CONTRARIAN RESEARCH REPORT COMPENDIUM

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Featured Companies

Jefferies (JEF)
Seaboard Corporation (SEB)
Aircastle Limited (AYR)
Willis Lease Finance (WLFC)

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The Contrarian Report

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HORIZON KINETICS

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Murray's Musings

REPRESENTATION IN ETFS

The topic of this section is the representation of various companies in a range of ETFs. Let's start with Exxon (XOM), the largest company in the S&P 500. It may interest some readers to know that XOM is represented in 86 different ETFs and, of course, their underlying indices. Some are quite obvious, like the S&P 500, the Large Cap ETF, the Russell 1000, the Russell 3000, the S&P 100, the Dow Jones Industrial Average, the Low P/E Fund and the S&P 500 Value Fund. However, it may also interest readers to know that Exxon is also represented in the following ETFs: Large Cap Growth, the Russell Top 200 Growth, the Consistent Growth, the Aggressive Growth, the Russell 1000 Growth, the Growth at a Reasonable Price, the Russell 1000 Value, the Russell 3000 Growth, the Russell 3000 Value—in itself it is quite an accomplishment to be in both the Growth and Value ETFs—the S&P 500 Growth Index, the Russell 1000 High Beta Index, the Russell 1000 High Momentum Index and others. Certain companies appear in various indices whose structural orientation, in principle, should be mutually exclusive to one another.

Selected ETFs in which XOM is represented	Ticker
S&P 500	VOO, IVV
Large Cap ETF	VV
Russell 1000	VONE
Russell 3000	VTHR
S&P 100	OEF
Dow Jones Industrial	DIA
Dow Jones Energy	IYE
Low P/E Fund	EZY
S&P 500 Value	IVE
Large Cap Growth	ROI
Russell Top 200 Growth	IWY
Consistent Growth	CONG
Aggressive Growth	AGRG
Russell 1000 Growth	VONG, IWF
Growth at a Reasonable Price	GRPC
Russell 1000 Value	IWD
Russell 3000 Growth	IWZ
Russell 3000 Value	IWW
S&P 500 Growth Index	IVW
Russell 1000 High Beta	HBTA
Russell 1000 High Momentum	HMTM

Source: www.etfdb.com

Apple (AAPL) is another example of such a company. It is represented in 82 ETFs. Some are quite obvious like the QQQ Trust, the S&P 500, the Technology Select SPDR, the

Russell 1000 High Beta, the Russell 1000 Low Volatility, the Russell 1000 High Momentum and the Russell 1000 High Volatility. It's quite an accomplishment to simultaneously be in both the low volatility and the high volatility ETF. Nevertheless, it's a fact. AAPL also happens to be in the S&P 500 Pure Growth, the S&P 500 Growth Index and the Russell 1000 Growth Index.

Selected ETFs in which AAPL is represented	Ticker
QQQ Trust	QQQ
Technology Select SPDR	XLK
Russell 1000 High Beta	HBTA
Russell 1000 Low Volatility	LVOL
Russell 1000 High Momentum	HMTM
Russell 1000 High Volatility	HVOL
S&P 500 Pure Growth	RPG
S&P 500 Growth Index	IVW
Russell 1000 Growth	IWF
S&P 500 Index	IVV

Source: www.etfdb.com

There are ETFs with a very narrow focus as their objective and it's amazing how the decision criteria repeatedly lead one to large cap liquid companies. For example, there exists an ETF known as the Ocean TOMO Patent ETF (OTP) and its purpose is to find companies in which to invest that hold patents. The S&P 500, in contradistinction, is merely a selection of stocks meant to be representative of what's available for investment in the entire stock market. The top ten companies in the S&P 500 Index are: Exxon, Apple, IBM, Chevron, Microsoft, GE, Johnson & Johnson, Procter & Gamble, AT&T and Coca-Cola. The top ten investments in the Ocean TOMO Patent ETF are Microsoft, Royal Dutch Petroleum, IBM, GE, AT&T, Oracle, Pfizer, Intel, Toyota, and Glaxo. The Ocean Tomo Patent Index is not radically different from the S&P 500, nor is its performance.

Top 10 Holdings of OTP	Weight *(as of 11/11/11)*	Top 10 Holdings of IVV	Weight *(as of 11/11/11)*
Microsoft	4.95%	Exxon	3.32%
Royal Dutch	4.94%	Apple	3.28%
IBM	4.86%	IBM	1.93%
GE	3.91%	Chevron	1.84%
AT&T	3.83%	Microsoft	1.74%
Oracle	3.66%	GE	1.55%
Pfizer	3.35%	Johnson & Johnson	1.54%
Intel	2.87%	Procter & Gamble	1.54%
Toyota	2.53%	AT&T	1.52%
Glaxo	2.52%	Coca Cola	1.37%

Source: www.etfdb.com

According to my own count, in the energy space there are 59 ETFs, in the commodity space there are 157 ETFs, in the large cap space there are 249 ETFs. Since for all intents

and purposes the S&P 500 represents the benchmark for large cap investing, one might wonder why we would need more than one index, but apparently we do. There are 110 Small Cap ETFs, 127 Large Cap Blend ETFs, 238 Blend ETFs in general, 52 Emerging Market ETFs, 616 American Stock Only ETFs, 49 Treasury ETFs, and 396 Sector ETFs, which in itself is interesting inasmuch as there are only 10 sectors in the S&P 500.

