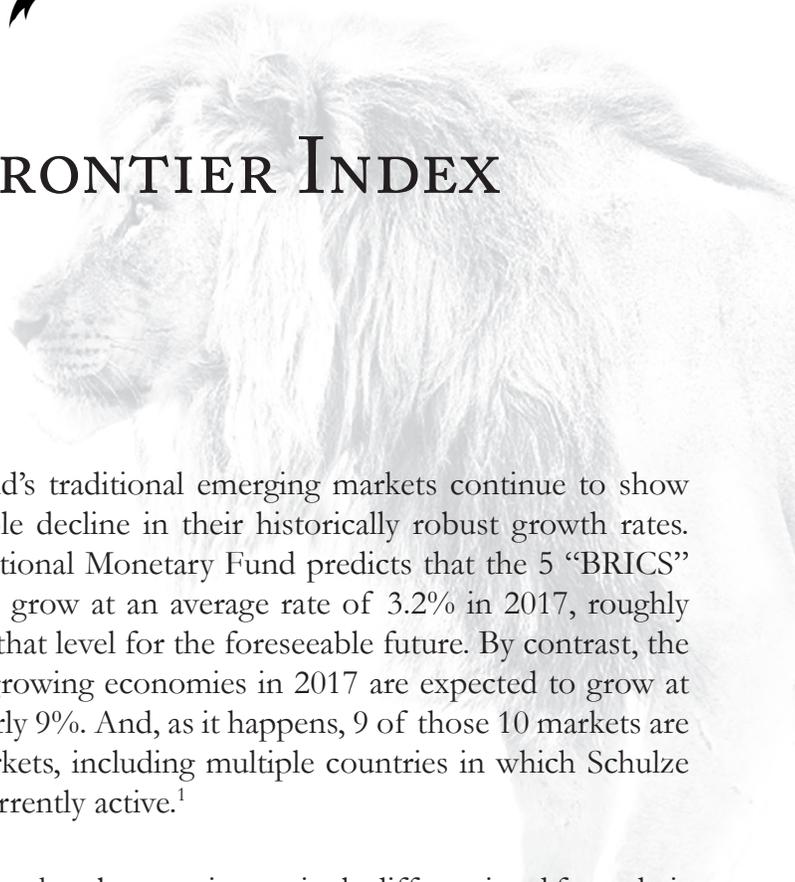


SCHULZE GLOBAL FRONTIER INDEX



The world's traditional emerging markets continue to show a notable decline in their historically robust growth rates. The International Monetary Fund predicts that the 5 “BRICS” markets will grow at an average rate of 3.2% in 2017, roughly flatlining at that level for the foreseeable future. By contrast, the ten fastest-growing economies in 2017 are expected to grow at rates of nearly 9%. And, as it happens, 9 of those 10 markets are frontier markets, including multiple countries in which Schulze Global is currently active.¹

As frontier markets become increasingly differentiated from their traditional emerging market cousins, investors are taking notice. Many institutional investors are beginning to shift portions of their portfolio allocations from “emerging” to “frontier”; even normally staid investors like major endowments and pension funds are devoting increasing resources towards exploring opportunities in Africa (ex-South Africa), Latin America (ex-Brazil), and Asia (ex-China and ex-India). Indeed, just as the past 10 years saw a sizable shift in global allocations towards emerging markets, many are forecasting that the next 10 years will see a shift towards the frontier economies.

However, despite this growing interest in the frontier, a logical method for distinguishing “frontier markets” from the broader “emerging markets” remains elusive; in our view, the current frontier indexes apply a methodology that results in a muddle of different markets, only some of which are truly frontier – thereby failing to provide investors with proper guidance. By following the existing indexes, investors may thus think they are attaining exposure to frontier markets – and the risk-reward profile such markets provide – when in fact they are not.

Schulze Global Investments
65 Chulia Street
48-03/04 OCBC Centre
Singapore 049513

For more information please contact:
info@schulzeglobal.com or visit
www.schulzeglobal.com.

¹ The exception is India which has displayed faster growth than its BRICS peers.





Ulaanbaatar, Mongolia.

The firm manages the Schulze Global Mongolia Debt Facility (SMDF), an OPIC-backed debt fund, and Schulze Equity Partners, a newly formed equity fund.

It is time to establish a more sound and useful methodology for determining what constitutes a frontier market. In this White Paper, we analyze existing methodologies and provide a better approach. In addition, we reveal the results of our approach: the Schulze Global Frontier Index.

EXISTING METHODOLOGIES AND INDEXES

The term “frontier markets” was coined by the International Finance Corporation (“IFC”) in 1992. It refers to “a subset of emerging markets that are smaller and less accessible but still investable.”

