inflection point
CAPITAL MANAGEMENT

Sustainable Alpha

The emerging markets opportunity

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Sustainable Alpha: The emerging markets opportunity

Emerging markets have attracted a great deal of interest from outside investors over the past 12 months. Indeed, as of early January 2011, they have attracted net *inflows* of investor capital of over $90 billion during the year, while the OECD markets have seen net *outflows of over $65 billion.*

This shift in investor sentiment is largely being driven by the stark contrast between the spectacular economic growth stories unfolding in countries such as China, India, and Brazil on the one hand, and the stagnating and even deteriorating economies of their own domestic markets in the West on the other.

At Inflection Point Capital Management, we too are enormously interested in global emerging markets (GEMs). The growth story is certainly a major part of it, but we have two additional reasons for paying particularly close attention:

- At the end of the day, it will be in the emerging markets that the global battle for environmental and social sustainability will ultimately be won or lost. The challenges are most acute there, and the potential rewards for meeting them are similarly outsized.
- The core of our investment thesis rests on market information inefficiencies, particularly around what we believe to be the market's systematic under-recognition of the risks and value potential driven by *sustainability* factors. Those information inefficiencies are particularly acute in the GEMs, and that is where we believe that our information advantage is greatest.

We have long held the view that developing economies ought to be highly attractive to sustainably-minded investors. Indeed, our predecessor firm Innovest launched the first sustainable emerging markets investment fund with our partners at Rexiter Capital Management in London nearly five years ago. Our current flagship product at IPCM – the Global Sustainable Alpha Fund – builds directly on that experience and has a strategy which has a significant tilt towards emerging market companies.

Note to readers

This was written just prior to the recent flow of substantial investment capital out of emerging markets, when those markets were riding high. This latest reversal, largely triggered by the recent political upheavals in Egypt and elsewhere in the region, highlights yet again the volatility of emerging markets, as well as the herding and over-reacting instincts of major investors. Fortunately, we had already tried to sound a note of caution in our piece, counseling against a headlong rush into emerging markets. Looks like we were either prescient or lucky; in either case, our fundamental theses still stand: a) emerging markets remain of critical importance to sustainability-oriented investors; and b) the benefits of in-depth, on-the-ground research cannot be overstated.

As the world struggles to achieve a durable economic recovery following the financial crisis, there are differing opinions as to the impact emerging economies can have on overall growth. The dominant view is that emerging economies will continue to act as the world's principal economic growth engine, one which can accelerate the pace of global recovery overall. As a harsh winter starts to bite in Europe, investors face something of an economic "winter of discontent", harking back to themid-'70s and the days of high national indebtedness, IMF bailouts and spiraling inflation. Emerging market countries, on the other hand, have shown greater fiscal discipline, with generally lower budget deficits or even surpluses in many cases, and high rates of structural growth. On the face of it, the GEMs would seem to be a compelling destination for investors.

We would, however, caution investors against getting carried away with an uncritical "GEMs mania" and a headlong rush into emerging markets. The weight of historical evidence has demonstrated that if there is any connection at all between overall economic growth in a particular country and robust stock market performance there, it is a tenuous one at best, and often even an inverse one. Recent financial flows have already created worryingly high levels of company valuations in several countries, which makes strong investment returns much more elusive. Indeed, despite significant internal variation among the BRIC countries, the group as a whole delivered stock market returns of only 3% through 2010.

We therefore believe that a balanced approach is required by investors, one which does at least two things:

- Acknowledges that *both* investment risks and opportunities tend to be exaggerated in emerging markets; and
- Acknowledges that many of the most important of them are driven by sustainability factors, which are typically not priced into the market.

This paper therefore attempts to provide readers with a *balanced* picture of emerging markets, viewed through the prism of a "sustainable investor". There are definitely out-sized returns to be had, but *only* after careful research (preferably, of the on-the-ground variety) and due diligence. As elsewhere, there are no free lunches.

The investment logic of emerging markets

For many years, the investment logic behind most actively managed funds in emerging markets was that information inefficiencies were particularly acute in those countries, and that the hard work of additional primary research would be especially well rewarded there. From the standpoint of traditional financial and accounting information, this argument still holds true, although it is becoming somewhat less so as company reporting standards start to converge at a higher, common international level.

Where the information inefficiencies are *now* most acute, however, is with respect to *sustainability* information. It is well-documented that the provision of company sustainability data by companies themselves is, in general, nowhere near the level of that in "developed" markets. This is true of both the quantity and the quality of company reporting. In addition, significant capacity constraints among third-party "ESG" research providers have resulted in coverage of emerging markets stocks which is extremely sparse. The lack of consistent and systematic disclosure by GEMs companies also means that even world-class data providers such as Bloomberg and Thomson Reuters (who have recently entered the ESG space) cannot provide deep and reliable coverage either. Of course, this information inefficiency also creates *opportunity* for those investors who can overcome the limitations which it imposes.

IPCM's principals have spent many years analyzing companies in both developed and developing countries, and our conclusion is that emerging market stocks generally display poorer sustainability performance and strategic positioning than their "developed" market peers. Having said that, however, pioneering firms do exist in those regions, and even the laggards arguably have greater upside potential for creating "sustainability alpha" by improving their performance. The data suggest that it is frequently the *rate* of improvement rather than absolute performance levels which are the most robust leading indicators of superior financial returns. The trick, of course, is finding the necessary information and analysis. To do this, new research tools and methodologies are required, ones which can compensate for the generally poorer levels of disclosure by emerging market companies and stock coverage limitations faced by ESG data and research providers. We shall discuss one such innovation later in this paper.

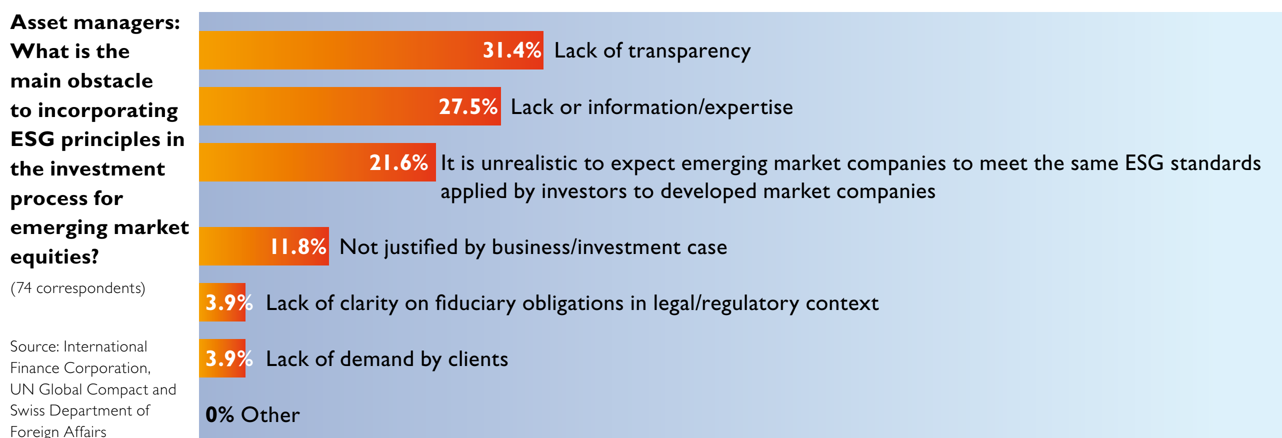
From an environmental and social perspective, rapid economic expansion in Asia, Latin America and Africa is putting extraordinary pressure on both natural resources and human capital. Four powerful megatrends are converging to create these pressures: population growth, industrialization, urbanization, and the rise of large new, high-consumption middle classes in countries such as India, China, and Brazil. In addition to the enormous environmental impacts of these phenomena, labour conditions have also become a matter of concern, both domestically and internationally. In response, new regulations and international standards such as the UN Global Compact are appearing and raising the bar for sustainability performance. In addition, as the price of commodities rises, the imperative to use them more efficiently becomes that much more critical. All of these trends offer new areas of opportunity for those firms capable of recognizing and then responding to them, and for investors able to identify them.