There are at least a trillion dollars in ETFs and there are clearly many trillion dollars more that are indexed in general without entering the ETF space. Indexation represents the most prevalent equity investment strategy and, therefore, it is the biggest business in investing. To orchestrate those investments requires exceedingly liquid large capitalization stocks. The problem is that there is a limited supply both in number and in capitalization of such stocks.

59	Energy ETFs
157	Commodity ETFs
249	Large Cap ETFs
110	Small Cap ETFs
127	Large Cap Blend ETFs
238	Blend ETFs
52	Emerging Market ETFs
616	American Stock Only ETFs
49	Treasury ETFs
396	Sector ETFs

Source: www.etfdb.com

THE ETF PARADOX

In the modern day, companies trade in relation to their identifiable characteristics. If a company is in financial services and it's in a Financial Services ETF, it will trade like the other companies, irrespective of whether or not it has those characteristics. In philosophy there is a situation known as the Idler's paradox, which deals with an imaginary university student who has been studied and whose grades have been predicted by the academic staff. He has been admitted to a very good university and the admissions department has decided that throughout his university career, this student will have certain grades. The admissions staff is known to be very good at predicting the grades. If that is the case, then why should the student attend classes or study? He already knows what his grades are going to be. That's known as the Idler's paradox.

In philosophy there's a much bigger paradox known as Newcomb's paradox. It's almost the reverse of the Idler's paradox. In Newcomb's paradox, there is a Predictor who thoroughly understands human nature and is exceptionally skilled at predicting a person's actions. The Predictor creates a game in which there are two boxes, and one box is transparent and holds $1,000. The other box is opaque and can have either nothing or $1 million in it. The idea is that you, as the object being studied, have the opportunity to pick

either one box or both boxes. The Predictor is very cynical, however, so if it predicts that you will pick both boxes, it will put zero in the opaque box. What should you do? Should you always pick both boxes and be guaranteed at least $1,000, or should you take a chance and pick the opaque box? The paradox is that you're only being asked to choose after the Predictor has already made a choice. Is your action dependent upon the Predictor or not?

I think the ETF world is very similar to these paradoxes in that an ETF is essentially a box that contains a variety of prizes, but instead of a series of boxes, it's only one box. The idea is that each of the various elements in that box should have the same characteristics as all the other elements in the box. The paradox arises in the fact that it's not possible for them all to have the same characteristics.

Let's say that there were 100 companies in a given box and that all are in the same industry. Let's also say that the consensus view is that this industry will be a very bad industry, and two-thirds of the companies will fail, meaning that they become insolvent. If two-thirds of the companies will be insolvent, then the one-third that remains will probably be very prosperous, because they will pick up business from the two-thirds that fail. At some point, if the forecast is sufficiently dire and it comes to fruition, the surviving companies within that box will do very well. That's the paradox. The various constituent elements cannot be separated in the context of the box, but they can be purchased separately outside the box.

Ultimately, the very logic of ETF investing, and the vast sums of money invested in those instruments, is going to create an enormous opportunity for individual stock selection, if it hasn't done so already. I think one such opportunity is companies that are not included in ETFs. I think another opportunity is to study the ETFs in depth, especially the ones that are under stress, and try to identify which companies might not be individually stressed in a fundamental sense, even though their stock prices are stressed.

Industry Thoughts

ORPHAN STOCKS

I have decided once again to create an industry: Orphan Stocks, which I define as those companies that are poorly represented, if at all, in ETFs. The table below lists 10 companies and the number of ETFs that I could find in which each company is a member, as well as the price to book ratios. Republic Bank of Kentucky, zero; Icahn Enterprises, zero; Winthrop Realty, one; Howard Hughes Corporation, zero; Jefferies, two; Sears Holdings, three (even though it happens to be a large capitalization company); Brookfield Residential, zero; Air Castle, one; Willis Lease Finance, zero, Marriott Vacations, which is a recent spinoff from Marriott Corporation, at the moment is not a member of any ETFs.

Ticker	Company	Price/Book Ratio	ETF Membership
RBCAA	Republic Bank of Kentucky	0.93x	0
IEP	Icahn Enterprises	0.91x	0
FUR	Winthrop Realty	0.84x	1
HHC	Howard Hughes Corp	0.80x	0
JEF	Jefferies Group	0.71x	2
SHLD	Sears Holdings	0.98x	3
BRP	Brookfield Residential	0.86x	0
AYR	Aircastle	0.64x	1
WLFC	Willis Lease Finance	0.64x	0
VAC	Marriott Vacations	0.45x	0

Source: www.etfdb.com

These companies all trade below book value, while the S&P 500 trades at over 3x book. Are these companies truly so demonstrably inferior to those in the S&P that they deserve to trade at less than one-third the valuation of the S&P 500 companies? It seems that there is a process at work here to drive down the valuations of those companies that are not included in ETFs, and it's been happening for years. The reverse process is at work for the companies that are included in ETFs.

