

I recently re-read Fred Wilson’s 2009 blog post on “[The Venture Capital Math Problem,](#)” and it got me wondering whether emerging markets private equity and venture capital (“EM PE / VC”) might face similar capacity constraints to U.S. venture.

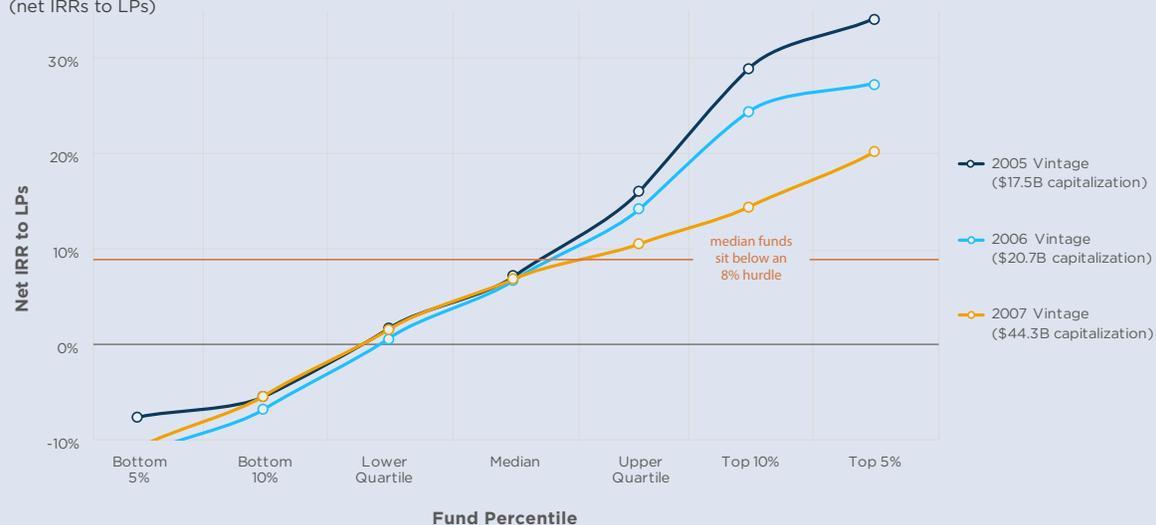
If you haven’t read Fred’s post, you should. But in essence, Fred looks at the fundraising figures for U.S. venture and, after making some assumptions about required returns, determines that the volume of exits caps the industry between \$15B to \$17B in annual fundraising. In his words, “the venture capital asset class does not scale.”

What I thought I’d do is take a page from Fred’s playbook and see whether we can back into a reasonable estimate of the absorptive capacity of EM PE / VC.

Now, similar to U.S. venture, the returns tend to follow a power law, with the top 10% of funds delivering the bulk of the returns. What makes this a bit difficult to discern is the fact that the bottom 10% of funds destroy capital. So, rather than an asymptotic curve, it appears like a linear relationship (see Exhibit 1).

**Exhibit 1: EM PE / VC returns follow a power law**

**Distribution of EM PE / VC returns by vintage year and fund percentile**  
 (net IRRs to LPs)



Source: Cambridge Associates, Thomson Reuters Datastream, Portico Advisers  
 Note: Includes EM buyout, growth equity, and venture capital funds; data as of Q2 2017

The big takeaway from this chart—*surprise!*—is that manager selection is absolutely critical. Another takeaway is that returns deteriorate as capital flows increase (from \$17.5B in 2005 to \$44.3B in 2007; remember these figures—they will come in handy later). Yet another takeaway is that half of these managers aren’t hitting an 8% hurdle.

## The Impossible Equation

As with U.S. venture, most LPs are hoping for 3x gross returns from EM funds, even if recent history hasn't given them much basis for these hopes. Following Fred's logic, we can impute the expected value of exits required for a given volume of fundraising.

