

Kliman on Systemic Fear: A Rejoinder

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Editors' Note: Andrew Kliman's paper in this issue, 'Value and Crisis: Bichler and Nitzan versus Marx', consists of two sections. The first section deals with Bichler and Nitzan's recent paper on 'Systemic Fear, Modern Finance and the Future of Capitalism' (2010). The second section takes issue with their earlier critique of Marx's labour theory of value (Nitzan and Bichler, 2009a), and offers an explanation of the global economic crisis. In the following rejoinder, Bichler and Nitzan address the points raised in the first of these sections.

Introduction

The first part of Kliman's paper isn't exactly a critique. The author doesn't engage our argument, and he shows no concern for the broader theoretical and historical context in which this argument is made. Instead, he looks for inconsistencies, discrepancies and incompatibilities – faults that in his view pull the rug out from under our entire analysis and make such engagement unnecessary to begin with. The gist of his complaint can be summarised as follows:

1. *Bichler and Nitzan, he argues, draw conclusions that their own data refute.* In their 2010 article they claim that, in capitalism, systemic fear is revealed solely by the breakdown of capitalisation (with stock prices being positively and tightly correlated with current earnings). They then argue that such a breakdown occurred only during the 1930s and 2000s, and use this observation to infer that capitalists have been gripped by systemic fear during these periods. However, according to the evidence that they themselves marshal, a positive and tight correlation also existed from the early 1950s to the early 1970s. And since the latter period wasn't one of crisis – in fact, it is commonly seen as the 'golden age' of capitalism – the notion that price-earnings correlations are indicative of systemic fear breaks down.

2. *Bichler and Nitzan erroneously assume that capitalism requires capitalists to believe that the system will continue forever.* The error here is both logical and empirical. Simple probability theory suggests that, for a high enough reward, most people will invest even when they believe that the capitalist system is very likely to collapse. And laboratory experiments, including those reported by Nobel laureates, show that people will continue to buy stocks that they know will become worthless by the end of the experiment. In other words, capitalists act like capitalists regardless of what they think about the future of capitalism.
3. *The very notion of systemic fear is entirely subjective and therefore useless for a scientific inquiry.* Bichler and Nitzan pretend to show that capital is a historical subject capable of bringing capitalism down, but their alleged demonstration relies on incoherent terminology and unfalsifiable Freudian speculations. Instead, they should go back to the 'good old fear' that capitalists feel when struck by a *real* crisis of *real* profit (as Marx already and perfectly explains in *Das Kapital*).

The Sleepwalkers

Kliman's first point is correct, and we are grateful to him for having pointed it out to us. The positive correlation between share prices and current earnings indeed is *not unique to the 1930s and 2000s*. As he indicates, *a similar correlation exists from the early 1950s to the early 1970s* – a correlation that we overlooked and failed to mention in our paper. However, as this rejoinder shall show, the oversight is hardly critical. It can be easily corrected in a manner consistent with both our systemic-fear hypothesis and our broader notion of the capitalist mode of power.

To begin with, Kliman's personal anxieties notwithstanding, inconsistency need not be lethal. Note that we are dealing here not with a heteronomous dogma, but with the autonomous, living process of an ever-changing science.¹ And scientific discovery, unlike religious reiteration of eternal truths, is littered with oversights and errors. They are the bread and butter of the creative process, the serendipitous leeway that gives scientists the ability to tease order out of chaos. For academics concerned with the health of their career, errors are a recipe for disaster – a risk best avoided by limiting oneself to 'adoptions', 'interpretations' and 'critiques'. But for creative scientists, making errors – and negating them – is the only path to breakthroughs.

The Pythagoreans erred in their belief that every magnitude can be expressed as a rational number. This erroneous conviction, though, helped launch the remarkable triangle of democracy-science-philosophy, and the eventual refutation of that conviction created a much larger mathematics that incorporated irrational as well as rational

numbers. And the list continues. Kepler's astronomical research was bogged down for a decade by his supposition that celestial orbits were circular rather than elliptical, but that mistake sharpened his inquiry and hardly invalidated his broader thesis. Delambre and Méchain's mission to measure the standard meter was full of baffling inaccuracies, but those inaccuracies helped trigger the mathematical development of statistical estimates. Einstein's belief in a stationary universe didn't sit well with his relativity theory, creating an inconsistency that he solved by inventing a 'cosmological constant'; later on, when he accepted that the universe was expanding, the inconsistency disappeared and the constant became unnecessary (erroneous?); and nowadays, talk of an accelerating universe may end up giving the constant yet another lease on life. The works of Gardiner Means on administered prices and on the separation of corporate control from ownership, although subject to intense empirical criticism, remain two of the most fruitful starting points in twentieth-century economics.² Andrew Wiles' proof of Fermat's Last Theorem took seven years to produce, only to be found fatally flawed. But two years later, the error was corrected, the proof was accepted, and mathematics benefitted from novel hypotheses and new areas of inquiry that Wiles' torturous journey helped open up. Yutaka Taniyama, one of the greatest sleepwalkers of modern mathematics, was described by his collaborator Guro Shimura as sloppy to the point of laziness: "He was gifted with the special capability of making many mistakes, mostly in the right direction. I envied him for this and tried in vain to imitate him, but found it quite difficult to make good mistakes" (quoted in Singh, 1997, p. 174). This willingness to go astray enabled Taniyama to come up with a most fantastic conjecture on the symmetry between modular forms and elliptical equations, a conjecture that opened up multiple new mathematical horizons well before it was finally proven.³

We, too, sleepwalked. Our concern was systemic fear and systemic crisis, not 'business as usual'. We wanted to understand what happens not when capitalists are sure of their rule, but when they lose their confidence. We wanted to know how they act not when capitalism seems certain, but when it is put into question. And so we overlooked what in retrospect seems obvious.

The Broad Context: The Capitalist Mode of Power, Capitalisation and the Stock Market

Kliman clings to a technical oversight, presenting it as a 'make-or-break' error for our broader argument. But by ignoring the argument itself and the overall framework in which it is developed, he ends up with a misleading caricature.

