularly enlightening. In the traditional specification where global growth is represented by the G7, the EM betas appear stable and high. For the typical EM countries, the reliance on G7 GDP seems to have increased over this period ( $\beta_2$  is positive in column 1), similar to the increased correlation seen in Figure 6.<sup>4</sup> However, the data paint a different picture once we include China: the explanatory power of the G7 virtually disappears in the latest period, at the expense of the Chinese influence.<sup>5</sup> The second column shows how  $\beta_2$  is negative and significant, suggesting that the importance of G7 economies for EM growth has fallen, and has been more than compensated by the increase in dependence relative to the Chinese growth performance ( $\beta_4$  is positive and significant). It is reassuring that the fit of the new specification is significantly better (particularly, as expected, for Asian economies and commodity exporters). Thus, EM growth continues to be highly correlated with global growth, but the composition of this dependence has decisively shifted away from G7 and toward China.

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 $<sup>^4</sup>$  The explanatory power of G7 growth also increases markedly over time: dropping the interaction and splitting the sample, we obtain an average  $R^2$  for the late period of 0.28, against 0.06 for the early period.

<sup>&</sup>lt;sup>5</sup> This pattern does not depend on the assumption of a constant linear trend: de-trending output using the standard Hodrick-Prescott filter and estimating betas and alphas on the growth rate of the cycle yields roughly the same conclusion.

Figure 9: Decoupling and convergence – EM growth as a function of G7 and Chinese growth (y/y, quarterly data)

EM Panel														
	EM me	dians*	regression <sup>1</sup>	В	₹	M	X	ID		TR				
β (G7)	0.068	1.589	2.948	-0.021	1.217	1.182	2.114	-0.431	1.569	1.137	2.055			
	0.073	0.011	0.000	0.936	0.000	0.001	0.000	0.207	0.105	0.043	0.041			
β (G7_late)	0.239	-1.322	-2.656	0.250	-1.217	-0.568	-1.620	0.556	-1.768	0.204	-0.859			
	0.069	0.074	0.000	0.284	0.001	0.067	0.004	0.142	0.092	0.641	0.392			
β (China)		0.753	0.816		0.864		0.038		1.423		0.691			
		0.000	0.000		0.000		0.862		0.001		0.079			
$\beta$ (China_late)		0.362	0.125		0.420		0.331		0.717		0.329			
		0.073	0.327		0.000		0.022		0.056		0.227			
β (hy)			-0.023											
			0.000											
β (hy_late)			0.012											
			0.000											
α	0.027	-0.076	0.016	0.028	-0.088	0.004	-0.026	0.047	-0.150	0.008	-0.086			
	0.000	0.010	0.661	0.000	0.000	0.481	0.381	0.000	0.034	0.520	0.071			
Observations	67	64	1141	67	64	67	64	67	64	67	64			
R-squared	0.168	0.434	0.248	0.037	0.432	0.191	0.222	0.020	0.285	0.219	0.274			

Note: <sup>1</sup> Sample for the panel regression starts in 1994. HY is high yield. Median values from country-by-country regressions. *p-values* in italics. G7 growth computed as the average of individual growth rates weighed by the dollar GDP of the previous year. The EM sample includes: Argentina, Brazil, Chile, Colombia, Mexico, Peru, Honk Kong, India, Indonesia, Malaysia, Philippines, Singapore, Taiwan, Thailand, Czech Republic, Hungary, Poland, Turkey, and South Africa. Source: IMF, Barclays Capital.

What does all this mean for EM as an asset class? We believe that EM countries have been able to reduce their sensitivity to growth in developed countries without having to significantly reduce their average growth rates, and their outperformance relative to developed countries. Figure 10 shows this basic concept. The relative risk-adjusted average growth (the "economic" Sharpe ratio) between EM and developed economies has more than doubled. It went from 0.75 = 1.16/1.54 prior to 2001, to 1.79 = 1.22/0.68 since then. This is a notable change that potentially even understates the true correction. Based on IMF forecasts for the next five years, this growth outperformance of EM is expected to *deepen* in coming years. G7 growth rates have been declining from 3% to 2%, and the tax of the current financial crisis on debt-laden G4 economies does not bode well for the near future (beyond the cyclical bounce). In turn, EM contribution to global growth increased accordingly: roughly 40% of global growth in the period 2003-2007 and, based on most forecasts, inching above 50% in the next few years (Figure 11).

EM contribution to global growth has increased and is expected to deepen further in the coming years In short, those who regarded the EM boom as a fluke of the Great Moderation and the commodity boom that would be put to rest by the crisis, failed to see the structural changes emerging. It is true that favourable terms of trade helped. But, while it may have been inflated in 2008 by pre-crisis speculative positioning, the commodity boom was partially built on a persistent increase in equilibrium prices, as the current price action indicates. Moreover, many emerging markets saved a large share of the terms of trade improvement in the form of deleveraging and reserve accumulation, securing the gains from the bonanza on a permanent basis.

But it is the structural evolution in economic policies and local markets that explains the benign growth pattern in most emerging economies —a pattern that we believe goes beyond transitory terms of trade shocks.

# The glass half empty: What's next in the road to graduation?

EM structural improvements have only been partially reflected in asset prices As the usual disclaimer says, past performance does not guarantee future results. We think that, when applied to EM, the implicit premise behind this warning (the "faith" in the circularity of history and the inevitability of policy mistakes that EM sceptics have been invoking for years) delivers the wrong message to global investors. The ability of EM to reduce and diversify their exposure to global shocks without sacrificing growth is a development that has been tested and confirmed by the strong response to a severe global crisis. Indeed, because of the backward-looking nature of financial markets, the structural improvements discussed here have been only partially reflected in asset prices: the performance of a new group of Advanced Emerging Markets (AEM) will likely look better in five years than what past data suggests. Moreover, the increased sensitivity to China at the expense of C4 economies that look set to lag the global recovery should enhance the "economic" alpha of AEM relative to the developed world. Both of these factors suggest that the optimal share of EM in global portfolios is bound to increase further.