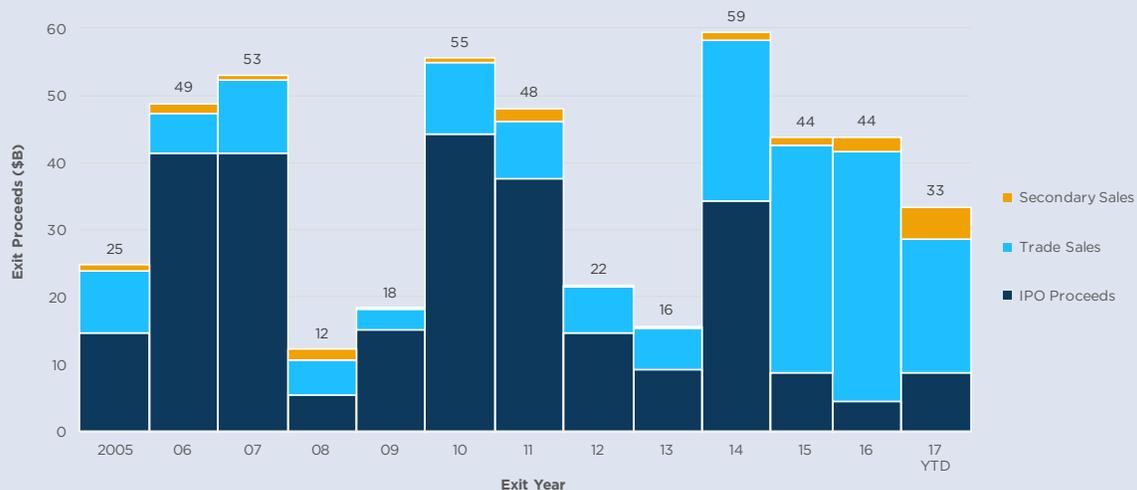
According to EMPEA, fundraising for EM buyout, growth equity, and venture funds averaged about \$40B annually from 2011-2016. For the entire field of managers to generate 3x gross returns, they need to turn \$40B into \$120B each year.

Of course, this assumes that managers are obtaining 100% of the shares for each investment. Given that growth equity and venture capital are the predominant strategies, this is an unrealistic assumption, but let's keep this simple and use \$120B as the target.

Since 2005, private equity-backed exits of EM portfolio companies have ranged between \$12B and \$59B per year, with an average of about \$37B (see Exhibit 2). This is not even close to the \$120B required for the industry to meet a 3x target.

### Exhibit 2: Since 2005, the value of exits has averaged about \$37B per year

**Value of exit proceeds from EM-based portfolio companies**  
(exit proceeds by year and channel)



Source: Thomson Reuters, Portico Advisers  
Note: All private equity exits for companies with head offices in emerging markets; data as of 6 December 2017

Let's be generous and leave out the five years when exit values were less than \$30B. The average then jumps to \$48B, which would lead us to an asset class that can absorb \$16B per year. Remember Exhibit 1 and the capitalization for 2005-vintage funds?

Now, \$16B of investment per year for economies that constitute nearly 60% of global GDP (on a PPP basis) seems preposterous. It is! It's utterly absurd.

One could argue that these exit data are capturing a fraction of the activity taking place. Fine. Let's double the figures. Maintaining our (unrealistic) assumption that GPs are acquiring 100% of all portfolio companies, and doubling the "generous" average to \$96B in exits per year, leads us to impute an asset class that can absorb \$32B per year.

And yet, the performance figures for EM PE suggest that may be too high of a hurdle (see Exhibit 3).

### Exhibit 3: As capital flows increased, distributions declined

EM PE / VC fundraising and net distributions to paid-in capital  
(\$B; DPI multiple)



Source: Cambridge Associates, EMPEA, Thomson Reuters Datastream, Portico Advisers  
Note: Performance data includes EM buyout, growth equity, and venture capital funds; data as of Q2 2017

Parenthetically, note that EMPEA’s fundraising statistics don’t include funds with global mandates, such as Warburg Pincus’s flagship vehicles. According to Thomson Reuters, Warburg has generated \$2.8B in EM exits YTD, or nearly 9% of the total. This suggests that the fundraising figures understate the volume of exits required, and the exit figures overstate the amount of exits that EM-dedicated funds are delivering. Let’s move on.