Sustainability-driven risks and opportunities

As we have seen, understanding company performance in emerging markets is difficult at the best of times, and sustainability data and analysis in particular are extraordinarily hard to come by. For us, however, this is a huge part of their investment appeal: in-depth, *proprietary* sustainability research

can arguably add even greater value than it can in developed markets. What is more, it can add it at multiple levels: country, sector, company, and cross-sector investment themes.

According to a recent survey by the IFC (International Finance Corporation, the private sector arm of the World Bank), low levels of sustainability disclosure by companies in emerging markets currently represent a major barrier to investment. The table below from an asset manager survey in 2008 summarizes some of the greatest information barriers and deficiencies:



Asset managers: What is the main obstacle to incorporating ESG principles in the investment process for emerging market equities?

(74 correspondents)

Source: International Finance Corporation, UN Global Compact and Swiss Department of Foreign Affairs

Out of this inefficiency, however, comes investment opportunity. Investors who recognise the information inefficiencies, and who are willing to put in extra effort to understand the sustainability performance of individual companies, can create a significant information advantage. Perhaps more to the point, our research and multi-year experience suggests that this advantage can be *monetized*. Through our research affiliate Solaron, headquartered in Bangalore, India, and with over 50 analysts on the ground in a number of other key emerging markets as well, IPCM has access to granular insights which most investors simply do not have. Access to this research has thrown up some valuable information that would otherwise have been very difficult to obtain, and has revealed both the need for and the efficacy of some innovative new research tools.

One such tool is the use of the emerging markets company stakeholder forum, an idea pioneered by Solaron. By way of example, in its research into Indian IT firm Infosys, Solaron sought input from 360 current and former employees via an online forum. By analyzing their responses, Solaron was able to show that there was growing dissatisfaction among the workforce, leading to very high turnover rates not disclosed by the company. And, through an understanding of the company's sales strategy gleaned from these same interviews, our affiliate was able to conclude that the company, unlike its Indian peers, was potentially over-reliant on sales to the US, at a time when that country was going into recession.

A second, higher profile example of the power of proprietary, on the ground research is provided by Vedanta, the Indian mining company. In September 2010, the company's investors and shareholders announced that they were planning to look into the company's human rights performance in India. Institutional investors have formed a coalition to investigate some of the issues that have dogged the company recently. Investors such as the Church of England, the Joseph Rowntree Charitable Trust, Norwegian Government Pension Fund, and Dutch pensions manager PGGM Investments have sold their shares in the company because of ethical and environmental concerns. In August 2010, the Indian government refused to give environmental clearance to the company's USD 1.7 billion bauxite mining project in Orissa. The union minister of state for environment and forests stated that forest clearance for the project in the Niyamgiri Hills had been cancelled and there would be penal action against Vedanta for violating laws. A notice has also been issued to the company for its alumina refinery in Lanjigarh, for increasing its capacity from 1 million to 6 million tonnes illegally. Access to local media and news coverage with the ability to use local languages, assists in the timely flow of data, and indeed Solaron points out that concerns about Vedanta surfaced in the Indian press

as far back as 2004, with NGOs voicing concern even prior to that. This was literally years before any Western media demonstrated any awareness of the issue; such knowledge could have made Western investors on the short side of Vedanta a fortune.

The Vedanta case illustrates one of the truly transformational shifts in the competitive environment for today's companies – *and* one of the biggest sources of sustainability alpha. Unlike even five years ago, companies are operating in a world of massive transparency and global inter-connectivity. They operate in a "CNN world" now – with 24/7 news coverage, bourgeoning social media, newly knowledgeable and empowered NGOs and other stakeholders, and a myriad of other challenges which dramatically shorten the "half-life" of competitive advantage. There is literally nowhere to hide. It is *also* a world in which sustainability issues are acquiring unprecedented currency.

Taken together, these phenomena demand entirely new skills, competencies, and even mindsets compared to those which may have made companies successful in the past. Some will prove capable of making this shift; others will not. It is the task of the 21st century investor to distinguish between the two groups. In attempting to do so, we strongly believe that the companies' performance on sustainability issues will provide an increasingly robust leading indicator.[1]

Some key sustainable investment themes

Recently published research from the World Resources Institute provides a succinct summary of eight of the most important sustainability-driven investment risk factors:

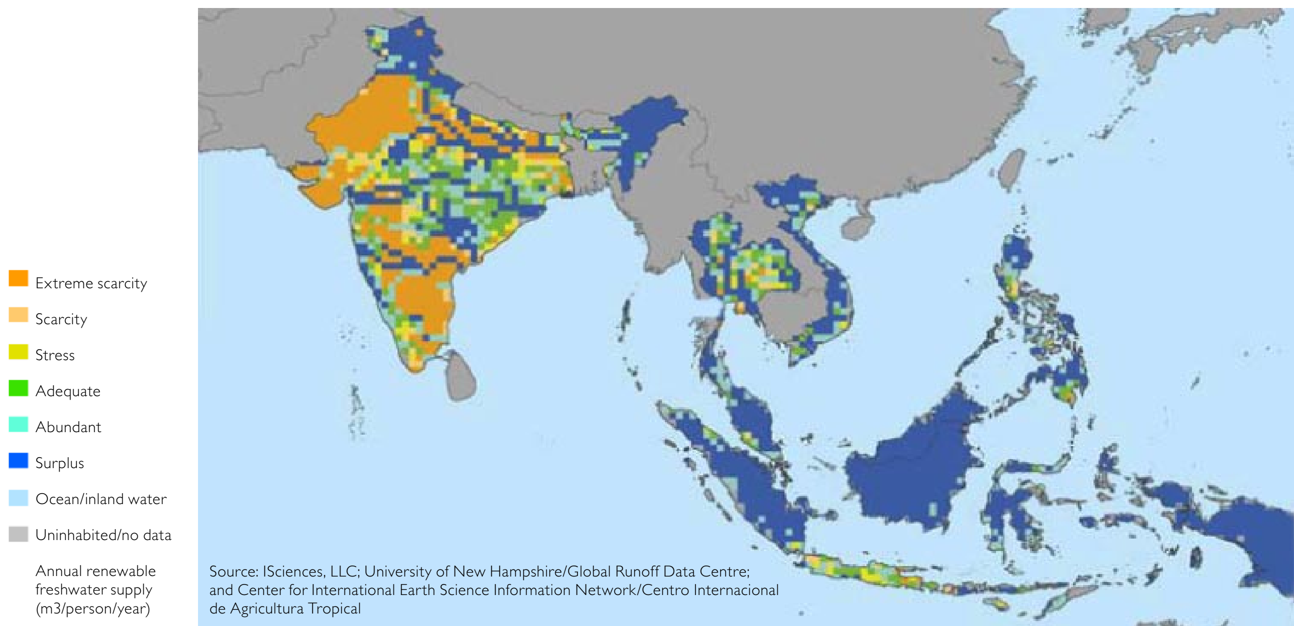
Trends	Short-term impacts	Long-term impacts
Deforestation	• Shortage and increased prices of raw material • Fines • Changes in consumer preferences	• New markets and revenue opportunities
Water scarcity	• Increased scarcity or cost • Greater competition among users	• Shortages • Regulation
Climate change	• Damage to assets • Disruption of operations	• Regulation • New markets and revenue streams
Food security	• Higher prices of raw materials • Reduced productivity or output	• Shortages
Energy security	• Higher input costs • Disruption of business operations	• Changes in consumer preferences
Air pollution	• Lower productivity • Damage to assets	• Changes in consumer preferences • Regulation
Urbanization	• Increased market demand • Decreased productivity	• New markets and revenue opportunities • Magnifies impacts of other trends
Population growth	• Larger market size • Lower cost of labor	• New markets and revenue opportunities • Magnifies impacts of other trends