The emergence of AEM and their increased sensitivity to China should enhance the group's economic "alpha"

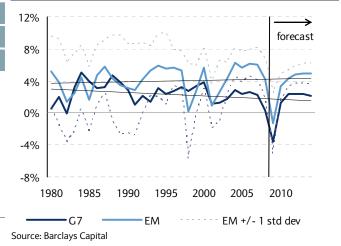
Does all this imply that (at least some) EM countries have already graduated to the developed world? Not necessarily. On the downside, many AEM still preserve **incomplete convertibility** (the third defining aspect in our preliminary EM identikit), as the recent Tobin tax on capital inflows introduced in Brazil reminded the enthusiastic investor.

However, AEM clearly lag their G7 counterparts on income distribution and poverty measures as well as institutional indicators More critically, a cursory look at some basic growth and income statistics highlights both the progress and the deficits of these countries relative to their developed peers (Figure 10). Income distribution and poverty indicators, while somewhat better, clearly lag the G7 group (as do the institutional indicators compiled by the World Bank, as well as sovereign ratings; Figure 6). One could speculate that a large population below the poverty line or an unequal income distribution could introduce some political urgency that, coupled with institutional weakness, might conspire against policy stability (and might, in the worst case, support extreme political outcomes). This is not the place to dwell in depth on these complicated issues. For our purposes, it is enough to highlight that, to the extent that solid growth and fiscal stability are necessary conditions to counter poverty and inequality, and to provide institutions room to consolidate the macroeconomic progress so far, they should prepare the ground to help catch up on those longer-term fronts where the AEM still lag their developed peers. <sup>6</sup>

Figure 10: The end result: a better relative "growth Sharpe"...

Figure 11: ...that is expected to persist

	Growth rate									
	(EM m	nedian)	G7 me	edian						
Period	Early	Late	Early	Late						
Mean	4.20%	3.68%	2.10%	1.20%						
Vol.	3.77%	3.17%	1.30%	2.24%						
Skew	-0.99	-0.64	-0.71	-1.92						
Kurtosis	0.60	-0.20	0.68	4.19						
Sharpe Ratio	1.16	1.22	1.54	0.68						
Poverty headcount	28%	24%	n.a.	n.a.						
(at 2\$ PPP)										
Income share of	6.9%	7.5%	7.6%	7.9%						
the lower quintile										



Source: IMF, Barclays Capital

<sup>&</sup>lt;sup>6</sup> As the economic literature documents, targeted fiscal spending plays a substantive role in improving income distribution (Goni et al., 2008). In turn, institutions are increasingly seen as endogenous to macroeconomic stability.

Ultimately, it should be apparent that the new AEM are neither the traditional exotic EM countries nor the fully developed G10, but something in between. If so, some G10 offer a good vantage point to forecast what these AEM may achieve in the next decade. Who are the new AEM? While countries like Brasil, India, Korea, Mexico or Singapore immediately come to mind, a complete list of AEM (and a corresponding benchmark) requires an appropriate metric to define the group beyond a simplistic comparison of borrowing costs or market depth and liquidity, a challenging task to which we will devote the next instalment of this series.

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#### A BIRD'S EYE VIEW OF THE EVOLVING NATURE OF EM

Originally the product of the bonds-for-loans swap engineered under the Brady plan, the group was soon associated with the few Brady countries with internationally traded, foreign-currency denominated sovereign paper (the Brady bonds). While we are not the first to point out that the term – if not the concept – sounds obsolete,<sup>1</sup> it is the fortuitous (as well as circular and somewhat uninformative) nature of the way EM are defined that we want to flag here. In the absence of a proper definition, rather than starting from what EM are not (developed industrial countries with deep, solid and transparent markets), we would rather focus on a number of distinct characteristics, often highlighted in the specialized literature (and well known by market practitioners), that help describe the essence of what EM are or, probably more accurately, have been.

First, they have a high dependence on external finance as a result of underdeveloped domestic markets and insufficient demand for local-currency assets, which has resulted in high (public and private) financial dollarization ratios. Critically, in the early years emerging economies have typically been short dollars, with distinct macroeconomic implications: 1) contractionary devaluations due to balance sheet effects (which called into question the convenience of flexible exchange rates and induced a tendency to peg that feedback into financial dollarization); 2) the need to subordinate monetary policy to the defence of the exchange rate during contractionary periods; 3) a tendency to self-fulfilling currency and debt runs (much in the same way as a bank run) and spurious financial contagion from otherwise unrelated countries. Second, a poor policy track record that increased the sacrifice ratio for monetary policy to bring down inflation penalized expansionary fiscal policies and introduced an autonomous source of uncertainty. The EM identikit may also include incomplete convertibility (associated with capital controls and regulations, differential tax treatment and non-negligible legal and confiscation risks) that additionally hampered the development of local markets.

Third, lower income levels, worse income distribution and weaker institutions than developed counterparts. A large population below the poverty line or an unequal income distribution normally introduces political urgency that, coupled with institutional weakness, may conspire against policy stability and may, in the worst case, support extreme political outcomes. Hence, political risk has been historically high.

In sum, the EM label was associated with relatively opaque, fragile and volatile economies that offer a higher risk/higher reward mix than their industrial counterparties. Quantitatively, this tended to show up in wider cycles and with a greater crisis propensity and, through their external financial dependence and high-risk nature, in higher betas to global markets, large correlation risk (alternatively, limited scope for within-EM diversification), and a more skewed and fat-tailed distribution of returns.

Not anymore. Progress on the policy front in EM relates to three very distinct stories. LatAm, the founding members that came to the asset class haunted by a history of chronic inflation driven by fiscal deficits, were the first to endorse inflation targeting (and, more generally, central bank independence and fiscal frugality) as a macroeconomic pillar. The former "transition economies" in Eastern Europe that suffered the destabilizing effect of price liberalization and privatization shock therapies in the early-90s, joined the group of inflation-challenged central banks but were rapidly lured by euro convergence and the deflationary effect of currency appreciation. By contrast, emerging Asia, which historically exhibited fiscal surpluses and low inflation, was less impressed by modern central bank policies.

