Empirical Research Partners Michael Goldstein 212 803-8010 Yi Liu 212 803-7942 Longying Zhao 212 803-7940

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Portfolio Strategy June 2018

A U.S./China Trade War, Parts I and II?

Margins and Tax Havens, Restructurings: More Bad Than Good

The Trade War: The Equity Market Isn't the Economy

- The Trump administration's decision to provoke a trade war with China has bigger consequences for the stock market than the economy because of the differing role of manufacturing in each. Manufacturing comprises 12% of GDP and more than 40% of the earnings of the S&P 500, as manufacturers have twice the profit margins of the rest of the market. The tariffs announced so far primarily hit the supply chains of U.S. manufacturers, an inevitable result, because half of Chinese exports to the U.S. are higher-tech products.
- Most of the U.S. exports to China are agricultural products and commodities, that can be sourced elsewhere, albeit at higher prices. Supply chains are more inflexible so the short-term effects of a trade war are likely to be asymmetric. We have no idea if one will actually take place and if it does, how it will end. The rapid pace at which it's being escalated seems to make a negotiated settlement less likely. If it continues on the current trajectory we expect the traditional defense sectors (i.e., health care, consumer staples and utilities) will eventually lead. To prepare for that we put together a list of companies drawn from the traditional defensive sectors that rank in the top-half of our fundamental model and have favorable risk profiles, that's presented in Exhibit 9 on page 5. Our favorites are those drawn from health care, that offer a +100 basis point free cash flow yield advantage over the market.

Bretton Woods II: Margins and Tax Havens

- Declines in effective tax rates were the biggest source of margin improvements for manufacturers in the Bretton Woods II era, sourcing more than a third of the increase. Reductions in interest expense accounted for 30% of it, and the remainder came from offshoring and robotics. Shifting income into tax havens, that have effective tax rates around 7%, produced roughly the same benefit to margins as the offshoring of labor. U.S. multinationals book around 30% of their income in tax-haven countries.
- Up until recently the companies paying the lowest effective tax rates sold at a higher multiple than the market, an unusual state of affairs and consistent with the idea that the race to the bottom in tax rates is still on. Barring a trade war, creating regression to the mean in margins is harder than it seems because the scale of the largest companies has put them in the driver's seat on many fronts, including the use of tax havens and robotics on the plant floor.

Restructuring Charges: A Sign of the Bottom?

- Through the 1990s investors saw restructuring charges as a sign of the bottom, as managements belatedly dealt with longstanding problems. Since then they've been less charitable and restructurers have underperformed. The charges that received the better receptions were those taken in businesses with lower capital intensity, where capital expenditures were falling, and stock and debt were being repurchased.
- The evidence is that a big charge tilts the odds in favor of the bears, and they're worse if arbitrage risk and short pressure are high and the stock is a failure candidate. In fact, this work made us think that we should take account of special items in our Failure Model. Exhibit 44 on page 14 highlights companies that have taken significant charges lately, with the best and worst attributes.

Nicole Price (212) 803-7935 Sungsoo Yang (212) 803-7925 Yu Bai (212) 803-7919 Yuntao Ji (212) 803-7920 Janai Haynes (212) 803-8005

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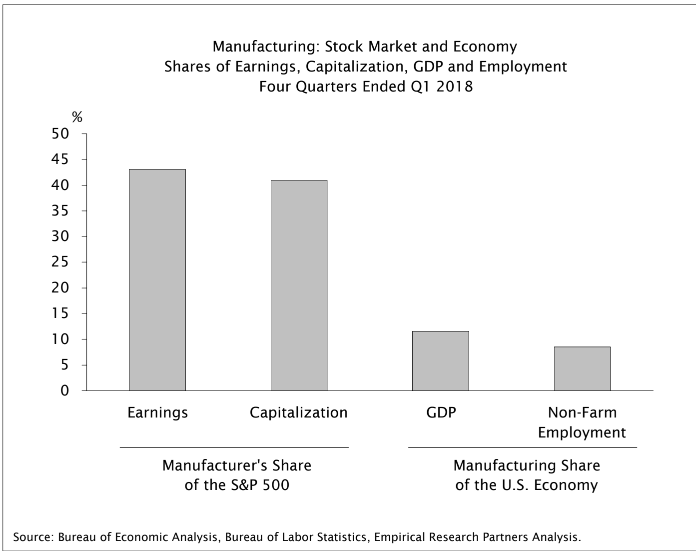
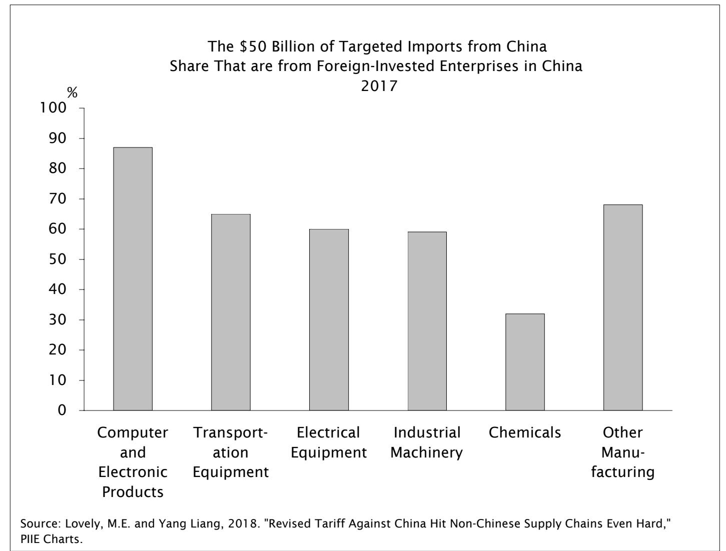
Conclusions in Brief

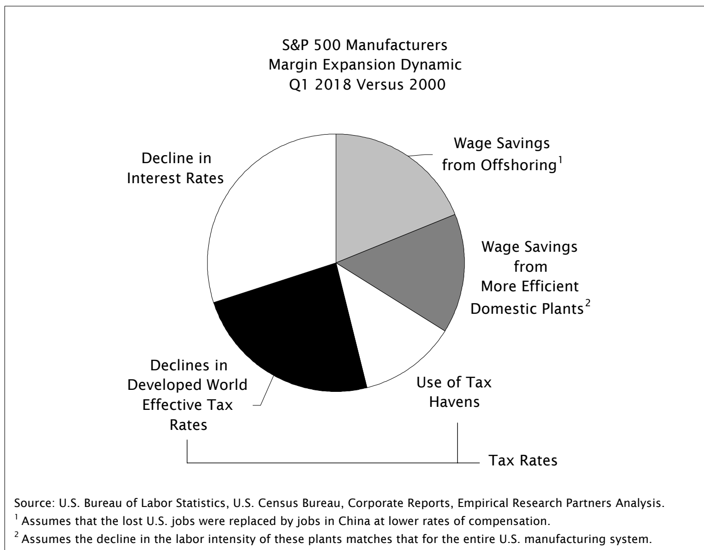
- A trade war with China would be more harmful to the equity market than the economy…



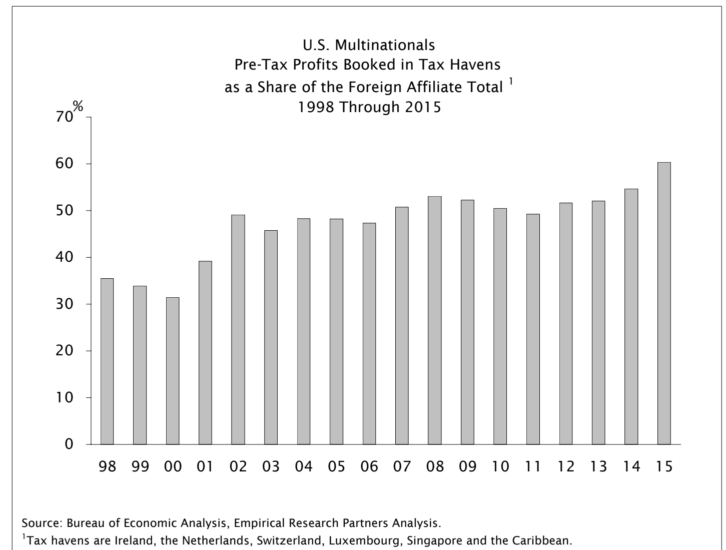
- …Because it hits the supply chains of the market's leadership:



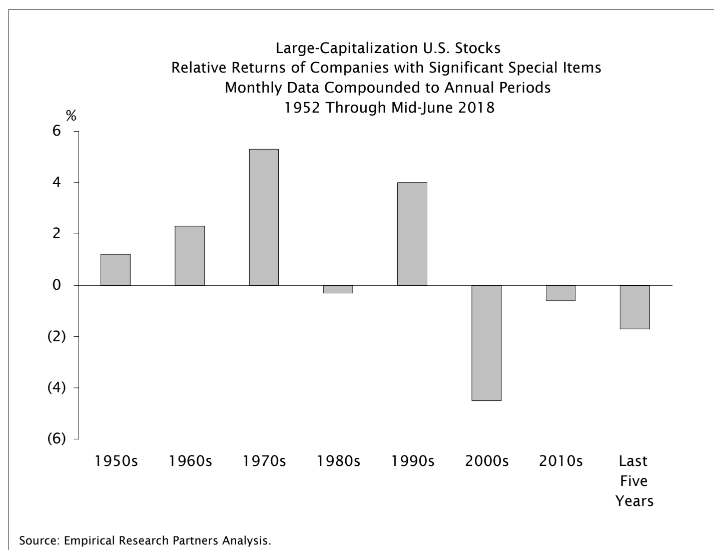
- The use of tax havens has been a driver of manufacturers' profit margins…