One could design a very nice investment management business by confining oneself only to those companies that are only slightly represented, or are not included at all, in the S&P 500 or other major indices. However, even as these words are written, I find myself under pressure not to recommend companies like those represented in the Orphan Stock list, because even the active managers want companies with copious liquidity. They would like to operate their investment management businesses on a very large scale. Since investing is a social science, the stocks of companies meeting those liquidity requirements have a great many owners, and are unlikely to be inefficiently priced. Conversely, companies that have very few people observing them are much more likely to be inefficiently priced. It appears that one can either have interesting valuations, but not be able to operate on a large scale, or one can operate on a large scale but have only non-interesting valuations.

Facts and Figures

RUSSELL 2000 INDEX

This discussion is about the Russell 2000 Index itself—the index itself, not the ETF. The index itself is optionable, and if one had sold a Russell 2000 December 2012 put option with a strike price of $600 on Friday, November 11, 2011, one would have received somewhere between $56.30 bid and $59.50 ask. That amount represents a sum equal to more than 10% of the capital at risk, because with a strike price of $600, the capital at risk is the strike less the premium received.

The worst that can happen to the Russell 2000 would be that it goes to zero. On November 11, 2011, the index The Russell 2000 closed at 744.64. In principle, if the Russell 2000 declined to 600.01 during the next year, that would represent a 19.5% decline. The return on that investment would still be roughly 10%, even if the collateral were invested in short-term Treasury bills. If the collateral could be invested in a security with a little more robust return than Treasuries, the return would be even higher. For this trade to lose any money, the Russell 2000 would have to decline by 27%.

Think of the elegant and mathematically complex mechanisms by which investors try to hedge their portfolios in search of a 10% rate of return. Yet, here is a readily available mechanism in a totally liquid investment that has significant downside protection encased within it—certainly as much as is required by the typical investor. It's a truly extraordinary mechanism that is overlooked.

Let's look at the S&P 500 Index which, presumably, is better understood than the Russell 2000. On November 11, 2011, the S&P 500 closed at 1,263.85. Puts on the S&P 500 with a strike price of $1,150 were selling for $104.10, based on the last sale. If one were to write a put and collect that premium of $104.10, the capital at risk would be, roughly, $1,046. The premium received represents an approximate return on capital at risk of about 10%. The indifference point, or the point at which this trade would lose money, would also be $1,046. The S&P 500 would have to decline by 17.24% for this trade to lose any money whatsoever.

One of the amazing features of the S&P 500 is that people have a fairly well thought out idea of what level of returns might be expected from that index in the fullness of time, and most analysts would agree that it's somewhat less than 10%. One is investing in an instrumentality that has the potential to earn a rate of return of anywhere from 6% to 8%, a return that may or may not be an adequate for a typical institution's needs. In addition, this index fluctuates a few percent each day. The first question that has to be asked is whether or not it is reasonable to invest in an index with the objective of earning a return somewhat less than 10%, if that index fluctuates 2% or 3% a day? In fact, there are days when it

fluctuates 5%. I think it is not reasonable. However, if one sought that 10% rate of return, one could achieve it by simply writing a put option on the S&P 500 and having downside protection of 17.24% without taking any other measures whatsoever.

LEVERAGED EQUITY ETFS

The table below highlights some leveraged equity ETFs. It's worth pointing out that these six leveraged equity ETFs average well in excess of $1 billion in assets under management (AUM).

The UltraShort S&P 500 is the largest, with $2.4 billion AUM. The others each have over $1 billion, except the Direxion Small Cap Bear 3x Russell 2000, which is slightly less than $1 billion. It's interesting that each and every one of the leveraged equity ETFs is path dependent to zero, so everyone knows that ultimately each and every ETF of this type will ultimately be worthless. Much like Zeno's paradox, it approaches a worthless state, but it never actually becomes physically worthless, only nearly worthless. If one keeps it long enough, it will ultimately be worth some de minimis sum. That information is disclosed in the ETF prospectuses, so it's not as if anyone is deceived. Nevertheless, in a directionless and volatile environment, these investments are deadly.

Ticker	Leveraged Equity ETF	AUM *(as of 11/11/11)*
SDS	ProShares UltraShort S&P 500	$2.3B
SSO	ProShares Ultra S&P 500	$1.5B
FAS	Direxion Financial Bull 3X	$1.6B
FAZ	Direxion Financial Bear 3X	$1.1B
TNA	Direxion Small Cap Bull 3X Russell 2000	$1.1B
TZA	Direxion Small Cap Bear 3X Russell 2000	$0.9B

Source: www.etfdb.com

In the Small Cap space, the Direxion Small Cap Bull 3x Russell 2000, with $1.1 billion in AUM, has a year-to-date rate of return of negative 34.89%. The Direxion Small Cap Bear 3x Russell 2000 has fewer AUM and a negative 37.88% rate of return. Similarly, in the financial space, the Direxion Financial Bull 3x has $1.6 billion of AUM and a year to date rate of return of negative 50.09%. The Direxion Financial Bear 3x has $1.1 billion of AUM and a rate of return of negative 15.37%.

Another instrumentality for an investor attempting to earn a rate of return is to be short both of these ETFs simultaneously and just keep them more or less equally weighted. The biggest risk is that the index could appreciate or depreciate very substantially, giving one of these instrumentalities a vigorous rate of return. In that case, the trade wouldn't work. Ultimately, those eventualities have a tendency to balance out by regression to the mean so it's not a problem in the long run. In the short run, however, it can be a problem, which is probably why investors don't do it. The ETF world is leading people in the direction of

engaging in very bizarre activities, all in the name of operating a business, as opposed to operating an investment.

