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Working Paper

The Harder They Fall

Research Note

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Suggested Citation: Nitzan, Jonathan; Bichler, Shimshon (2019) : The Harder They Fall, Research Note, The Bichler and Nitzan Archives, Toronto, <http://bnarchives.yorku.ca/581/>

This Version is available at:

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The Harder They Fall

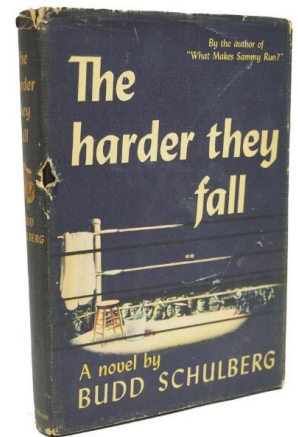
Shimshon Bichler and Jonathan Nitzan

Jerusalem and Montreal, January 19, 2019



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Like most of those subjected to the capitalist mode of power, Toro Molina, the protagonist of Budd Schulberg's novel The Harder They Fall (1947), knows nothing about the larger scheme of things. Lured to the U.S. on a promise to 'financialize' his huge muscles, the Argentine-villager-turned-U.S.-boxing-champion will see none of the yield on his 'human capital'. His promoters will take it all. They will 'fix' his battles into a winning streak to capitalize his victories as he fights his way to the West Coast – and then leverage his serialized losses as he makes his way back to the East. The harder he falls, the higher they rise.



1. From boom to doom

Until a few months ago, the stock market narrative in the United States could have been summarized by the popular acronym BTFD – or 'buy the fucking dip'. Analysts and strategists, emboldened by the world's synchronized recovery, Trump's pro-business policies and ample liquidity, predicted that equities would continue rising and recommended that investors take advantage of any temporary weakness to augment their stock holdings in anticipation of further upside.

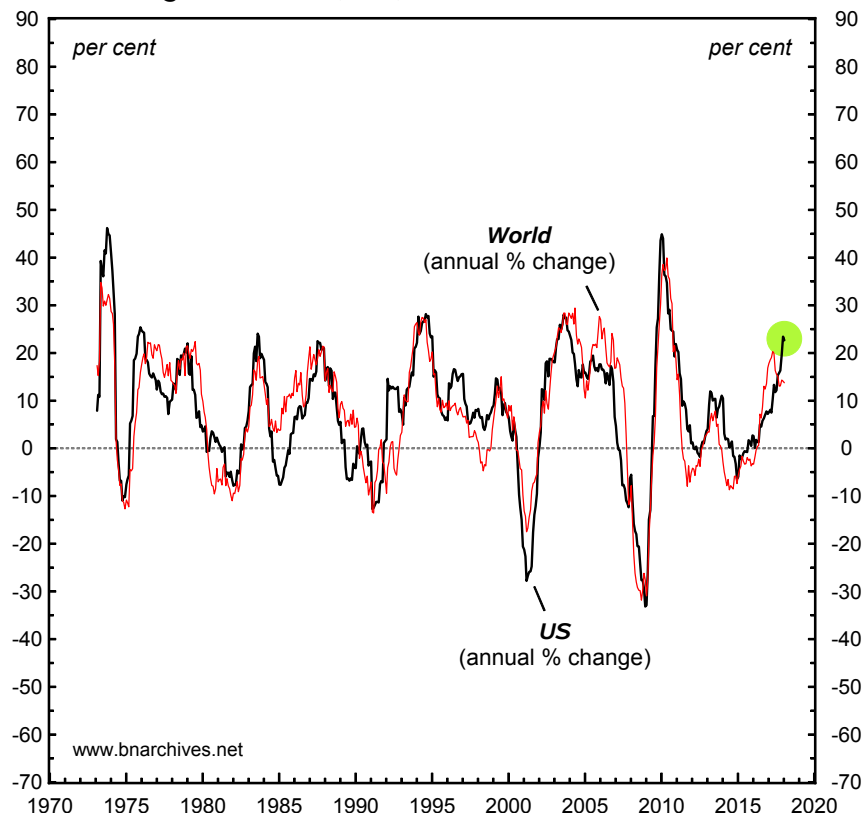
But the atmosphere of boom has since given way to doom and gloom. With equity markets having entered 'correction' territory, many observers, including some of the world's richest investors, now warn of a coming crash and a protracted 'bear market'.