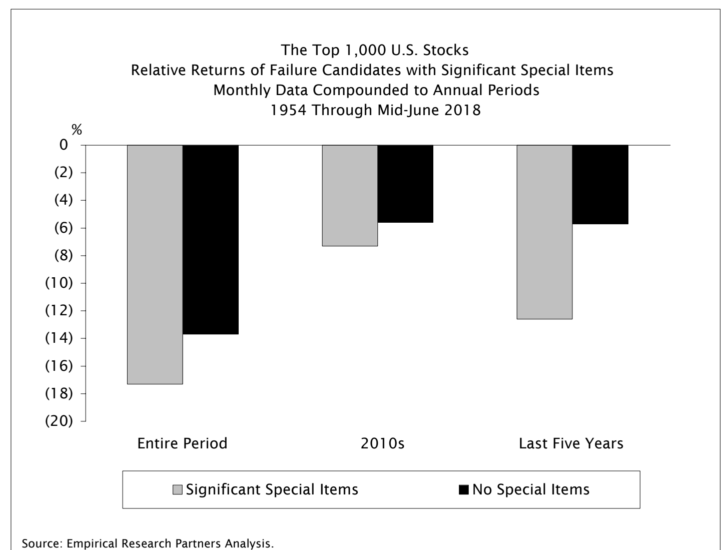
- …And multinationals doubled up on the strategy:



- "One-time" charges are now seen as a negative…



- …And they skew the odds in favor of the bears:

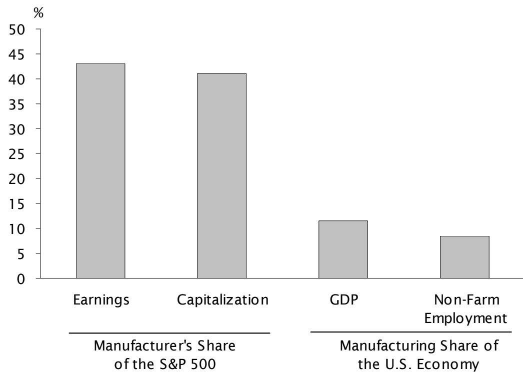


A U.S./China Trade War, Parts I and II?

The Equity Market Isn't the Economy

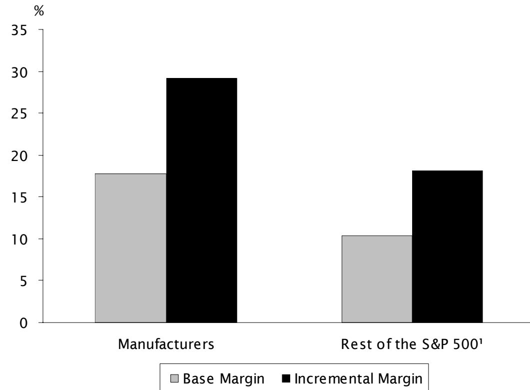
We're more concerned about the prospects of a tit-for-tat trade war between the U.S. and China than are most economists, because the U.S. large-cap equity market and the economy are not the same thing. Manufacturers, broadly defined, account for 43% of the earnings of the S&P 500 and sourced 41% of the growth in them in the last four quarters (see Exhibit 1). They represent a like share of capitalization. Their margins, having almost doubled in the past 20 years, are now about twice those of the rest of the market. In the last four quarters they've earned 29% pre-tax margins on each new dollar of sales while the rest of the market generated 18% (see Exhibit 2). Manufacturing carries a much smaller weight in the economic statistics, contributing just 12% of GDP and 8.5% of non-farm employment. The Bretton Woods II era was first and foremost a stock market event.

**Exhibit 1: Manufacturing: Stock Market and Economy
Share of Earnings, Capitalization, GDP and Employment
Four Quarters Ended Q1 2018**



Source: Bureau of Economic Analysis, Bureau of Labor Statistics, Empirical Research Partners Analysis.

**Exhibit 2: The S&P 500: Manufacturers and All Others
Base and Incremental Margins
Four Quarters Ended Q1 2018**

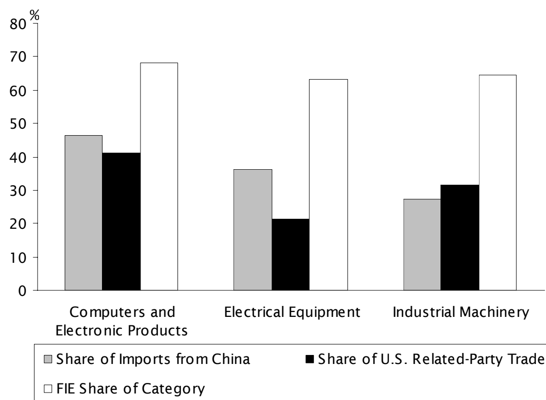


Source: Empirical Research Partners Analysis.

¹Excludes financials and REITs.

As we described in some recent research, the problem with using tariffs to pare the trade deficit with China and to stem the transfer of technology to them is that most of the relevant activity occurs in the supply chains of U.S. multinationals.[1] While Chinese labor goes into the finished goods the suppliers are mostly either the foreign affiliates of U.S. companies or those of other non-Chinese enterprises doing business there (see Exhibit 3). The bottom line is it's hard to inflict damage upon the Chinese without doing the same to the leadership of the U.S. equity market.

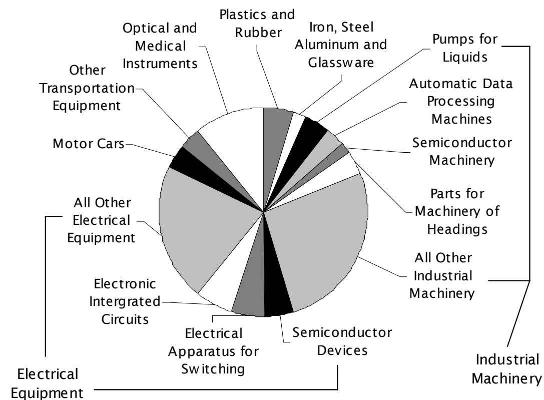
**Exhibit 3: Capital Goods Categories
Share of Imports Coming from China and
Shares that are U.S. Related-Party Trade
and from Foreign-Invested Enterprises
2017**



Source: Lovely, M.E. and Yang Liang, 2018. "Tariffs Primarily Hit Multinational Supply Chains, Harm U.S. Technology Competitiveness," PIIE Policy Brief 18-12.

¹2016 data.

**Exhibit 4: Breakdown of the $50 Billion of Targeted Imports
from China
As of Mid-June 2018**



Source: USTR, Empirical Research Partners Analysis.

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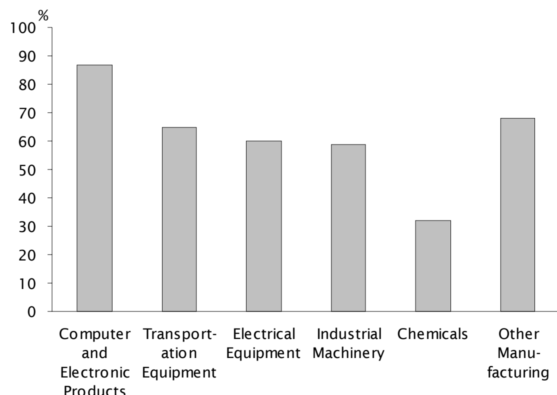
[1] *Stock Selection: Research and Results* June 2018. "Bretton Woods II: MAD."

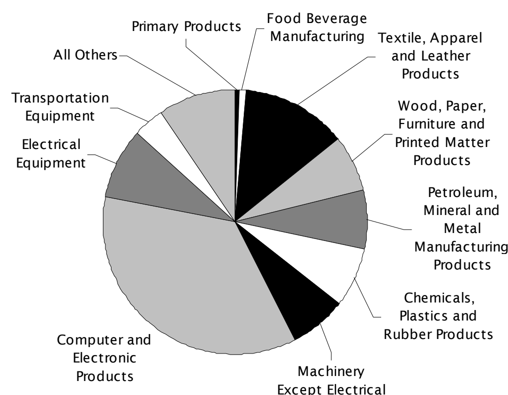
The tariffs announced by the Trump administration last week, that cover a tenth of Chinese imports, were designed to limit the pain felt by the U.S. electorate while hitting industries that are patent and technology intensive. TVs, that had been the largest category on the original list, disappeared from the revised one, while semiconductors and an array of capital goods were added to it (see Exhibit 4). Nevertheless, the conclusion we reached after reviewing the initial list has held true, and most of the imports subject to the new tariffs come from *foreign*-invested enterprises operating in China, not from Chinese companies (see Exhibit 5).

Exhibit 5: The $50 Billion of Targeted Imports from China Share That are from Foreign-Invested Enterprises in China 2017



Source: Lovely, M.E. and Yang Liang, 2018. "Revised Tariffs Against China Hit Non-Chinese Supply Chains Even Harder," PIIE Charts.

Exhibit 6: All U.S. Imports from China Decomposition by Type 2017

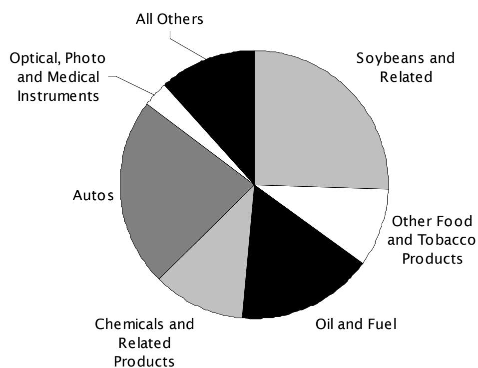


Source: U.S Census Bureau, Empirical Research Partners Analysis.

The initial set of tariffs is small potatoes in the broader scheme of things. For example, the semiconductor imports that are affected amount to only 3% of overall U.S. usage. On the other hand the value of all imports of semiconductors is almost the same size as the domestic production of them, making protectionism a real threat.

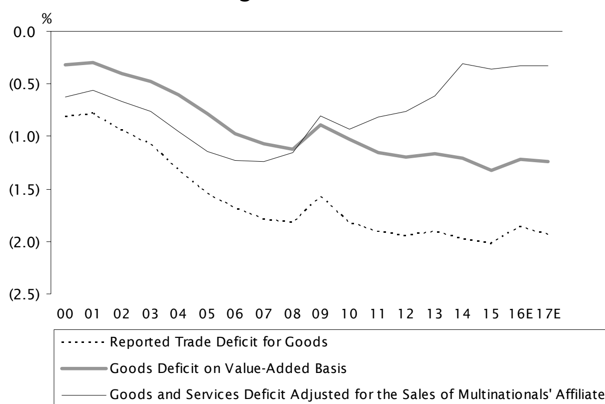
President Trump's desire to raise the stakes and impose 10% on another $200 billion of U.S. imports from China has pushed this skirmish into the trade war category. At that scale the tariffs are certain to have a material impact on supply chains and be felt by the U.S. consumer as well. Stepping back, high-tech products now constitute almost half the imports from China (see Exhibit 6). About a third of them are consumer goods, and the rest are mostly capital goods or parts. Given that mix the ability to quickly switch to non-China-based suppliers is quite limited. The elasticity of demand for U.S. agricultural and commodity exports in China is almost certainly higher than that for the high-tech products imported here (see Exhibit 7). As a result, the trade deficit could worsen in a war. There's been a substantial economic benefit from globalization that's now at risk. The trade war has a foreign front – U.S. exports that are targeted - and a domestic one, the record profit margins of multinational manufacturers.