On the financial dependence front, again, EM developments differ geographically. Discouraged by recurrent dollar liquidity runs in the late 90s, emerging Asia and Latin America endorsed a strategy of debt de-leveraging and de-dollarization, and accumulation of liquid foreign assets, substantially reducing net debt ratios and liquidity coverage. Reserve hoarding has been alternatively attributed to fear of appreciation, whereby intervention is geared toward preserving an artificially depreciated exchange rate to foster the competitiveness of export or reduce that of imports. Whatever the underlying motive, leaning-against-the-wind intervention coupled with a more conservative liability management have been the mark of EM central bank policy in the 2000s.

Eastern Europe is the exception to the rule. Led by euro convergence, the region built important currency mismatches through private foreign borrowing that financed growing current account deficits and currency overvaluation, and a home-grown real estate bubble. In a sense, the Western European influence was crucial in both good and bad ways: it supported institution building and avoided fiscal profligacy through the carrot of euro adoption, but stimulated a huge moral hazard-induced currency imbalance in the private sector, making the region something of an outlier in an otherwise much-improved EM space. However, judging from the LatAm experience, one would expect these countries to exhibit in the future a much lower tolerance for credit booms funded by foreign currency external finance. As the evolving nature of EM teaches, countries learned from past mistakes – and Eastern Europe is the region that can benefit the most from the 2008-2009 crash course in systemic risk management.

<sup>&</sup>lt;sup>1</sup> See, e.g., "Acronyms BRIC out all over", The Economist. September 18, 2008.

<sup>&</sup>lt;sup>2</sup> In Asia, where sovereign debt ratios continued to be small or non-existent, the precautionary motive for reserve accumulation could be seen as a hedge for private foreign liabilities (in fact the triggers of the Asian financial crises of the 90s).

<sup>&</sup>lt;sup>3</sup> See Aizenmann and Lee (2005) for arguments of the first type, and Levy-Yeyati and Sturzenegger (2007) for a discussion of the "mercantilist" view. Ultimately, both motives are likely to be intertwined, as a depreciated currency, to the extent that it contributes to a current account surplus, allows both for the accumulation of foreign assets and the sustainability of some precautionary slack on the external front.

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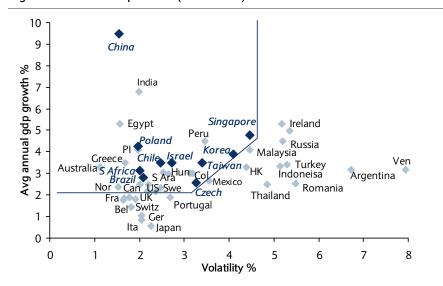
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# Advanced Emerging Markets (AEM): The list

- We have selected 10 countries whose fundamentals have departed from those of traditional EM countries enough to warrant, in our view, a special category in the investors' menu. Of 33 EM countries, the following countries make up our list of AEM (in ranking order): Singapore, Chile, Korea, Taiwan, Israel, China, Brazil, South Africa, Poland, and the Czech Republic.
- Our selection process aims to capture a list of countries with a future of solid growth without the volatility and tail risk characteristic of the original EM countries. We have developed a scorecard that factors in not only past growth performance, but also financial exposure and policy improvements, as well as the response to the recent global crisis (a unique test of EM resilience to external shocks). The resulting AEM list is not a trivial line-up of usual suspects: only two out of four BRICs (Brazil, Russia, India, China) are included India and Mexico are close calls but fail to make the team, due to the subpar policies in the first case and to meager growth in the second.
- The list differs from credit ratings in important ways. In particular, LatAm ratings are systematically lower than our ranking, whereas Asian, and particularly Eastern European, ratings typically are higher, reflecting the backward-looking nature of agency ratings. Moreover, despite the inevitable disappointment, our selection approach implies a list that "sticks": as our definition of AEM entails a structural evolution into the group that should not reverse, we expect new members to come and few incumbents, if any, to drop out.

Figure 1: Growth Sharpe ratios (1997-2009): AEM and the rest



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The ability of some EM countries to weather the latest crisis was the final proof of how much they evolved since the 90s We have recently argued (see *Advanced emerging markets: A reassessment of an asset class*, 12 November 2009) that the ability of some EM countries to weather the latest financial storm remarkably well was the final proof of the evolving nature of some EM countries. We highlighted three major structural (ie, permanent) changes to explain this evolution: (a) the build up of war chests in a number of EM countries during the boom years through financial de-dollarization and deleveraging, coupled with the hoarding of liquid foreign assets; (b) the embracing of macroeconomic stability and the enhancement of monetary and fiscal policy track record; and (c) the surge of China as an economic superpower, large enough to become the key global driver of growth in EM Asia and commodity-exporting countries (mostly in LatAm). These changes neutralized the domestic amplifiers of external shocks that triggered contagious EM crises in the past, allowing many EM countries to conduct countercyclical policies for the first time since the inception of the asset class. In this light, we concluded that a subset of EM countries, which we label "Advanced" Emerging Markets (or AEM), are halfway between the traditional EM and developed open economies, such as Australia or Canada, and need to be examined by investors and researchers in a different light.

We describe our criteria and methodology to select the AEM that, we believe, fall into this new category. In turn, we illustrate the extent to which these AEM have advanced relative to the late 1990s, and how they compare with open developed economies.

# Beauty contest: The rules

Because AEM membership does not imply larger short-term upside but greater ability to generate stable long-term growth... We start this exploration with a warning: The list does not imply that these countries will in the short run have potential upside in terms of asset returns, as current asset valuations are not taken into consideration. It is, however, a guide for the long-run investors of countries whose asset returns should not follow the behavior in terms of volatility of those of traditional EM countries and, at the same time, should time have higher returns than those of developed economies. Moreover, like any "best of" compilation, any ranking based on a set of common quantitative criteria, no matter how encompassing the selection, will inevitably leave some readers unsatisfied. As a way to minimize these misgivings, we begin by providing a definition of what these criteria should and should not reflect.