Source: Emerging Risks: Impacts of Key Environmental Trends in Emerging Asia – IFC/WRI 2009

While the WRI study itself happened to be focused on six countries in Asia (comprising roughly 25% of the world's population, these same megatrends and risks can be observed in virtually *all* emerging markets.

Having said that, sustainability risks can vary quite widely from one country to another, so that a one-size-fits-all approach to emerging markets investing is unlikely to be effective. The map below, for example, suggests that access to fresh water is problematic for India and parts of Thailand and the Philippines, but less so for Malaysia and Indonesia. But further research would also reveal that forest mismanagement in those latter two countries may also in the long term lead to similar water scarcity problems there as well. Access to water is a critical issue for agricultural, industrial, and urban development, so pressure on water may hamper growth in some emerging markets.

1 For a fuller exposition of this thesis, please consult Matthew Kiernan (2009) Investing in a Sustainable World. New York: American Management Association.



Source: ISciences, LLC; University of New Hampshire/Global Runoff Data Centre; and Center for International Earth Science Information Network/Centro Internacional de Agricultura Tropical

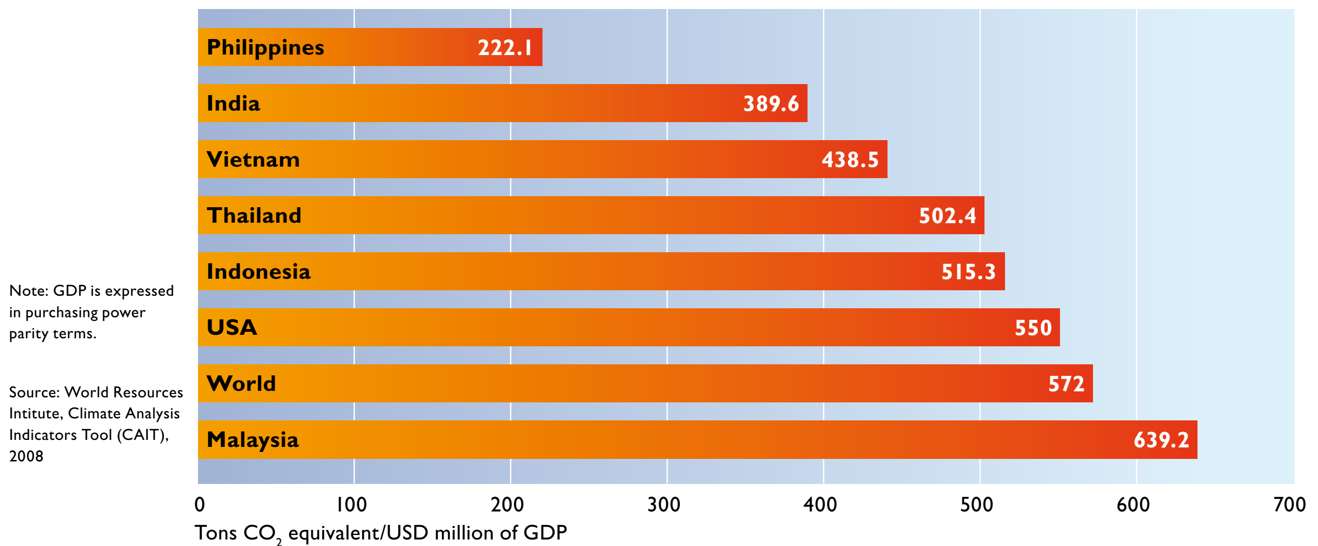
Coca Cola provides an interesting case study on the impacts which water scarcity and access can have. In 2000 the company opened a bottling plant in Kerala, India, which shared its water supply with the local community. Two years later the water supply dwindled and became polluted, with local people and farmers blaming the company. Protests and legal action forced a closure of the plant and for a short time even the drinking of Coke was banned. While some other factors contributed to the water problem, Coca Cola was blamed and suffered lost sales, costs and brand damage, and only recently has it rectified this through a water conservation programme, a ten-year saga that could have been avoided.

Leading global companies are now developing integrated plans for issues affecting their operations all around the world, recognising the increased levels of risk in particular emerging market countries. For example, in September 2010 Unilever announced an ambitious new "Sustainable Living Plan"; a summary of the water targets is shown below.

Water		
Agriculture	Accurate measurement of the water used in agriculture is still in its infancy	Develop comprehensive plans w/suppliers and partners to reduce the water used to grow crops in water-scarce countries: China, Indonesia, India, Mexico, South Africa, Turkey and the US.
Manufacturing	• By 2009, reduced the water used in factories by 68% since began reporting water abstraction in 1995. • Uses the World Business Council for Sustainable Development's global water tool to help decide which factories should be a priority for water management.	• By 2020, water abstraction by global factory network will be ≤ 2008 levels, despite growing volumes. This represents a 78% reduction per tonne of production and a 65% absolute reduction (versus 1995 baseline). • Focus on factories in water-scarce locations: China, Indonesia, India, Mexico, South Africa, Turkey and the US. • All newly built factories will be designed to abstract < ½ the water of current factories.

Unilever has a health and well-being programme as well, and we at IPCM regard such programs as important for companies operating in emerging markets, since improving the health of local communities promotes good customer relations and brand loyalty. Hindustan Lever in India has several access to medicine initiatives which make the company of interest to our own global healthcare investment strategy.

While tropical countries such as Malaysia and Indonesia in the main have abundant water supplies, their carbon footprints on the other hand are already on a par with or in excess of many developed countries, largely because of deforestation. In addition, countries like Indonesia and Malaysia, with very long, low lying coastlines, are highly susceptible to the physical impacts of climate change.



Note: GDP is expressed in purchasing power parity terms.

Source: World Resources Intitute, Climate Analysis Indicators Tool (CAIT), 2008

India, with a relatively low carbon footprint but aware that its energy usage is set to grow considerably, as is the case of course for China, is already promoting energy efficiency and GHG mitigation programmes. The recent (December 2010) UN climate talks at Cancun were notable for a more positive stance proffered by both India and China. In something of a *volte face*, these two countries saw Cancun as a platform for rebuilding their carbon strategies. India helped to end the deadlock on emissions monitoring and China put forward new ideas on extending Kyoto, and both China and India now seem willing to contemplate legally binding emissions reductions – just as well, given their current business-as-usual trajectories for greenhouse gases.