Q: Would the managers of one of the path-dependent leveraged ETFs be able to delay the inevitable by reverse splitting?

A: First, I have to qualify the answer. We can't say "the manager of the ETF," because the ETF has no manager; the computer is the manager. We should say, "Would the *sponsors* of the ETF be able to delay the inevitable?" The answer is that, not only are they able to delay the inevitable, but that is their standard practice. As the ETFs decline, they reverse split them to raise yet more money, and they expend very little effort in doing so.

Featured Companies

JEFFERIES GROUP (JEF)

(Data as of 11/14/11)

Jefferies is an investment bank that is not dissimilar to its larger brethren except that it operates with a much more conservative balance sheet and on a much smaller scale. Recently, Jefferies was downgraded by Egan-Jones Ratings because, according to the rating agency, it was exposed to $2.7 billion of European sovereign debt. The fact that this sum represented approximately 75% of shareholder equity was rather alarming. Jefferies maintained that its positions in European sovereign debt were hedged.

To quell fears that could seriously affect Jefferies in a funding sense, on November 4, 2011, the company released its gross and net exposures as of that day. As can be seen in the table below, Jefferies had over $2 billion in long positions in Italian government bonds, but it also had $2 billion of short positions in Italian government bonds. The total net position was negative $25 million. The total net position on all of the sovereign debt exposure on that date was negative $9 million. On a net basis the company had no exposure; however, the release of that information did little or nothing to quell the market fears.

Country	Long *($ in millions)*	Short *($ in millions)*	Net *($ in millions)*	Futures *($ in millions)*	Total Net *($ in millions)*
Italy	2,086	(2,011)	75	(100)	(25)
Spain	191	(209)	(18)	-	(18)
Ireland	110	(80)	30	-	30
Portugal	20	(16)	4	-	4
Greece	-	-	-	-	-
Total	**2,407**	**(2,316)**	**91**	**(100)**	**(9)**

Source: Company report

Although Jefferies essentially had no net exposure, it subsequently cut what it had in half, but this action did little or nothing to alter the market's sentiment. During the last several quarters of the crisis, Jefferies has been consistently profitable, and it maintains an 11x leverage ratio. There's no evidence that it is in any way stressed other than the fact that it's obviously going to have to shrink its balance sheet to get more desirable financing terms.

Its largest investor, Leucadia National, actually bought more stock, as did the principals of Leucadia National, who bought stock personally for their own accounts. Jefferies is moving to fill the vacuum left in various areas by the large investment banks as they have withdrawn from various types of businesses.

Ultimately, Jefferies is likely to be a very successful company. It trades at only 71% of book value so, unless it is really in danger of going insolvent, which doesn't appear likely,

Jefferies is clearly a buy. If it merely trades at a slight premium to book value and that book value rises as it should when the company earns money, it would represent a very substantial return on investment. Therefore, Jefferies is recommended.

Q: Does the discount to book value reflect some counterparty risk?

A: The answer is no, because one of the questions that was asked of Jefferies before they made their release was how they were hedging their exposure, meaning, it's all well and good to say you have no net position, but are you hedging with credit default swaps? If yes, then one would have counterparty risk. If one is hedging with actual shorts, there is no counterparty risk. Jefferies is hedged with shorts and, to a very small extent, with futures. With futures, however, the counterparty is the clearing house, which is AAA rated. Therefore, at least as far as these positions are concerned, there is no discernible, identifiable counterparty risk.

SEABOARD CORPORATION (SEB)

(Data as of 11/14/11)

Seaboard Corporation has a $2.6 billion market capitalization and a P/E ratio of 7x. Shareholders' equity is $2 billion, so it trades at 1.3x book value. It has $351 million of cash on the balance sheet, a billion dollars of current assets, and no debt. This company is not included in an ETF.

Seaboard is an agricultural conglomerate so, in principle, it is not dissimilar to Bunge or Archer Daniels Midland, except that its business is oriented towards processing and shipping of pork. Pork consumption worldwide is growing and the company has expanded into many other areas, one of which is processing and shipping other types of meats. Seaboard has a diverse set of businesses. It owns 50% of Butterball Turkey. It owns High Plains Bioenergy, which has the ability to produce 30 million gallons a year of biodiesel fuel. It owns various warehouses and ocean terminals in Miami and Houston. It owns about forty ships, fifteen flour mills, one rice mill, four maize mills, one sugar processor, two electric utilities in the Dominican Republic, and one jalapeno processing plant.

During the last 10 years, Seaboard has increased its revenue by 150% by moving into business areas that other companies have abandoned or ignored. It has also repurchased 20% of its shares and eliminated all of its debt. Based on its businesses and accomplishments, it seems bizarre that the company should trade at only 7x earnings. Yet, its daily liquidity trading characteristics are sufficiently small as to justify it. Liquidity appears to be the only justification for the valuation, even though Seaboard is a much better value than a similar company with more daily trading action.

