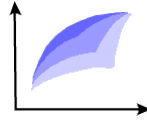


Efficient Frontier



An Online Journal of Practical Asset Allocation

Edited by William J. Bernstein
and Susan F. Sharin

Fall 2004

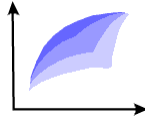
Table of Contents

- [Luigi Does It Yet Again](#)
- [The Philanthropy of the Uninformed](#)
- [Links of the Month: Streaming Economics;](#)
How to *Really* Listen to Streaming Audio

[Home](#)

Copyright © 2004, William J. Bernstein. All rights reserved.

Efficient Frontier



William J. Bernstein

Luigi Does It Yet Again

Whether you're an economist, politician, or revolutionary, a keen eye for human institutions and their effects is a priceless skill. Hamilton, Madison, and Adams all viewed the United States as a tenuous political experiment, and were it not for their penetrating institutional insights, that experiment would not have succeeded. Adams, almost alone among the founding fathers, saw from the outset that the French Revolution would turn out badly; Jefferson, on the other hand, cheered it on, and even decades later thought that the U.S. should undergo a similar cleansing exercise once each generation.

Institutional insight is also critical in the capital marketplace, and few observers of this area possess the historical breadth and analytical insight of Luigi Zingales of the University of Chicago. Readers of these pages will recall discussions of his work on corporate ownership structure in the [Summer 2000](#) and the [Fall 2003](#) issues. In the April 2004 *Journal of Finance*, Professor Zingales, along with Alexander Dyck, published a landmark paper on "the private benefits of control." (A [working paper](#) version of the article is available from Zingales' website.)

Think about the price difference between the voting and nonvoting shares of a publicly held company. In nations where "agency conflicts"—the tendency for owners and managers to loot the company, that is to say, to steal from minority shareholders—are strictly punished, the benefits to corporate control are relatively small, and thus the gap between the prices of voting and nonvoting shares will likewise be small. And where the punishment risk of agency conflicts is small and the reward large, so too will be the gap between the prices of voting and nonvoting shares.

Of course, since few public companies issue voting and nonvoting shares, this gap is not very helpful in measuring just how well minority shareholders—that is, you and I—are treated in any given nation. However, we can get much the same information from the sale prices of privately negotiated large "controlling blocks" of shares, as compared to the market price. After all, even with one share class, shares sold in a very large block are essentially voting shares, whereas a small lot essentially represents nonvoting shares. Here, then, are the premia that Zingales and Dyck found for controlling block sales, from lowest to highest:

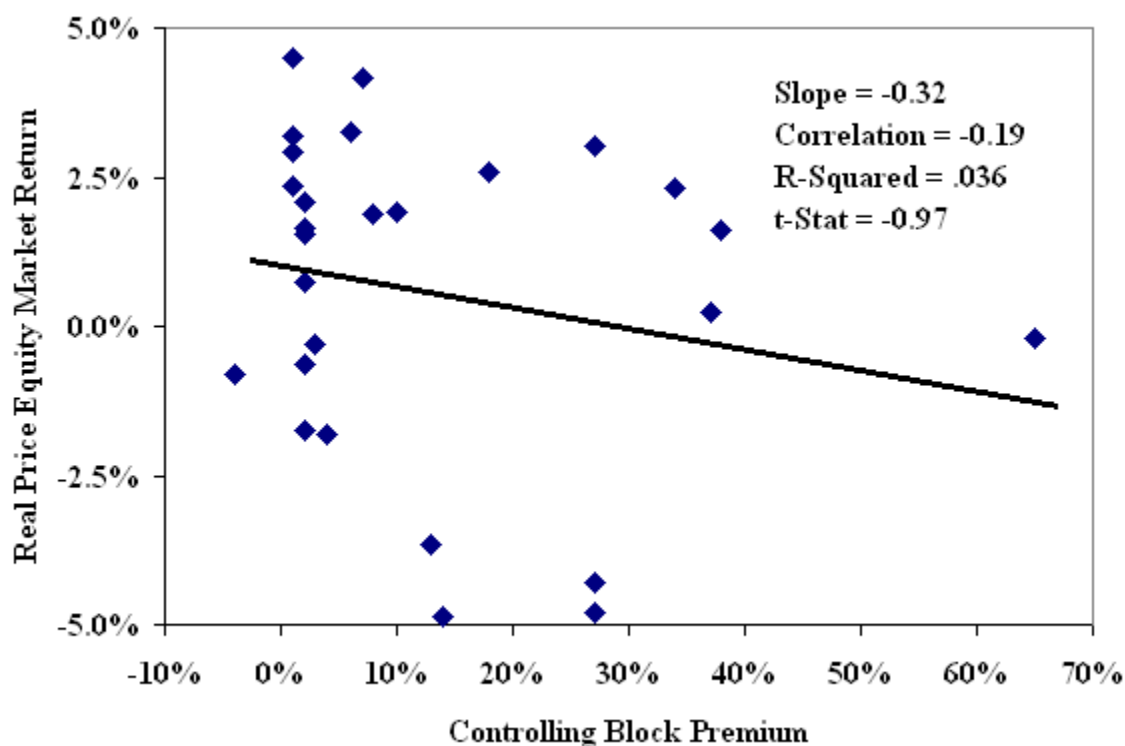
Japan	-4%
Hong Kong	0%
Taiwan	0%
Canada	1%
Norway	1%
United Kingdom	1%
United States	1%

Australia	2%
Finland	2%
France	2%
Netherlands	2%
Portugal	2%
South Africa	2%
New Zealand	3%
Singapore	3%
Egypt	4%
Spain	4%
Switzerland	6%
Indonesia	7%
Malaysia	7%
Sweden	7%
Denmark	8%
Germany	10%
Thailand	12%
Philippines	13%
Poland	13%
Peru	14%
South Korea	16%
Chile	18%
Argentina	27%
Colombia	27%
Israel	27%
Venezuela	27%
Mexico	34%
Italy	37%
Turkey	37%
Austria	38%
Czech Republic	58%
Brazil	65%

Very roughly, this ranking correlates fairly well with our prejudices about the rule of law (as well as water quality) in these nations, although not perfectly—one does not expect to see Sweden, Denmark, and Germany (nor Indonesia, for that matter) clustered in the middle of such a list, nor Austria at the bottom. Zingales and Dyck did, in fact, find that this ranking correlated well with standard measures of accounting rigor, laws defining director accountability, competition laws, per capita newspaper circulation, Catholicism, tax

compliance, and, of course, rule of law. The most intriguing relationship is the least obvious—the level of tax-law compliance. Why should this correlate with the level of abuse by controlling shareholders? Simple: A government that collects a significant amount of corporate taxes effectively becomes a minority shareholder in all of the nation's companies and thus develops a healthy concern for corporate governance. Effective enforcement of corporate tax laws thus serves to precisely align the government's interest with that of the investing public.

This concept pretty much corresponds to our ideas about the importance of institutions—that is, government regulation—of the security markets. What does this mean for the global investor? To find out, I've plotted the above data versus the Jorion/Goetzmann database (*Journal of Finance*, June 1999) of twentieth-century returns for all nations with a greater than 35-year market history. Note that that these returns are inflation-adjusted and do not include dividends.



As expected, nations with high controlling-block premia have lower returns. But not by much; the slope of the regression is only -0.032 , meaning that even the nations near the bottom of the list with premia in the 30% range—Venezuela, Mexico, Italy, and Turkey—carry a return penalty of about 1%. There is also a great deal of scatter, with a relatively low correlation (-0.19), a negligible R-squared, and a nonsignificant t-Stat.

What to conclude? From the investor's perspective, not much. Yes, there is a slight penalty to investing in nations with poor minority-share protection, but the markets, as a whole, compensate by lowering prices and keeping returns, after all the monkey business, more or less in line with returns in nations with better-developed protections.