One thing to keep in mind when assessing climate change opportunities is the impact of the Climate Fund which was proposed and agreed in principle in Cancun. (That Fund is the subject of a separate commentary by IPCM, available in the "Thought Leadership" section of our web site). We may see developing countries "leapfrog" ahead of their Western competitors in developing and commercializing the next generation of climate adaptation and mitigation technologies. Given the increasingly dim prospects for a coherent climate policy in the US and the ongoing financial turmoil and fragility in Europe, the locus of innovation and investment is already shifting to China, India, Brazil, and other emerging countries.

Have China and India seen the light, and a "green" one at that? More likely is notion that they have espied a new commercial opportunity in clean tech, which they realise is theirs for the taking given the new geopolitical landscape. Clean energy reforms in the US could be stalled for years to come, and with no price on carbon in America their energy firms could become less competitive on the world stage. The EU has a carbon price, but it languishes around the 15 euro mark, whereas we estimate that a price in the vicinity of 50-80 euros a tonne would be required to stimulate real change.

And while the price may rise from 2013 when the new cap-and-trade system is expected to commence, industry has in any case been able to hoard credits during the recession. The powerful oil and transport lobbies in Europe and the US will continue to put the brakes on more ambitious targets for renewable energy commitments, the result being that India and especially China see an opportunity to dominate the emerging green economy. The first order of business will be to ramp up their clean tech efforts, such that they are then well positioned to take advantage of the tightening international agreements on emissions reductions, that they themselves appear now much keener to promote. As investors, we may want to look towards Asia when seeking our carbon-related opportunities.

Sector/issue analysis and sustainable investment strategies

High-impact industrial sectors comprise a significant tranche of the MSCI EM Index, roughly 40 percent :

Sector weighting as of Tuesday 2 February 2010

Source: MSCI Barra

Sector	Number of companies	Weight
Energy	18	11.66%
Materials	110	14.91%
Industrials	112	6.70%
Consumer discretionary	70	5.67%
Consumer staples	58	5.66%
Healthcare	12	2.32%
Financials	174	24.08%
Information technology	84	13.13%
Telecommunications services	54	9.03%
Utilities	45	3.77%
Total	**767**	**100%**

With this high concentration of high-impact industrial sectors, however, comes a litany of environmental and social problems. In addition to the breakneck pace of industrialization, we are witnessing an unprecedented trend towards rapid urbanization. This in turn is placing enormous stress on both the natural environment and on the water, transportation, waste management, and public health care infrastructures of local and even national governments. Even changing diets are creating environmental pressures, as more intensive agricultural inputs and methods are required to produce the additional protein demanded by the new, more affluent middle classes.

Of course, the flip side of all of these extraordinarily difficult sustainability challenges is an equally massive economic opportunity in providing the solutions. We believe that some of the most compelling opportunities for investors lie in researching and understanding the very different company-specific exposures to several embryonic investment *themes* with particular resonance in emerging markets. At IPCM, we have developed two such thematic strategies, related to economic opportunities at the "base of the pyramid", and to providing access to affordable medicines. We touch on each theme here briefly; readers are encouraged to consult our web site for more extensive background papers on each of them – and others. (www.inflectionpointcm.com)

Opportunities at the "Base of the Pyramid"

The investment thesis driving this strategy is simply a more specific application of our general view that more "sustainable" companies tend to have superior strategic management overall and, ultimately, better long-term financial prospects as a result. In this case, our thesis is as follows: tapping into the financial and human potential of the four billion people at the base of the economic pyramid (BOP) will become a competitive imperative, both for large companies indigenous to emerging markets and for international companies active or seeking to do business there. It is also a fiendishly difficult challenge for most companies, at both a strategic and an operational level. Typically, it requires the complete re-invention of business models, supply chains, talent pools, and so on. It is, in short, a quintessentially robust, forward-looking proxy for the superior management quality and corporate agility which we seek.

We applied this thesis in Latin America, interviewing and analyzing each of the 120+ companies in the MSCI Latin America Index, through the very specific "prism" of their BOP performance and positioning. Although enormously labour- and time-intensive, the exercise provided some extraordinary insights which we believe give us a significant information advantage in creating a more comprehensive – and *differentiated* assessment of these companies.

Below we profile three companies that were highly ranked in our 'inclusive business' assessments for our base of pyramid (BOP) strategy.

Company
BoP Summary

Cemex SAB de CV

In order to target majority markets, Cemex has developed programs to specifically meet the needs of these markets. The company's main program, Patrimonio Hoy, has the objective to allow low-income populations to access construction materials in order to build their houses properly and quickly. Patrimonio Hoy implies the creation of local businesses in order to offer the company's products. End-consumers are provided with credit with no need of collateral as well as with professional assistance throughout the construction process. In specific, the company contracts architects to assist end-consumers. The Patrimonio Hoy program has been operating for 10 years and has supported around 200,000 families. The program started operating in Mexico and was recently implemented in Colombia. Cemex has a program focused on transferring corporate responsibility best practices to suppliers. Some of these practices are focused on improving suppliers' managerial capabilities, labor relations and stakeholder relations. Moreover, as part of the Patrimonio Hoy program, entrepreneurs receive training on how to offer the program, in addition to the company's products and services.

Company
BoP Summary

Cyrela Brazil Realty SA

In order to expand its operations to other regions, Cyrela relies on local small and medium companies, which are normally family-owned. Developments are undertaken by the company together with these companies. Cyrela assumes the financial management. In Cyrela's estimate, some of the benefits of working with local players include gaining the expertise that these players already have in low-income segments as well as their knowledge about the region and market demands. On the other hand, these local players benefit from Cyrela's brand reputation, operational management, and sales training.
The risks implied in dealing with small and medium companies are financial and operational. For example, the partnering company might run out of funds or might not complete the job on time. In order to reduce these risks, Cyrela has contractual agreements that establish responsibilities for the company and its partners, and includes monitoring and controlling mechanisms. As part of its organizational structure, the group has an engineer responsible for engaging and relating with small and medium partners, understanding their behavior, interests and performance. In order to improve the performance of its small and medium partnering companies, Cyrela shares its operational know-how with these companies and also trains their sales force. Moreover, some of these partners have adopted Cyrela's corporate social responsibility initiatives, including literacy training programs for construction workers.