For starters, the list should be, in principle, orthogonal in size. All else being equal, bigger countries normally capture more attention than smaller ones as they are likely to have a more important global impact, as well as deeper financial markets. BRICs are a case in point: How can they not be on the list? The BRIC acronym is, however, economically vague, as it pools together a country that, for its sheer size and global clout, should be treated as a class in itself (China), a varied and dynamic economy with good policies but only moderate growth (Brazil), a fast grower with less-than-stellar policies (India), and a currency-mismatched oil exporter with subpar policy and institutional records (Russia). <sup>1</sup>

...our criteria are chosen to capture long-standing progress in order to make the ranking "sticky," as AEM continue to evolve into fully developed economies Second, because our goal is to identify countries that have graduated from the traditional EM predicaments in a permanent way, the criteria should capture long-standing progress on each of the relevant fronts, rather than the latest "economic miracle." As such, we expect the AEM list to be selective and "sticky": while there is always room for surprises (many names in peripheral Euroland come to mind), our definition of AEM implies that countries that evolved into the group should not drop out in the future. As noted, if anything, AEM should progress into fully developed economies – with some of the remaining EM countries gradually making it to the AEM list. This

<sup>&</sup>lt;sup>1</sup> That does not mean that BRICs (or any non-AEM for that matter) cannot be an appealing investment proposition: in fact, risky economies tend to offer the most upside potential almost by definition (just as Argentina did in 2009), only of a different, more speculative nature.

We compute a "growth score" based on both historical Sharpe ratios and the negative tail of the growth distribution (proxied by the response to the global crisis)

We add three criteria that specifically capture forwardlooking drivers of stable growth: 1) financial vulnerabilities, 2) Policy track record, and 3) socio-economic development calls for dynamic indicators of continuous improvement, and a focus on higher moments (ie, vulnerabilities and tails risks) to complement first moments (e.g., average growth).

Third, while our primary objective is to identify countries that we believe will be able to achieve solid, stable, and sustainable economic growth, as this has systematically led to a more mature behavior of a country's asset prices, we need to supplement historical data with forward-looking aspects. Here, we start by characterizing economic performance by examining their historical "growth Sharpe," namely, the ratio of (in our case, for simplicity, log linear) trend growth divided by its standard deviation, from 1999 to 2009 (Figure 1). However, while a country's past behavior is typically useful to predict is future performance, it has obvious limitations. In particular, high growth in the past may reflect a rebound from depressed levels or early stages of convergence from low income levels, both unlikely to be reprised in the coming years. Also, while a score card based on 30 years of output data would be in direct contradiction with our claim that the emergence of AEM is a recent phenomenon, 10 years of data from the 2000s are inadequate to characterize the full distribution of growth performance, including the severity of tail risks. Interestingly, the crisis period helps mitigate some of these drawbacks: for all practical purposes, we can assess the tail risk of rare adverse growth events by looking at the 2008-09 decline in growth rates. Thus, we compute a "growth score" based on the first two moments (the historical growth Sharpe ratio), and the negative tail of the distribution of the growth rate (the response to the global crisis).

To further correct for the shortcomings of past growth performance as a selection mechanism, we add three criteria that specifically capture long-standing progress in each of the three areas that have traditionally handicapped EM countries: the extent of financial vulnerabilities (*FinVul*), the policy track record (*Policy*), and so-called development factors (*Dev*), each proxied by a small group of related indicators. <sup>2</sup> Combining these three factors with the "growth score", we obtain a simple metric for the classification of countries, the AEM score card, as:

Average Score 
$$_{i} = (S_{i}^{Growth} + S_{i}^{FinVul} + S_{i}^{Policy} + S_{i}^{Dev})/4$$

where  $S_j(.)$  is the average z-score for each of the four criteria, rescaled to the [0, 1] interval for comparability. Note that these additional scores act as "pulling" factors that proxy future economic performance in countries with short histories of stable growth: whereas *Policy* and *FinVul* are related with growth stability and smooth cycles, *Dev* includes preconditions for long-term growth such as education, health, income distribution, and institutional quality. Below, we detail the variables used to determine each score (the Appendix presents a list of variable definitions and sources):

- 1. **Financial vulnerability** encompasses both aspects of debt sustainability: solvency, proxied here by the public external debt-to-GDP and the net external debt- to-GDP ratios; and liquidity, proxied by the net external financing needs over current account receipts (where the former is computed as short-term external debt + currently maturing long-term external debt minus official foreign exchange reserves over CA receipts), and the country's borrowing cost proxied by the 5y sovereign CDS spread.<sup>3</sup>
- Monetary and fiscal policy track record is proxied by risk-adjusted inflation, defined as
  the mean plus one standard deviation of the inflation rate; and by the average of the
  cyclically adjusted primary fiscal balance over 2004-08, computed for simplicity as the

 $<sup>^2</sup>$  In all cases, we checked the robustness of our findings to many alternative quantitative indicators, with similar results.

<sup>&</sup>lt;sup>3</sup> Variable definitions and sources are listed in the Appendix.

estimated residuals from the equation *primary surplus*<sub>t</sub> =  $\alpha$  +  $\beta$  *cycle*<sub>t</sub> +  $\mu$ <sub>t</sub>, where *cycle* is obtained from the log linear de-trending of the real GDP series.

3. Development factors include socio-economic development indicators, coupled with institutional weakness. Inequality may limit policy stability by creating local support for extreme political outcomes. More generally, development benefits usually found in rich and more equal countries, such as adequate education and health coverage, are a precondition for the productivity-based growth to become sustainable over time beyond the advantages provided by cheap labor cost and natural resources. To proxy for these aspects, we choose from a battery of well-known indicators: the Gini coefficient of income distribution (for which equity grows from 0 to 1); the UN Human Development Index that comprises life expectancy, education, and living standards); and the World Bank's composite institutions index. Since all of these are indexes, the figures are not normalized before averaging.