So let us reiterate the broad picture, if only in outline, and in the process try to clarify our argument and put things right. Our focus on the twin notion of systemic fear

and systemic crisis didn't come out of the blue. It emerged as part of a new approach to capitalism – an approach that offers an alternative to both neoclassical and Marxian political economies, and that we have articulated in many articles and books, including our recent *Capital as Power* (Nitzan and Bichler, 2009a). In 2008, we began to write a paper series on the 'Contours of Crisis'; a series that we hope to continue and eventually develop into a book (Bichler and Nitzan, 2008, 2009; Nitzan and Bichler, 2009b). The article 'Systemic Fear, Modern Finance and the Future of Capitalism' (Bichler and Nitzan, 2010) is an expanded version of the third installment in that series. The series introduces and develops the notions of systemic crisis and systemic fear – but it does so in steps, gradually rearticulating and refining the terms as the story continues to unfold.

Mainstream and Marxist political economies see capitalism as a mode of production and/or consumption. Consequently, they both adhere to a double separation – one between politics and economics; and another between the so-called real and nominal spheres of the economy itself.⁴ In this framework, the nominal sphere of money, credit and finance is merely a mirror – accurate for the neoclassicals, distortive for the Marxists – of the underlying 'economic reality'. From this viewpoint, the only true crises are 'real' ones: crises of employment, production and consumption; crises of real profitability; crises of real accumulation, crisis of real investment, etc. These crises can be triggered by many causes, including government intervention, natural disaster, war, and, of course, finance. But whatever their origins, they become meaningful only insofar as they materialise in the underlying 'reality' of the economy.

Our framework is very different. Capitalism is not a mode of production and consumption, but a mode of power. To understand it, we start not from the narrow 'material' sphere of economics, but from the broad architecture of social power. And even when we deal with so-called economic processes, we focus not on productivity and well-being, but on the *power to control* productivity and well-being. In this framework, capital is not a technological/productive entity that is merely 'reflected' in finance. It is not machines, structures and work in progress, but a pure quantitative code of power. And that code is *financial and only financial*.

The central and by now all-pervasive algorithm of the capitalist mode of power is capitalisation: the discounting to present value of risk-adjusted expected future income. This is the ritual that constantly *creorders* – or creates the order – of capitalism's power institutions and process. Over the past century, capitalisation has expanded to encompass numerous aspects of social life – from the mindset and genetic code of individuals, to social organisations and institutions, and even the ecological future of humanity. But the most distilled and perfected form of capitalisation remains the stock market. This is the chief symbolic barometer of the capitalist outlook; it is the mechanism through which capitalists increasingly organise their world of strategic sabotage and differential accumulation; and it is the main yardstick with which they gauge their success and failure.

Major Bear Markets

Systemic crisis is one that threatens the very future of capitalism. The first necessary feature of such a crisis is the existence of a *major bear market*. That was the starting point of our paper series. In ‘Contours of Crisis: Plus ça change, plus c’est pareil!’ (Bichler and Nitzan, 2008), we explained what we mean by such crises, identified their occurrence in the United States, characterised their main features, and speculated about their relationship to broad societal transformations.

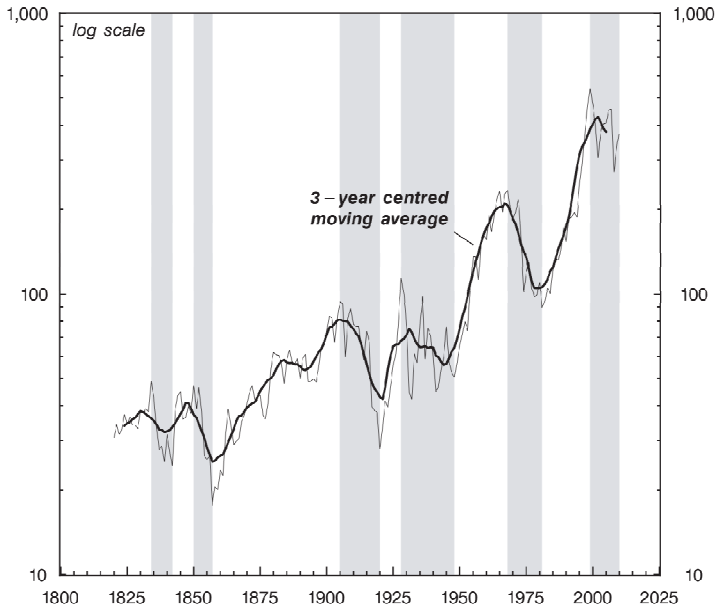
Since there is no agreed-upon definition for a bear market – let alone a ‘major’ one – we devised our own:

A major bear market denotes a multi-year period during which: (1) the 10-year centred moving average of stock prices, expressed in constant dollars, trends downward; and (2) each successive sub-peak of the underlying price series, expressed in constant dollars, is lower than the previous one.⁵

The reason for expressing stock prices in ‘constant dollars’ is that the capitalist outlook is always differential. Modern capitalists do not seek simply to increase their dollar assets, but to increase them *faster than the assets of others*. Now, one of the most basic benchmarks for such comparisons is the standard basket of consumer goods and services. If the price of equities rises faster than the price of that basket, equity price inflation ends up being higher than overall Consumer Price Index (CPI) inflation; the so-called ‘constant dollar’ price of equities increases; and equity owners end up doing better than the average basket owner.⁶ (Of course, beating CPI inflation is merely the first step in a long sequence, whose ultimate achievement is beating the increase of *every* existing basket, but these further steps need not concern us here.)

According to the above definition, over the past two centuries, the United States has experienced six major bear markets. These periods are marked by the grey areas in Figure 1 and are listed in Table 1, along with the cumulative declines in stock prices.

Figure 1
U.S. Stock Prices in Constant Dollars



NOTE: Grey areas indicate major bear markets, as defined in the text and in Table 1. The U.S. stock price index splices the following four sub-series: a combination of bank, insurance and railroad stock series weighed by Global Financial Data (1820-1870); the Cowles/Standard and Poor's Composite (1871-1925); the 90-stock Composite (1926-1956); and the S&P 500 (1957-present). The constant dollar series is computed by dividing the stock price index by the Consumer Price Index. The last data point is for 2010. Data are rebased with 1929=100.0

SOURCE: Global Financial Data (series codes: _SPXD for stock prices; CPUSA for consumer prices); Standard and Poor's through Global Insight (series codes: SP500@40.D7 and SP500.D7 for stock prices); IMF through Global Insight (series code: L64@C111 for consumer prices).

Table 1
Major U.S. Bear Markets*
(constant-dollar calculations)

PERIOD	DECLINE FROM PEAK TO TROUGH (%) **
1835–1842	–50%
1851–1857	–62%
1906–1920	–70%
1929–1948	–56%
1969–1981	–55%
2000–2010	–50%

NOTE: The most recent sub-trough of the current major bear market occurred in 2008. It is not yet clear whether this sub-trough marks the end of this bear market.