2. EPS: the stylized facts

Figure 1 sets this shifting sentiment in a long-term context. The chart, which begins in the early 1970s, shows the annual growth rates of U.S. and global earnings per share (EPS), smoothed as 12-month trailing averages, (in this piece, we use the terms 'earnings' and 'profits' interchangeably).

The historical pattern of both series is highly stylized and very similar. In both cases, EPS growth is cyclical, mean-reverting and oscillating within clear bounds. Although there are some glaring exceptions, in general earnings growth rates tend to peak at around +25% and trough at around -10% (a more pedantic plot showing the series' historical means \pm one standard deviation would convey the same pattern only with more clutter).

1. Earnings Per Share (EPS)



NOTE: Series express per cent change over the same month the year before and are smoothed as 12-month trailing averages. Last data points: December, 2018.
SOURCE: Datastream.

3. Has earnings growth peaked?

According to the data, current EPS growth rates hover around their upper historical bound: the U.S. rate is just shy of +25% (circled in green), while the global rate (including the U.S.) is already down from its +20% peak.

It is of course possible for both U.S. and world EPS to continue rising at somewhat lower rates – as they did, for example, during the late 1990s and mid-2000s. But based on the historical record, the likelihood of a sharp downward reversal from these elevated levels seems high – particularly given mounting indications of a global slowdown.

4. Why should falling earnings matter for the stock market?

To the uninitiated, the answer might seem obvious: stock prices discount corporate earnings, meaning that when earnings decelerate or drop – all else remaining the same – so must equity prices.

Or must they?

Note that Figure 1 depicts the growth of *current* EPS (accrued over the past 12 months). In theory, though, stocks should capitalize not current earnings, but *future* earnings, and not future earnings in the abstract, but future earnings *all the way to eternity* (Benjamin Graham, quoted in Zweig 2009: 28).

Now, it is true that, due to discounting, the deeper we delve into the future, the lower the capitalized value of any given dollar of earnings. But since according to the theorists of finance the future is potentially infinite, discounted future dollars add up and eventually overwhelm the magnitude of current ones.

So, in principle, *current* earnings should not really matter for stock prices. And, indeed, very often they don't.