Our AEM ranking: Singapore, Chile, Korea, Taiwan, Israel, China, Brazil, South Africa Poland, Czech Republic Figure 2 shows our AEM scorecard with the results from each criteria and the overall ranking. Predictably, three Asian countries make the top four list: Singapore (1), Korea (3), Taiwan (4), all with strong past growth performances, stable policy frameworks, and few external financial vulnerabilities, with China (6) coming close behind. Chile (2) and Israel (5) also get to the top of our list, with a remarkable policy framework and solid fundamentals. Brazil (7) and South Africa (8) have also advanced notably in terms of key forward-looking indicators and make the cut. At the end of the list are Poland (9) and the Czech Republic (10), with good marks in inequality and human development as all former transition economies display a solid growth record with lower levels of financial vulnerabilities than other Eastern European countries such as Ukraine or the Baltic pegs.

As noted, any weighting of these criteria is likely to be arbitrary. To check how sensitive the list is to the methodology, we test an alternative approach assigning the AEM label to those countries that rank within the top 40% in at least three out of four criteria. Reassuringly, the eight countries that pass this stricter filter are included in the first list (China and Poland are excluded). A milder test, excluding development indicators and requiring countries to be at the top 40% for two out of three criteria brings a few new names: India, Mexico, Peru, and Thailand, all promising candidates to enlarge the AEM roster in the near future.

AEM score comparably against a sample of developed small openeconomies in terms of risk adjusted growth and financial vulnerability, but lag in policy track record and development Finally, a quick comparison with average scores for our sample of small open economies with national currencies (Australia, Canada, New Zealand, Norway, and Sweden) sheds some light on the remaining distance. The AEMs score comparably in terms of risk-adjusted growth and, despite their higher sovereign spreads, better than developed countries in financial vulnerability – which reflects the accumulation of foreign assets as a response to financial crises in the 1990s and the commodity surge in the 2000s. By contrast, they lag somewhat in policy track record (although the average fiscal surplus in our developed cohort is influenced by Norway's oil revenues) and, more dramatically, development indicators, which appear to be the ultimate frontier for AEM to become fully mature.

# Lost in aggregation: No-shows and the development filter

The headline ranking masks a large array of country characteristics that are lost in the process of aggregation. In this section, we highlight several features of our ranking that helps us understand, for instance, why Brazil is in and India or Mexico are out, why policy track record and financial vulnerability are key to our selection approach, and how our ranking relates to (and differs from) traditional credit ratings.