From the societal perspective, however, the effects are much more serious, because poor minority-shareholder protection increases the cost of capital. Zingales and Dyck found, for example, that nations with high controlling-block premia had higher concentration of ownership, fewer IPOs, and, in general, more poorly developed equity markets.

So, prudent, valuation-driven investing in less developed nations, while risky, is still likely to provide adequate returns. Just don't forget the bodyguard, the water purifier, and the gold bars

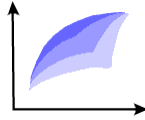
when you visit.

A rectangular button with a wood-grain texture and the word "Home" in a dark, sans-serif font.

Copyright © 2004, William J. Bernstein. All rights reserved.

The right to download, store and/or output any material on this Web site is granted for *viewing use only*. Material may not be reproduced in any form without the express written permission of William J. Bernstein. Reproduction or editing by any means, mechanical or electronic, in whole or in part, without the express written permission of William J. Bernstein is strictly prohibited. Please read the [disclaimer](#).

Efficient Frontier



William J. Bernstein

The Philanthropy of the Uninformed: The Better It Gets, The Worse It Gets

It's no secret that I'm an incorrigible optimist. When I look at the broad sweep of the human saga, I'm overwhelmed by history's generosity—two hundred years of ever-increasing Western prosperity born on a continuous stream of technological progress. Only those untutored in the squalor of the pre-modern world would deny that the quality of life, morals, social justice, and even political discourse has improved immeasurably over the decades and centuries. For those libertarian romantics who've saved up for a time journey back to the late-nineteenth century Valhalla of perfect Anglo-American capitalism, I have some advice: don't forget your antibiotics, antiemetics, nose plugs, and Mace.

Likewise, to posit that the fruits of market capitalism benefit mainly the capitalists and not the common man is to betray an inexcusable ignorance of basic economics. In the past century, the portion of GDP accruing to labor, capital, and land has remained reasonably close to the 80/10/10 ratio obtained ever since such data first became available. Manifestly, the major beneficiary of the system is the working class.

Contrary to popular expectation, the fruits of capitalism are slowly being prised from the capitalists' greedy fingers. I am speaking, of course, in the broad historical sense. Consider that the first recorded loans in Sumeria paid interest of 20% on silver and 33% on grain. While these high rates certainly carried with them risk of default and confiscation, there can be no doubt that life was good for the first few Sumerian protocapitalists, that is, those who actually had excess silver and grain to loan.

Likewise, the first English joint stock companies paid their investors quite handsomely. In its first several decades at the start of the seventeenth century, the East India Company (EIC) could not even attract permanent capital—each voyage was separately funded, the investors completely paid off by the precious contents of the flotilla as it returned up the Thames eighteen months later. Consummate with the highly risky nature of the enterprise, returns were usually well north of 100%.

Not until the EIC proved that it could reliably deliver the goods did shareholders permanently surrender their capital in return for an annual low double-digit dividend. By the turn of the nineteenth century, the Crown could sell consols (perpetual bonds) at slightly more than two percent. (Hence Bagehot's famous dictum: "John Bull can bear many things, but he cannot bear two percent." That is, low rates encouraged imprudent speculation on chancy enterprises. *Plus ça change.*)

In Britain, the U.S., and the rest of the world, prudent investors were wary of common stocks, and equity capital remained harder to come by. No more. In recent years, the expected return on equity has plummeted around the globe. Existing companies—"seasoned issues"—yield less than 2%, and even the best case scenario has their *per-share* dividends and earnings growing only slightly more rapidly than inflation. (I've italicized "per share" for a reason. The best evidence is that in the U.S., companies dilute their outstanding shares by about 2% per year; this factor must be subtracted from the growth of aggregate GDP and corporate earnings

and dividends.) Of course, strictly speaking, when you buy a seasoned issue, you're not investing; you're merely saving. In the economic sense, you get a gold star only by providing capital directly to a company, either through an IPO (initial public offering) or to an existing firm in the form of a secondary issue.