5. The price-EPS correlation: a brief history

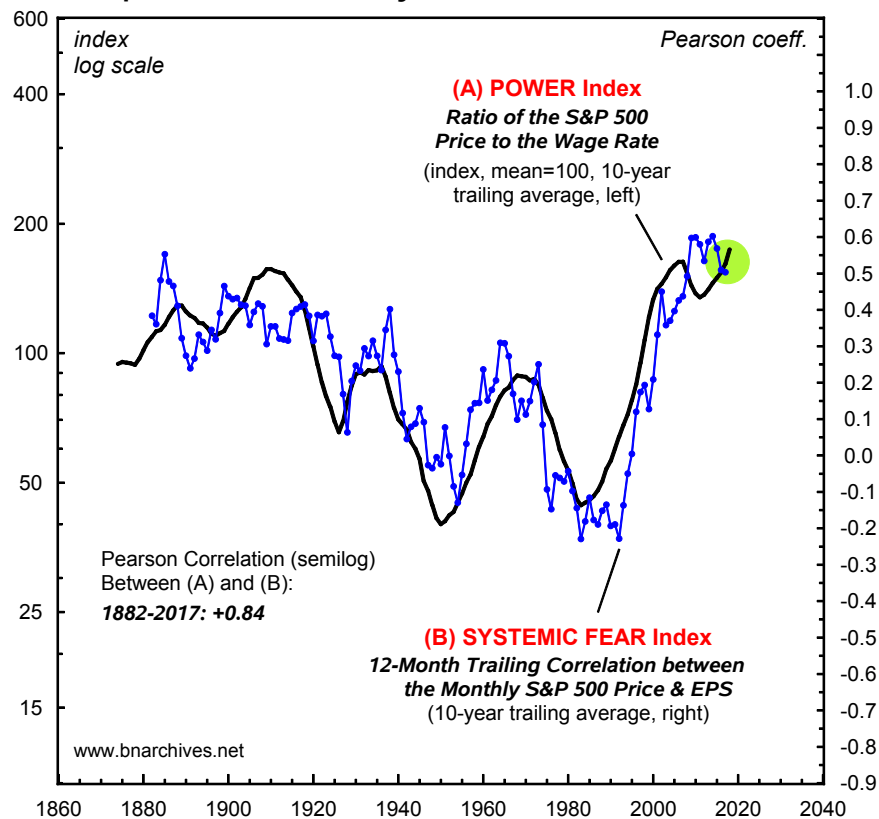
Figure 2 is updated from our *RWER* paper 'A CasP Model of the Stock Market' (Bichler and Nitzan 2016: Figure 9, p. 141). The blue dotted series depicts the 12-month trailing Pearson Correlation coefficient between the monthly S&P 500 stock price index and current EPS, with the trailing correlation itself then smoothed as a 10-year trailing average.

As the chart shows, this correlation has changed dramatically over time, tracing a somewhat ragged V-shape pattern. During the late nineteenth and early twentieth centuries, the price-EPS correlation was high, hovering around +0.4. But from then on, it trended downward, and by the late 1970s it even turned negative.

In other words, during much of the twentieth century, current earnings became decreasingly important and eventually irrelevant for stock prices – exactly as the standard manuals of finance stipulate.

But in the early 1990s the downtrend suddenly reversed. The price-EPS correlation started to rise, and by the early 2010s reached record levels, in excess of +0.6. Unlike the previous downtrend, this upward trajectory is *inconsistent* with the canons of finance.

2. Capitalized Power and Systemic Fear



NOTE: Last data points: 2018 for the power index, 2017 for the systemic fear index.
SOURCE: Global Financial Data, Robert Shiller, Global Insight.

6. Systemic fear and capitalized power

What does the price-EPS correlation mean, and why has it changed so dramatically over time?

In our work, we answered the first question by proposing to view the price-EPS correlation as a quantitative proxy for the *systemic fear* of capitalists (Nitzan and Bichler 2009b; Bichler and Nitzan 2010; Kliman, Bichler, and Nitzan 2011; Bichler and Nitzan 2016, 2018; for a critique, see Baines and Hager 2019).

Stated briefly, our logic runs as follows. When capitalists are optimistic about the long-term future of their system – i.e., when they think that the flow of profit will continue *indefinitely* – there is no reason for them to pay much attention to *current* earnings. In this ‘business as usual’ scenario, with capitalists abiding by their sacred forward-looking ritual of capitalization, equity prices reflect long-term profit expectations (as well as other factors, such as risk and the discount rate) and are impacted only marginally or not at all by profits that are earned here and now. The result is a low or even negative price-EPS correlation, as witnessed for example during the 1970s and 1980s.

By contrast, when capitalists become apprehensive about the long-term prospect of their system – in other words, when they are struck by systemic fear – they grow uncertain about and have difficulty envisioning the future flow of profit. This deep uncertainty forces them to abandon their forward-looking ritual and instead capitalize stocks based on what they can be certain of *here and now* – that is, on current profit. The result is a high price-EPS correlation, as witnessed for instance since the early 2000s.¹

Now why did our ‘systemic fear index’ decline during much of the twentieth century, only to reverse course and rise sharply since the 1990s? The answer, we suggest, has to do with the solid black series shown in Figure 2. This series measures the ratio between the S&P 500 price index and the U.S. average wage rate, and we label it the *power index*.