AIRCASTLE LIMITED (AYR)

(Data as of 11/14/11)

Aircastle is an aircraft leasing company, an industry that is going through a contraction on one hand, and an expansion on the other. The major providers of aircraft leasing have been shrinking their balance sheets in recent years, for various obvious reasons. Examples of those companies are GE Capital Aviation Services, International Lease Finance, a subsidiary of AIG, and smaller leasing companies like Royal Bank of Scotland Aviation Capital. The trend toward leasing rather than purchasing planes is increasing worldwide. About 30% of the world fleet of aircraft is owned by leasing companies, and that share is growing. Air traffic itself is growing worldwide so, as the larger companies shrink their balance sheets and exit various portions of the aircraft leasing business, there is an opportunity for others to take that share.

Aircastle has an $872 million market cap. Its shareholders' equity of $1.35 billion is all tangible, and it trades at 64% of book value. Its assets are objectively verifiable aircraft, with given ages and conditions. In principle, they could be sold. This company is unquestionably trading below its net asset value. It has $266 million of cash on the balance sheet and $2.8 billion of debt, so it has 2 turns of leverage, or 200-plus percent. Its dividend yield is 5%, and it trades at 9x earnings. In the last 10 months, it has bought $160 million worth of its stock, which is very significant for a company with a market cap of $872 million. Since it's buying back its shares at a discount to book value, these are anti-dilutive transactions.

Aircastle has 136 aircraft and 61 lessees or customers, who operate in 34 different nations. The average lease term is 5 years. The aircraft leased outside the United States equals 92% of all its business. In principle, it's a U.S. company because it's listed in the U.S., but in practice, almost all of its business comes from outside the U.S. Its aircraft are 99% utilized. There's no basis for asserting that this company deserves to trade at less than two-thirds of book value. It could be liquidated for a 50% premium to its current trading price. However, that's what happens in the search for liquidity.

Q: Why are aircraft leases so popular?

A: Aircraft leasing is popular because the earnings volatility for the various airline companies makes it difficult to get financing on truly favorable terms. Generally, airlines pay a lot of money for borrowings. Of course, the airlines could finance with equity, but they would earn an abysmally low rate of return on equity. When the leasing companies' balance sheets are sound, they get better financing terms than the airlines themselves.

WILLIS LEASE FINANCE (WLFC)

(Data as of 11/14/11)

Willis Lease Finance is also a leasing company but, instead of leasing aircraft, its primary business is to lease jet engines. There are times when jet engines need to be overhauled, but the plane itself does not need extensive service. In other words, the plane is able to fly, it's just that the engine needs to be replaced. Willis owns 183 leasable jet engines. It also owns 3 aircraft and an assortment of spare parts that it also leases. It's interesting that aircraft parts are leased. Willis has 62 customers that are present in 35 countries. Only twenty-two percent of its revenue comes from the United States.

Willis has a $148 million market capitalization and $231 million of shareholders' equity, which is all tangible. Like Aircastle, Willis trades at 64% of book value, but the latter is more leveraged. Willis has only has $8 million of cash on the balance sheet, although it has restricted cash of $80 million. It has $781 million of debt, so it has over 3 turns of leverage. This company earned $2.68 a share in 2008, and the only reason it doesn't earn $2.68 per share now is that its utilization rate is 86% at the moment; in other words, it's not operating at full capacity.

Willis is priced as if it will continually earn a 5% to 6% return on equity. If it were able to earn a 10% return on equity, based on the earnings that would arise in that case, at its current price it would be trading at 6x earnings. It's not inconceivable that this company could earn a 10% return on equity with a better utilization rate, and it's very likely to happen in the not too distant future. Therefore, Willis Lease Finance is also recommended.

How They Did It

THE PRIMITIVE STATE OF INVESTMENT STATISTICS

This essay focuses on statistics in general and investment statistics in particular, rather than on a person. To introduce the topic I will tell you a story. In the years before the French Revolution, there was a French nobleman who went to his wine cellar to look for a suitable bottle of wine for the evening meal. While searching, he was horrified to find a bottle of wine of such low quality that it would never grace his table. He wanted to dispose of it, but did not wish to waste good wine. Since it was one week before Christmas, he decided to give that bottle of wine to his favorite peasant, and he did so. After Christmas, he happened to see that peasant and asked him how he liked the wine. The peasant said, "The wine was perfect." The nobleman said, "How so? No wine is ever really perfect." The peasant replied, "Well, this wine was perfect because if it was any better, you wouldn't have given it to me; if it was any worse, I wouldn't have drunk it."

Statistics in finance are essentially based on the same idea as the peasant's assessment of the wine. Before one performs calculations or assigns valuations, one must identify the categories. Variables must first be identified before that can be counted. In finance, almost all the variables derive from the prices at which the various securities trade. Even a simple calculation like market capitalization, which defines so much of what is done in investments, is a function of the trading price of securities. Market capitalization is also a function of the number of shares issued. Its dramatic fluctuations, however, are not caused by changes in the share count; rather, they are caused by changes in the price.

As a point of comparison, let's look at some data from the U.S. military, which maintains huge databases of statistics that are mainly based on reality[1]. For example, the statistics that it maintains on its weaponry include:

a) rate of fire,
b) number of potential targets that might be hit at a given strike,
c) the effective range of the weapon,
d) the accuracy of the weapon,
e) the rate of misfire or jam.

Those are some of the elements used in computing the Lethality Index of weapons. The Lethality Index equals (rate of fire) x (targets per strike) x (relative effect—probability that a hit will incapacitate a target) x (range factor) x (accuracy) x (reliability).