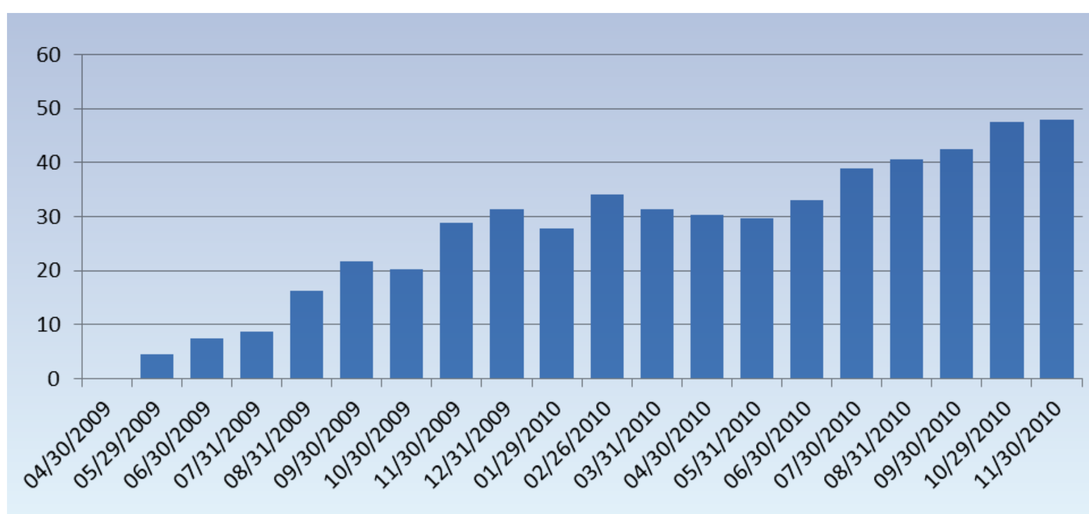
Company
BoP Summary

Suzano Papel e Celulose SA

Suzano aims at creating long-term partnerships with suppliers. The company has adopted the Land Owner Assistance Program (LOAD) to facilitate the purchase of wood from local farmers. Farmers participating in this program have the option to be granted advanced payments. For distribution of some of its products, the company relies on printing companies and other distributors.
As part of its initiatives to integrate procurement processes in Brazil, Suzano adopted the E-Suppliers project, a portal established by paper producers. A number of suppliers have adopted this portal. The company also includes a quality management system. Before their admittance, suppliers undergo several assessments under the consideration of financial, quality, environmental and health & safety variables, and are monitored on a bi-monthly basis. They are also required to comply with ethical and social standards (provisions against child and forced labor). These initiatives reduce the company's risk of suppliers failing to meet minimum criteria. As part of the Land Owner Assistance Program, Suzano currently has 755 contracts in 47 cities, covering 73.7 thousand hectares. Timber from farmers participating in the program represented 13.2% of the timber sourced by the company. This initiative is a clear example of the group's efforts to create wealth for small businesses in the communities of operation.

Of perhaps greatest interest to investors will be the *investment* performance implications of this primary research. In order to try to isolate the "BOP alpha effect" from the myriad other drivers of risk and return, we created a new index, based solely on our assessment of the companies' BOP performance. (Needless to say, we would not recommend such a single-factor analysis as the sole basis for an actual investment portfolio, but the exercise was instructive nonetheless).

IPCM BOP Passive Index vs MSCI Emerging Markets Daily TR Gross USD



Access to Affordable Medicine

IPCM's Access to Medicine+ investment strategy for the healthcare and adjacent sectors is another variation on the "sustainability *qua* superior management quality" thesis which is one of the cornerstones of our approach. To begin with, it should be axiomatic that multi-national, developed market corporations need to adapt their strategies to take account of trends in emerging markets that have the potential to affect the growth of their business. One healthcare theme growing in importance is that of access to affordable medicine (ATM), which is becoming increasingly relevant not just for pharmaceutical firms, but to other companies operating in countries where improved health and nutrition are especially critical for economic growth and consumption.

Our four-part investment thesis is analogous to that which underpins our BOP strategy:

- Global pharmaceutical companies can expect to generate 80% of their future growth in emerging markets;
- It is increasingly important to the successful penetration of those markets that pharma companies solve the vexing challenge of ensuring access to affordable medicines in those markets;
- Doing so is an extraordinarily difficult challenge for top management, at both strategic and operational levels; companies who can out-perform their peers in tackling it are quite likely to be better-managed, more strategically aware and agile companies overall, and therefore are superior investment candidates; and
- Robust research and analysis of ATM issues is scarce, has not generally been priced into the market, and therefore can provide investors with a monetizeable information advantage.

Below we provide a summary of some of our insights into the ATM strategies of several leading multi-nationals likely to be affected by this issue. Readers will note that the financial and competitive impacts of the ATM issue extend far beyond the pharma sector itself.

Company	**GSK**
ATM Summary	Top rated holding in our ATM portfolio. Management strategies grounded in sustainable business rationale, notably for ATM where it leads the peer group, also a leader interms of public policy and influence, which bodes well for its ability to operate in a sector highly sensitive to public perceptions. An innovator on ATM challenge – highest number of products in ATM pipeline adjusted for size of company; has increased IP and molecules library sharing, has created patent pool for neglected tropical diseases. Price reductions on all patented products and non-exclusive voluntary licencing agreements, indicates a recognition of EM needs and threat posed by generics. Weaker performance in some critical areas such as product safety and clinical trials, leading to potentially costly penalties.

Company **Novartis**

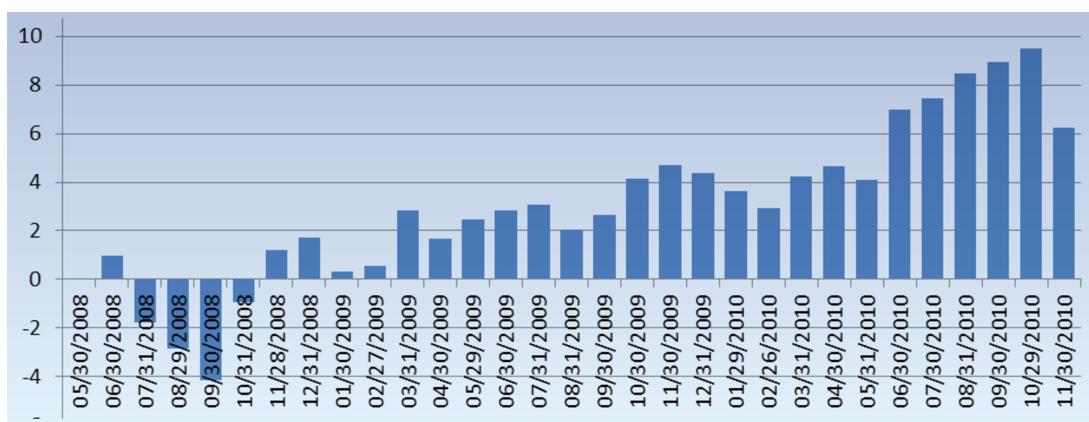
ATM Summary Novartis has one of the strongest pipelines in the pharmaceutical industry, over 50 new products set to premier in the next several years, and invests significantly in neglected diseases with broad range of commercial products in the ATM space. Awarded Medicine for Malaria product of the year in 2009. Novartis is different from many major pharmaceutical companies in that it also has strong presence in the generics market. Sandoz, one of its divisions, brought in 17% of the company's total sales in 2009. With $7.49 billion in annual sales, Sandoz is the largest generic manufacturer under a major pharmaceutical company. This investment in the generic market provides Novartis with steady revenue streams that protect it somewhat from revenue volatility due to patent expiration of its name-brand pharmaceuticals. One of the leading ATM innovators in its peer group, and one of the most comprehensive vaccine development programmes. Ranked third in the ATM Index. Few concerns identified in terms of overall sustainability strategies and implementation.

Company **Lafarge**

ATM Summary Has established global partnerships with major non-governmental organizations, including the World Wide Fund for Nature (WWF), Habitat for Humanity and CARE. Lafarge works with these partners to conserve natural resources and energy, improve employee health and living conditions, and help local communities – environmental and stakeholder themes we regard as important for this sector. Two of the group's major public health programs combat AIDS and malaria in sub-Saharan Africa. 7,000 people, or 9% of Lafarge's total workforce, were employed in the region in 2008, strong exposure therefore to ATM issues. As part of its Sustainable Development Ambitions 2012 plan, Lafarge has committed to extending its work against these diseases to other major developing countries in which it operates (China, India) by 2010 – these actions in key emerging markets highlight the company's awareness of ATM challenges in future growth regions, and position it well to deal with them. A leader in promoting sound workplace relations and healthy employees, the company has strong policies to discourage discrimination on grounds of disease concerns. Malaria kills one person every 30 seconds and significantly hampers Africa's economic development. It causes on average a third of Lafarge employee absenteeism in Africa. The group has been combating the disease since 2006. Lafarge has developed a malarial prevention and health program inspired directly by the methodology used to combat AIDS.