Figure 2: AEM - Scorecard and ranking

	Stable growth Policy tra					track reco	record Financial vulnerabilities						Development factors							Selected countries				
			Avg. Z-			Cyclicall y adj.	Avg. Z-			Net Ext	Public Sector		Avg. Z-							Avg.		Top 10		
	Risk	Stress	score		Risk	fiscal	score		Net Ext.	Fin.	External	Comed	score			Human				Index		(Average		2
	Adj GDP	test (2009)	(rescaled	Rank	Adj CPI	balance (% GDP)	(rescaled	Rank	Debt (% GDP)	Needs / CAR (%)	Debt (% GDP)	Level	(rescaled	Rank	Gini	Develop . index	WBGI	Avg. score	Avg. Index	(rescaled	Rank	score, rescaled)		of 3
China	6.3	-1.1	1.00	1	5.5	-0.91	0.59	22	-50%	-139.10	2%	73	0.79	2	45%		- 0.95	-0.87	-0.21	0.11	31	AEM		✓
India	3.6	-1.5	0.75	3	7.6	-2.37	0.36	28	-1%	-3.80	5%	146	0.53	11	33%	0.61	- 0.14	-1.23	0.05	0.34	21			✓
Indonesia	3.1	-0.7	0.72	5	12.1	1.93	0.61	21	10%	27.20	17%	228	0.38	23	32%	0.73	- 0.58	-0.88	-0.06	0.25	26			
Korea	1.6	-5.6	0.48	12	4.1	2.77	1.00	1	1%	2.20	2%	134	0.54	10	29%	0.94	0.86	0.58	0.50	0.74	7	AEM	✓	✓
Malaysia	1.4	-8.2	0.41	19	4.6	-2.01	0.51	23	-28%	-31.90	3%	91	0.63	5	36%	0.83	0.26	-0.12	0.24	0.51	16			
Philippines	2.4	-3.4	0.60	6	8.8	1.41	0.69	16	9%	17.80	24%	190	0.34	27	42%	0.75	- 0.55	-0.79	-0.07	0.23	27			
Singapore	1.0	-8.0	0.38	21	4.8	1.17	0.82	9	10%	-140.6*	0%	40	0.69	4	38%	0.94	1.84	1.02	0.80	1.00	1	AEM	✓	✓
Taiwan	0.9	-7.2	0.38	22	3.0	-0.31	0.74	13	-126%	-171.1*	0%	40	1.00	1	34%	0.94	0.94	0.64	0.51	0.75	6	AEM	✓	✓
Thailand	1.4	-7.4	0.43	18	5.3	0.25	0.71	14	-50%	-47.90	1%	94	0.71	3	55%	0.78	- 0.35	-0.57	-0.04	0.26	25			✓
Vietnam	5.4	-2.2	0.90	2	17.8	-1.77	0.03	32	4%	4.90	30%	248	0.32	28	38%	0.73	- 0.79	-1.00	-0.15	0.17	29			
Argentina	0.4	-5.4	0.37	23	10.9	2.32	0.69	15	-16%	-74.70	18%	1649	0.43	18	38%	0.87	- 0.32	-0.20	0.05	0.35	20			
Brazil	1.7	-3.9	0.53	9	6.8	3.10	0.93	4	-2%	-12.70	4%	140	0.55	9	55%	0.81	0.06	-0.27	0.11	0.39	18	AEM	✓	✓
Chile	2.1	-5.4	0.53	8	7.0	3.48	0.96	2	6%	10.60	2%	82	0.53	12	55%	0.88	1.44	0.57	0.59	0.81	3	AEM	✓	✓
Colombia	1.1	-3.7	0.47	15	6.6	0.48	0.68	17	0%	1.90	10%	173	0.48	16	47%	0.81	- 0.42	-0.50	-0.03	0.27	24			
Ecuador	0.9	-4.5	0.44	17	6.4	2.61	0.90	7	7%	22.80	18%	5863	-	33	46%	0.81	- 1.02	-0.75	-0.22	0.10	32			
Mexico	0.5	-9.6	0.30	26	4.9	1.09	0.81	10	2%	8.20	5%	175	0.50	15	50%	0.85	- 0.17	-0.19	0.06	0.35	19			✓
Peru	1.5	-3.2	0.52	10	4.7	1.34	0.84	8	2%	5.70	15%	150	0.44	17	55%	0.81	- 0.34	-0.47	-0.03	0.27	23			✓
Uruguay	0.3	-1.1	0.46	16	9.0	0.73	0.61	20	-15%	-46.70	30%	332	0.40	21	41%	0.87	0.84	0.27	0.43	0.68	11			
Venezuela	0.3	-4.8	0.38	20	26.6	1.45	-	33	-25%	-181.60	14%	1247	0.61	6	48%	0.84	- 1.39	-0.73	-0.34	-	33			
Bulgaria	1.1	-10.8	0.33	24	10.2	2.69	0.76	12	13%	17.80	28%	264	0.30	30	31%	0.84	0.28	-0.07	0.27	0.54	13			
Czech Republic	2.1	-8.3	0.47	14	5.0	-2.70	0.43	26	-13%	-16.20	7%	90	0.55	8	26%	0.90	1.06	0.52	0.57	0.80	4	AEM	✓	✓
Estonia	0.5	-19.2	0.11	31	8.6	0.61	0.62	18	39%	46.40	3%	251	0.40	22	31%	0.88	1.30	0.53	0.62	0.84	2			
Hungary	0.8	-9.6	0.32	25	7.5	-1.49	0.45	25	67%	76.60	34%	264	0.08	32	27%	0.88	1.01	0.40	0.54	0.77	5			
Latvia	0.5	-24.0	0.00	32	12.8	-1.16	0.28	30	50%	94.90	8%	627	0.27	31	38%	0.87	0.81	0.26	0.43	0.68	10			
Lithuania	0.4	-24.0	-	33	8.8	-0.84	0.47	24	32%	47.50	8%	386	0.37	25	36%	0.87	0.82	0.28	0.44	0.69	9			
Poland	2.0	-2.9	0.57	7	3.9	-1.27	0.61	19	23%	51.70	13%	135	0.36	26	34%	0.88	0.76	0.30	0.43	0.68	12	AEM		
Romania	0.8	-12.6	0.26	29	10.7	-0.78	0.40	27	18%	46.80	5%	285	0.43	19	31%	0.84	0.21	-0.11	0.25	0.51	15			
Russia	1.2	-13.1	0.29	28	13.4	5.40	0.90	6	25%	79.20	2%	283	0.41	20	32%	0.82	- 0.95	-0.67	-0.15	0.17	30			
Turkey	0.5	-9.5	0.30	27	10.0	4.23	0.91	5	25%	114.60	10%	220	0.31	29	44%	0.81	- 0.04	-0.35	0.11	0.39	17			
Ukraine	0.6	-19.1	0.11	30	20.6	-0.57	0.03	31	11%	19.10	8%	1356	0.37	24	28%	0.80	- 0.51	-0.58	0.00	0.30	22			
Egypt	3.2	-0.4	0.74	4	11.7	-0.99	0.34	29	-26%	-30.50	16%	235	0.52	14	32%	0.70	- 0.68	-1.05	-0.10	0.21	28			
Israel	1.2	-3.4	0.48	11	3.5	1.95	0.94	3	-27%	-62.10	14%	123	0.58	7	30%	0.94	0.79	0.55	0.47	0.71	8	AEM	✓.	✓.
South Africa	1.6	-5.5	0.48	13	9.5	2.79	0.79	11	-2%	-6.70	6%	163	0.52	13	43%	0.68	0.52	-0.65	0.26	0.52	14	AEM	✓	✓
AEM (avg)	2.04	-5.14	0.53		5.32	1.01	0.78		-0.18	-48.40	0.05	102.01	0.61		0.39	0.86	0.60	0.16	0.36	0.61				
Non AEM (avg)	1.38	-8.61	0.40		10.42	0.63	0.55		0.07	9.32	0.14	641.59	0.40		0.39	0.81	-0.12	-0.37	0.10	0.39				
Developed (avg)	1.88	-4.75	0.52		3.14	6.02	1.50		0.32	128.00	0.12	53.62	0.29		0.32	0.96	2.10	5.90	0.91	1.10				

Source: Barclays Capital, see appendix for full list of sources \*NFAs may be inflated by the inclusion of interbank loans, but excluding them does not change the ranking

As expected, countries' strengths and weaknesses broadly display a predictable regional pattern that is highly dependent on recent history As we noted in the first installment of this series, countries' strengths and weaknesses broadly display a predictable regional pattern that is highly dependent on recent history. LatAm, battered by fiscal deficits and high inflation in the 1980s and early 1990s, scores relatively high in policy, whereas emerging Asia outpaces the rest in terms of growth performance, and Eastern Europe displays the best income distribution and human development indicators. On the negative side, LatAm still lags the rest in terms of growth (perhaps the key challenge for the region), most of Eastern Europe suffers from increased financial exposure. Pulling all regions together, we find that emerging Asia leads to the road to graduation with the best average score, and the few laggards (Philippines and Vietnam) are small economies likely to be pulled by their neighbors. By contrast, while Eastern Europe predictably lags, past experience and the important stock of human capital of these economies would suggest a steep policy learning curve and a fast convergence, although the future role of the EU, a critical driver for ERM II countries, remains uncertain.