Capitalist power, we claim, gets capitalized *differentially* – that is, by weighing the value of one’s assets or income *relative* to those of others (Nitzan 1992, 1998; Nitzan and Bichler 2009a). In this case, where our focus is on the broad power of capitalists relative to workers, a simple power index can be calculated by comparing stock prices to wages.

The remarkable – and perplexing – thing about our power and systemic fear indices is that they are so tightly and systematically correlated: over the past century and half, their Pearson Correlation measures +0.84 out of a maximum of 1. And the question is why.

Why should the ups and down of the price-EPS correlation bear any relationship to the gyrations of the stock price/wage ratio? Indeed, assuming our labelling of the two series is valid, why should the systemic fear of capitalists oscillate together with their differential power? If anything, shouldn’t they move *inversely* to one another?

7. The dialectics of power and fear

As far as we know, this question has never been posed before, let alone answered. Indeed, to the best of our knowledge, the underlying series themselves haven’t been constructed and plotted before – and certainly not as proxies for capitalized power and systemic fear. So our answer here can only be tentative.

According to Hobbes’ *Leviathan* (1691, first published in 1651), the relatively equal abilities of human beings breed their uncertainty, insecurity and mutual suspicion, and these forces in turn compel them to try to increase their differential power without end. But then – and this is the crucial qualifier – the more power one possesses, the more one dreads losing it all. The result is an ongoing cycle, with fear stoking a hunger for power, and the amassment of power heightening the very fear that begot that hunger in the first place (for example, pp. 75 and 94).

¹ The high price-EPS correlation of the late nineteenth and early twentieth centuries was associated, at least in part, with the fact that forward-looking capitalization was only beginning to gain traction in the equity market, and that its birth pangs elicited plenty of uncertainty about and mistrust of future earnings projections. ‘The principle that capitalization should be based on [future] earning capacity rather than on actual cost’, declared one disgruntled observer, ‘is not only unsound in theory but is also vicious in its practical application’ (Bonbright 1921: 482). For more, see Nitzan and Bichler (2009a: 155-158).

And if our interpretation here is correct, this is exactly what we see in Figure 2. The greater the power of capitalists relative to workers (i.e., the higher the ratio of stock prices to wages in the chart), the more difficult it will be to increase this power further in the future, and therefore the greater the capitalists' systemic fear that their relative capitalization will decelerate or stall. In this sense, the greater the capitalized power the direr its potential investment consequences. As differential power continues to increase against mounting opposition, there is a growing risk that this power will be openly challenged and scaled back (through reform and downward redistribution); and if despite these counter-developments capitalized power continues to climb, there arises the possibility – remote as it may be – of capitalized power being overthrown altogether (revolution). For capitalists, then, capitalized power and systemic fear go hand in hand: the greater (lesser) the power, the greater (lesser) the systemic fear of losing it.

