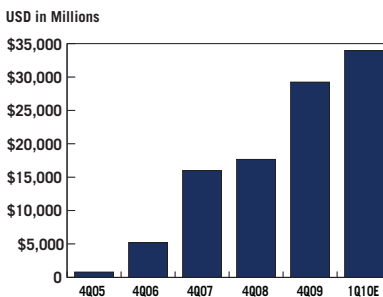


# Fundamentals



Rob Arnott

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## TOO BIG TOO SUCCEED<sup>1</sup>

Much ink has been spilled on the perils of allowing some companies to become “too big to fail.” This assumes that governments, hence taxpayers, must foot the bill when these whales become seriously ill, while reinforcing a view that the top dogs, whose failure might do systemic damage, should be regulated or constrained to mitigate the damage that they might cause.<sup>2</sup>

The flip side of this view—indeed, perhaps supported by the “too big to fail” ethos—receives scant attention: companies can become “too big to succeed.”

When you’re #1, you have a bright target painted on your back. Indeed, in a world of fierce competition and serial witch hunts in Washington, that bull’s-eye is probably painted on your front and sides, too. Competitors are gunning for you. Governments and pundits are gunning for you. In a world that generally roots for the underdog, hardly anyone outside of your own enterprise is cheering for you to rise from world-beating success to still-loftier success!

Was Goldman Sachs targeted with civil and criminal fraud charges because they have criminal intent to defraud their clients, while their competition is pure as the driven snow? Or have they become a symbol of success-to-excess, to an extent that prompts populists and pundits to want them to suffer?

Is Exxon Mobil regularly pilloried in Washington because

people think that their business practices are monopolistic, their profit margins obscene, and their product is polluting and distasteful (never mind that we all buy it)? Or is it because their relentless business success makes them a popular target?

Of course, none of this is new.

Initially, Bank of America management thought they’d be lauded by the political elite for buying (and saving!) Merrill Lynch during the disastrous weekend when Lehman imploded. Instead, they found themselves on the proverbial horns of a dilemma when Merrill disclosed an extra \$20 billion of losses before the deal closed. Bank of America could have cancelled the deal by invoking the material adverse conditions clause or they could have proceeded and sought additional sources of capital. Ultimately, Bank of America chose to proceed and, instead of being lauded for stepping up, they were pilloried for needing an infusion of capital (which they repaid) and sued for not cancelling the deal.

How much of this controversy was linked to the fact that Bank of America was the largest bank in the United States by most measures? How much of Citi’s “moments in the spotlight” have been due to the fact that it was Bank of America’s predecessor in the #1 spot?

Microsoft’s opportunity in the spotlight came a decade ago, when they were attacked on the

grounds of “monopolistic” business practices, as was IBM in the prior decade. The decade before that, AT&T was successfully dismantled on the same basis.

The very business practices that propel an organization to #1—aggressiveness, focus, canny outmaneuvering of the competition—become unacceptable if you’re wearing the yellow jersey. Being #1 means *always* having to say you’re sorry!<sup>3</sup>

#### Too Big to Succeed?

Does our tendency to punish our winners hurt their investors? Yes. In fact, we find the leader in any sector underperforms the average stock in its own sector by 3.5% in the next year ... and the next year ... and the next year. As **Table 1** shows, the damage doesn’t really slow down for at least a decade, as the top dog in each sector lags its own sector by 3.3% per year for the next decade! With compounding, the top stock in the 12 market sectors declined 28% in value relative to the average stock in its respective sector.

On a 10-year basis, the majority beat their peers in only 6 of the 49 starting years and in just two sectors over the full span. The “big winner”? Energy, with the top dog scoring an average of just 0.8% outperformance per annum relative to the average energy stock, over the subsequent decade.

For investors, top dog status is dismayingly unattractive!

Our research also shows that top dog status changes frequently. In most sectors, the top dog is replaced several times over the 58-year time span. The average sector has seen six top dogs over that span, while “Other” has had 17 different #1 companies. No wonder that the 1-, 3-, 5-, and 10-year shortfalls for these “Other” top dogs is nearly always worst on the list.

The only sector where the top dog was able to hold its position for the entire period occurred in Energy: Exxon Mobil (and its predecessors, Exxon and Standard Oil of New Jersey) never lost its top dog status. How did it stay on top when the top dogs in other sectors failed in their quest to be top dog? Perhaps it remained a winner because it has always stuck to its core competencies, avoided the combative business practices that got other top dogs in trouble, was content with solid mainstream growth and profit margins, has not risen to the bait when under attack, and kept as low a profile as any top dog possibly could. The firm’s persistence at the top also was aided by the 1999 merger of Exxon and Mobil, which combined the #1 and #2 companies in that sector.