* A major bear market is defined as a multiyear period during which: (1) the 10-year centred moving average of stock prices, expressed in constant dollars, trends downward; and (2) each successive sub-peak of the underlying price series, expressed in constant dollars, is lower than the previous one.

** The peak occurs one year prior to the onset of a major bear market.

Clearly, the 1950s and 1960s did not fulfill this first criterion of a systemic crisis: there was no bear market, let alone a major one. Although much of the emphasis during that period, epitomised in the triumphalist books of John Kenneth Galbraith (1958; 1967), was on the rising welfare-warfare state, the self-financing ability of the leading industrial corporations and the alleged demise of finance, the stock market actually boomed – and at growth rates that would make today’s neoliberals envious. Capitalism was not in crisis, and capitalists certainly had no reason to fear for its future. That is obvious enough.

Major Bear Markets and Societal Transformations

Now, ‘Plus ça change, plus c’est pareil?’ wasn’t merely technical (Bichler and Nitzan, 2008). It further argued that the long-term ups and downs of the stock market, no matter how stylised and patterned, are not self-generating. They don’t just happen on their own.

Each of them has a reason, and that reason is deeply social and historically unique. Note that, during the twentieth century, *every oscillation from a major bear market to a bull market was accompanied by a systemic societal transformation*:

- The crisis of 1906–1920 marked the closing of the American Frontier, the shift from robber-baron capitalism to large-scale business enterprise, and the beginning of synchronised finance.
- The crisis of 1929–1948 signaled the end of ‘unregulated’ capitalism, and the emergence of large governments and the welfare-warfare state.
- The crisis of 1969–1981 marked the closing of the Keynesian era, the resumption of worldwide capital flows and the onset of neoliberal globalisation.

Moreover, the article pointed out that none of these transformations were ‘in the cards’. Most observers in the 1900s didn’t expect managerial capitalism to take hold; few in the 1920s anticipated the welfare-warfare state; and not too many in the 1960s predicted neoliberal regulation. All three transformations involved a complex set of conflicts; their trajectories were fuzzy, and their outcomes were all but impossible to anticipate.

In other words, underneath the seemingly *oscillating* long-term patterns of the market lies an *open-ended* and inherently unpredictable *creordering* of the entire political economy. Although past bear markets have always given way to long bull runs, these transitions were never automatic. Each and every one of them reflected a profound transformation of the underlying societal structure. This quantitative-qualitative correspondence, we noted, still holds. In order for the current crisis to end and a new long-term upswing to begin, the social structure must be transformed, and the key aspect of that transformation is the *creordering* of capitalist power.

The Capitalist Mode of Power: Approaching the Glass Ceiling

While systemic crisis is always accompanied by a major bear market transformation, the reverse is not necessarily true: a major bear market does not have to be associated with systemic crisis. Systemic crises are ones that threaten the very future of capitalism, and these threats arise only when capitalist power approaches a *glass ceiling* and it becomes difficult if not impossible for capitalist power to increase under existing circumstances. These conditions are fairly rare, and they need not exist – and usually do not exist – in every major bear market.

How do we know that capitalist power is approaching its glass ceiling? The answer begins with the nature of capitalist power. Private ownership is created,

augmented and protected through organised exclusion, and organised exclusion is always a matter of power: it requires strategic sabotage and the threat and occasional use of force. Now, capitalism is historically unique in that everything that can be owned can be priced. And since ownership is based on power, relative prices quantify the relative power of owners: the greater the relative magnitude of the owned assets, the greater the power of their owner. In this sense, capitalism is deeply *differential*, and that differentiability is not static, but dynamic. Caught in a never-ending power struggle, capitalists are compelled to think of accumulation not absolutely, but relatively. They seek not to meet the average, but to beat it; not to keep their distributive share, but to raise it; not to run with the herd, but to butt ahead of it.

As we indicated in ‘Systemic Fear’, though, power is deeply dialectical. As an institution of power, private ownership is inherently conflictual: it requires organised exclusion, strategic sabotage and the differential exercise of force. And since capitalists are conditioned to accumulate differentially, their quest for further redistribution forces them to exclude *more*, inflict *greater* sabotage and *increase* the dose of force. But there is a built-in limit: no single capitalist or group of capitalists can ever own more than what there is to own. So from a certain point onward, further forceful redistribution is bound to run into mounting resistance; it gradually grows more difficult to achieve; and, eventually, it reaches its own envelope and becomes impossible to sustain.

This is the glass ceiling, the elusive yet imposing point of hubris to which we alluded in ‘Systemic Fear’. It is the societal point where the rulers, having reached their maximum power, seem completely confident in the obedience of the ruled. And it is the point from which their power and confidence has no where to go but down.

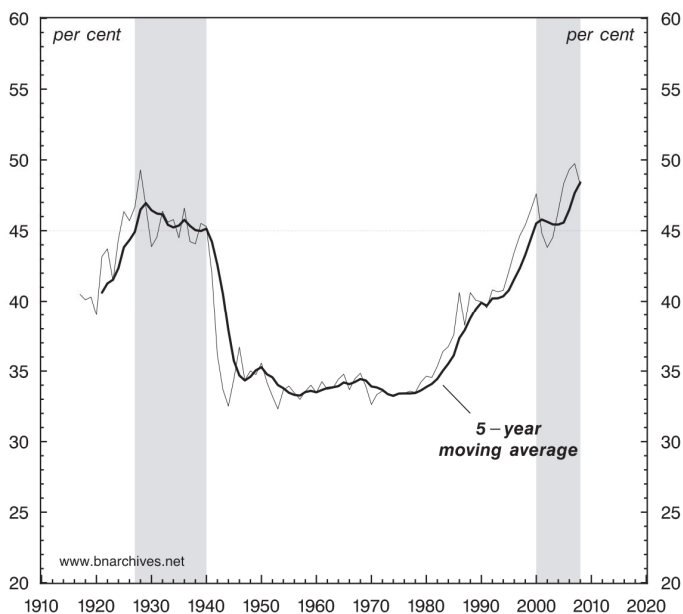
Have U.S. capitalists reached this point of hubris? In the second part of ‘Systemic Fear’, we noted that much of the postwar increase in stock prices was accounted for by the self-reinforcing convergence of redistributive power processes. During that period, there was a rise in the gross profit and interest share of capitalists in national income; a drop in effective corporate tax rates; a decline of profit volatility that reduced risk perceptions; and, since the early 1980s, a fall in the rate of interest that boosted corporate profit relative to interest payments and lowered the discount rate. Now, since these processes are self-exhaustive, the question is: at what point do they become impossible to maintain, and how far is the U.S. political economy from reaching that point?