The IFC’s definition accurately captures the nature of a frontier market. The trouble, however, lies in the IFC’s methodology for determining what countries then meet that definition. That methodology focuses specifically on certain features of those countries’ public capital markets. It looks at the total number of listed companies, the market’s liquidity, the average market cap, and the total market cap, among other things. On the basis of these factors, it classifies a market as frontier.

Leading frontier indexes, including S&P Frontier Broad Market Index, the MSCI Frontier Markets 100 Index, the FTSE Frontier 50 Index, and the Russell Frontier Index all apply the IFC’s methodology to some extent or another. Various investors, media outlets, and academics then use these indexes to derive their own lists of frontier markets.

But the underlying methodology suffers from a fatal flaw: it relies on an analysis of countries’ public stock markets, which is not a suitable method for establishing frontier credentials. Indeed, a review of the countries that have found their way onto these various frontier indexes illustrates the point.

Take the MSCI index, for example – which many today consider to be the most definitive. The index is adjusted annually and currently includes 30 countries. The index includes some countries that certainly meet the definition of a frontier market: Bangladesh, for example, or Togo.

But it also includes countries like Bahrain, Kuwait, Lithuania, and Estonia. Bahrain and Kuwait are relatively wealthy countries, with per capita GDP of \$28,000 and \$34,000, respectively. Both countries are substantially integrated into the global economy (in part due to significant penetration of multinational businesses in the market) and display relatively high levels of financial



sophistication. The same goes for Estonia and Lithuania, with per capita GDP of \$17,000 and \$14,000, respectively, and full-fledged membership in the European Union. All of these countries are at a completely different developmental stage than, for example, Togo – a real frontier market with per capita GDP of \$600 that remains largely cut off from the global economy.

If the inclusion of certain countries under the “frontier markets” banner is concerning, the exclusion of others is even more troubling. The MSCI index reveals that a whole swath of Africa is left off entirely. These overlooked countries include such attractive frontier markets as Ethiopia, Uganda, and Cameroon. The same holds true in Asia, where Mongolia, Nepal, and Cambodia do not make it onto the list at all. The Caucasus is also nearly absent, with no inclusion of interesting markets like Georgia, Azerbaijan, and Armenia. Even some frontier destinations in Latin America are ignored.

And the MSCI index is not alone. All major frontier-related indexes exhibit the same deficiencies – both in regards to inclusion and exclusion of certain countries.

Of course, with respect to the excluded countries it is important to note that many of them are left off the prevailing indexes because they do not have stock exchanges, and thus cannot be engaged through a public equity strategy. But that fact only serves to demonstrate a common misconception about frontier markets: namely, that meaningful exposure to frontier markets can actually be obtained through buying listed securities. As we have explained elsewhere, one of the key realities of frontier markets is that they very often cannot be suitably engaged through public instruments. The fact that the MSCI Frontier index is nearly flat over a 10 year period attests to the fact that a public equities strategy is ineffective when it comes to leveraging robust growth in the underlying economies of frontier markets.

Increasing numbers of sophisticated investors are starting to recognize this misconception and are therefore seeking entry to frontier markets through private equity, creating all the more urgency for an index that is not tethered to a public equity approach.

THE SCHULZE GLOBAL FRONTIER INDEX

To address this problem, Schulze Global has built its own index of frontier markets: The Schulze Global Frontier Index (“SGFI”).





Addis Ababa, Ethiopia.

In Ethiopia, Schulze Global manages the Ethiopia Growth and Transformation Fund (EGTF), an \$86.5 million fund backed by several of the world's leading development finance institutions, as well as Africa-focused funds of funds and U.S. and European family offices.

To produce the SGFI, Schulze Global applies the following methodology:

Step 1 – Per Capita GDP: The first step in building the SGFI is to analyze per capita GDP. Per capita GDP provides an important indication of a market's level of development. If a market exhibits low per capita GDP relative to the global average, then it will generally demonstrate other key frontier market characteristics – such as lower levels of financial sophistication, fewer multinational businesses, and a prevalence of family enterprises.

Step 2 – Total GDP: The second step is to analyze total GDP. This step is intended to weed out markets that would otherwise qualify as frontier based solely on their per capita GDP. Such countries, for example China and India, are so large that they have become integrated into the global economy even though their per capita GDP remains low. They are more advanced and more globally connected than their per capita GDP alone would suggest, and therefore should not be considered frontier markets.

Step 3 – Removal of Conflict Markets and “Micro” Markets: The next step is to manually remove those countries suffering from active armed conflict. Certain countries, such as Syria and Yemen, are better labeled “conflict markets” rather than frontier markets. Such markets cannot be reasonably engaged through any traditional investment structure and therefore should be excluded from the SGFI entirely, until the conflict subsides. In addition, all countries with a GDP of less than US\$ 1 billion (almost entirely Pacific and Caribbean island nations) are excluded due to the fact that the market would be too small to absorb a reasonable amount of capital.