Exhibit 7: Breakdown of the Targeted $50 Billion Chinese Imports from the U.S. As of Mid-June 2018



Source: U.S. Census Bureau, Empirical Research Partners Analysis.

Exhibit 8: The U.S. Trade Deficit With China As Reported, on a Value-Added Basis and Adjusted for the Sales of Multinationals' Affiliates As a Share of U.S. GDP 2000 Through 2017E



Source: Bureau of Economic Analysis, Census Bureau, OECD, Empirical Research Partners Analysis.

Conclusion: MAD

Given how the pieces of the puzzle fit together we see a trade war as a real threat to the margins and multiples of a large chunk of the equity market. It would create mutually-assured destruction. Globalization has been the gift that just kept on giving for U.S. equity investors and an attempt to abruptly reverse course would prove destabilizing. The world operates far differentially than it did 20 years ago. The sales of the majority-owned foreign affiliates of U.S. multinationals are roughly $6 trillion, while U.S. goods exports total $1.6 trillion. The U.S.'s trade position with China looks decidedly different when the foreign affiliates are taken into account (see Exhibit 8 overleaf).

We have no idea how this trade war is going to end. The rapid rate at which it's being escalated seems to make a negotiated settlement less likely. If it continues on the current path and creates a shock to the system, we'd expect the traditional defensive sectors (i.e., health care, consumer staples and utilities) to lead. If the process is elongated and leads to an acceleration in inflation, not our base case, they'd be less helpful. Exhibit 9 presents issues drawn from the defensive sectors that rank in the top-three quintiles of our fundamental model, that takes no account of momentum, and have better-than-average risk profiles. About half are drawn from the health care sector where the average issue on this list offers a free cash flow yield that tops 5%, compared to the market's average of about 4%.

Exhibit 9: Large-Capitalization Health Care, Consumer Staples, Telecommunications and Utility Stocks
Fundamental Model Ranking and Risk Scoring
Sorted by Average Risk Score Within Sector
As of Mid-June 2018

			Quintiles (1=Best; 5=Worst)						Free Cash Flow-to-		
			Fundamental	Risk Measures					Enterprise	Forward	Market
Symbol	Company	Price	Model Rank	Arbitrage Risk	Downside Risk	Beta	Short Pressure	Average Score	Value Yield	P/E Ratio	Capitalization ($ Billion)
Health Care:											
Pharmaceuticals											
PFE	PFIZER INC	$36.16	1	1	1	2	1	1.3	6.6 %	12.2 x	$211.5
LLY	LILLY (ELI) & CO	86.11	2	1	1	1	2	1.3	4.6	16.7	93.5
JNJ	JOHNSON & JOHNSON	121.32	3	1	1	2	1	1.3	5.6	14.9	325.4
ZTS	ZOETIS INC	88.93	3	1	1	3	1	1.5	3.3	28.9	43.1
NVS	NOVARTIS AG	74.09	2	1	2	2	2	1.8	5.1	14.1	189.1
JAZZ	JAZZ PHARMACEUTICALS PLC	177.81	3	3	1	3	3	2.5	5.5	13.5	10.7
SNY	SANOFI	39.59	2	1	4	2	4	2.8	6.4	12.2	99.8
MRK	MERCK & CO	60.99	3	3	5	2	1	2.8	3.3	14.4	164.2
Biotechnology											
GILD	GILEAD SCIENCES INC	$69.06	1	3	2	4	2	2.8	12.1 %	11.2 x	$89.8
Equipment and Services											
AET	AETNA INC	$186.95	2	1	2	1	1	1.3	2.6 %	17.1 x	$61.2
DHR	DANAHER CORP	101.27	3	1	2	2	1	1.5	4.1	22.6	70.7
HCA	HCA HEALTHCARE INC	105.95	1	2	3	1	1	1.8	5.3	12.0	37.2
BAX	BAXTER INTERNATIONAL INC	74.30	3	2	2	2	1	1.8	3.7	25.5	39.9
UNH	UNITEDHEALTH GROUP INC	254.87	2	3	2	2	1	2.0	5.1	20.1	245.2
ANTM	ANTHEM INC	244.04	2	4	1	2	1	2.0	4.1	15.8	62.4
ABT	ABBOTT LABORATORIES	62.82	3	1	1	5	1	2.0	4.4	21.8	110.1
BSX	BOSTON SCIENTIFIC CORP	32.29	3	4	1	2	1	2.0	2.9	23.1	44.6
CI	CIGNA CORP	173.93	1	2	5	1	1	2.3	8.9	13.1	42.3
HUM	HUMANA INC	305.10	1	3	1	3	2	2.3	6.7	21.7	42.0
ZBH	ZIMMER BIOMET HOLDINGS INC	111.84	2	1	3	4	2	2.5	5.0	14.6	22.7
UHS	UNIVERSAL HEALTH SVCS INC	115.16	3	3	4	2	1	2.5	3.7	12.1	10.9
WCG	WELLCARE HEALTH PLANS INC	239.85	3	3	2	3	2	2.5	8.9	23.2	10.7
ESRX	EXPRESS SCRIPTS HOLDING CO	80.48	1	4	3	3	1	2.8	10.4	8.9	45.2
Consumer Staples											
USFD	US FOODS HOLDING CORP	$37.31	1	2	1	1	1	1.3	8.8 %	17.8 x	$5.2
CAG	CONAGRA BRANDS INC	37.94	2	1	3	1	2	1.8	5.5	16.6	14.9
PG	PROCTER & GAMBLE CO	75.84	2	2	4	1	1	2.0	5.1	17.2	190.7
PEP	PEPSICO INC	105.38	2	2	3	2	1	2.0	4.1	18.4	149.5
MDLZ	MONDELEZ INTERNATIONAL INC	40.18	2	1	3	3	1	2.0	3.7	16.3	59.5
EL	LAUDER (ESTEE) COS INC -CL A	157.05	3	4	1	1	3	2.3	3.4	31.8	57.7
SYY	SYSCO CORP	66.75	3	1	3	1	4	2.3	4.4	19.5	34.8
INGR	INGREDION INC	114.44	3	1	4	2	2	2.3	4.8	14.3	8.3
HSY	HERSHEY CO	91.55	2	2	4	1	3	2.5	5.1	17.1	19.2
KMB	KIMBERLY-CLARK CORP	100.74	3	3	1	2	4	2.5	5.9	14.5	35.2
Telecommunications											
BCE	BCE INC	$40.93	3	1	1	1	5	2.0	5.8 %	15.1 x	$36.8
VZ	VERIZON COMMUNICATIONS INC	47.46	2	3	4	1	1	2.3	4.7	10.4	196.1
RCI	ROGERS COMMUNICATIONS -CL B	47.04	3	2	2	2	4	2.5	4.8	14.6	24.3
Utilities											
UGI	UGI CORP	$49.92	3	1	1	1	2	1.3	4.5 %	17.9 x	$8.6
FTS	FORTIS INC	31.25	2	1	1	1	3	1.5	1.5	NM	13.2
EXC	EXELON CORP	41.72	2	2	2	1	2	1.8	2.2	13.6	40.3
ED	CONSOLIDATED EDISON INC	73.90	3	2	1	1	3	1.8	(0.1)	17.3	23.0
DTE	DTE ENERGY CO	97.40	3	2	1	1	3	1.8	1.2	16.8	17.7
DUK	DUKE ENERGY CORP	74.41	3	1	2	1	4	2.0	0.2	15.8	52.2
XEL	XCEL ENERGY INC	43.60	3	2	1	1	4	2.0	1.0	18.0	22.2
CNP	CENTERPOINT ENERGY INC	26.08	2	3	2	1	3	2.3	3.5	16.4	11.3
SO	SOUTHERN CO	44.57	3	2	2	1	4	2.3	0.0	15.3	45.1
EIX	EDISON INTERNATIONAL	60.49	2	2	5	1	2	2.5	0.2	14.7	19.7
ETR	ENTERGY CORP	78.40	2	2	2	1	5	2.5	(2.6)	12.3	15.4
PCG	PG&E CORP	39.79	1	4	5	1	1	2.8	1.8	10.4	20.5

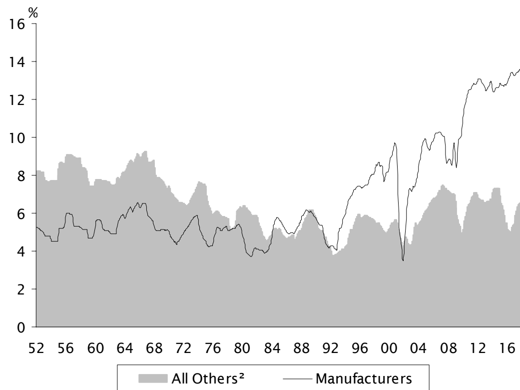
Source: Empirical Research Partners Analysis.

Bretton Woods II: Margins and the Tax Haven Windfall

Creative Tax Accounting is a Part of the Story

The persistent rise in profit margins over the course of the last two decades has been centered in companies that make something, somewhere, that prospered during the Bretton Woods II era of globalization. The manufacturers in the S&P 500, that currently number 182 companies and source 43% of earnings, have seen their net margins climb from 8% in 2000 to 14% in the latest four quarters (see Exhibit 10). We believe that there have been four primary drivers behind the trend: the savings in wages and benefits that's come from moving production to the emerging markets, the lower interest expense associated with falling rates, the benefits of robotics on the plant floor, that have never been competed away, and most importantly, a decline in effective tax rates (see Exhibit 11). Most of the swoon in tax rates has been attributable to a reduction in statutory rates throughout the developed world, while some of it was tied to the shifting of income into tax haven countries.