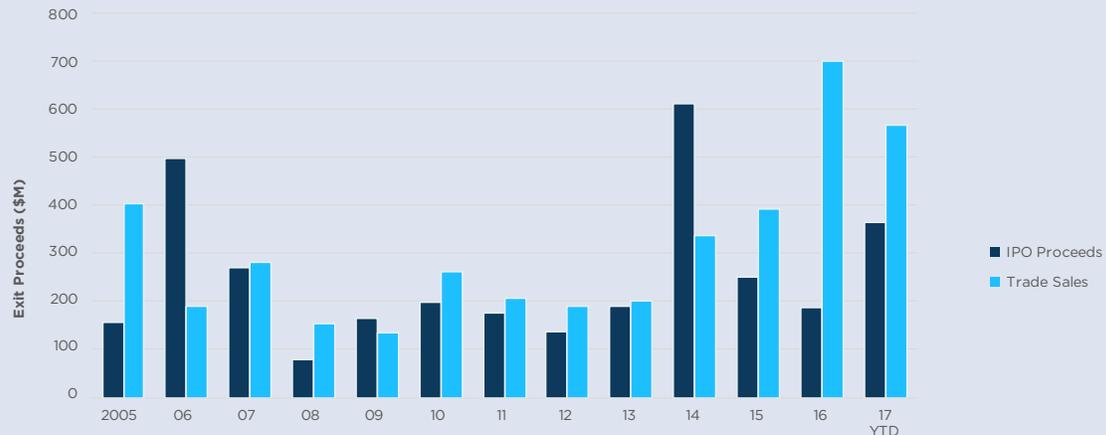
## Modeling the Future

It’s irresponsible to draw straight-line conclusions about the future from the recent past. History doesn’t move linearly, after all. More importantly, emerging markets haven’t reached “steady state.” Their economies and consumption expenditures are expanding rapidly, their capital markets continue to develop, and local corporates have a growing appetite for acquisitions. Emerging market exit values should rise over time.

In fact, that’s exactly what we are seeing (see Exhibit 4). Since 2008, average exit proceeds from IPOs have grown from \$80M to \$366M, while average proceeds from trade sales have increased from \$154M to \$568M.

### Exhibit 4: Average exit values have increased steadily since 2008

Average value of exits from EM-based portfolio companies by year and channel  
(\$M)



Source: Thomson Reuters, Portico Advisers  
Note: All private equity exits for companies with head offices in emerging markets; data as of 6 December 2017

There is a secular evolution away from exits via IPO to exits via trade sale, and this is true whether you look at the data by value (as in Exhibit 2) or by count (see Exhibit 5). (Note that the abundance of IPOs in 2010-11 is almost entirely a function of China's pre-IPO craze, when listing approvals—though a black box—were clearly more lenient.)

### Exhibit 5: Excluding China's pre-IPO craze, there is a secular shift toward trade sales

Exits from EM-based portfolio companies by year and channel (#)



Source: Thomson Reuters, Portico Advisers  
 Note: All private equity exits for companies with head offices in emerging markets; data as of 6 December 2017

So, let's use this as a model for our world going forward:

- Investors expect 3x gross from EM funds  
 (reasonable assumption, unreasonable expectation)
- GPs acquire 50% stakes  
 (reasonable assumption)
- Average exit proceeds are \$800M  
 (a 50% premium over the three-year moving average for trade sales)
- Trade sales are available for all sellers at the average price  
 (unreasonable assumption)
- IPOs are available for all firms at the average price  
 (LOL)

What might this world suggest about fund sizes?

Given our investors' return expectations and our exit proceeds, let's determine the initial deal value using the following equation:

$$\frac{\text{Exit Value}}{\text{Expected Return Multiple}} \times \% \text{ Stake} = \text{Initial Deal Value}$$

This gives us a deal value of \$133M:  $(\$800M / 3x) \times 50\% = \$133M$ .

It's silly to generalize across emerging markets, but \$133M seems like a reasonable deal size for larger economies, where a transaction between \$100M and \$150M would sit neatly within the mid-market. It's on the high side for smaller economies, where the pool of investable companies available at 1x to 2x revenue multiples is shallow, indeed.

Basically, if we tighten up the assumptions, it suggests that the sub-\$1B segment is where investors should look for EM-dedicated managers.

## Parting Thoughts

This thought exercise has illustrated that:

- Manager selection is absolutely critical—top-decile funds generate the majority of the excess returns;
- Returns decline as fundraising increases;
- The historical value of exit proceeds imputes an industry size of \$16B per year; and,
- Investors should consider EM funds less than \$1B in size.

The historical value of exit proceeds imputes an industry size of \$16B per year

Now, consider a sensitivity analysis of industry-wide required exit proceeds given fundraising amounts and expected gross return multiples (see Exhibit 6). Assuming that GPs are taking 100% stakes in portfolio companies—a heroic assumption—and that recent fundraising hauls continue, then the industry needs to double the volume of exit proceeds (and then some) to between \$105B and \$135B each year.