[1] Trevor Dupuy, *Numbers, Predictions and War: Using History to Evaluate Combat Factors and Predict the Outcome of Battles* (Fairfax, VA: Hero Books, 1985).
Trevor Dupuy, *Attrition: Forecasting Battle Casualties and Equipment Losses in Modern War* (Falls Church, VA: Nova Publications, 1995).

That metric deals with mayhem and destruction, but it has a certain logic to it. The military keeps other metrics such as those on battlefield mobility, including radius of action. The combat potential of an aircraft is influenced by how far it can fly without refueling. That's an objectively verifiable calculation. Other metrics include the rapidity of fire, or the number of rounds a weapon can fire in a given period of time; the ammunition supply effect, or the quantity of ammunition a given weapons platform can carry, which has to do with its effectiveness; and the dispersion factor, or how densely a unit is packed and the kind of target it makes. All those metrics are calculable, and the military has been very successful in using those calculations to reduce battlefield casualties.

By contrast, investment statistics are very primitive. For instance, there are calculations on variables like geographic diversification, but that distinction is based on where the security is listed without regard to the geographical source of the company's revenues and earnings. Clearly, the qualitative characteristics of the business, such as they are, will derive from the geographical character of the revenues independent of what the listing venue is. If Exxon were to move its primary listing venue to London and cease listing in New York, would it then become a British company? If the company were to change its primary listing venue to Tokyo, would anybody dare to say that Exxon is a Japanese company? To make it yet more absurd, if there was a stock exchange in Tibet and Exxon made the Tibetan exchange its primary listing, would anyone seriously assert that Exxon is a Tibetan company?

Fund managers themselves maintain absolutely no statistics on the types of mistakes they make. The analogy to the military's management of statistics would be the number of misfires or the accuracy of a weapon. Mistakes are made all the time, but no one compiles databases of information categorizing the mistakes according to their origin, grievousness, or other classification. Statistical study of investments hasn't even begun. Are some judgments easier to make? Which judgments are more likely to be successful, and which unsuccessful? There are no statistics whatsoever on how many times macroeconomic judgments are wrong, except that we all know that they are frequently incorrect. Analysis of that information would be useful, but no statistics are kept.

Similarly, there are no statistics on the so-called casualty rate of different industries. What is the expected life of a given company within a competitive industry? What is the expected life of a given company in a noncompetitive industry? How long is a given product life cycle? No one maintains those statistics.

The Air Force has a concept known as loiter time, which is the amount of time a given aircraft can remain over a combat area as opposed to the amount of flight time spent getting to and from a combat area. In the investment arena, no one keeps a record of how much time is devoted to the average position. Generally, investors haven't studied their own work habits to know that some positions get more time than others. Do the larger

positions actually get more analytical time than the smaller positions? Since data on those metrics is not collected, analysis in any scientific sense hasn't even begun, which illustrates the primitive state of investment statistics.