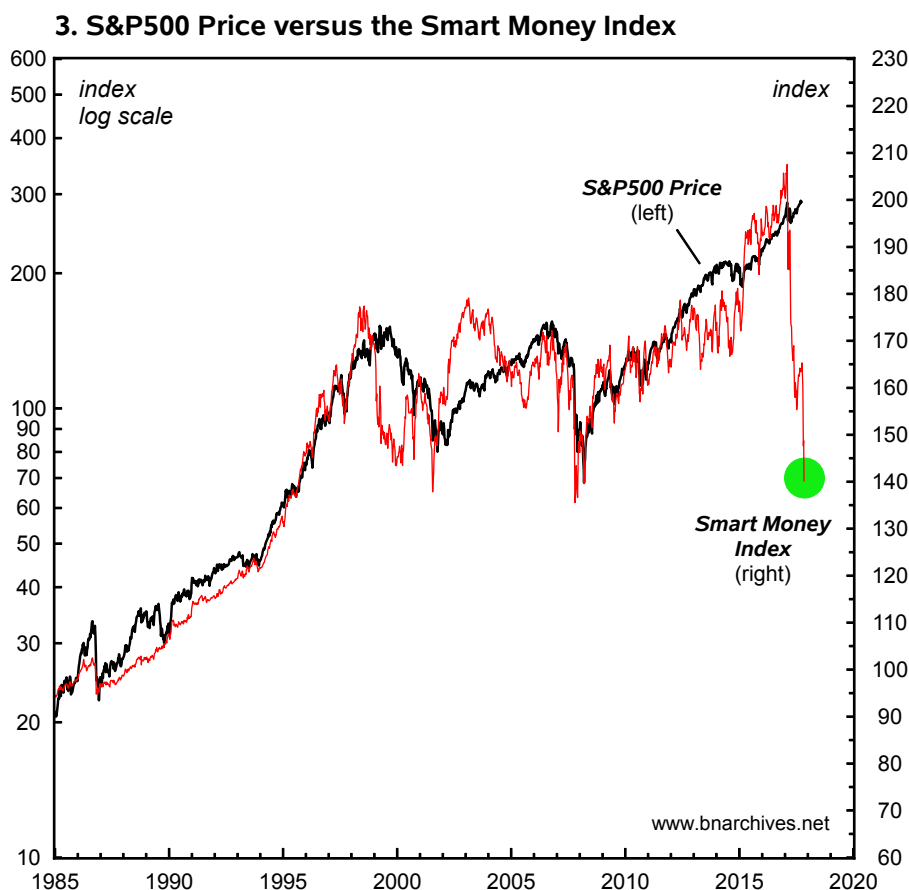
Now, the *impact* of growing fear – and this is a key point – is largely introverted, at least initially: it affects not the *level* of capitalization, but its *temporal basis*. When capitalized power is low (like it was, for instance, during the 1970s and 1980s), capitalization relies on and reflects forward-looking earnings expectations (hence the low or even negative price-EPS correlation). But as capitalized power grows (as it has, for example, since the 1990s), capitalists, apprehensive about mounting systemic risks, gradually shift their gaze from the deep future to the most recent past (causing the price-EPS correlation to rise).

8. The harder they fall

With this framework in mind, the question of peak earnings becomes crucial. According to Figure 2, the dialectical twins of capitalized power and systemic fear are currently at record highs, which means that the stock market trajectory is now highly dependent on the direction of current profits. And given that according to Figure 1 U.S. and world earnings growth are also near record highs, it seems likely that the U.S. rate will soon flip (as the global one already has), and that when it does, the U.S. stock market, being ultra-sensitive to current earnings, will follow suit.

The anticipation of this outcome is revealed, and rather dramatically, by Figure 3. The chart, currently popular among financial fear mongers, juxtaposes the S&P 500 price against the so-called 'smart money index'. The *divergence* between the directions of the two series proxies the relative bullishness/bearishness of sophisticated investors (hence the term 'smart money'). When sophisticated investors are bullish, they 'buy into weakness', causing the smart money index to fall by less (or rise by more) than the S&P price. And when they are bearish, they do the opposite – namely, they 'sell into strength', thus causing the smart market index to rise by less (or fall by more) than the S&P 500 price.

Based on this arithmetic, the huge drop in the smart money index since early 2018 against the backdrop of a rising S&P 500 price suggests that sophisticated investors have grown extremely pessimistic.



NOTE: Last data points: September/October, 2018, for the price and smart money indices, respectively.
SOURCE: Bloomberg via Bull Markets (<https://bullmarkets.co/freedata/>).

All in all, then, it seems that the road for another major bear market, with roller-coaster consequences for the subjects of global capitalism, is now wide open. The only thing missing for the hard fall is a reversal of U.S. current earnings.

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