If we make a more realistic assumption, that GPs are taking 50% stakes, then the required exit values could double to between \$210B and \$270B. This is 4x to 5x greater than the exit proceeds EM portfolio companies have generated historically. This is quite a high bar.

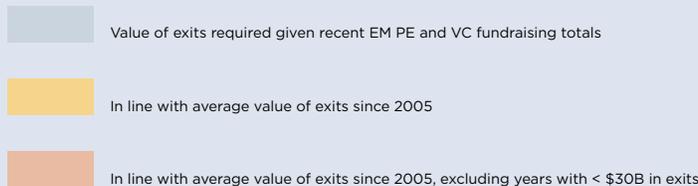
### Exhibit 6: Sensitivity analysis of required exit volumes in emerging markets

Value of Exit Proceeds Required, Assuming 100% Stakes (\$B)

Fundraising (\$B)	Gross Return Multiple				
	1.0x	1.5x	2.0x	2.5x	3.0x
20	20	30	40	50	60
25	25	38	50	63	75
30	30	45	60	75	90
35	35	53	70	88	105
40	40	60	80	100	120
45	45	68	90	113	135
50	50	75	100	125	150

Value of Exit Proceeds Required, Assuming 50% Stakes (\$B)

Fundraising (\$B)	Gross Return Multiple				
	1.0x	1.5x	2.0x	2.5x	3.0x
20	40	60	80	100	120
25	50	75	100	125	150
30	30	45	60	75	90
35	70	105	140	175	210
40	80	120	160	200	240
45	90	135	180	225	270
50	100	150	200	250	300



Source: Portico Advisers

My verdict: the EM PE / VC industry does not scale. Why? My hypothesis is that the economics of the traditional fund model aren't aligned with the investment landscape in EM. Perhaps we'll cover this in a future piece.

LPs should reassess their return expectations for EM PE / VC and ensure that they are realistic. If LPs can't get access to the private equity or venture capital managers with whom they really want to invest, then they may wish to consider alternative private markets strategies in EM—such as private credit funds, holding companies, and hybrid funds, to name a few—buckets be damned.

For their part, fund managers must ensure that their investment strategy and fund structure are aligned with the investable universe of companies in their target geographies. They must have a differentiated value proposition, and they must be able to communicate it clearly.

A parting question: is the issue that emerging markets can't absorb \$40B of investment per year, or that most of the managers should find new jobs?

My verdict: the EM PE / VC industry does not scale. Why? My hypothesis is that the economics of the traditional fund model aren't aligned with the investment landscape in EM.



**PORTICO  
ADVISERS**

**Michael Casey**

*Founder & Managing Director*

E: [mike@porticoadvisers.com](mailto:mike@porticoadvisers.com)

O: +1 202 657 6736

## **ABOUT PORTICO**

Portico Advisers, LLC is a research-driven private markets advisory firm that serves investors active in Africa, Asia, Eastern Europe, and Latin America. Portico offers a suite of fundraising and transaction advisory services for fund managers, and undertakes custom research studies for institutional investors.

Learn more at [www.porticoadvisers.com](http://www.porticoadvisers.com).

## **DISCLAIMER**

The information and opinions in these materials have been prepared by Portico Advisers, LLC ("Portico Advisers") solely for informational and discussion purposes. Portico Advisers does not undertake to update these materials and the opinions and conclusions contained herein may change without notice. These materials are provided on an "as is" basis. Portico Advisers disclaims all warranties, express or implied, including, without limitation, the warranties of merchantability, fitness for a particular purpose, and non-infringement. These materials are provided with the understanding that Portico Advisers is not rendering professional advice and services. Portico Advisers does not make any warranty that the information in these materials is error-free, omission-free, complete, accurate, or reliable. Nothing contained in these materials is intended to constitute legal, tax, securities, or investment advice. Past performance is not necessarily an indicator of future performance. These materials do not constitute a solicitation or any offer to buy or sell any security or financial instrument, or to participate in any investment strategy. The logos, trademarks, and service marks contained herein are the property of their respective owners. Copyright © by Portico Advisers, LLC 2017, all rights reserved. This report or any portion hereof may not be reprinted, sold, or redistributed without the written consent of Portico Advisers.