Perhaps the two most striking absences are Mexico and India. In the first case, good policies and limited financial exposure (Mexico was the first to suffer a BoP crises in the 1990s and, accordingly, the first to endorse deleveraging and de-dollarization) cannot compensate for a disappointing growth record and poor institutions - which, for many observers, explain, in part, the former. As such, it is the best example of our definition of AEM: good policies per se do not guarantee economic performance and, in fact, could be threatened by years of subpar growth. To make it to the AEM group, a good past performance or a good starting point (supportive development indicators) in the present is required. By contrast Brazil, one of the winners from the crisis in terms of reputation among investors, benefits from a growth performance that, while still far from the Asian "miracles," is with Chile among the best in the region. Finally, India offers a different illustration of our approach: in this case, growth has been stellar, and financial exposure has never been an issue, but a large fiscal deficit (and, again, a poor development score) cast doubt on the sustainability of the past performance.

The inclusion of forward-looking variables explains the key differences between our ranking and that of credit rating agencies The differences between our rankings and that of credit rating agencies provide key insights toward what we believe is the value-added of our classification: the importance of forwardlooking variables and the ability to react faster to current events. Figure 3 shows a comparison of our ranking to those of traditional rating agencies. In particular, the strong policy track record of recent years, including the fast response to the global crisis, has made LatAm countries that typically have a strong negative bias (given the long history of defaults) score

Figure 3: AEM scores: BarCap and credit rating agencies (avg Moody's and S&P)

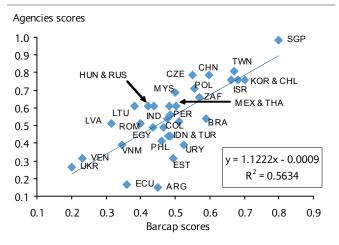
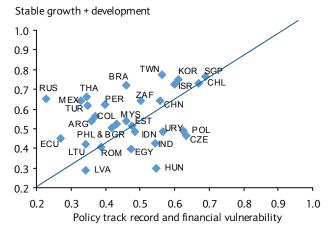


Figure 4: What ratings cannot capture: "Pulling" factors



Source: Barclays Capital

Source: Barclays Capital

17 December 2009 6 better in our ranking than in the agencies'. The opposite is true for Asian countries without a turbulent credit history. In turn, the weak policy response of countries such as Russia, combined with the large crisis downturn in output that resulted from traditional magnifiers of external shocks in many Eastern European countries, explains the low AEM scores relative to agency ratings.

## What changed with the crisis?

The crisis showed the world that structural changes and policy improvements relative to the 1990s (Figure 5) were good and there was no going back to that decade, as is clearly illustrated by the quick and unprecedented countercyclical response that helped attenuate the shock (see Box 1).

The nature of AEM and the depth of their markets call for a higher weight in global portfolios and a different strategy than in the past Naturally, we cannot make our case for AEM solely based on past performance. Economic performance and EM asset returns in the past five years reflect a healing process as much as a convergence. Many AEM entered the decade carrying the wounds of the financial crises of the 1990s, and the weight of a history of disappointments that led analysts and market participants to endorse a skeptical bias on critical issues such financial dollarization and default. As those handicaps were gradually overcome and markets updated their views, prices (spreads, FX, and equity) adjusted accordingly, leading to a remarkable outperformance. It is difficult to find arguments for a similarly stellar future showing for AEM. We do believe, however, that the crisis has helped consolidate these AEM and that they offer perhaps the best risk-adjusted potential in an otherwise modest global asset menu. But invoking past returns to make this point strikes us as potentially misleading (indeed, the biggest alpha may actually be found in other EM countries as they rush to join the club). But the nature of these countries and the depth of their markets call for a higher weight in global portfolios and a different strategy approach, which we will examine, along with a more precise representation of the nature of AEM in asset space, in the next installment of this series.

Korea Early 1.0 Israel Late 0.9 0.8 Policy track record 0.7 China 0.6 0.5 Chile 0.4 0.3 0.2 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 Stable growth

Figure 5: Then and now: Policy and growth z-scores for the 90s and 00s

Source: Barclays Capital

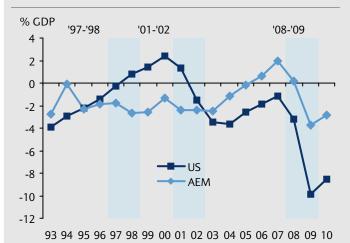
## Box 1: The emergence of countercyclical tools

When, in the midst of the Asian crises, the IMF decided to stick to a conventional adjustment recipe (essentially, rate hikes and fiscal cuts) to restore confidence, more than a few policy makers and academics (including, most notably, the World Bank's then Chief Economist Joseph Stiglitz), countered that the crises (unlike in Latin America in the 90s) were due to an imprudent private sector rather than imprudent governments, and that asking the government to make up for that would only delay the recovery: high interest rates would devastate highly indebted East Asian firms, while reduced government spending would shrink the economy further. The contrarian prescription was, in a nutshell, print, borrow, and spend.

The reason many EM countries fail to follow these prescriptions (and one of many justifications of its policies offered by the IMF) pointed at market perceptions. Unconvinced about the solvency of these countries, local and foreign investors not only refused to fund spending but shorted the currency at the first sign of a monetary expansion, defeating its purpose. As a result, few EM countries were able to widen fiscal deficits beyond the cyclical impact that ailing economies have on fiscal accounts. Moreover, interest rates were not allowed to fall sharply in response to the fast drop in activity for fear that domestic and foreign investors would flee in search of safer havens. Indeed, a recent paper finds that during the current crisis, the vast majority of the 41 countries with IMF agreements (including, eg, Latvia and Hungary) had pro-cyclical policies in place. While one can blame the IMF for its stubbornly conservative approach, it could be argued that fundamentals and market reaction imposed the policies and the need to resort to the IMF, creating some sort of common reverse causality. At any rate, what matters is that these countries did not have the ability to use countercyclical policies to mitigate the crisis toll.