One quick way to address this question is to examine the size distribution of income. This measure is far from ideal. Limited to income size, it says nothing explicit about the distribution between capitalists and non-capitalists (although it is reasonable to assume that much of the top income is earned by capitalists); it ignores the differential processes of accumulation that affect the distribution of income and assets *within* capital;

and it tell us little about the non-income power underpinnings of capitalisation.⁷ But the size distributional measure has one major advantage: thanks to the painstaking work of a few researchers, its data are available for an extended period, from 1917 to 2008.

Such data are presented in Figure 2. The thin line shows the per cent share of 'market income', inclusive of capital gains, accounted for by the top 10% of the U.S. population. The thick line expresses the 5-year moving average of the underlying series.

Figure 2
Income Share of the Top 10% of the U.S. Population



NOTE: Income is defined as 'market income', including capital gains; it excludes government transfers. Grey areas indicate periods during which the 5-year moving average of the data series exceeded 45%. The last data point is for 2008;

SOURCE: Piketty, Thomas, and Saez. 2004. *Income Inequality in the United States, 1913-2002*. Monograph, pp. 1-92. Updated until 2008 at <http://www.econ.berkeley.edu/~saez/TabFig2008.xls>; data sheet: data-Figure1 (retrieved on February 7, 2011).

The numbers draw a striking U-pattern, with its twin peaks marked by the 1930s on the left and the 2000s on the right. In both periods, the income share of the top 10% of the

population averaged over 45% and at some point approached 50%. And both periods are unique. In between, from the early 1940s to the early 1980s, the numbers are far lower, averaging less than 35% and hardly changing from year to year.

Of course, historical patterns per se do not reveal their own glass ceiling (which is why economists can never specify the maximum amount of profit, or the highest possible growth rate). But although there is no way to know for sure, it seems to us, however impressionistically, that 45% is fairly close to the glass ceiling for this measure. The bull market of the 1980s and 1990s was associated with a rise of more than 40% in the top's income share (from 33% to 47%, and to nearly 50% more recently), along with significant reductions in interest rates, effective corporate tax rates and profit volatility. And since the latter reductions would be difficult to replicate, a similar bull run from here onward would require the top income share to rise to more than 70%. Such an increase is highly improbable – that is, unless the U.S. turns into a dictatorship of the kind described in Jack London's *Iron Heel* (1907) or Vladimir Sorokin's *Day of the Oprichnik* (2011). And given that in the 1930s the top income share peaked at around current levels, it is not far fetched to take 45% as the Zeno-like cutoff point beyond which the ruling class enters hubris territory: confident in its enormous power, but aware that this power is difficult to increase much further.⁸

So now we have two criteria for systemic crisis: (1) a major bear market; and (2) extreme income and asset inequality, indicative of peak capitalist power and an inability to increase that power significantly. It is at this point, when these two conditions of systemic crisis are fulfilled, that systemic fear – fear for the very future of capitalism – becomes possible. And according to the available data, these two conditions have coincided only twice since the First World War: during the the late 1920s and 1930s, and again during the 2000s.

The Dominant Dogma and Forward-Looking Capitalisation

Now, note that these two conditions imply a *potential* for systemic fear. To know whether capitalists have *actually* been struck by such fear, we need a third condition. And that third condition is the breakdown of forward-looking capitalisation.

In our 'Systemic Fear', we argued that, under the normal circumstances of 'business as usual', capitalists are conditioned by their dominant dogma to follow the ritual of capitalisation; that, in following this ritual, they express their belief that their system is eternal; and that this belief in turn implies that they are confident in their rule and in the obedience of the ruled (we deal with Kliman's objection to this point later in the article).

However, in times of systemic crisis – i.e., when capitalism is mired in a major

bear market, and when extreme inequalities, having pushed capital toward its envelope, make further increases in power difficult if not impossible to achieve – there arises the prospect of systemic fear. If that fear takes hold, with capitalists no longer certain of the future of their system, their ability to look forward is seriously impaired. And when looking into the future becomes impossible, the ritual of forward-looking finance breaks down.

One indication of such a breakdown, we argued in our paper, is a tight, positive correlation between the rates of change of stock prices and current earnings. When capitalists adhere to the capitalisation ritual, they price stocks based on the earnings trend all the way to the deep future (from the ‘standpoint of eternity’, as finance guru Benjamin Graham put it). But when capitalists are struck by systemic fear, the ritual breaks down, by definition. With the future of capitalism deeply uncertain, the long-term earnings trend becomes undefined, and undefined earnings cannot be incorporated into the capitalisation formula. So capitalists have to look for an alternative. They need something they are sure of and which is visible here and now. And that something, we argued, is current earnings.

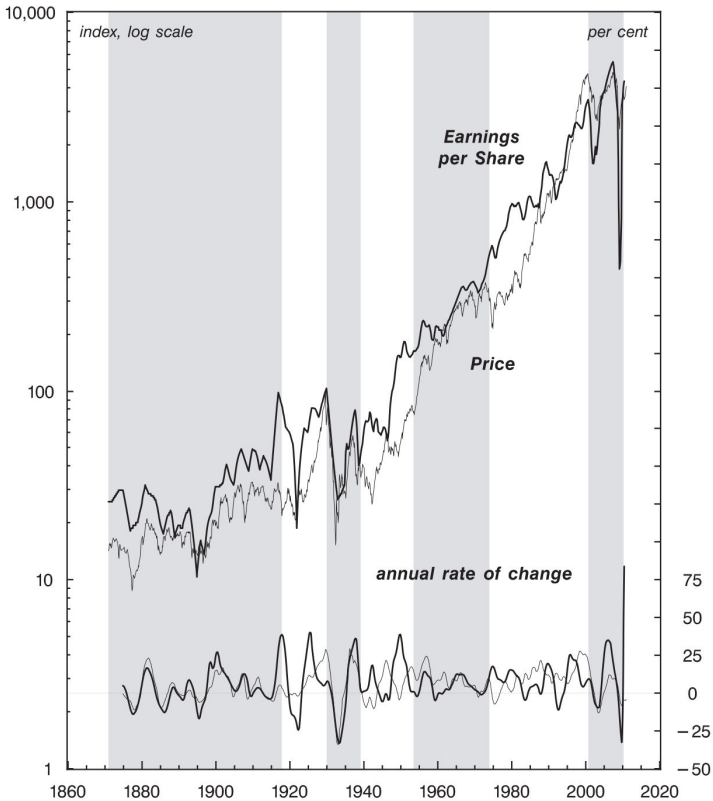
Now note the causal direction here: systemic fear creates a tight positive correlation between the growth rates of equity prices and current earnings. But the reverse isn’t necessarily true: *in and of itself*, a positive correlation between the growth rates of equity prices and current earnings does not necessarily mean that capitalists have been struck by systemic fear.