In a recent [working paper](#), Fama and French examined the survival and profitability of new issues. Their results were eye-opening. Between 1973 and 2001, the number of IPOs increased dramatically, from around 160 per year to about 550 per year. Their profitability decreased (in the words of the authors, became "left skewed") as did their survivorship, while their growth became "right skewed." Growth, on average, decreased slightly, though a few highly successful companies saw dramatic growth.

In 1973, the probability of an IPO going kerplunk within ten years was only one in six. Just a decade later, the chances rocketed to two in five. Four hundred years ago, one might have recoiled from the financial risk of outfitting ships for the Indies. (To say nothing of the physical risks; the mortality on such journeys hovered around 50%. "Hell on earth" is not too strong a descriptor to be taken from sailor's diaries. The term "ghost ship" derives from the point reached by many vessels when enough of the crew died and the survivors became so debilitated that they could no longer control the ship, which, as it drifted aimlessly across the maritime lanes, became a slowly moving death trap for the remaining crew.)

However, the Fama-French data suggest that, at least in terms of financial risk, supplying capital to new enterprises hasn't become any less dangerous. In fact, compared to the business models of most 1990s dot-com startups, sending an illiterate, poorly nourished crew on a 25,000-mile round-trip journey in tiny rickety boats through stormy and hostile seas was a lead-pipe cinch.

While not a boon to modern investors, the facile market for new equity capital has been great for the rest of society. Someone, after all, had to capitalize all the wonderful new technologies that have given birth to the modern world: in the eighteenth and early nineteenth centuries, the fabulously expensive canals; later in the nineteenth century, the railroads; and in the twentieth century, steel, radio, autos, utilities, and aircraft. On average, investors in these companies got their clocks cleaned. The same, of course, will prove true of those generous souls who capitalized the vast fiber networks, biotech outfits, and hardware and software startups that will remake humankind in the coming century.

Far from being the play's villain, modern capitalists have become our society's great philanthropists, tossing great wads of money out their figurative windows so that the rest of us may prosper. (Since their philanthropic behavior is not intentional, they do not garner the maximum brownie points.) A superb example is the recent reliance of public finance on state lotteries—the quintessential tax on the uninformed. What Fama and French's data are telling us is that the bar to companies seeking entrepreneurial capital has been lowered yet further; entrepreneurial capitalism has advanced to the point that if you are a twenty-something with a cockamamie idea that might, just might, pay off, you will be buried in seed money. (This is not to sneer at greedy young people; human genius is most productive in early adulthood, and one of the unrecognized advantages of the American system is that we allow our youth to sass their elders and do not beat the creativity out of our best and brightest by making them master three languages and stochastic calculus by age sixteen.)

Clearly, then, IPO investing, while not having gotten riskier in the past several decades, has become a higher-stakes game—the payoff may not have changed, but the stakes are higher and the probability of success lower on each throw of the dice. What of their expected returns? This is a tad more controversial. While initial work by Jay Ritter and others demonstrated new-issue returns that were several percent lower than that of the market, more recent work by Fama and French suggests that IPO returns are commensurate with their size and value loadings. And since the value loadings of these issues are strongly negative, their returns are lower than

that of the broad market—a rose by any other name. An even more interesting question concerns the risks and returns of IPOs; it is difficult to argue, as the three-factor model does, that efficient markets demand that they offer lower raw returns because they are somehow less risky.

The situation with IPOs mirrors the situation in the broader market documented by Burton Malkiel and his colleagues—higher volatility in individual names counterbalanced by decreasing correlations among them. While overall market volatility remains unchanged, a larger portfolio is required to obtain adequate diversification. The most recent Fama-French data show that IPOs have become even more like lottery tickets; it has never been easier, by concentrating on just a few issues, to become fabulously wealthy. And it has never been easier, by regularly throwing money at them, to become poor.