#### Is There a Political Connection?

The 15 “successful” *five-year* spans—in which more than half of the 12 sector top dogs were able to turn their sector dominance into superior stock

**Table 1. Relative Performance for the Top Dogs<sup>4</sup>**

The Magnitude of Top Dog Relative Performance (1952-2009)									
	How Many Top Dogs?	Panel A. Relative Return By Sector				Panel B. Frequency of Win by Sector			
		1 Year	3 Years	5 Years	10 Years	1 Year	3 Years	5 Years	10 Years
Average, all sectors	5.8	-3.5%	-3.9%	-3.9%	-3.3%	42.2%	40.4%	37.2%	33.2%
Standard deviation		3.7%	4.1%	3.4%	2.5%	8.0%	10.5%	14.0%	15.3%
Adjusted t-Statistic		-3.22	-3.25	-4.03	-4.55	-4.19	-2.93	-3.00	-2.73
Sector 1 Nondurables	6	0.4%	-1.2%	-1.6%	-2.8%	43%	46%	46%	33%
Sector 2 Durables	5	-3.5%	-5.4%	-5.2%	-4.5%	45%	38%	30%	20%
Sector 3 Manufacturing	5	1.3%	0.8%	0.5%	0.1%	48%	54%	63%	55%
Sector 4 Energy	1	-1.1%	0.3%	0.5%	0.8%	52%	57%	56%	53%
Sector 5 Chemicals	3	-3.1%	-1.7%	-1.8%	-2.0%	52%	46%	46%	43%
Sector 6 Business equipment	5	-4.4%	-3.8%	-4.0%	-4.2%	47%	45%	43%	33%
Sector 7 Telecommunication	3	-7.4%	-6.6%	-5.7%	-6.1%	34%	32%	26%	12%
Sector 8 Utilities (1953-2009)	7	-3.3%	-4.3%	-4.9%	-2.7%	32%	36%	21%	27%
Sector 9 Shops	3	-0.8%	-0.5%	-2.0%	-1.8%	43%	43%	39%	47%
Sector 10 HealthCare	8	-4.9%	-5.0%	-4.3%	-2.4%	45%	34%	31%	45%
Sector 11 Finance	7	-2.3%	-4.5%	-6.7%	-6.6%	40%	36%	30%	14%
Sector 12 Other	17	-12.5%	-14.4%	-11.6%	-7.0%	26%	18%	17%	16%
Capo dei capi, Largest Big Dog	6	-6.6%	-5.4%	-6.1%	-4.9%	38%	33%	22%	23%

Note: We use SIC codes to define the 12 sectors. These definitions may vary from the GIC definitions.  
Source: Research Affiliates.

performance—began in 1952, 1968–72, 1982, 1986, 1988, 1990, 1993–97, and 2004. These five-year spans were largely dominated by Eisenhower (first term), Nixon, Reagan, Bush I, Clinton, and, in one isolated case (beginning 2004), Bush II. For the most part, these might be seen as political environments characterized by rolling back regulation and not demonizing success.

The 14 “seriously unsuccessful” five-year spans,<sup>5</sup> in which few top dogs (no more than 3 out of 12) were able to turn their sector dominance into superior stock performance, began in 1963–64, 1973–79, 2000–2003, and 2005. These spans were dominated by the administrations of Johnson, Ford, Carter, Bush II (but for one starting year), and Obama (one year only, but it’s a doozie). Each of these administrations is characterized by sharp increases in government spending and regulation.