Money Manager Index

From Jan 1983 to November 2011

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Yr. End	Index	Yearly return	Annualized return (since inception)
1983								1.00	0.81	0.76	0.87	0.75	1983	0.75	(60.5)%	(50.2)%
1984	0.75	0.71	0.70	0.66	0.67	0.67	0.61	0.83	0.79	0.76	0.67	0.65	1984	0.65	(13.5)%	(26.5)%
1985	0.92	0.93	0.99	0.95	1.20	1.30	1.32	1.38	1.28	1.50	1.86	2.02	1985	2.02	211.8%	33.7%
1986	2.46	2.78	2.47	2.31	2.36	2.33	2.03	2.23	1.98	2.37	2.34	2.34	1986	2.34	15.9%	28.2%
1987	3.21	3.27	3.16	2.55	2.37	2.30	2.39	2.47	2.22	1.56	1.44	1.52	1987	1.52	(35.0)%	9.9%
1988	1.80	1.87	1.78	1.79	1.69	1.94	1.92	1.96	2.01	1.97	1.95	2.07	1988	2.07	36.0%	14.3%
1989	2.42	2.37	2.54	2.63	2.64	2.64	2.93	3.12	3.07	3.05	3.23	3.26	1989	3.26	57.8%	20.2%
1990	3.12	3.15	3.53	3.06	3.47	3.45	3.30	2.70	2.68	2.40	2.52	3.02	1990	3.02	(7.3)%	16.1%
1991	3.08	3.49	3.70	3.68	3.71	3.61	3.86	4.05	4.07	4.69	4.47	5.72	1991	5.72	89.4%	23.0%
1992	5.76	5.61	5.30	5.12	4.98	4.99	5.93	6.06	6.19	6.56	7.25	7.36	1992	7.36	28.6%	23.6%
1993	8.06	8.04	8.20	7.94	8.15	8.57	9.05	10.00	9.99	9.31	8.97	8.90	1993	8.90	21.0%	23.4%
1994	9.52	8.73	8.05	7.85	7.81	7.53	7.66	8.31	8.15	8.52	7.88	7.95	1994	7.95	(10.6)%	19.9%
1995	7.74	8.38	8.72	8.77	9.20	9.35	9.93	10.78	11.22	10.53	10.89	10.40	1995	10.40	30.8%	20.8%
1996	11.12	11.50	11.33	11.62	11.86	12.53	11.91	12.36	13.32	14.03	14.42	15.02	1996	15.02	44.4%	22.4%
1997	16.04	16.81	15.32	17.27	18.42	20.29	22.28	21.39	25.31	24.95	24.95	25.50	1997	25.50	69.8%	25.2%
1998	25.67	29.00	29.89	30.60	28.90	30.44	27.67	21.33	21.74	25.16	27.27	25.41	1998	25.41	(0.4)%	23.3%
1999	26.00	23.71	23.92	26.77	28.94	29.74	28.78	26.74	25.89	27.73	28.54	30.55	1999	30.55	20.2%	23.2%
2000	31.07	31.19	36.01	35.60	35.20	40.32	43.58	45.75	45.62	48.69	44.05	49.84	2000	49.84	63.1%	25.2%
2001	50.23	46.41	44.27	46.96	48.90	49.98	50.67	49.70	46.47	44.81	48.04	51.91	2001	51.91	4.2%	23.9%
2002	53.62	53.74	55.11	52.52	52.83	50.48	42.58	44.92	41.54	42.66	45.78	43.17	2002	43.17	(16.8)%	21.4%
2003	42.72	41.18	42.36	45.98	49.02	50.71	53.47	53.97	53.46	56.12	55.83	58.49	2003	58.49	35.5%	22.1%
2004	64.38	65.08	64.63	61.68	60.86	62.30	58.71	64.08	65.73	68.86	73.53	78.16	2004	78.16	33.6%	22.6%
2005	76.46	77.94	74.06	72.83	77.02	80.25	83.59	83.07	86.03	89.19	96.58	97.35	2005	97.35	24.6%	22.7%
2006	107.62	111.44	110.75	111.88	101.89	100.61	100.62	104.98	114.61	116.64	113.78	118.05	2006	118.05	21.3%	22.6%
2007	125.73	123.77	122.62	127.58	133.57	134.68	126.61	124.07	133.57	148.09	135.13	135.56	2007	135.56	14.8%	22.3%
2008	127.53	115.76	115.94	121.58	130.51	115.68	119.94	120.55	109.69	72.70	62.95	67.91	2008	67.91	(49.9)%	18.1%
2009	57.51	51.76	65.63	79.49	85.67	90.79	99.97	101.69	107.32	107.36	110.94	115.01	2009	115.01	69.4%	19.7%
2010	106.84	110.32	118.13	114.91	100.18	88.17	97.65	89.64	103.59	108.29	108.64	119.58	2010	119.58	4.0%	19.1%
2011	122.80	128.28	127.94	127.97	126.06	121.03	115.49	104.250	91.32	102.440	103.790		2011	103.79	(13.2)%	17.8%

S.No.	Ticker	Name	Initial Amount Invested	Shares Purchased	Date of Investment	Current Index Value
1	AMG us equity	Affiliated Manager	$22,947	1377	11/30/1997	130,205
2	ALNC us equity	Alliance	$7,633	491	4/30/1994	14,544
3	BLK us equity	BlackRock	$23,205	1658	9/30/1999	285,159
4	WDR us equity	Waddell & Reed	$27,513	1587	3/31/1998	43,143
5	EV us equity	Eaton Vance	$2,641	3998	1/31/1986	96,081
6	TROW us equity	T. Rowe Price	$2,423	2014	4/30/1986	114,306
7	BEN us equity	Franklin Resources	$908	1263	4/30/1985	127,349
8	LM us equity	Legg Mason	$1,000	462	8/31/1983	12,262
9	FII us equity	Federated Inv	$26,381	2206	5/31/1998	35,540
10	FIG us equity	Fortress Investment Group	$102,249	3389	2/28/2007	11,523
11	PZN us equity	Pzena Investment Management	$122,426	6317	10/31/2007	31,270

Index Constituent Changes: 1. Everest Financial Group Limited (EFG AU) was delisted from the Australian Security Exchange effective 7/19/2011 and has been removed from the index. The divisor has been adjusted accordingly. 2. RAB Capital Plc (RAB LN) was delisted from the London Security Exchange effective 9/2/2011 and has been removed from the index. The divisor has been adjusted accordingly.