We used the term "monetizeable" in a previous paragraph advisedly. Once again, to test the alpha potential of the ATM signal, we converted several person-years worth of company-specific research into a "pure" ATM index, and have been running it in real-time for over two years. The result has been an annualized outperformance of approximately 260 basis points over the MSCI Health Care World Index.

IPCM Passive ATM Index vs MSCI Health Care Daily TR Gross USD



New risk and return drivers: the stock exchanges

Throughout this paper, we have stressed the critical importance for investors of generating and maintaining an information advantage. So far, so good. But all of the unique, proprietary sustainability insights in the world cannot improve the risk-adjusted returns of public markets investors unless they are at some point *recognized* by the stock markets and thereby *monetized.* Fortunately for sustainability-oriented investors, some recent and prospective reforms undertaken by emerging markets stock exchanges will make that far more likely to happen.

Much of the impetus for these reforms is being generated by the Sustainable Stock Exchanges Initiative, a joint effort of the World Federation of Exchanges, the UN Principles for Responsible Investment, the UN Global Compact, and UNCTAD. The Initiative was launched in 2009, and recently held an invitation-only conference in Xiamen, China.

The Initiative is already beginning to bear fruit. Very recently, for example, the Malaysian Stock Exchange, the Bursa Malaysia, announced that it is planning to launch an environmental, social and governance index to attract socially responsible investment (SRI) funds. Earlier this year the exchange launched two consultation papers on corporate governance, seeking input on listing requirements and on the proposed Corporate Disclosure Guide. The Malaysian program is simply the most recent; other emerging market stock exchanges with some form of "ESG" index or initiative include Johannesburg, Sao Paulo, Shanghai, Shenzen, Cairo, Tel Aviv, Seoul, and Mexico City.

While the actual implementation of these initiatives is, inevitably, somewhat patchy, it is nonetheless fair to observe that few if any *developed* market stock exchanges could match even the laggards among this group. Apparently unencumbered (or at least less encumbered) by the myopia and misconceptions about ESG which have inhibited progress in the West for decades, these emerging markets players are seizing the opportunity to leapfrog their "developed" counterparts and build market infrastructure much better suited to the realities and imperatives of a 21st century, globalized economy.

The BRICs and beyond

As the global recovery shuffles along at a glacial pace, still lurching from one crisis to another and facing much uncertainty, economies in **emerging markets** race along at breakneck speed. The IMF projected growth in developed economies at a gloomy 2.7 percent for 2010 and 2.2 percent for 2011 as western markets experience reductions in demand and employment, constraints in credit growth, and households, financial institutions and governments in those markets seek to repair their balance sheets. Projections for developing economies are more upbeat and it is expected that output will expand at rates of 7.1 percent for 2010 and 6.4 percent for 2011. Some developing countries, for example China, are growing at an annual rate of close to 10%, which is more than treble the pace of the United States this year. Their balance sheets are healthier than those of developed countries as they have relatively low debt-to-GDP ratios and current account surpluses. Other important factors behind their success include:

- The increase in the domestic component of emerging markets economies
- Increased government expenditure in areas such as infrastructure
- Private domestic consumption which will, at least to some extent, offset the decline in growth resulting from slowing exports
- A growing middle income class.

Underlining these factors is a recent article in which leading investment firms highlight the growing interest in emerging markets investment. Goldman Sachs, for example, predicts that 2 billion people in emerging markets will soon be earning more than US$5,000 per household per year. At this level, people begin to buy discretionary consumer goods, as well as to increase the protein content of their diet, with the attendant adverse environmental impacts of more intensive agricultural inputs and processes.

Furthermore, commentary from Standard & Poor's estimates that emerging markets account for approximately 80 percent of the world's population and half of global economic output, but only 13 percent of the global stock market capitalisation[2]. The latter figure is somewhat higher using

2 http://money.usnews.com/money/personal-finance/mutual-funds/articles/2010/06/22/why-emerging-markets-belong-in-your-portfolio.html

MSCI's classification, whereby 22 countries are listed as emerging economies, with their share being closer to 25 percent, a figure that continues to rise. The BRICs countries account for around half the market capitalization of the MSCI EM Index, but other countries such as South Africa, Taiwan, Mexico and Korea have a notable weighting as well, as the table below indicates:

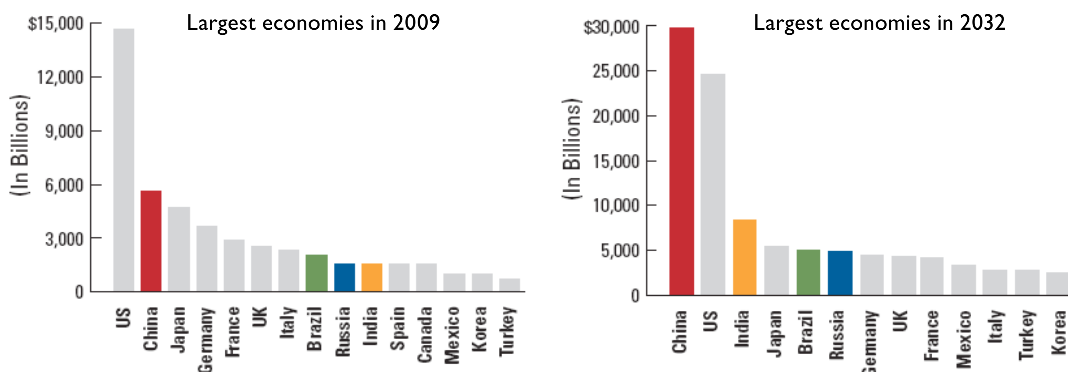
Country weightings as of Tuesday 2 February 2010

Country	# companies	Weight	Country	# companies	Weight
Brazil	75	16.4%	Mexico	23	4.4%
Chile	16	1.5%	Malaysia	42	2.8%
China	118	17.4%	Peru	3	0.6%
Colombia	8	0.7%	Philippines	12	0.4%
Czech Republic	3	0.4%	Poland	19	1.3%
Egypt	12	0.6%	Russia	28	7.0%
Hungary	4	0.6%	Thailand	23	1.3%
Indonesia	84	13.13%	Turkey	20	1.6%
India			Taiwan	117	10.8%
Korea	54	9.03%	Israel	17	2.9%
Morocco	45	3.77%	South Africa	45	7.0%
Total				**767**	**100%**

MSCI Barra

Yet, despite this, global investment funds are generally underweight in emerging markets, with allocations of only about 6 percent of assets on average. Goldman Sachs has observed that, should those funds increase their allocation to 10 percent by 2020 and 18 percent by 2030, it would translate into an additional US$4,000bn in emerging market equity purchases over the next 20 years[3]. As the chart below makes clear, the BRICs countries will lead the way:

Largest economies by gross domestic product (GDP), USD



It is always wise, however, to add a note of caution when assessing projections for market growth; as we have noted elsewhere in the paper, overall economic growth does *not* automatically translate into good investment returns.