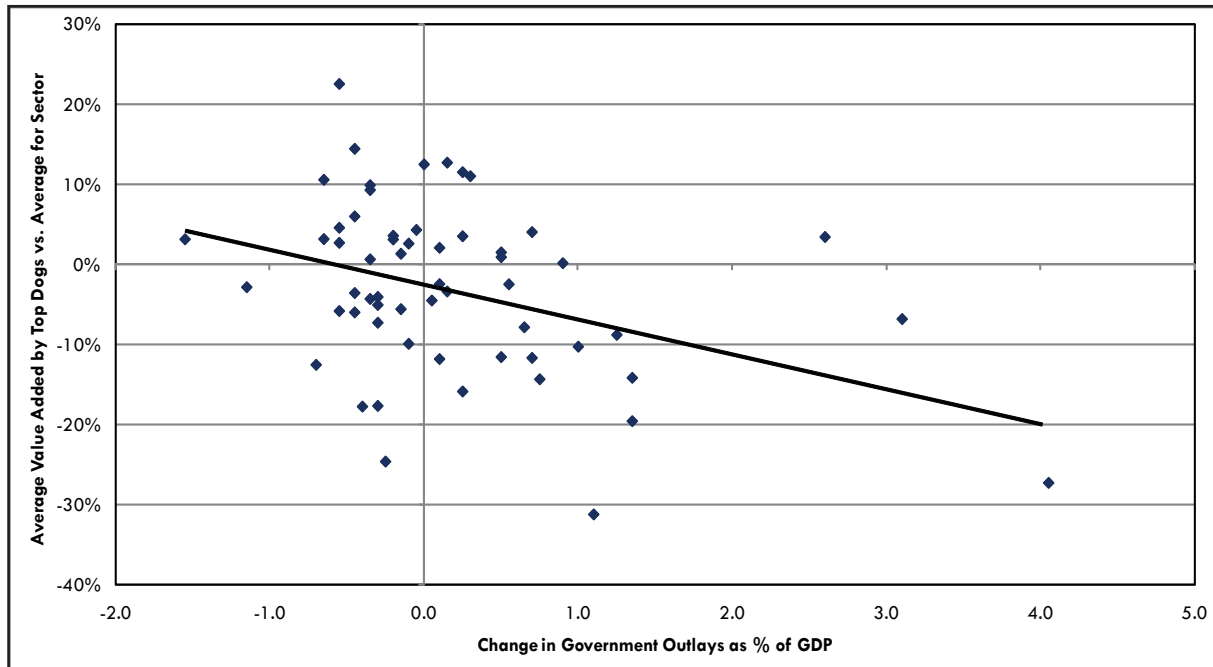
Out of curiosity, we conducted a really simple statistical test: We compared the correlation between the magnitude of government outlays as a percentage of the economy and the relative performance of these top dogs. We found a statistically significant negative correlation—suggesting that larger government outlays is bad

news for top dogs (see **Figure 1**). Looking at government outlays and relative performance in concurrent one-year spans, the correlation is –31% based on 58 sample years. Where the change in government outlays is correlated with the *following* year’s average relative performance of the top dogs, the correlation is –27%. Combining the two results, the average top dog performance correlation with the two-year growth in government outlays is –38%.

### Summary

From these results, one might conclude that an investor could do rather well by investing in the Russell 1000, minus its 12 sector leaders. Better still, perhaps we should exclude all of the companies that have been sector leaders any time in the past decade because the performance drag for the top dogs tends to persist for a decade or more. These stocks typically comprise about one-fourth of the Russell 1000! If these stocks suffer a 300–400 bps shortfall in most years, one could outperform the index by nearly 100 bps per annum merely by leaving the top dogs out, cancelling the corrosive influence of competitors, populists, and pundits.

**Figure 1. Performance of Top Dogs vs. Change in Government Outlays (1952–2009)**



Source: Research Affiliates.

### Endnotes

1. A shorter version of this paper was published in the U.S. edition of FT.com on June 6, 2010. <http://www.ft.com/cms/s/0/a1783e04-7002-11df-8698-00144feabdc0.html>
2. There's a wonderful film, "Phar Lap," based on a true story about an Australian horse that beat all comers. Brought to the United States to compete, the horse continued to win. The horse was saddled with more and more weight, until its heart gave out. It finally lost.
3. Of course, there are other factors why some big firm's don't remain top dogs year after year, such as misguided diversification of business lines into non-core areas, deterioration of their culture, or emergence of new game-changing technologies. But that doesn't change the fact that populist tendencies seek to bloody the biggest players.
4. I'm indebted to Vitali Kalesnik and Lillian Wu for the yeoman's task of assembling and analyzing these data.
5. The unsuccessful periods are defined as those in which two or less top dogs beat their sectors.