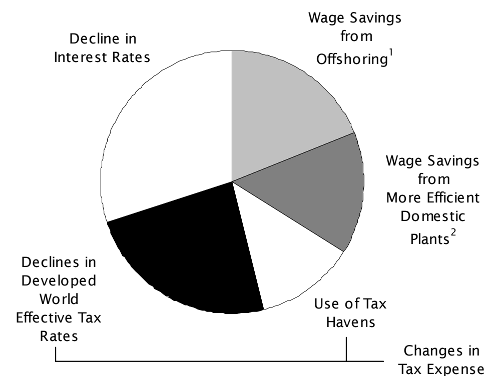
Exhibit 10: The S&P 500: Manufacturers and All Others Net Profit Margins[1] 1952 Through Q1 2018E



Source: Corporate Reports, Empirical Research Partners Analysis.

[1]Trailing four-quarter data, smoothed on a trailing three-month basis.
[2]Excludes financials and REITs.

Exhibit 11: S&P 500 Manufacturers Margin Expansion Dynamic Q1 2018 Versus 2000



Source: U.S. Bureau of Labor Statistics, U.S. Census Bureau, Corporate Reports, Empirical Research Partners Analysis.

[1]Assumes that the lost U.S. jobs were replaced by jobs in China at lower rates of compensation.
[2]Assumes the decline in the labor intensity of these plants matches that for the entire U.S. manufacturing system.

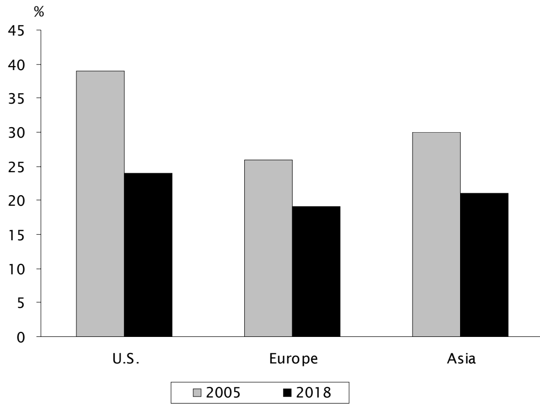
To construct Exhibit 11 we estimated the savings in wages and benefits that came from offshoring by taking account of both the decline in employment among U.S. manufacturers and the differential between their wage costs and those in China and other emerging economies. We then reduced our raw estimates for productivity differentials and the costs associated with producing goods in distant locales. We conclude that the net savings from offshoring accounted for just under a fifth of the margin expansion. A slightly smaller share, 15% or so, was attributable to the automation of U.S. manufacturing plants. To gauge that benefit we examined the relationship between shipments and employment costs for U.S. manufacturing plants, using the Survey of Manufactures that's conducted annually by the Census Bureau. We estimated the cost savings relative to the top line and then applied that ratio to the domestic revenues of the S&P 500 manufacturers, that represent about half their top lines.

The decline in borrowing costs represents a benefit almost as large as the two wage savings categories combined, sourcing 30% of the margin expansion seen since 2000. The most important source however came from the reduction in effective tax rates, at 36% of the total. Two-thirds of that decline was attributable to cuts in statutory rates and the rest came from the shifting of income into tax haven locales (see Exhibit 12).

We read a very good paper that helped flesh out the details underlying the sharp decline in tax rates.[2] The authors drew upon a range of arcane data sources to understand how the shifting of income into havens had benefited the multinationals. That can occur through transfer pricing of both products and services, the movement of intellectual property into low-tax-rate locales, and, via the interest rates charged on inter-company debt. The bulk of the savings have come from the shifting of revenues and expenses, rather than through manipulating the net interest items (see Exhibit 13).

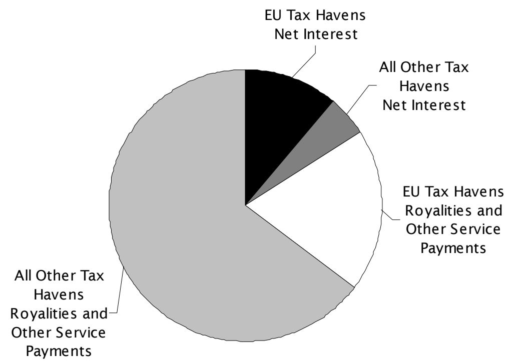
[2]Tørsløv, T. R., Wier, L. S. and Gabriel Zucman, 2018. "The Missing Profits of Nations," NBER Working Paper No. 24701.

Exhibit 12: The Developed World
Top Statutory Corporate Tax Rates
2005 and 2018



Source: Tørsløv, T. R., Wier, L. S. and Gabriel Zucman, 2018. "The Missing Profits of Nations," NBER Working Paper No. 24701.

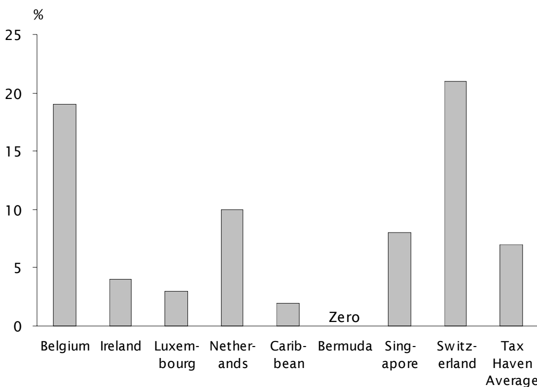
Exhibit 13: U.S. Multinationals
"Excessive" Net Interest, Royalties and Other Service Payments by Location
2015



Source: Tørsløv, T. R., Wier, L. S. and Gabriel Zucman, 2018. "The Missing Profits of Nations," NBER Working Paper No. 24701.

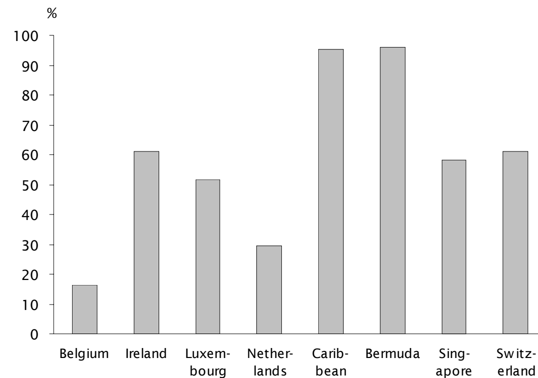
There's been a real benefit from income shifting because the *effective* tax rates in tax-haven countries are generally in single digits, averaging around 7% in 2015 (see Exhibit 14). In those places in particular there's a wide gap between the statutory rates and the effective ones. The profits shifted from multinationals represent the majority of corporate income in most of them, save the Netherlands and Belgium (see Exhibit 15). The strategy of attracting large amounts of offshore income that's taxed at low rates has proven successful, and most of those countries have above-average ratios of corporate tax revenues-to-national income (see Exhibit 16).

Exhibit 14: Tax Haven Countries
Effective Tax Rates
2015



Source: Tørsløv, T. R., Wier, L. S. and Gabriel Zucman, 2018. "The Missing Profits of Nations," NBER Working Paper No. 24701.

Exhibit 15: Tax Haven Countries
Multinationals' Shifted Profits Compared to the Reported Corporate Pre-Tax Total
2015



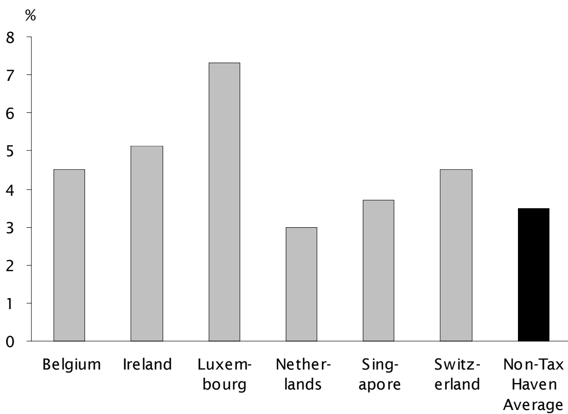
Source: Tørsløv, T. R., Wier, L. S. and Gabriel Zucman, 2018. "The Missing Profits of Nations," NBER Working Paper No. 24701.

The U.S. Once Again Leads the Charge

U.S. companies have been among the most aggressive users of tax havens (see Exhibit 17). Those tax avoidance tactics skyrocketed during the Bretton Woods II era, and the share of foreign-affiliate profits coming from a handful of havens went from just above 30% in 2000 to double that fifteen years later (see Exhibit 18). We observe a similar trend when we divide the income booked in tax havens by the entirety of the multinationals' pre-tax earnings (see Exhibit 19).

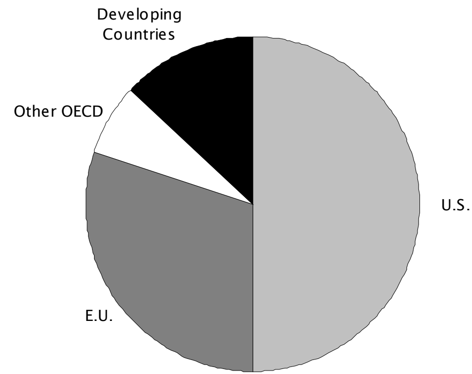
The authors of the paper point out that the location of the profits for tax purposes has almost nothing to do with the actual operations of the companies. They divide the pre-tax earnings of the multinationals' foreign affiliates by their employee compensation, separating the tax havens from the rest. The profit-to-compensation ratio in the non-tax haven countries has long been in the 40% to 60% range, while in the havens it's climbed from 200% in 2000 to nearly double that in 2015 (see Exhibit 20). That illustrates why the stimulative effects of the large corporate tax cut we've just had in the U.S. will likely prove disappointing. The tax-haven countries have led the race to the bottom, while the developed countries have engaged in a fruitless battle to place.