This point wasn’t properly articulated in our paper, so it is important to clarify it. To reiterate, according to the forward-looking capitalisation formula, equity prices discount the long-term earnings trend. *Current* earnings do not appear in the capitalisation formula, so in principle they should have no direct impact on share prices.⁹ However, current earnings can still have an indirect, apparent effect. During certain periods, one or more of the capitalisation components can become correlated with current earnings, and if that happens, we may end up with a spurious correlation. For instance, changes in current earnings could be – and sometimes are – correlated negatively with changes in the rate of interest. And since the rate of interest features in capitalisation, the result could be a spurious correlation between the growth rates of current earnings and stock prices. Indeed, there is nothing to prevent such a spurious correlation from cropping up during periods of systemic fear; and if it does crop up, the impact of current earnings on equity prices may become more difficult to disentangle.¹⁰

For this reason, the correlation between the growth rates of stock prices and current earnings becomes meaningful *only* in times of systemic crisis. It is only then, when capitalism is pulled down by a major bear market and capitalists are approaching their hubris-point of peak power, that such a correlation could be taken as indicative of systemic fear.

Figure 3 shows the levels and rates of change of equity prices and earnings per share (with rates of change expressed as 3-year moving averages). The grey areas indicate periods of high positive correlation between the rate-of-growth series at the bottom of the figures (including the period pointed out by Kliman). The correlation coefficients for the different periods are listed in Table 2.

Figure 3
S&P 500: Price and Earnings per Share, 1871-2011



NOTE: Earnings per share denote net profits per share earned in the previous twelve months. Monthly earnings are interpolated from annual data before 1926 and from quarterly data after 1926. Stock price data are monthly averages of daily closing prices. Both series are expressed in \$U.S. and rebased with September 1929=100. The last data

points are June 2010 for earnings per share and January 2011 for price; SOURCE: Robert Shiller, http://www.econ.yale.edu/~shiller/data/ie_data.xls.

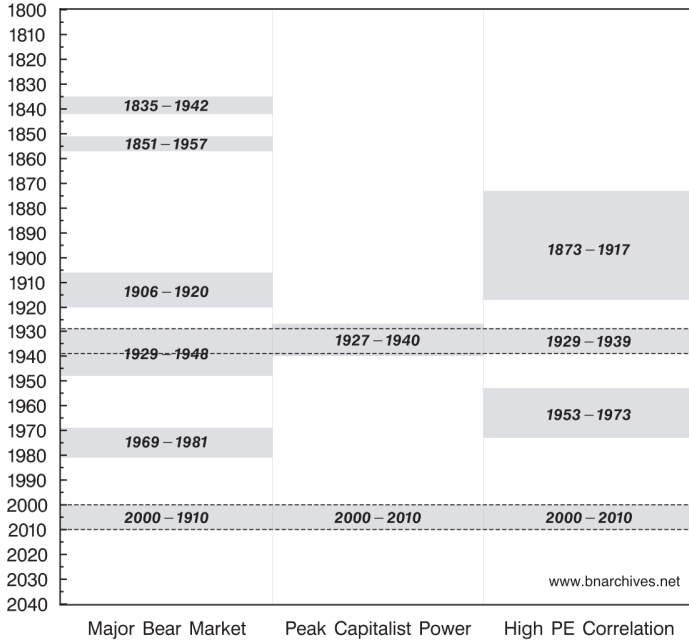
Table 2
S&P 500: Pearson Correlation Coefficient Between the Annual Rates of Growth of Price and Earnings per Share
(Monthly data expressed as 3-year moving averages)

	PERIOD	CORRELATION COEFFICIENT
	Jan 1873 – Oct 1917	+ 0.72
	Oct 1917 – Mar 2010	+ 0.35
<i>Sub periods</i>	Oct 1917 – Dec 1929	+ 0.29
	Dec 1929 – Feb 1939	+ 0.89
	Feb 1939 – Jun 1953	– 0.34
	Jun 1953 – Aug 1962	+ 0.90
	Aug 1962 – Dec 1973	+ 0.80
	Dec 1973 – Sep 2000	– 0.20
	Sep 2000 – Mar 2010	+ 0.65

SOURCE: Figure 3.

The data show four periods of high positive correlation: the period leading up to 1917; the 1930s; the early 1950s to the early 1970s; and, finally, the 2000s. But based on our earlier discussion, only two of these periods can be associated with systemic fear. This association is summarised in the timeline of Table 3, which provides data on our three criteria for systemic fear. The table covers the period from the 1820s to the present, although the data coverage is uneven and allows conclusions to be drawn only from 1917 onwards.

Table 3
Criteria for Systemic Crises in the United States



NOTE: Grey areas denote periods of (1) major bear markets; (2) peaks of capitalist power as indicated by extreme income inequality; and (3) periods of a high positive correlation between the growth rates of share prices and earnings per share. The dashed lines delineate the two periods that fulfil all three criteria: 1929–1939 and 2000–2010.

SOURCE: Figures 1, 2 and 3.

- The first criterion is a major bear market, based on the long-term trend and pattern of the stock market expressed in ‘constant dollars’. Based on these considerations, the United States has experienced six major bear markets since the 1820s.
- The second criterion is peak capitalist power, based on extreme income inequality. This condition has been fulfilled twice since 1917: from 1927 to 1940 and from 2000 to 2008 (with the stock market having recovered since 2008, it is not far

fetched to assume that income inequality continues to hover at peak levels). Combining these two conditions, we can conclude that only two of the four major bear markets since the beginning of the twentieth century have contained a systemic crisis: the periods from 1929 to 1940 and the period from 2000 to 2010.