International Money Manager Index

From Jan 1983 to Nov 2011

Year	31-Jan	28-Feb	31-Mar	30-Apr	31-May	30-Jun	31-Jul	31-Aug	30-Sep	31-Oct	30-Nov	31-Dec	Yr. End	Index	Yearly return	Annualized return (since inception)
1986											1.00	1.02	1986	1.02	10.0%	10.0%
1987	1.25	1.37	1.48	1.48	1.37	1.33	1.39	1.40	1.33	0.81	0.76	0.73	1987	0.73	(27.7)%	(23.3)%
1988	0.75	0.92	1.02	0.95	0.80	0.89	0.88	0.82	0.86	0.88	0.89	0.93	1988	0.93	26.4%	(3.4)%
1989	1.03	1.02	1.06	1.17	1.19	1.18	1.25	1.16	1.17	1.20	1.21	1.28	1989	1.28	37.8%	8.1%
1990	1.24	1.24	1.18	1.19	1.22	1.24	1.26	1.26	1.23	1.24	1.25	1.33	1990	1.33	3.7%	7.0%
1991	1.34	1.52	1.56	1.58	1.57	1.47	1.52	1.64	1.81	1.89	1.94	1.92	1991	1.92	44.8%	13.5%
1992	2.01	1.93	1.88	2.14	2.19	2.13	2.08	1.99	1.95	1.77	1.76	1.96	1992	1.96	1.9%	11.5%
1993	1.98	2.03	2.20	2.39	2.42	2.45	2.54	3.05	3.01	3.07	3.01	3.30	1993	3.30	68.7%	18.1%
1994	3.72	3.39	3.17	3.04	2.99	2.89	3.01	3.14	3.13	3.19	3.15	3.15	1994	3.15	(4.7)%	15.1%
1995	3.07	3.12	3.28	3.41	3.56	3.59	3.87	3.76	3.76	3.77	3.70	3.73	1995	3.73	18.6%	15.4%
1996	3.76	3.85	3.70	3.79	3.96	3.90	3.75	3.96	4.16	4.47	4.90	4.86	1996	4.86	30.3%	16.8%
1997	5.11	5.37	4.99	4.96	5.43	5.94	6.57	6.32	7.45	7.24	6.80	7.19	1997	7.19	47.9%	19.3%
1998	7.12	8.05	8.78	9.25	8.95	8.74	8.91	6.67	6.08	7.01	7.51	7.71	1998	7.71	7.3%	18.3%
1999	7.99	8.21	8.68	9.07	8.71	8.61	8.63	8.43	8.47	8.79	9.80	10.79	1999	10.79	39.9%	19.8%
2000	11.23	12.27	13.95	13.50	13.73	15.39	15.85	16.82	17.07	16.31	14.43	16.76	2000	14.43	33.8%	20.7%
2001	17.42	15.88	13.46	15.14	15.84	15.15	14.21	13.61	10.77	11.43	13.90	14.12	2001	14.12	(2.2)%	19.1%
2002	14.74	13.78	15.09	15.11	16.38	14.14	12.92	12.10	11.23	11.06	11.33	10.50	2002	10.50	(25.6)%	15.7%
2003	10.18	9.52	9.69	10.62	12.17	13.04	13.98	15.38	16.67	17.88	18.16	18.07	2003	18.07	72.1%	18.4%
2004	20.00	22.41	29.98	35.46	26.68	30.80	25.37	25.20	23.67	23.34	27.56	31.48	2004	31.48	74.2%	20.9%
2005	32.19	32.57	31.88	27.79	27.36	29.05	30.38	31.49	33.39	32.24	32.95	37.18	2005	37.18	18.1%	20.8%
2006	41.01	40.97	43.69	46.45	42.39	41.58	40.60	43.32	43.55	43.70	44.58	49.38	2006	49.38	32.8%	21.3%
2007	50.95	51.18	53.59	56.09	58.16	56.37	53.90	48.65	50.96	57.03	48.21	45.75	2007	45.75	(7.3)%	19.8%
2008	38.71	39.71	38.59	40.18	39.25	35.10	34.59	33.33	26.09	18.72	14.50	15.79	2008	15.79	(65.5)%	13.3%
2009	14.62	13.24	14.96	19.63	22.82	23.73	26.14	27.05	28.41	28.53	28.69	29.83	2009	29.83	89.0%	15.8%
2010	28.50	27.58	29.90	29.58	25.53	24.72	27.82	26.74	30.36	33.68	31.85	34.52	2010	34.52	15.7%	15.8%
2011	34.91	36.17	36.51	39.63	37.86	35.31	35.83	32.76	29.28	32.04	31.23		2011	31.23	(9.5)%	14.7%

S.No.	Ticker	Name	Initial Amount Invested	Shares Purchased	Date of Investment	Current Index Value
1	IGM CN Equity	IGM Financial Inc	$1,000	73	31/11/1986	3,122
2	FCAM LN Equity	F&C Asset Management Plc	$1,203	485	5/31/1989	526
3	IVZ US Equity	Invesco Plc (Previously Amvescap)	$1,357	1,153	1/31/1991	11,740
4	SDR LN Equity	Schroders Plc	$1,208	505	3/31/1991	10,654
5	RAT LN Equity	Rathbone Brothers Plc	$1,208	736	3/31/1991	12,934
6	ADN LN Equity	Aberdeen Asset Mgmt Plc	$1,208	1,827	3/31/1991	5,763
7	CIX CN Equity	CI Financial Corp.	$2,585	3,224	6/30/1994	65,108
8	EMG LN Equity	Man Group Plc	$2,862	6,344	10/31/1994	11,247
9	AGF/B CN Equity	AGF Management Ltd-Cl B	$3,343	1,346	1/31/1996	20,741
10	8739 JP Equity	Sparx Group Co Ltd	$11,762	108	12/31/2001	6,312
11	HGG LN Equity	Henderson Group Plc	$14,447	8,666	12/31/2003	12,668
13	AZM IM Equity	Azimut Holding Spa	$21,908	4,977	7/31/2004	39,658
15	CCAP LN Equity	Charlemagne Capital Ltd	$36,848	22,300	3/31/2006	3,767
16	PGHN SW Equity	Partners Group-Reg	$36,848	578	3/31/2006	109,982
17	INRE LN Equity	Invista Real Estate Inv Mngt	$36,589	21,540	9/30/2006	3,807
18	ASHM LN Equity	Ashmore Group Plc.	$36,688	9,873	10/31/2006	54,100