Exhibit 16: Tax Haven Countries
Corporate Tax Revenues as a Share of National Income
2015



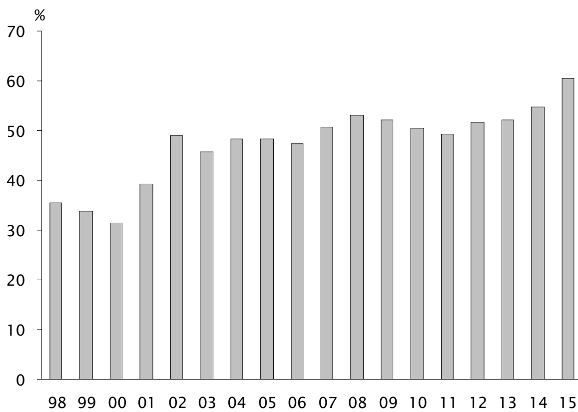
Source: Tørsløv, T. R., Wier, L. S. and Gabriel Zucman, 2018. "The Missing Profits of Nations," NBER Working Paper No. 24701.

Exhibit 17: Tax Haven Countries
Sources of Shifted Profits
2015



Source: Tørsløv, T. R., Wier, L. S. and Gabriel Zucman, 2018. "The Missing Profits of Nations," NBER Working Paper No. 24701.

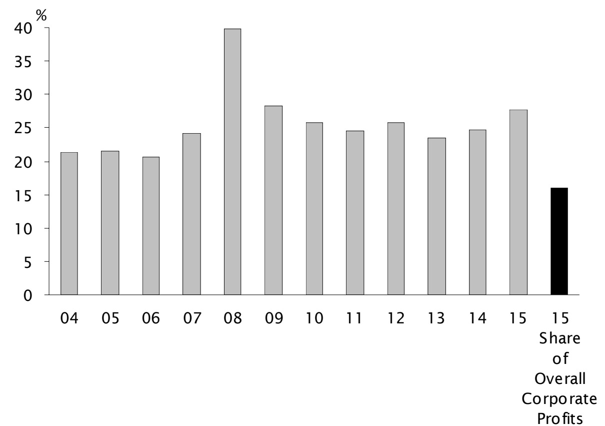
Exhibit 18: U.S. Multinationals
Pre-Tax Profits Booked in Tax Havens as a Share of the Foreign Affiliate Total[1]
1998 Through 2015



Source: Bureau of Economic Analysis, Empirical Research Partners Analysis.

[1]Tax havens are Ireland, the Netherlands, Switzerland, Luxembourg, Singapore and the Caribbean.

Exhibit 19: U.S. Multinationals
Pre-Tax Profits in Tax Havens as a Share of the Total[1]
2004 Through 2015



Source: Bureau of Economic Analysis, Tørsløv, T. R., Wier, L. S. and Gabriel Zucman, 2018. "The Missing Profits of Nations," NBER Working Paper No. 24701, Empirical Research Partners Analysis.

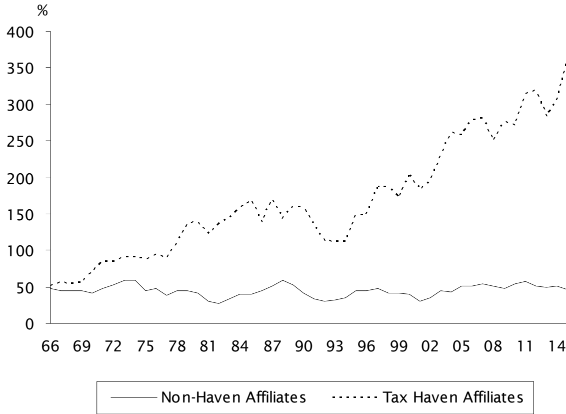
[1]Tax havens are Ireland, the Netherlands, Switzerland, Luxembourg, Singapore and the Caribbean.

Conclusion: Normal, Harder to Locate

As illustrated in Exhibit 10 and 11 there's been more than one story behind the nearly 20-year improvement in profit margins, there's been a bunch of them. The half of the increase that's come from declining interest rates and the off-shoring of production has run its course, and on the margin could even be reversing. The benefits from the automation of the plant floor though have further to run (see Exhibits 21 and 22). The increased concentration in manufacturing has helped too, as the most sophisticated companies have demonstrated they can make more with less (see Exhibit 23).

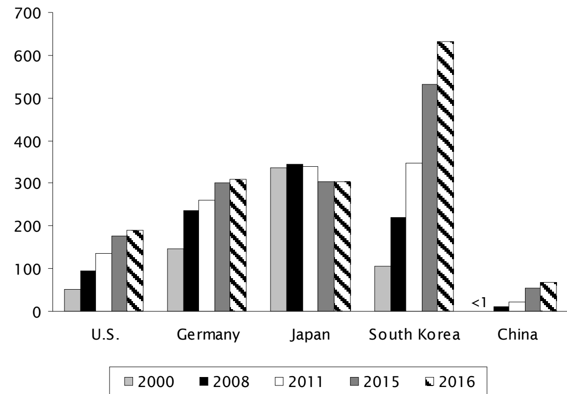
The most-significant driver of margins has been the decline in effective tax rates, a function of a race to the bottom in the developed world and companies' unfettered ability to shift income into tax havens. The latter dynamic has been nearly as important to margins as offshoring. The market believes that it's unlikely that anything will arise to reverse the trend, and has bid up the stocks of companies paying the lowest effective tax rates (see Exhibit 24). The drumbeat of globalization has made it challenging to estimate what's "normal" because countervailing forces have yet to emerge. That's been particularly true in the corporate tax arena, where the multinationals have had their way. As discussed earlier, we're been worried about the Trump Administration's tariff proposals. Those aimed at China seem likeliest to disrupt the status quo, because they involve the supply chain of the market's leadership, the technology and industrial capital goods sectors (see Exhibit 25).

Exhibit 20: Pre-Tax Profits of U.S. Multinationals' Foreign Affiliates as a Share of Their Employee Compensation 1966 Through 2015



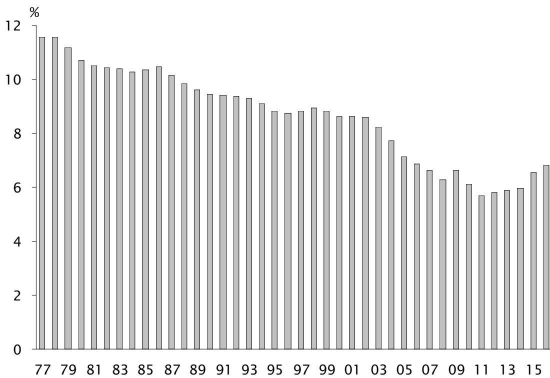
Source: Tørsløv, T. R., Wier, L. S. and Gabriel Zucman, 2018. "The Missing Profits of Nations," NBER Working Paper No. 24701.

Exhibit 21: Robot Use in Manufacturing by Country Number Per 10,000 Employees 2000, 2008, 2011, 2015 and 2016



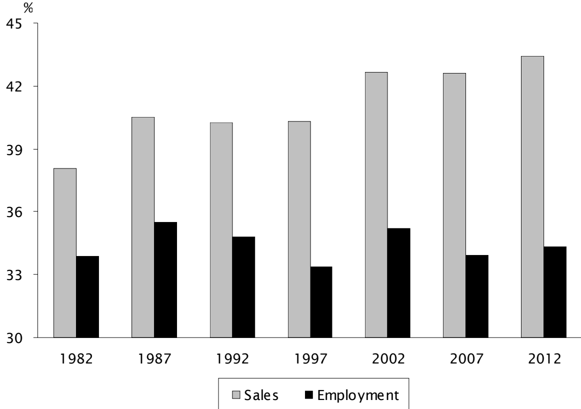
Source: Metra Marteech Limited, International Federation of Robotics, Empirical Research Partners Estimates.

Exhibit 22: U.S. Manufacturing Plants Production Worker Wages as a Share of Shipments 1977 Through 2016



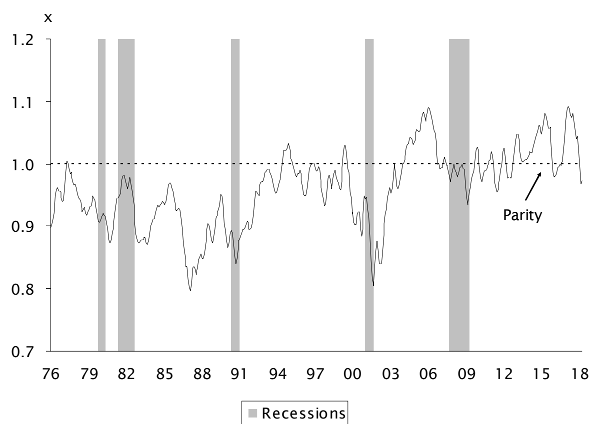
Source: U.S. Census Bureau: Annual Survey of Manufactures, Empirical Research Partners Analysis.

Exhibit 23: U.S. Manufacturers Top Four Firms: Share of Sales and Employment 1982 Through 2012



Source: Autor, D., Dorn, D., Katz, L. R., Patterson, C. and John Van Reenan, 2017. "Concentrating on the Fall of the Labor Share," IZA Institute of Labor Economics, DP No. 10539.

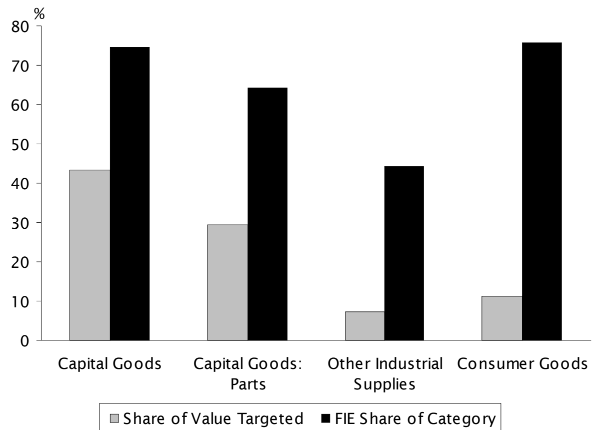
Exhibit 24: Large-Capitalization Stocks Lowest Quintile of Effective Tax Rates Relative Forward P/E Ratios[1] 1976 Through Mid-June 2018



Source: National Bureau of Economic Research, Empirical Research Partners Analysis.

[1]Equally-weighted data smoothed on a trailing three-month basis.

Exhibit 25: Proposed Section 301 Tariffs Share of Targeted Value and from Foreign-Invested Enterprises by Category 2017



Source: Lovely, M.E. and Yang Liang. 2018. "Tariffs Primarily Hit Multinational Supply Chains, Harm U.S. Technology Competitiveness, PIIE Policy Brief 18-12.