- The criterion for systemic fear is systemic crisis during which the rates of change of stock prices and current earnings are tightly and positively correlated. Such positive correlation existed during four periods since the 1890s. But only two of these periods were ones of systemic crisis: 1929-1939 and 2000-2010.¹¹

In sum: Kliman found an oversight in our paper on ‘Systemic Fear’ and celebrated it as if it pulled the rug out from under our entire argument. But that oversight, although inconvenient and regrettable, hardly dents our broader argument. Capitalism remains the first mode of power to offer a quantitative indicator for systemic fear. This indicator involves the convergence of three conditions that we have discussed at great length in our work: a major bear market, a glass ceiling of peak capitalist power, and the breakdown of the dominant dogma of forwarding-looking finance. And these conditions have coincided only in the two periods indicated in ‘Systemic Fear’ – the 1930s and the 2000s.

Toward Behavioural Marxism?

But Kliman claims that the problem is not only empirical; it’s also theoretical. Think of a situation, he says, in which ‘you’ (the investor?) believe that capitalism is about to collapse, but you are not entirely sure (the probability of collapse is less than 100 per cent). Next, assume that someone comes along and invites you to make a small investment that will yield an extremely high rate of return. If capitalism collapses, you lose your investment (no pain, no gain); but if it doesn’t, you become fabulously rich (fulfilling your mission on earth). Now, between you and me (wink), wouldn’t you grab this golden opportunity and invest? And given that you would go ahead and invest (assuming you are like most people – i.e. most capitalists), isn’t your decision a clear proof that the future of capitalism is irrelevant for capitalists (like you)?

And if the logic of greed isn’t enough, there are the scientific experiments. According to Kliman, these experiments repeatedly show that ‘people’ (capitalists?) continue to invest in stocks, almost to the very end. They invest when earnings go up; they invest when earnings come down; in fact, they invest even when they know, with certainty, that earnings will converge to zero and that the equities they buy will become worthless at a definite point in time. And since these experiments show that the investment behaviour of people (capitalists?) is more or less independent of the future of their system (i.e., the end of the experiment), the very notion of ‘systemic fear’ – at least in

the way that Bichler and Nitzan describe it – is irrelevant and in fact meaningless.

These are very interesting claims, particularly when coming from a fundamentalist Marxist.¹²

Marxism correctly rejects the neoclassical dogma. The neoclassical tenets – egocentrism, the emphasis on individual rationality, the belief that the market is natural, the sanctification of private property and the rejection of societal planning, to name but a few – are not natural laws, but the mere objectification of the capitalist creed. According to Marxist epistemology, the autonomous, utility-maximising individual is an oxymoron; an impossibility that can be concocted only by the misguided ideological servants of capital. From the viewpoint of Marxists, human beings are not stand-alone entities, but creatures of their society. They have a certain freedom to think and act, but in the final analysis, their thoughts and actions are bound by the class relations and the forces of production of their own historical epoch.

Adhering to this epistemology, though, has proven easier said than done. Although critical of the liberals, Marxists have by and large failed to develop their own accounting system, their own unique data and their own dedicated research methods. And so, gradually, pressed by academic necessity and tempted by the available alternative, they have gravitated toward the ever-expanding databases and increasingly sophisticated methods of their class enemy, the bourgeoisie.

During the 1950s and 1960s, Marxists started to use the capitalist national accounts and measurements of the ‘capital stocks’. But there was a hefty price to pay: the derivation of these quantities relies on the very assumptions that Marxists correctly reject. ‘Real GDP’, for instance, is aggregated based on the supposition that the statistician knows equilibrium prices, and that these equilibrium prices reflect the relative utilities of the produced goods and services. Similarly with the ‘capital stock’: its magnitude, which many Marxists cite without a second thought, is taken to measure the util-generating capacity of the underlying machines and structures. And so, paradoxically, when Marxists routinely employ such measures to denote economic growth rates or the pace of capital accumulation, they end up endorsing the conceptual tools with which the ruling capitalist class manages society, as well as the individualistic-hedonic-equilibrium ideology that this ruling class imposes.¹³

And that is just for starters. In subsequent decades, many Marxists began using bourgeois econometrics, and in so doing abandoned the last vestige of dialectics. They developed closed models with mathematical propositions and proofs, and in so doing made their arguments increasingly ahistorical. They succumbed to the elegance of game theory, and in so doing accepted the rational-atomistic starting point of conventional economics. And now we learn from Kliman that it is perfectly fine for a Marxist to invoke the findings of experimental economics and behavioural finance.

Now, as noted, our own work starts from finance. This choice has nothing to do with convenience or fashion. We start from finance because *finance is the heart and brain of the modern capitalist mode of power*. The capitalisation ritual of finance is the algorithm with which capitalists *creorder* their society, and the relative magnitudes that emerge from that ritual map the ever-changing terrain of capitalised power. Deciphering modern finance is the initial step for any understanding of how modern capitalist power is organised, imposed and altered.

Kliman, though, adheres to a different approach. For him the only real capital is one created by production denominated in socially necessary abstract labour time (or its 'real' price equivalent). The rest – i.e., finance – is a speculative operation in the sphere of exchange that sometimes matches and sometimes mismatches the movement of actual capital. And whatever has to do with speculations, bubbles and other mismatches or distortions can be safely delegated to the neoclassical experiments of Nobel laureates and the psychological analysis of behavioural finance.

But then, if this is the micro-Marxism Kliman has to offer, it is a strange one indeed: a representative experiment of representative gamblers, sans quotes, who serve to represent the universal human bourse, with no classes, no struggle, no dialectics, for ever and ever. Note that the participants in Kliman's experiments are not capitalists, but 'people' (in America everyone has an equal opportunity to buy up Microsoft or sleep under the bridge). These people are examined not in a real, power-based society, but in a laboratory 'game' for which they are hired or volunteer (since, at the moment, the experiment is still too complicated for rats). There is no ruling class, no power belt and no underlying population of workers, unemployed and the redundant. There is only a collection of Marshallian 'representatives'. These ideal types play their game not in order to control their society and shape their world, but simply to make a buck (the universal drive of all people at all times, even if the buck happens to be hypothetical). And most importantly, the questions they face have no bearing on their own future, let alone on the future of their society. Once the experiment is over (and capitalism ends) they can go home and forget all about it.