Trouble in paradise? China and India

Conventional wisdom has it that the emerging markets are poised to continue their spectacular growth story of the past decade. Broadly speaking, we share that view, at least sufficiently to hold an overweight position in those markets. However, we suggest that investors be mindful of at least three things:

- All emerging markets are not created equal
- All that glitters isn't gold, and potentially serious problems lurk below the surface in many countries and companies
- Dynamic, successful companies do not necessarily make good stocks if, for example, they are overbought and therefore overpriced.

3 http://www.bloomberg.com/news/2010-09-08/emerging-nation-stocks-to-top-developed-market-by-2030-goldman-sachs-says.html

With respect to the first point, levels of domestic prosperity and reliance on exports vary widely from one country to another: Brazil may be more immune from declining exports, Taiwan less so.[3]

As an example of the second point, India has just reported positive growth figures, but these are tempered by other economic data that may signal some problems ahead that could act as a brake on growth in that growing economic powerhouse.

We summarise our BRICs "growth caveats" in the table below and then provide a more detailed critique of our caveats and also explore growth prospects in two BRICs nations, India and China. In short, while we share the consensus opinion that emerging markets will continue to offer growth potential for sustainable investors (partly due to the extreme information inefficiencies in sustainability data), we also believe that there is a growing weight of evidence to suggest that future growth rates may not accelerate at the levels predicted.

Under those circumstances, successful investment strategies will need to pay even *closer* attention to environmental, social and economic issues in emerging markets, and to the enormous performance disparities among companies, even within the same industry sectors. Those disparities tend to be significantly more pronounced in emerging markets than they are in the OECD countries, where performance is converging more rapidly towards higher common standards.

Possible Impediments to Emerging Markets (EM) Growth			
	1. Exports	**2. Decoupling**	**3. Markets**
Prevailing View	The West is so dependent on cheap imports from EMs that EM export growth will rise unabated.	Decoupling means that a growing middle class and higher domestic consumption will offset any fall in exports from EMs so growth will be sustained.	EM stock markets not linked to developed country stock markets, immune from falls there.
Countervailing View	West so in debt now, with such high unemployment, e.g. 10% US, 20% Spain, that governments are under pressure to invest in local manufacturing and jobs and restrict imports.	EM economies may be overheating with inflation on the rise. Could suffer financial boom and bust just like the West.	EM markets totally linked to performance elsewhere, the economy is global – when the west sneezes EMs catch a cold.
Sample Evidence	USD 600bn dollar monetary stimulus and recent G20 trade talks on currency tactics.	Ghost towns in Inner Mongolia, China, leading to bursting of property bubble, could get expensive for lenders and lead to restricted consumer expenditures, credit squeeze on the way. UAE had major property bubble	Turbulence in EM markets following volatility in wake of EU/IMF bailout of Ireland

India's economy grew at 8.9 percent in the second quarter of 2010, an advance on the brisk growth rate reported for the previous three months. These figures surpassed analyst expectations that the economy would not match the 8.8 percent year-on-year growth it recorded in the April to June quarter. The Indian government forecasts that the economy will expand 8.5 percent this year, after growing 7.4 percent last year, despite a severe drought that hit farm production and contributed to high food prices. Predictions are that an economy propelled by buoyant domestic demand has the capacity to climb towards 10 percent growth in the coming two years to rival Chinese rates of growth. The government's challenge is to keep a steady momentum and avoid at all costs any shocks to growth.

Confirmation of rising output in Asia's third-largest economy by India's statistical office will offer temporary respite to the Congress party-led government, which is currently beset by a number of damaging corruption scandals. These have exposed an unhealthy interaction between business and government that is widely suspected but rarely put on public display. The government has reached out to India's citizens with the mantra of "inclusive growth", which aims to share the high rates of growth recorded in the country's industrial hubs and large cities with the poorer areas.

However, revelations of alleged crony capitalism among key ministries and big business (one can scarcely *contemplate* such things in the "advanced" markets!) threaten to erode public confidence in the state and its institutions. India's economic growth comes against a background of tightening monetary policy as the Reserve Bank of India tries to encourage growth while contending with persistently high inflation. The central bank has steadily raised interest rates over the past year, unwinding an ultra-loose policy stance adopted to combat the effects of the global financial crisis.

While India's headline growth has rebounded to near pre-financial crisis levels, inflation remains worrisome as rising incomes, changing diets and low productivity continue to put pressure on agricultural commodities. Increased fuel costs are also an issue in a country still heavily dependent on imported oil and that could also lead to rising prices.

Another concern is the paucity of foreign direct investment at a time of increased short term capital inflows from the west. Infrastructure is identified by many policymakers as the key sector for investment, but some global business leaders, notably Jeff Immelt, the head of General Electric, have complained about an inability to execute projects that has left India trailing China. India recorded a sharp 18.8 percent drop in its foreign direct investment inflows, to $10.78bn, during the first six months of 2010[4]. All of these phenomena give rise to a healthy dose of caution, and underline the importance of deep, company-specific primary research.

And we are now seeing macroeconomic policy take centre stage: many emerging economies are cautious to allow their currencies to appreciate, in order to protect and enhance their countries' exports. While China may be the most high-profile example of this, it is hardly alone, and international economic tensions are higher than they have been for some time. Global leaders have found it difficult to agree a ceasefire in the so-called "currency war" that saw the world's biggest economies accused of artificially devaluing their money to drive export growth. This too poses a threat to sustainable economic growth in emerging markets.

The deal at the G20 Seoul Summit in South Korea in November 2010 should result in "indicative guidelines" to prevent global trade imbalances – but the agreement falls short of tougher restrictions proposed by the US. President Obama had called for a 4 percent limit on national trade deficits and surpluses, which was blocked by China and Germany, the world's two biggest exporters. UK Prime Minister David Cameron had raised concerns of the "competitive devaluation" of currencies, which some have warned could lead to a 1930s-style financial crisis. He said that one of the key factors behind the 2008 financial crisis – the build-up of trade imbalances between the high-consuming West and the productive economies of East Asia – had not gone away and might even, according to the IMF, be getting worse.

China and the US have both accused each other of driving down the value of their currencies through measures such as quantitative easing and suggestions that Beijing is keeping the yuan's value low against the dollar to aid exports at the expense of American jobs. Leaders of the world's biggest economies agreed to strengthen the role of the International Monetary Fund (IMF), which will take on trade imbalances affecting world growth. It is understood that Britain, the US and Canada overcame opposition from some other G20 members to secure agreement that finance ministers should draw up the guidelines in time for the first assessment to take place at the next G20 summit in France next June.[5]

Yet another economic threat to the emerging markets has been created by one of the most important secular shifts over the past decade: the reversal of the "vector of economic contagion". Today, it is the "developed" countries' economic fragility which poses a serious threat to the sustainability of the emerging markets' dynamism. Global macro-economic policy-makers in the West are generally agreed that a shift within emerging economies towards domestic, consumption-led growth is one of the key antidotes to the current global economic imbalances (coupled, of course with dramatically

4 http://www.ft.com/cms/s/0/ca83be2e-fc3c-11df-b675-00144feab49a.html#axzz16mswkEKX

5 5 http://www.dailymail.co.uk/news/article-1328995/G20-Seoul-Summit-World-leaders-pledge-ceasefire-currency-war.html#ixzz16Tp3RBJ7

increased savings rates in the West). They should be mindful, however, of the old dictum "be careful what you wish for", since it may be that this shift will indeed be accomplished, but largely because the weakened Western economies simply cannot sustain the current level of purchases and imports from emerging markets. In an increasingly globalized economy, we do not regard "de-coupling" as a realistic or sustainable phenomenon. Ultimately, there is really nowhere to hide.