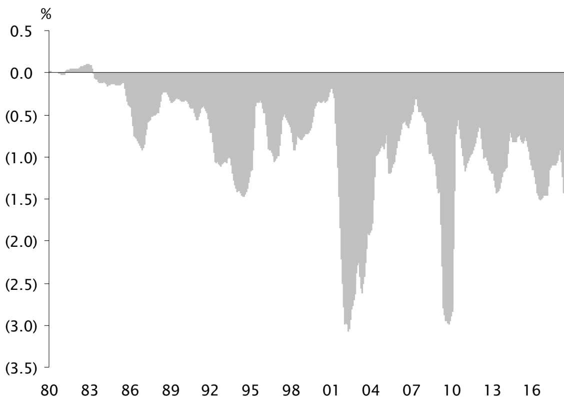
Restructuring Charges: A Sign of the Bottom?

What Was Once Good is Now Bad

A client asked if restructuring charges should be seen as signs of a bottom, and if there were ways to distinguish those that could prove to be beneficial to shareholders from those that are harmful. That's a good question that touches upon a topic we haven't looked into for many years. After reviewing the academic literature we concluded we're not alone, and little work has been done on the consequences of restructurings in the last 15 years.

It's not as though companies have stopped doing restructurings and taking charges. Exhibit 26 charts special items relative to revenues for our large-cap universe since the early-1980s. In the last couple of decades the "one-time" items have consistently amounted to 1.0% to 1.5% of the top line, doubling in the immediate aftermath of each of the last two recessions. In fact, most large-cap companies take some sort of charge each and every year. We have detailed data on the make-up of those special items line since 2001 and as shown in Exhibit 27, most of the dollars are in the restructuring category (i.e., severance, closing costs, relocation), are writedowns (i.e., impairment of assets other than goodwill), or recognize the impairment of goodwill. We focused our attention on companies with significant items, those that rank in the top quintile when the charges are normalized by revenues. In the 2010s they had to exceed 2% of the top line in a quarter to make the cut (see Exhibit 28).

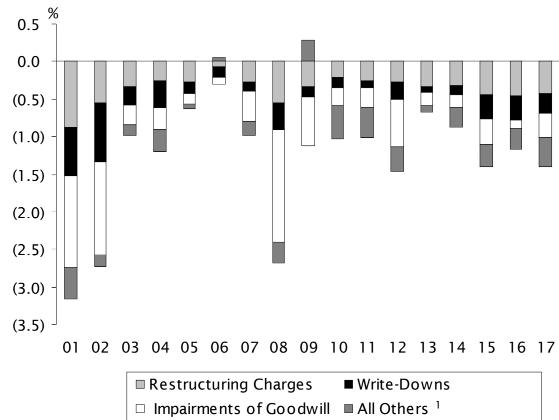
Exhibit 26: Large-Capitalization Stocks
Special Items as a Share of Revenue[1]
1980 Through May 2018



Source: Corporate Reports, Empirical Research Partners Analysis.

[1]Based on trailing four-quarter data, smoothed on a trailing three-month basis.

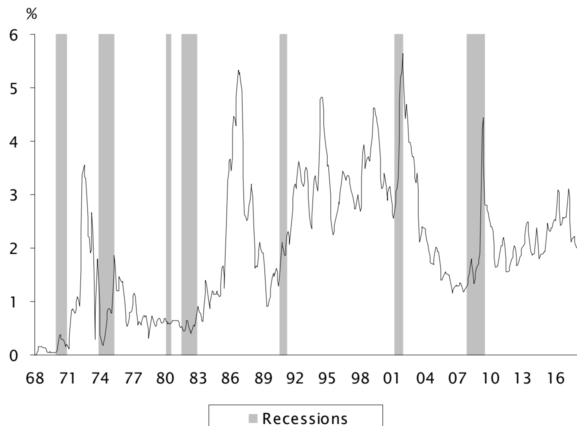
Exhibit 27: Large-Capitalization U.S. Stocks
Decomposition of Special Items
as a Share of Revenues
2001 Through 2017



Source: Corporate Reports, Empirical Research Partners Analysis.

[1]Acquisition/merger-related, unusual gain/losses, litigation/insurance settlements, in process R&D write-downs and miscellaneous other items.

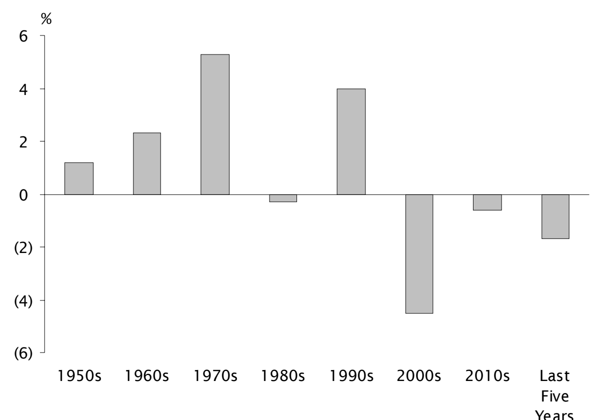
Exhibit 28: Large-Capitalization U.S. Stocks
With Significant Special Items
Expressed as a Share of Quarterly Revenues[1]
Minimum to Rank in the Highest Quintile
1968 Through Mid-June 2018



Source: Empirical Research Partners Analysis, National Bureau of Economic Research.

[1]Based on quarterly data, smoothed on a trailing three-month basis.

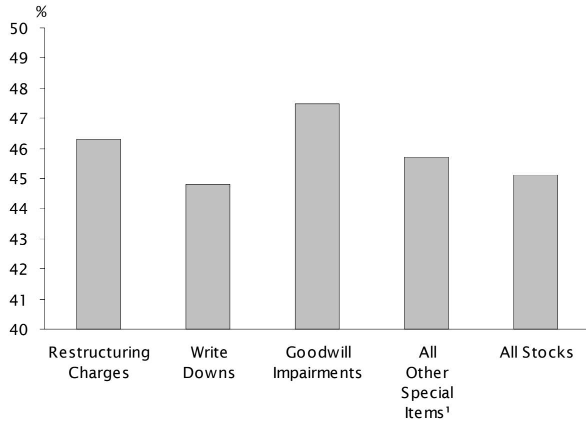
Exhibit 29: Large-Capitalization U.S. Stocks
Relative Returns of Companies with
Significant Special Items
Monthly Data Compounded to Annual Periods
1952 Through Mid-June 2018



Source: Empirical Research Partners Analysis.

Special items were seen as a positive for a long time and up until the 2000s companies that took them generally outperformed the market (see Exhibit 29 overleaf). Since then it's been a different story and they've usually lagged. The odds of a restructurer generating alpha are close to those for the average stock, the problem is that the losers swamp the winners (see Exhibit 30). What we're seeing here is consistent with our research on the performance of companies doing spin-offs. Neither the parent company nor the spin-offs have been good investments in this decade (see Exhibit 31).

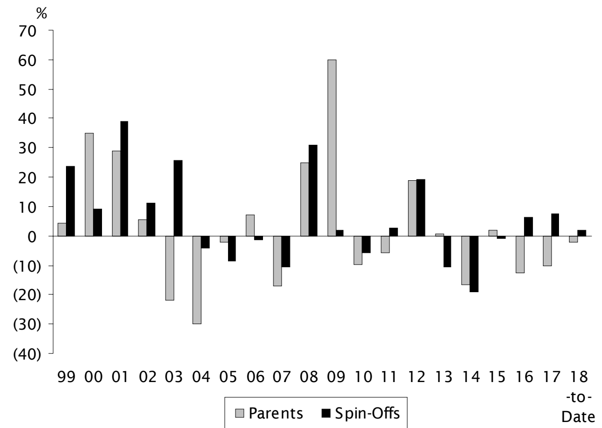
Exhibit 30: Large-Capitalization Stocks With Significant Special Items Share of Stocks Outperforming Over One-Year Holding Periods 2001 Through Mid-June 2018



Source: Empirical Research Partners Analysis, National Bureau of Economic Research.

¹Acquisition/merger-related, unusual gain/losses, litigation/insurance settlements, in process R&D write-downs and miscellaneous other items.

Exhibit 31: U.S. Stocks Relative Returns to Spin-Offs and Their Parents Measured Over One-Year Holding Periods 1999 Through Early-June 2018

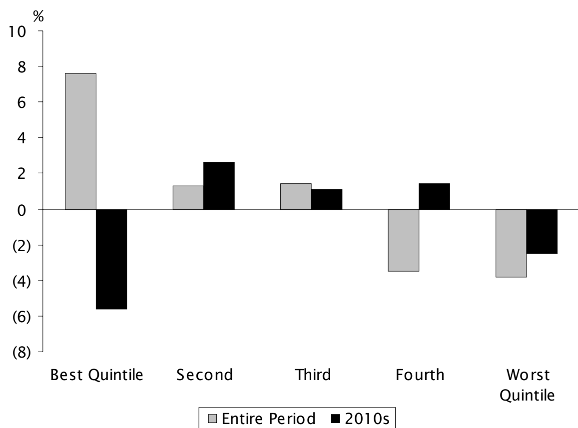


Source: FactSet Research Systems, Empirical Research Partners Analysis.

Improving the Odds: The Fundamentals

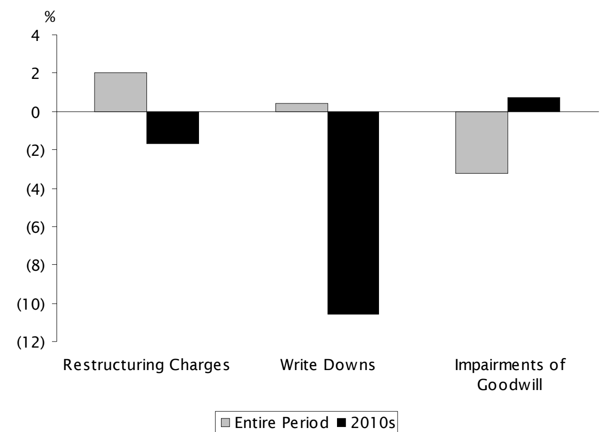
We did work to see if we could improve the odds of finding the winners by taking account of other factors. The long-term history is that charges taken by lowly-valued companies were seen as a positive, as the need to take action was already embodied in their prices (see Exhibit 32). That hasn't been the case in the current decade and value stocks with asset write downs have been exceptionally poor performers, in part because of the write downs of reserves by energy producers (see Exhibits 33 and 34). The performance has been disappointing both in that sector and in the telecom arena, as mergers have combined with disruption, calling into question the validity of the book value (see Exhibit 35).