The ultimate purpose of these experiments is to discover, once and for all, the eternal human 'nature' of the universal investor – and in the process to annul the very heart of Marxism. According to Alan Greenspan, this human nature can be conventional, or perverse. What matters, he explains, is "not whether human response is rational or irrational, only that it is observable and systematic" (Greenspan, 2008). And perhaps Kliman feels that Marxists have much to learn from these natural-state-of-things models that the capitalist rulers impose on themselves and on their subjects. What remains unclear, though, is how any of this relates to the long-term outlook of the capitalist ruling class. To use simulated stock market experiments to tell us about the *systemic* confidence and fear of present-day capitalists is like using a chess game to understand the mindset of

the French nobility during the French Revolution, or a board game of Monopoly to understand the anxiety of capitalists during the 1930s.

In our paper, we claimed that capitalist belief in the permanence of capitalisation is a prerequisite for investment. This is a foundational claim. It deals not with this or that profit flow, with this or that asset, or with this or that capitalist. Instead, it refers to the basic institution of the capitalist mode of power: the institution that makes finance in general and capitalist calculations in particular possible to begin with, the institution that pervades everything capitalists do, the institution that holds their power structure together. The validity of our claim is tied to the centrality of this institution, and that is why we expressed our claim hypothetically, as a thought experiment. This is also why we brought different historical examples of systemic collapse – from the fall of the last Babylonian emperor Belshazzar, to the French Revolution, to the collapse of the Soviet Union – instances during which a latent but deep crisis *suddenly* gave way to disintegration. The crises themselves had different causes; but what made them culminate in collapse, we argued, was that the rulers were struck by systemic fear: they lost their confidence in their own dogma and their ability to rule. And such losses – as well as their consequences – are difficult if not impossible to predict.

“[T]he future comes disguised”, says Coetzee; “if it came naked, we would be petrified by what we saw” (1990, p. 163). To ask what will happen to capitalism if capitalists become convinced that capitalisation is about to end is like asking what will happen to the ecosystem if earth surface temperature rises by 25 per cent. No laboratory, even one run by a Nobel laureate, can replicate this process.

Finally, Kliman invokes the ‘S’-word: Bicher and Nitzan, he says, have turned capital into a ‘Subject’, capable of triggering its own demise, and they have voiced this claim using tongue-twisting concepts and irrefutable Freudian conjectures. We prefer to remain silent on the second allegation. The interested reader can judge for herself by reading our articles and books. But we have to plead guilty to the first accusation. Capital is certainly a subject, and with a capital ‘S’ to boot. In fact, if we are to remain true to Marx, we should add that, save for rare revolutionary situations, capital is the *only* social subject, the entity that subjugates all else – capitalists as well as workers – to its will and rage.

Marxists Contra Marx

Kliman seems to have been deeply offended by our position ‘versus Marx’, as he puts it, so a few closing comments about this subject may be in order.

We have the greatest admiration for Marx as a revolutionary scientist, and we have learned a great deal from his path-breaking work on the capitalist system. But like Marx (and unlike many Marxists), our real interest is not in Marx, it is in capitalism.

Marx tried to trace the intricacies of human history, to map its progressive breakthroughs, and to understand its regressive setbacks. He focused on the critical aspects of the capitalist regime, searching for weak points in the fortified walls that protected the capitalist rulers. He tried to anticipate the development of capitalism, to identify the inner contradictions that would pave the way for a revolution.

But Marx's work mirrored his own epoch. And as capitalism continued to develop and mutate, his theories, research and conclusions have become less and less congruent with the ever-changing reality. As a result, radicals have come to face two mutually exclusive options. In the words of Cornelius Castoriadis, they have had to decide whether to remain revolutionaries or 'Marxists'. To choose the former meant to take from Marx what seemed true, insightful and useful – and to let go of the rest. To choose the latter meant to sanctify all of Marx's writings and then constantly 'reinterpret' them to fit the shifting reality.

Some radicals chose the former path, but many more took the latter. After Marx's death, there emerged numerous congregations and sects, each with its own theological interpretation. Until the 1960s and 1970s, the fault lines were largely geopolitical. The main debate was between Moscow and Beijing, with subsidiary interpretations emerging later on in lesser communist capitals, such as Belgrade, Havana and Pyongyang.

The unravelling of Stalinism and Maoism and the winding down of the Cold War shifted the centre of gravity to the universities of Europe and North America. But that shift hasn't liberated the Marxists from Marx. Instead of an open-ended scientific debate on the changing nature of capitalism, there developed a closed theological debate about the eternal nature of Marx's writings (what did Marx *really* mean?). There are exceptions – some of which are ingenious – but for many Marxists the key questions have become those of how to appropriate the prophet's writing; and of what might be done to fortify the faith.

The consequence is a minute division of labour, not unlike the neoclassical one, between different groups of Marxists and post-Marxists, each of which specialises in protecting a different section of the Great Marxist Wall. There are experts on the 'young Marx', on 'Marxist philosophy' and on 'Marxist dialectics'. Some deal with the 'Marxist theory of the state', while others focus on 'cultural Marxism'. There are pundits for 'analytical Marxism', 'Marxism and game theory', and 'Marxist anthropology'. There are even those who claim to do 'political Marxism' (suggesting that Marxism can also be *a*-political). Within 'Marxian economics' proper, there are those who do 'crisis', others who do 'regulation and the social structures of accumulation', and still others who do 'investment and profit rates'. There is even a specialisation in 'fictitious capital' and its various distortions. The list goes on. Of course, not all of these specialists are defensive of the dogma, but many are.

At the analytical heart of these specialised endeavours stand the experts on Marx's labour theory of value and surplus value. Most Marxists are unfamiliar with the intricacies of this theory, and most 'productive labourers', however defined, would probably find its language impossible to understand – that is, assuming they even tried. But this theory is the foundation stone of Marx's science.¹⁴ It is the key to understanding capitalist exploitation, capitalist development, and, eventually, capitalism's own demise. It has to be defended, if only in appearance.

This is the forte of Andrew Kliman. His own section in the Great Marxist Wall is the theory's internal 'consistency'. This section has been somewhat weakened since Bortkiewicz, but not to worry. A new and improved reading of the theory – the Temporal Single System Interpretation, or TSSI – has recently been applied to the weak points, and apparently it works wonders.¹⁵

For defenders such as Kliman, the key thing is to save Marx from deviant interpretations. Our 2009 *Capital as Power* contains a systematic critique of liberal and Marxist theories of capital and the elementary particles of utils and abstract labour on which these theories rest; it develops an alternative approach to capital based on power; it offers an analytical, historical and empirical exposition of a new theory of differential accumulation; and it provides a new history of the capitalist mode of power. In short, it is an important book to ignore – and, indeed, so far no Marxist has reviewed it. Even Kliman, who broke the wall of silence, is careful to ignore the gist of our framework, theory and findings: his main concern is to defend his own defence of Marx's value theory – a defence that our book deals with only briefly.