## Performance Update

TOTAL RETURN AS OF 5/31/10	BLOOMBERG TICKER	YTD	12 MONTH	ANNUALIZED 3 YEAR	ANNUALIZED 5 YEAR	ANNUALIZED 10 YEAR	ANNUALIZED 10 YEAR VOLATILITY
FTSE RAFI® 1000 Index <sup>A</sup>	FR10XTR	2.68%	31.50%	-6.31%	2.79%	4.82%	17.78%
S&P 500 <sup>B</sup>	SPTR	-1.50%	20.99%	-8.69%	0.31%	-0.82%	16.09%
Russell 1000 <sup>C</sup>	RUTOINTR	-0.88%	22.33%	-8.38%	0.67%	-0.41%	16.40%
FTSE RAFI® US 1500 Index <sup>D</sup>	FR15USTR	9.08%	48.65%	-1.75%	6.91%	11.65%	22.62%
Russell 2000 <sup>E</sup>	RU20INTR	6.29%	33.62%	-6.57%	2.77%	4.71%	21.05%
FTSE RAFI® Developed ex US 1000 Index <sup>F</sup>	FRX1XTR	-12.45%	7.67%	-10.29%	4.21%	5.05%	19.43%
MSCI EAFE <sup>G</sup>	GDDUEAFE	-12.08%	6.84%	-12.61%	1.83%	1.05%	18.13%
FTSE All World Series Developed ex US <sup>H</sup>	FTS5DXUS	-10.96%	8.23%	-11.30%	2.99%	2.08%	18.37%
FTSE RAFI® Developed ex US Mid Small <sup>I</sup>	FRSDXUS	-6.99%	16.64%	-8.28%	4.13%	8.69%	18.38%
MSCI EAFE Small <sup>J</sup>	MCUDEAFE	-7.70%	12.61%	-15.03%	-0.37%	3.79%	20.11%
FTSE RAFI® Emerging Markets <sup>K</sup>	TFREMU	-4.62%	24.03%	3.64%	19.27%	20.25%	25.32%
MSCI Emerging Markets <sup>L</sup>	GDUEEGF	-5.36%	22.72%	-0.46%	14.00%	10.78%	24.99%
FTSE RAFI® Canada <sup>M</sup>	FRCANTR	2.70%	23.18%	-0.13%	8.99%	9.84%	14.26%
S&P/TSX 60 <sup>N</sup>	TX60AR	0.77%	12.29%	-2.33%	7.71%	4.38%	16.78%
FTSE RAFI® Australia <sup>O</sup>	FRAUSTR	-9.24%	21.55%	-5.59%	6.52%	9.60%	13.02%
S&P/ASX 200 Index <sup>P</sup>	ASA51	-7.54%	20.80%	-7.09%	6.06%	8.06%	13.63%
FTSE RAFI® Japan <sup>Q</sup>	FRJPNTR	-1.06%	0.38%	-16.89%	-1.18%	0.08%	18.58%
MSCI Japan <sup>R</sup>	GDDLJN	-2.85%	-0.09%	-19.58%	-2.98%	-4.07%	18.41%
FTSE RAFI® UK <sup>S</sup>	FRGBRTR	-2.08%	19.31%	-5.22%	4.04%	3.95%	16.98%
MSCI UK <sup>T</sup>	GDDUUK	-2.64%	21.71%	-4.34%	4.50%	1.67%	14.90%
RAFI Investment Grade <sup>U</sup>		4.25%	16.34%	7.69%	5.71%	7.05%	5.61%
Merrill Lynch US Corporate Master <sup>V</sup>	COA0	3.96%	17.44%	6.22%	4.91%	7.01%	6.21%
RAFI High Yield <sup>W</sup>		4.16%	22.60%	9.68%	9.46%	10.14%	9.49%
Merrill Lynch US High Yield BB-B Rated <sup>X</sup>	HOA4	3.11%	23.23%	4.24%	6.21%	6.52%	10.18%