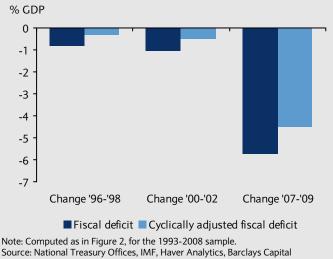
Instead, AEM countries responded dramatically differently during this crisis relative to traditional EM countries (such as the ones currently in IMF agreements), or their own experience a decade ago. For the first time, these countries have allowed for a large deterioration of their fiscal deficits during recessionary times. Figure 2 compares the change in the fiscal deficit for the average AEM country during the Asian crisis, with the recent global one. Despite average growth falling sharply in 1997-98, the fiscal balances deteriorated only marginally at the time. Similarly, there was no significant change in the AEM countries' fiscal deficits during the 2001-02 global contraction despite the slowdown in economic activity in these countries. By contrast, today's deficits have grown more (in response to a milder decline in economic activity) than in previous episodes, largely due to expansionary fiscal policies. Israel and South Africa stand out as examples where the pro-cyclical policies of the 1990s resemble the flipside today's countercyclical policies. Israel's fiscal deficit improved between 1996 and 1998 from -4.0% of GDP to -3.1% of GDP, and South Africa's deficit moved from -5.1% of GDP to -2.6% of GDP. Both countries today have been able to expand their fiscal deficits in bad times: Israel's GDP is estimated to have expanded by 4.9% from 2007 to 2009 with South Africa's growing by 8.4%.





Source: National Treasury Offices, IMF, Haver Analytics, Barclays Capital

Figure 2: Change in the cyclically adjusted fiscal deficit during the Asian crisis and global financial crisis



Source: National Treasury Offices, IMF, Haver Analytics, Barclays Capital

17 December 2009 8 To illustrate this broad pattern, Figure 2 shows the change in the "cyclically" adjusted average fiscal deficit for AEM countries. This measure takes into account the natural decline in revenues that occurs during recessions that leads to higher fiscal deficits, even if countries do not have any discretionary expansionary policies (computed using the same method as for cyclically adjusted fiscal balances (see Appendix), but using the sample period 1993-2008). The figure shows how they were allowed to expand their fiscal deficits dramatically as the result of the global financial crisis.

A similar picture emerges from the AEM countries' increasingly countercyclical monetary policy track record (Figured 3 and 4). Except for countries directly affected by the different crises, on average, AEM countries had marginally declining policy rates during 1997-98, slightly more aggressive cuts during the 2001-02 slowdown, and a heads-on expansionary monetary approach in 2008-09. The stable nature of AEM predates the 2000s in a few cases: countries such as China and India already had countercyclical policies in 1997-98, and the response to this crisis has been no different. By contrast, countries such as Chile, Israel, and Hong Kong that had pro-cyclical monetary policy in 1997-98 were strongly countercyclical in 2008-09. The difference among these countries in only a decade is a good reminder of the benefits of saving for good times.

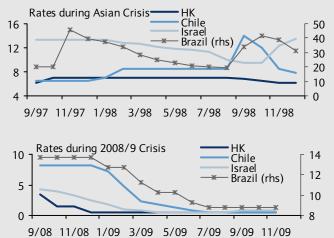
Crucially, their increased (or newborn) ability to use policies to buffer the effects of global downturns is but a reflection of the structural changes that we highlighted above, and the decline in output volatility is persistent (and understated by historical data). Structural changes in our group of AEM countries were already evident prior to the global crisis of 2008. But whether markets would recognize the ability of these countries to move through the changes and whether governments would feel confident enough to do it remained a big unknown. Not anymore. The crisis was the litmus test often invoked by EM skeptics, and helped AEM to show that they qualified. Now it is the time for markets to catch up with the news.

Figure 3: Aggressive countercyclical monetary policies when they were needed the most



Source: : National Central Banks, Haver Analytics, Barclays Capital

Figure 4: Chile, Israel, Brazil and Hong Kong during the Asian crisis and during the 2008-09 crisis



Source: : National Central Banks, Haver Analytics, Barclays Capital

<sup>&</sup>lt;sup>1</sup> Weisbrot, Ray, Johnston, Cordero and Montecino (2009), "IMF-Supported Macroeconomic Policies and the World Recession: A Look at Forty-One Borrowing Countries." Center for Economic and Policy Research Briefing Paper, October

# Appendix: Variable definition and sources

#### 1. Stable Growth

**Risk Adjusted GDP:** GDP growth Sharpe ratio (growth average divided by its standard deviation) over 1999-2008. Source: IMF, Barclays Capital.

**Stress Test (2009):** 2009 GDP growth minus its 1999-2008 average. Source: IMF, Barclays Capital.

#### 2. Policy track record

**Risk Adjusted CPI:** Average annual inflation (measured as the log chenga of the CPI) plus one standard deviation, for the period 2004-2008. Source: IMF, Barclays Capital.

**Cyclically adjusted fiscal balances (% GDP):** the estimated residual from the equation fiscal balance $_t$  = a + b cycle $_t$  +  $m_t$  where cycle is a variable derived from de-trending the log of the real GDP index of each country using the sample period of 1999-2008. Fiscal balances expressed as a percentage of GDP. Source: National Treasury Offices, IMF, Haver Analytics, Barclays Capital

### 3. Financial Vulnerability

**Net External Debt (% GDP):** Total external debt minus external assets (including FX reserves and foreign assets of financial/credit institutions) normalized by GDP. Source: National Statistical Offices, IMF, central banks, Barclays Capital

**Net External Financing Needs (% CAR):** Current account payments, redemptions on long-term external debt plus short-term debt coming due, adjusted for reserves and current account receipts normalized by current account receipts. Source: National Statistical Offices, IMF, central banks, Barclays Capital

**Public Sector External Debt (% GDP):** Source: National Statistical Offices, IMF, central banks, Haver Analytics, Barclays Capital

## 4. Development Factors

**Gini Index:** The Gini index lies between 0 and 100. A value of 0 represents absolute equality and 100 absolute inequality. Source: World Bank, United Nations Human Development Reports

**Human Development Index (HDI):** The HDI measures a population's health, longevity, knowledge, education, and standard of living. Source: United Nations Human Development Reports

World Bank Governance Indicators (WBGI): Measured over six dimensions of governance.

1) voice and accountability 2) political stability and absence of violence 3) government effectiveness 4) regulatory quality 5) rule of law 6) control of corruption. Source: World Bank

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