Sadly, the zeal to defend Marx has caused many of the defenders to lose their grip on reality. The period since 2000 has seen capitalism rocked by major turbulence, and the free-market dogma has been challenged openly from within and without. Liberal economics – including its macro and micro variants, its Keynesian and Monetarist inflections, its expectations and game theories – seems to have lost its intellectual compass, and there have been open calls on Nobel laureates to return their Sveriges Riksbank Prizes. This has been the historical opportunity Marxists have been waiting for since the 1930s, and they seem to have missed it. Instead of developing new theories and new research programmes, they were busy defending Marx and ridiculing or simply ignoring radicals who tried to transcend him. And when the time finally came, they were caught off guard. Marxists today talk of speculative-fictitious bubbles and the tendency of the rate of profit to fall, of a too-weak or a too-strong state, of capitalist irrationality, greed and corruption. But deep down inside, many of them know that these reiterations belong to the world of yesterday. They offer no serious challenge, let alone an alternative, to the current capitalist mode of power.

Notes

- ¹ The difference between heteronomy and autonomy is articulated in the social and philosophical writings of Cornelius Castoriadis – see, for example, his *Philosophy, Politics, Autonomy* (1991).
- ² Means' claim that there were in fact two types of prices – administered prices as well as market prices – was brilliantly defended against charges of empirical error levelled by Chicago School Nobel laureate George Stigler, but eventually swept under the carpet by the economics profession. By contrast, his empirical data on the separation of corporate control from ownership were shown to be faulty by the relatively unknown Marxist Maurice Zeitlin, yet continue to inform mainstream business studies (see Berle and Means, 1932; Means, 1935, 1972; Stigler and Kindahl, 1970, 1973; and Zeitlin, 1974).
- ³ One of the first, and still unparalleled, histories of cosmology is Arthur Koestler's *The Sleepwalkers* (1959), a story that is nicely complemented by Simon Singh's more recent *Big Bang* (2004). On the measurement of the standard meter, see Alder's *The Measure of All Things* (2002). The development of mathematics is told in Singh's *Fermat's Last Theorem* (1997).
- ⁴ These dualities are introduced in Part I of *Capital as Power* (Nitzan and Bichler, 2009), and are further developed in the rest of the book.
- ⁵ This definition is more precise than the one in Bichler and Nitzan (2008). In the original article, we referred to a downtrend in stock prices. Here we operationalise this downtrend as a falling 10-year centred moving average.
- ⁶ The measurement of 'constant dollars' involves significant theoretical and philosophical quandaries that economists are yet to solve. Our concern here, though, is not the logical underpinnings of the measurement, but the mindset of capitalists. And since capitalists take constant-dollar measures for granted, these difficulties need not distract us (for more on these issues, see Nitzan, 1992: Chs. 5 and 7).
- ⁷ On the differential ratio of net profit to wages, see Bichler and Nitzan's 'Elementary Particles of the Capitalist Mode of Power' (2006: Figure 5). On capital's share of national income, aggregate concentration and differential accumulation, see Nitzan and Bichler's *Capital as Power* (2009a: Figure 13.1, p. 274; Figure 14.1, p. 318; and Figure 14.2, p. 320).
- ⁸ Elsewhere in our work we examined the differential process by which capitalist power breaks through its geographic-societal 'envelopes' – from the industry, to the sector, to the national setting, and, finally, to the global arena (e.g. see Nitzan, 2001; Nitzan and Bichler, 2009a, Ch. 15). In this process, the power of capitalists that are based in one region or country could expand by creating, altering and taking over capitalist power in

other regions and countries. U.S.-based capitalists have done so after the 1930s by raising the profit share of their foreign subsidiaries from 5 per cent to over 30 per cent of the total. But since this redistribution too is self-limiting, a repeat of that process nowadays seems less than likely.

- ⁹ Current earnings feature in capitalisation only insofar as they alter the long-term earnings trend. In the case of corporate equities, this impact usually is negligible and can be ignored.
- ¹⁰ For example, during much of the period from the early 1950s to the early 1970s, the rates of change of equity prices and the rate of interest were negatively correlated (with interest rates measured by the tax-free yield on AAA municipal bonds). This negative association means that, during that period, the observed correlation between the rates of change of equity prices and current profits identified by Kliman may have been spurious. The same cannot be said about the 2000s, since the rates-of-change correlation between equity prices and the rate of interest during that period was *positive*. The case of the 1930s is more ambiguous. There was a negative correlation between the rates of change of prices and the rate of interest, but the variations of the rate of interest were very small relative to the variations in current earnings, suggesting that their impact on prices was probably far smaller than the impact of current earnings.
- ¹¹ Although it is probably too early to tell, the 2010 data in Figure 3 suggest that the correlation between the rates of change of stock prices and current earnings is no longer positive. A continuation of this situation would mean that capitalists no longer suffer from systemic fear.
- ¹² For the difference between neo-Marxists and fundamentalist Marxists, see for example Sherman (1985).
- ¹³ For more on the individualistic-hedonic-equilibrium assumptions of ‘real’ economic measurements, see Nitzan (1989) and Nitzan and Bichler (2009a: Chs. 5 and 8).
- ¹⁴ Marx claimed his theory to be superior to the bourgeois alternatives, partly because it did something they couldn’t: it *objectively* derived the rate of profit from the material conditions of the labour process. Prices of production, writes Marx, “are conditioned on the existence of an average rate of profit’, which itself ‘*must be deduced out of the values of commodities* ... Without such a deduction, an average rate of profit (and consequently a price of production of commodities), remains a vague and senseless conception” (Marx, 1909, Vol. 3, pp. 185-86, emphasis added). This same point is reiterated by Engels: “These two great discoveries, the materialistic conception of history and the revelation of the *secret of capitalist production through surplus value*, we owe to Marx. With these discoveries *socialism became a science*. The next thing

was to work out all its details and relations' (Engels, 1966, Section I, emphases added).

- ¹⁵ According to Kliman and McGlone (1999, pp. 33-34), the TSSI "vindicates the internal consistency of Marx's most challenged theoretical results without relinquishing his theory's quantitative determinacy or absorbing it into the theories of his critics", and "is able to make sense out of crucial aspects of [Marx's] value theory that the standard interpretation (and others) have always found to be incoherent" (p. 55). See also Kliman (2004; 2007).

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