Exhibit 32: Large-Capitalization U.S. Stocks With Significant Special Items Relative Returns by Valuation Quintile Monthly Data Compounded to Annual Periods 1952 Through Mid-June 2018



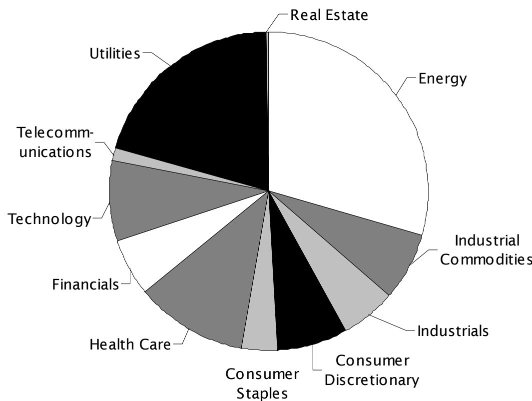
Source: Empirical Research Partners Analysis.

Exhibit 33: Large-Capitalization U.S. Stocks Relative Returns to the Best Quintile of Valuation With a Significant Restructuring Change, Write Down or Impairment of Goodwill Monthly Data Compounded to Annual Periods 2001 Through Mid-June 2018



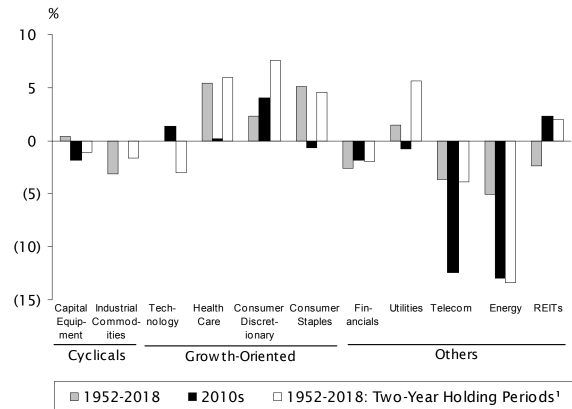
Source: Empirical Research Partners Analysis.

Exhibit 34: Large-Capitalization U.S. Stocks
Share of Asset Write Downs by Sector
2010 Through Mid-June 2018



Source: Empirical Research Partners Analysis.

Exhibit 35: Large-Capitalization Stocks
With Significant Special Items
Relative Returns Over One- and Two-Year Periods
By Sector
Monthly Returns Compounded and Annualized
1952 Through Mid-June 2018

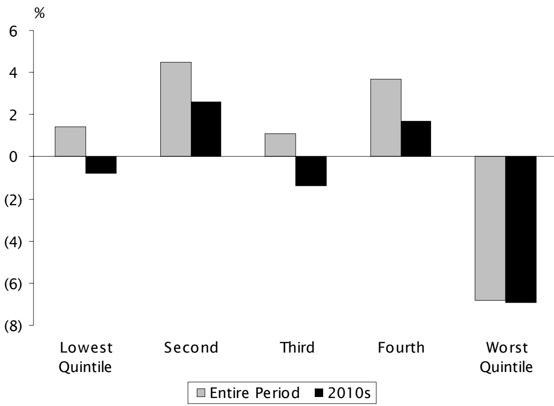


Source: Empirical Research Partners Analysis.

[1]Buy and hold returns.

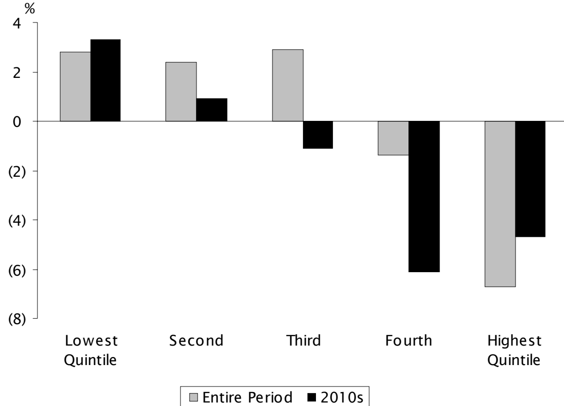
We hypothesized that restructurers would perform better if the charge was accompanied by a reduction in capital spending. We found some evidence of that, but what really stood out is that the companies with the biggest growth rates in expenditures fared badly (see Exhibit 36). Apparently write-offs undermine the reputations of big spenders. When evaluating restructurers, low capital intensity has long been better than high (see Exhibit 37). In the same vein, the concurrent repurchase of shares or debt makes the charges more palatable, while new issuance makes the situation worse (see Exhibit 38 and 39).

Exhibit 36: Large-Capitalization U.S. Stocks
With Significant Special Items
Relative Returns by Capital Spending Growth
Monthly Data Compounded to Annual Periods
1952 Through Mid-June 2018



Source: Empirical Research Partners Analysis.

Exhibit 37: Large-Capitalization Stocks
With Significant Special Items
Relative Returns by Quintile of
Capital Spending-to-Depreciation
Monthly Data Compounded to Annual Periods
1952 Through Mid-June 2018



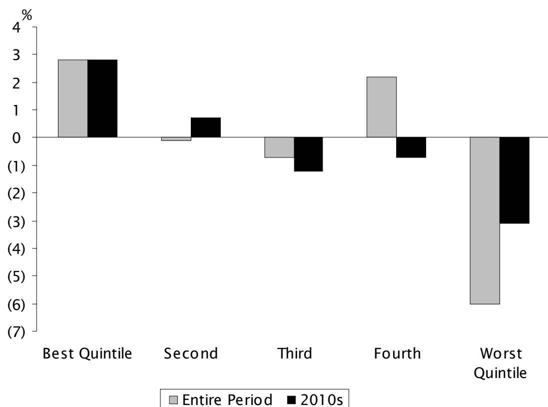
Source: Empirical Research Partners Analysis.

Improving the Odds: The Psychology

The psychology surrounding a stock tells us something about the likely response to a special item. In this context, dispute, as captured by our arbitrage risk framework, is a negative, as most of the time the charge validates the position of the bears (see Exhibit 40).[3] We see something similar when we assess the impact of short pressure, a measure of supply/demand dynamics in the securities lending market. Once again the recognition of the problem adds fuel to the fire for the shorts (see Exhibit 41). Consistent with all of the above, a charge taken by a failure candidate increases the odds of it underperforming, also the case for stocks with bottom-quintile nine-month price performance (see Exhibits 42 and 43).

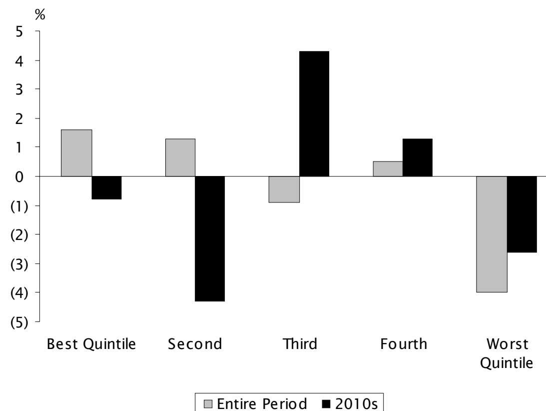
[3]Arbitrage risk is the unexplained volatility of the stock, after accounting for its beta over the last 90 trading days.

Exhibit 38: Large-Capitalization U.S. Stocks With Significant Special Items Relative Returns by the Change in Shares Outstanding Monthly Data Compounded to Annual Periods 1952 Through Mid-June 2018



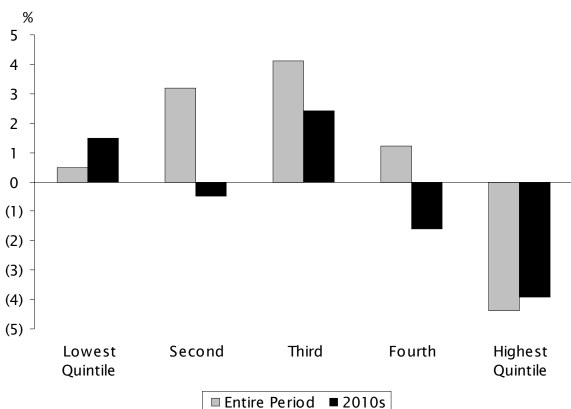
Source: Empirical Research Partners Analysis.

Exhibit 39: Large-Capitalization Stocks With Significant Special Items Relative Returns by the Change in Long-Term Debt-to-Market Capitalization Monthly Data Compounded to Annual Periods 1952 Through Mid-June 2018



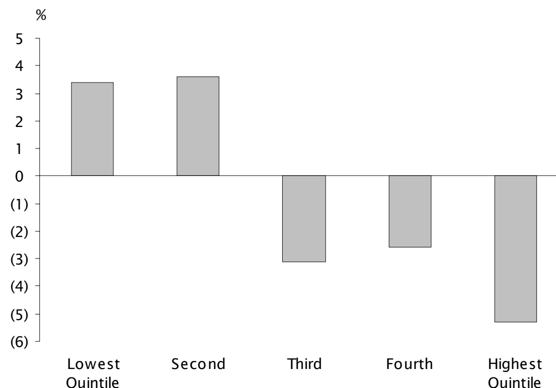
Source: Empirical Research Partners Analysis.

Exhibit 40: Large-Capitalization U.S. Stocks With Significant Special Items Relative Returns by Arbitrage Risk Quintile Monthly Data Compounded to Annual Periods 1952 Through Mid-June 2018



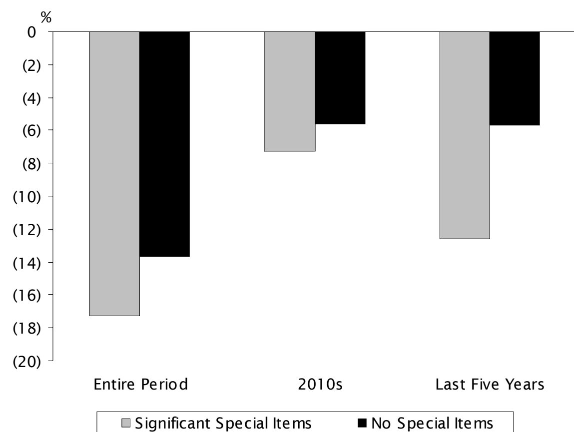
Source: Empirical Research Partners Analysis.