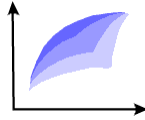
As our society becomes ever wealthier and the return to capitalists falls ever lower, let us raise our glasses and toast the system's great unwitting philanthropists, whose generosity funds the pullulating mass of ever riskier young companies, a few of which will eventually pay off big and power our economy.



Copyright © 2004, William J. Bernstein. All rights reserved.

The right to download, store and/or output any material on this Web site is granted for *viewing use only*. Material may not be reproduced in any form without the express written permission of William J. Bernstein. Reproduction or editing by any means, mechanical or electronic, in whole or in part, without the express written permission of William J. Bernstein is strictly prohibited. Please read the [disclaimer](#).

Efficient Frontier



William J. Bernstein

Links of the Month

Streaming Economics

It's nice to attach a face, or at least a voice, to those who influence our thinking. The luxuriant spread of streaming audio and video on the Web has made an increasing amount of material available. A small, superb example is provided by the Webcast of the University of Chicago's [celebration of Eugene Fama's 65th birthday](#), which features delightful talks from the likes of Richard Roll, Robert Merton, and Michael Jensen.

An even larger volume of material is available from the World Bank's B-SPAN lecture series. To name just a few of the luminaries you can hear and see: [Jeffrey Sachs](#), [Daniel Yergin](#), and [Raghuram Rajan](#).

How to *Really* Listen to Streaming Audio

Watching a Webcast on a 15-inch monitor is not a lot of fun. Even if your home is outfitted with wireless, listening to a good audio while attempting to amuse your dinner guests or while cleaning up the dishes afterward is still not easy.

There *is* a better way, and once you've mastered it, you'll toss out the radios in your house and car. It's called [Total Recorder](#). (Full disclosure: In case you're wondering, I have no connection to this product or the company that produces it, High Criteria, aside from the fact that it's the niftiest piece of software I own.)

[Total Recorder](#) allows you to convert any streaming audio, including the audio portion of a Webcast, into MP3 format. If you're an [NPR](#) buff, that means you can capture any program they've produced since they began archiving their output eight years ago. Since it's archived, you can record it any time you want. The site is even searchable. Want to hear every program by them on Martha Stewart? Can do. Looking for that Niall Ferguson interview you caught snippets of last week while driving home? No problem. The shareware version will record very brief clips, but if you want to use it properly you'll have to pay the princely sum of \$11.95 to register for full functionality.

Even better, in my opinion, than NPR is [BBC Radio 4](#). While their archiving is not as good as NPR's, their program depth is far greater. Their [Listen Again](#) section will allow you to access programs as far back as two years, although many are deleted in as little as a few weeks. (I'm particularly addicted to [In Our Time](#), [Thinking Allowed](#), and [Material World](#).) To paraphrase Samuel Johnson: If you're bored with Radio 4, you're bored with life.

What good is all this stuff? If you spend lots of time commuting by car or on foot or are a compulsive walker/runner, the NPR site is a source of entertainment that can be tailored precisely to your tastes, and Radio 4 is the equivalent of continuous graduate-level material.

Some words of warning: First, Total Recorder is not for computer wusses; it's not at all

intuitive. (And, if you're a Mac enthusiast, sorry; you're not invited to this party.) Second, you'll have to possess a working knowledge of both RealPlayer and the Windows Media Player. So if you don't know your way around your system, you'd best stay away. Third, while it is theoretically possible to record with a dial-up connection, I don't recommend it. You will need broadband.

I've written a [brief set of instructions](#) for getting Total Recorder up and running. Good listening.



Copyright © 2004, William J. Bernstein. All rights reserved.

The right to download, store and/or output any material on this Web site is granted for *viewing use only*. Material may not be reproduced in any form without the express written permission of William J. Bernstein. Reproduction or editing by any means, mechanical or electronic, in whole or in part, without the express written permission of William J. Bernstein is strictly prohibited. Please read the [disclaimer](#).