Recent history would seem to bear that out. During the 2008 financial crisis, markets in regions from Eastern Europe to the Middle East to Asia showed they were far from immune to the stock market dislocations in Western economies.[6] In October 2008, the height of the crisis, even the oil-rich Gulf states, which at one time seemed protected from the financial turmoil affecting the West, suffered a collapse in confidence, while Russia suspended trading for two days to prevent a 14 percent slide turning into a rout. The collapse in share prices in the Far East provided a clear indication that the downturn was truly a global one. Industry in Japan and China was hit by a collapse in demand from America and Europe, which finally caused investors to lose their nerve. Hong Kong's Hang Seng index ended down 8.2 percent – its lowest level in more than two years. Not only Russia but Indonesia, Ukraine and Romania were forced to close their stock exchanges, fearing catastrophic losses, while in Brazil, one of the world's big four emerging markets, stocks fell dramatically, taking cumulative losses to 22 percent in the space of a single week.

And, while India may have bucked recent trends, Asian shares have again fallen more recently after the Chinese financial system was hit by a funding squeeze. New rules introduced in November 2010 to combat inflationary pressures mean that Chinese banks must keep more cash in reserve, leaving less cash that might find its way into business or consumer loans, much less domestic stock markets. There are also fears that interest rates may have to rise soon to tackle inflation, making borrowing more costly. It was the fifth time this year that the central bank had made such a move, and came after Chinese inflation hit a two-year high of 4.4 percent.

Zhong Jiyin, an economist with the Chinese Academy of Social Sciences, has recently opined that the latest increases in banks' reserve requirement ratios would not be enough to reverse excessive liquidity. Writing in the China Daily, he said that the government needed to raise interest rates by another 200 basis points (two percentage points) to try to curb inflation. Rising prices in China are, at present, mainly restricted to food. But analysts think price pressures could spread to other areas, unless China increases interest rates and tightens credit to deal with inflation. "There is a little nervousness about how hard the policymakers will have to slam on the brakes to contain inflation," according to an economist with Action Economics in Singapore. And a chief dealer at Pearl Investment in Singapore, said: "Investors are dumping shares because they are afraid of rate increases down the road. Banks are not going to be lending money as liberally as they wish because the government has capped lending for next year."[7]

Earlier this year some analysts had also sounded words of warning about property booms in countries such as China. The outlook in fact appears mixed. According to ING Real Estate Investment Management, China's housing market is not in a bubble and economic expansion and accelerating urbanization will support gains in property prices in the long term[8]. This view was supported by UBS Global Asset Management, who concurred that economic growth will underpin the overall domestic property market, even amid concern that a bubble has formed in first-tier cities and some second-tier ones.

The Chinese government has introduced measures to rein in record price gains, including a ban on loans for third-home purchases, higher mortgage rates and down-payment requirements for second homes. Real-estate prices jumped 12.4 percent across 70 cities in May this year, after a 12.8 percent surge in April that was the most since the data series began in 2005. China overtook Hong Kong as

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6 http://www.telegraph.co.uk/finance/financetopics/financialcrisis/3160869/Financial-crisis-Stock-markets-across-world-fall-amid-emergency-bank-rescues.html

7 http://www.bbc.co.uk/news/business-11872461

8 http://www.businessweek.com/news/2010-06-22/china-housing-isn-t-a-bubble-as-economy-underpins-say-ubs-ing.html

the world's hottest housing market in the first quarter of 2010, with prices rising at more than double the rate of anywhere else.

China's retail and residential properties remain the top desired investments for the three years ending 2012, according to a survey of 75 investors and fund managers this year by Hong Kong-based Anrev, a non-profit organization. UBS's and ING's optimism contrasts with Nomura Holdings Inc. The "bubble" in China's property market is going to burst very quickly, with prices set to fall as much as 20 percent in the next 12 to 18 months, according to a Hong Kong-based economist at Nomura. But the chairman of Morgan Stanley Asia Ltd said the government's measures are working "by all accounts. China's property boom isn't a bubble because it's supported by 'solid' demand for residential housing". So there you have it: depending on which set of "experts" you find most convincing, there either will or won't be a property bubble in China. Glad that's settled!

Mother Africa: New Locus of Opportunity

In our view, few analyses of sustainability-driven risks and, in particular, opportunities in emerging markets accord sufficient emphasis on Africa.

The continent's sustainability challenges are already well known and painfully well-documented by the UN and others: grinding poverty, disease, malnutrition, water scarcity, degrading agricultural land, and corruption comprise only a partial list. But investors ignore the other side of the Africa coin at their peril.

During the decade from 1995 to 2005, major structural and macroeconomic reforms in many countries tamed inflation, liberalized trade, and privatized many moribund state-owned enterprises. As a direct result, Africa's real GDP grew by nearly 5% per annum from 2000 to 2008, more than doubling the pace of the previous two decades. Already, the ROI achieved by foreign investors in Africa is significantly higher than that from other emerging markets, including China, India, and Vietnam.

Overall, like other emerging markets regions, Africa's growth rate going forward is expected to be substantially higher than that of the OECD countries. The continent enjoys a number of unique advantages:

- The opportunity to *quintuple* its commodity exports by accessing previously untapped natural resources (Africa has roughly 60% of the world's total supply of uncultivated arable land)
- Favourable geography for liberalizing international trade, with an enormous coastline as well as a strategic location relatively close to Asian, North American, and European markets
- A rapidly expanding labour force with growing productivity rates
- The opportunity to replace Asia as the global centre for low-cost manufacturing (Africa will have a larger labour force than China by 2040)
- A growing consumer middle class (Africa already has roughly 100 million people with annual incomes of $20,000 or more, a larger middle class than India's)
- A growing service economy (the number of telecoms subscribers in Nigeria grew from essentially zero in 2000 to over 60 *million* a decade later)
- The largely untapped potential of Africa's dynamic entrepreneurial class.

At IPCM, we find the Africa investment story – a "road less travelled" – to be a compelling one, and it will be increasingly shaped by sustainability imperatives and considerations. Having said this, we must reiterate our frequent disclaimer: strong overall economic growth is not necessarily associated with superior investment returns! Nonetheless, we believe superior returns *and* sustainability outcomes are both eminently attainable in Africa: as elsewhere, the price of achieving them will be first-rate, *differentiated* research.

Conclusion

We have argued in this paper that investors' search for sustainability alpha should be increasingly focused on emerging markets. Why? In brief, because both the greatest sustainability risks *and* potential rewards are to be found there. Two things in particular make the GEMS sustainability investment case compelling:

- The relative information inefficiencies surrounding sustainability information and, more importantly, analysis; and
- The greater inter-company *dispersion* in sustainability performance and positioning; the gap between top and bottom quartile companies tends to be much greater than that among OECD companies.

These two conditions create the perfect environment for the development and continuous enhancement of a significant *information advantage* for investors. The rewards for in-depth, proprietary research promise to be greater in emerging markets than they are elsewhere. It only remains for investors to recognize this, and to act accordingly.

This is one of a series of research documents published by Inflection Point Capital Management.
Dr Matthew Kiernan (pictured below, left) and the IPCM investment team are continually undertaking new studies into an ever-widening range of sustainability data and research sources. In doing so, we believe that we can achieve an even greater "transmission efficiency" of our information advantage, integrate both sustainability and financial research more seamlessly, and optimize and direct the entire investment product development process from start to finish.
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