Definition of Indices: (A) The FTSE RAFI® 1000 comprises the 1000 largest companies selected and weighted using our Fundamental Index methodology; (B) The S&P 500 Index is an unmanaged market index that focuses on the large-cap segment of the U.S. equities market; (C) The Russell 1000 Index is a market-capitalization-weighted benchmark index made up of the 1,000 highest-ranking U.S. stocks in the Russell 3000; (D) The FTSE RAFI® 1500 comprises the 1001st to 1500th largest companies selected and weighted using our Fundamental Index methodology; (E) The Russell 2000 is a market-capitalization weighted benchmark index made up of the 2,000 smallest U.S. companies in the Russell 3000; (F) The FTSE RAFI® Developed ex US 1000 Index comprises the largest 1000 non-US-listed companies by fundamental value, selected from the constituents of the FTSE Developed ex US Index; (G) MSCI EAFE (Morgan Stanley Capital International Europe, Australasia, Far East) is an unmanaged index of issuers in countries of Europe, Australia, and the Far East represented in U.S. dollars; and (H) The FTSE All World ex-US Index comprises Large and Mid-Cap stocks providing coverage of Developed and Emerging Markets excluding the United States. It is not possible to invest directly in any of the indexes above; (I) The FTSE RAFI® Developed ex US Mid Small Index tracks the performance of small- and mid-cap equities of companies domiciled in developed international markets (excluding the United States), selected based on the following four fundamental measures of firm size: book value, cash flow, sales, and dividends. The equities with the highest fundamental strength are weighted according to their fundamental scores. The Fundamentals Weighted® portfolio is rebalanced and reconstituted annually. Performance represents price return only; (J) The MSCI EAFE Small Cap Index targets 40% of the eligible small-cap universe (companies with market capitalization ranging from US\$200 to US\$1,500 million) in each industry group of each country in the MSCI EAFE Index; (K) The FTSE RAFI® Emerging Markets Index comprises the largest 350 companies selected and weighted using the Fundamental Index® methodology; (L) The MSCI Emerging Markets Index is an unmanaged, free-float-adjusted cap-weighted index designed to measure equity market performance of emerging markets; (M) The FTSE RAFI® Canada Index comprises the Canadian stocks represented among the constituents of the FTSE RAFI® Global ex US 1000 Index, which in turn comprises the 1,000 non-U.S.-listed companies with the largest fundamental value, selected from the constituents of the FTSE Developed ex US Index; (N) The S&P/Toronto Stock Exchange (TSX) 60 is a cap-weighted index consisting of 60 of the largest and most liquid (heavily traded) stocks listed on the TSX, usually domestic or multinational industry leaders; (O) The FTSE RAFI® Australia Index comprises the Australian stocks represented among the constituents of the FTSE RAFI® Global ex US 1000 Index, which in turn comprises the 1,000 non-U.S.-listed companies with the largest fundamental value, selected from the constituents of the FTSE Developed ex US Index; (P) The S&P/ASX 200 Index, representing approximately 78% of the Australian equity market, is a free-float-adjusted, cap-weighted index; (Q) The FTSE RAFI® Japan Index comprises the Japanese stocks represented among the constituents of the FTSE RAFI® Global ex US 1000 Index, which in turn comprises the 1,000 non-U.S.-listed companies with the largest fundamental value, selected from the constituents of the FTSE Developed ex US Index; (R) The MSCI Japan Index is an unmanaged, free-float-adjusted cap-weighted index that aims to capture 85% of the publicly available total market capitalization of the Japanese equity market; (S) The FTSE RAFI® UK Index comprises the U.K. stocks represented among the constituents of the FTSE RAFI® Global ex US 1000 Index, which in turn comprises the 1,000 non-U.S.-listed companies with the largest fundamental value, selected from the constituents of the FTSE Developed ex US Index; (T) The MSCI UK Index is an unmanaged, free-float-adjusted cap-weighted index that aims to capture 85% of the publicly available total market capitalization of the British equity market; (U) The RAFI® Investment Grade Master Index is a U.S. investment-grade corporate bond index comprised of non-zero fixed coupon debt with maturities ranging from 1 to 30 years issued by publicly traded companies. The issuers held in the index are weighted by a combination of four measures of their fundamental size—sales, cash flow, dividends, and book value of assets; (V) The Merrill Lynch U.S. Corporate Master Index is representative of the entire U.S. corporate bond market. The index includes dollar-denominated investment-grade corporate public debt issued in the U.S. bond market; (W) The RAFI® High Yield Master is a U.S. high-yield corporate bond index comprised of non-zero fixed coupon debt with maturities ranging from 1 to 30 years issued by publicly traded companies. The issuers held in the index are weighted by a combination of four measures of their fundamental size—sales, cash flow, dividends, and book value of assets; (X) The Merrill Lynch U.S. High Yield Master II Index is representative of the U.S. high yield bond market. The index includes domestic high-yield bonds, including deferred interest bonds and payment-in-kind securities. Issues included in the index have maturities of one year or more and have a credit rating lower than BBB-/Baa3, but are not in default.

Source: All index returns are calculated using Total Return data from Bloomberg except for the FTSE RAFI Developed ex US Mid Small (FRSDXUS) and the MSCI EAFE Small (MCUDEAFE) which uses price return data.

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