Exhibit 41: Large-Capitalization Stocks With Significant Special Items Relative Returns by Quintile of Short Pressure Monthly Data Compounded to Annual Periods 2010 Through Mid-June 2018



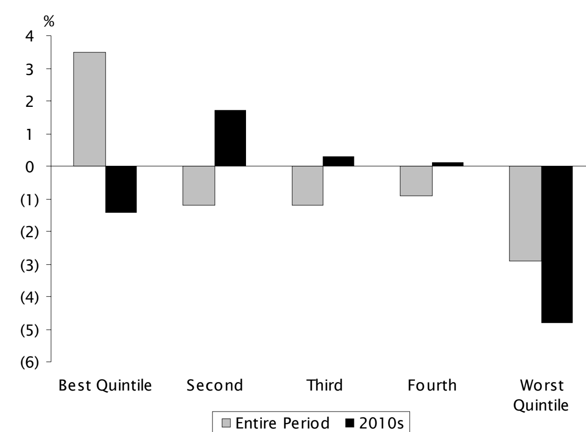
Source: Empirical Research Partners Analysis.

Exhibit 42: The Top 1,000 U.S. Stocks Relative Returns of Failure Candidates With Significant Special Items Monthly Data Compounded to Annual Periods 1954 Through Mid-June 2018



Source: Empirical Research Partners Analysis.

Exhibit 43: Large-Capitalization Stocks With Significant Special Items Relative Returns by Quintile of Nine-Month Stock Price Trends Monthly Data Compounded to Annual Periods 1952 Through Mid-June 2018



Source: Empirical Research Partners Analysis.

Conclusion: Not a Reliable Sign of the Bottom

Taking a charge was once regarded as a good thing because managements often belatedly recognized a longstanding problem and took actions to remedy it. In the last two business cycles the responses haven't been favorable, probably because the low-hanging fruit has already been picked and the phrase "non-recurring" has fallen out of the lexicon. Charges recur.

The restructuring stories that have worked out have tended to be low-capital intensity businesses, that are reducing capital expenditures and buying back their own stock and debt. Controversy and short pressure are signs that the response to a charge will be negative. This work made us think it might be worthwhile to add a variable for big special items to our Failure Model.

Exhibit 44 presents companies that currently rank in the highest quintile of special items-to-revenues, based on the last four quarters of data, sorted by the fundamental and psychological variables that have mattered to returns. A significant number of the stocks with the worst combination are also failure candidates.

Exhibit 44: Large-Capitalization Stocks
Top Quintile of Special Items-to-Revenue
Sorted by Fundamentals + Market Reaction
As of Mid-June 2018

			Quintiles (1=Best, 5= Worst)											
			Fundamentals					Market Reaction						
			Capital Spending -to- Depreciation	Capital Spending Growth	Change in: Common Shares Outstanding	Change in: Long-Term Debt-to- Capitalization	Fundamentals Average Score	Nine-Month Price Trend	Arbitrage Risk	Short Pressure	Market Reaction Average	Fundamentals +Market Reaction Average Score	Failure Model Decile	Market Capitalization ($ Billion)
Symbol	**Company**	**Price**												
Best Fundamentals + Market Reaction														
FLIR	FLIR SYSTEMS INC	$54.72	1	2	4	2	2.3	1	1	1	1.0	1.6	4	$7.5
ABT	ABBOTT LABORATORIES	62.82	2	2	4	1	2.3	2	1	1	1.3	1.8	4	110.1
PNR	PENTAIR PLC	43.88	1	1	2	1	1.3	4	1	3	2.7	2.0	1	7.8
PFE	PFIZER INC	36.16	3	2	2	1	2.0	4	1	1	2.0	2.0	1	211.5
COP	CONOCOPHILLIPS	66.60	1	4	1	1	1.8	1	4	2	2.3	2.0	1	77.9
ZBRA	ZEBRA TECHNOLOGIES CP -CL A	155.04	1	1	4	1	1.8	1	5	1	2.3	2.0	2	8.3
HPE	HEWLETT PACKARD ENTERPRISE	15.91	3	1	1	1	1.5	2	4	2	2.7	2.1	2	24.3
AKAM	AKAMAI TECHNOLOGIES INC	82.58	3	4	2	1	2.5	1	3	1	1.7	2.1	2	14.1
GDI	GARDNER DENVER HOLDINGS INC	29.98	1	1	5	1	2.0	2	4	1	2.3	2.2	7	5.9
ZBH	ZIMMER BIOMET HOLDINGS INC	111.84	2	1	4	1	2.0	4	1	2	2.3	2.2	4	22.7
KO	COCA-COLA CO	43.55	3	1	3	2	2.3	4	1	2	2.3	2.3	7	185.5
ADSK	AUTODESK INC	141.26	1	2	2	4	2.3	2	4	1	2.3	2.3	10	31.0
FIS	FIDELITY NATIONAL INFO SVCS	107.27	5	2	4	1	3.0	3	1	1	1.7	2.3	5	35.5
SLB	SCHLUMBERGER LTD	67.04	1	2	3	1	1.8	4	3	2	3.0	2.4	6	92.9
MMM	3M CO	204.17	2	2	2	3	2.3	4	2	2	2.7	2.5	9	121.2
BSX	BOSTON SCIENTIFIC CORP	32.29	2	1	4	2	2.3	3	4	1	2.7	2.5	6	44.6
VRX	VALEANT PHARMACEUTICALS INTL	23.56	3	1	4	1	2.3	1	5	2	2.7	2.5	1	8.2
WY	WEYERHAEUSER CO	37.12	na	na	4	2	3.0	3	1	2	2.0	2.5	5	28.1
AES	AES CORP	13.07	na	2	3	1	2.0	2	3	4	3.0	2.5	2	8.6
JNJ	JOHNSON & JOHNSON	121.32	2	3	3	3	2.8	5	1	1	2.3	2.5	4	325.4
LLY	LILLY (ELI) & CO	86.11	4	1	2	4	2.8	4	1	2	2.3	2.5	3	93.5
Worst Fundamentals + Market Reaction														
BABA	ALIBABA GROUP HLDG	$208.57	5	5	3	4	4.3	2	4	5	3.7	4.0	9	$535.9
GE	GENERAL ELECTRIC CO	13.20	5	3	3	5	4.0	5	5	2	4.0	4.0	10	114.6
SPB	SPECTRUM BRANDS HOLDINGS INC	80.18	2	4	1	5	3.0	5	5	5	5.0	4.0	8	4.4
UTHR	UNITED THERAPEUTICS CORP	115.56	5	5	1	5	4.0	4	5	3	4.0	4.0	2	5.0
ETR	ENTERGY CORP	78.40	na	4	4	5	4.3	4	2	5	3.7	4.0	3	15.4
DISH	DISH NETWORK CORP	34.45	5	5	4	1	3.8	5	5	3	4.3	4.0	10	16.1
QSR	RESTAURANT BRANDS INTL INC	60.97	1	4	5	5	3.8	5	4	4	4.3	4.0	9	28.9
IT	GARTNER INC	137.76	4	5	5	5	4.8	3	2	5	3.3	4.0	10	12.6
SJM	SMUCKER (JM) CO	104.19	4	5	3	4	4.0	4	4	5	4.3	4.2	7	11.8
DISCA	DISCOVERY INC	27.21	na	3	5	5	4.3	2	5	5	4.0	4.2	6	13.5
EQT	EQT CORP	55.90	4	1	5	5	3.8	5	5	4	4.7	4.2	7	14.8
CPB	CAMPBELL SOUP CO	36.67	3	4	2	5	3.5	5	5	5	5.0	4.3	9	11.0
SRPT	SAREPTA THERAPEUTICS INC	105.24	5	5	5	5	5.0	1	5	5	3.7	4.3	9	6.9
COTY	COTY INC	14.17	3	4	4	5	4.0	5	4	5	4.7	4.3	10	10.6
ALB	ALBEMARLE CORP	92.87	5	5	3	3	4.0	5	4	5	4.7	4.3	10	10.3
SJR	SHAW COMMUNICATION INC -CL B	20.94	5	5	5	1	4.0	5	4	5	4.7	4.3	10	10.5
CZR	CAESARS ENTERTAINMENT CORP	11.75	1	5	5	5	4.0	4	5	5	4.7	4.3	10	8.2
SRE	SEMPRA ENERGY	112.67	na	2	5	5	4.0	5	5	4	4.7	4.3	8	29.8
IRM	IRON MOUNTAIN INC	33.38	na	na	5	5	5.0	5	2	5	4.0	4.5	9	9.5
O	REALTY INCOME CORP	52.90	na	na	5	5	5.0	5	2	5	4.0	4.5	9	15.0
ENB	ENBRIDGE INC	32.31	5	5	5	4	4.8	5	4	4	4.3	4.5	9	55.1
TRGP	TARGA RESOURCES CORP	47.40	5	5	5	5	5.0	4	4	5	4.3	4.7	10	10.4
Financials														
ETFC	E TRADE FINANCIAL CORP	$64.39	na	na	1	na	1.0	1	2	1	1.3	1.2	2	$17.1
AON	AON PLC	140.26	na	na	1	na	1.0	4	1	1	2.0	1.5	7	34.4
LNC	LINCOLN NATIONAL CORP	66.72	na	na	1	na	1.0	4	2	1	2.3	1.7	1	14.6
HIG	HARTFORD FINANCIAL SERVICES	53.17	na	na	1	na	1.0	4	2	1	2.3	1.7	6	19.0
CIT	CIT GROUP INC	51.28	na	na	1	na	1.0	3	2	4	3.0	2.0	2	6.6
USB	U S BANCORP	51.28	na	na	2	na	2.0	4	1	2	2.3	2.2	7	84.6
WLTW	WILLIS TOWERS WATSON PLC	154.98	na	na	2	na	2.0	4	1	2	2.3	2.2	5	20.5

Source: Empirical Research Partners Analysis.