Step 4 – Relative Ranking: The final step is to take the remaining markets and rank them by percentile in accordance with the information derived from the first two steps, so that the ranking is made on a relative (rather than absolute) basis. Because we believe that per capita GDP is generally the most important indicator of a market's frontier status, we weight per capita GDP by 1.5x. The results are then normalized so that all countries fall along a scale of 1 to 10. Countries that rank below a 5 on this 10-point scale comprise our SGFI.

Our process is straightforward, but the resulting SGFI is far more accurate and actionable than any of the existing frontier indexes – especially for those investors looking outside the public equities space. The latest SGFI is attached as Annex I.





Tbilisi, Georgia

Schulze Global recently conducted a first close on Caucasus Clean Energy Fund (CCEF), a \$100 million fund dedicated to pursuing investment in Georgia's hydropower sector.

It is worth noting that the SGFI's ranking system does not take a view on whether certain countries are "more" or "less" frontier. Rather, if a country scores below a 5 on the SGFI, it is considered frontier by Schulze Global and no further distinctions are made to determine the extent of the country's frontier bona fides.

It is also worth noting that Schulze Global does not, in this White Paper, opine on which frontier markets are more attractive investment destinations than others. Some frontier markets are likely to perform well over the next 10 years, whereas some are likely to perform poorly; some present significant challenges from the standpoint of political risk and other considerations, whereas some present a more straightforward value proposition. Investors must reach independent conclusions in this respect – indeed, Schulze Global has its own views on how to decide which frontier markets to invest in, and discusses that methodology in a separate White Paper.

But the SGFI provides a critical starting point for any such analysis, by ensuring that investors begin with the right set of countries.

CHANGES SINCE LAST SGFI EDITION

The last SGFI was published on the basis of data from 2013. Largely, the list of countries has remained the same; however, several oil-dependent economies such as Azerbaijan, Gabon, and Angola which were previously classified as non-frontier now appear on the SGFI. The clear reason for this is the relatively low oil price which has prevailed over the past years, which has led to significantly lower GDP in these markets, ensnaring investors who bet on a commodities play.

CONCLUSION

We applaud investors' growing interest in frontier markets. But as investors turn their attention towards the frontier, it is critical that they possess an accurate list of the frontier geographies – something the current indexes do not provide. The SGFI, by contrast, provides an accurate and actionable reference point for investors to guide them towards real frontier markets. It is especially helpful for those investors looking for opportunities through the lens of private equity – which Schulze Global firmly believes is the most suitable strategy for engaging the frontier.



ANNEX I: SCHULZE GLOBAL

FRONTIER MARKET INDEX (2017)

Albania	Grenada	Paraguay
Angola	Guatemala	Rwanda
Antigua and Barbuda	Guinea	Saint Lucia
Armenia	Guinea-Bissau	Senegal
Azerbaijan	Guyana	Serbia
Bangladesh	Haiti	Seychelles
Barbados	Honduras	Sierra Leone
Belize	Jamaica	Solomon Islands
Benin	Jordan	Sri Lanka
Bhutan	Kenya	Sudan
Bolivia	Kyrgyz Republic	Suriname
Bosnia and Herzegovina	Lao P.D.R.	Swaziland
Botswana	Lesotho	Tajikistan
Burkina Faso	Liberia	Tanzania
Burundi	Madagascar	Timor-Leste
Cabo Verde	Malawi	Togo
Cambodia	Maldives	Tunisia
Cameroon	Mali	Uganda
Central African Republic	Mauritania	Uzbekistan
Chad	Mauritius	Vietnam
Congo, Dem. Rep. of the	Moldova	Zambia
Congo, Republic of	Mongolia	Zimbabwe
Côte d'Ivoire	Montenegro	
Djibouti	Morocco	
El Salvador	Mozambique	
Eritrea	Myanmar	
Ethiopia	Namibia	
Fiji	Nepal	
FYR Macedonia	Nicaragua	
Gabon	Niger	
Georgia	Pakistan	
Ghana	Papua New Guinea	



ABOUT SCHULZE GLOBAL

Schulze Global is a private equity firm focused on the world's most dynamic frontier markets. Founded by Gabriel Schulze and the Schulze family, Schulze Global has developed a unique approach to successfully investing in frontier markets. That approach combines rigorous financial analysis, a deep understanding of the local culture and business community, and strong in-country relationships.

Schulze Global looks for frontier markets that are undervalued because the global investment community either overestimates the risks related to the market, or underappreciates the market's growth potential. The scarcity of capital in these markets means that Schulze Global is able to generate high risk-adjusted rates of return while at the same time making a valuable, double-bottom-line ("DBL") contribution to the country's development.

Singapore (HQ)
65 Chulia Street
#48-03/04 OCBC Centre
Singapore 049513
+65 3158 1820
+65 6491 5139 (f)
info@schulzeglobal.com

Singapore | Tbilisi | Addis Ababa | Colombo | Abidjan | Ulaanbaatar

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