Leithner Letter No. 159-162
26 February - 26 June 2013

It is important to realise that, however ironically, it follows from these considerations that all the demagogues and outright bandits in the world who rail against the height of profit and who call for or actually undertake the looting and plundering of property thereby labour to raise [net consumption and thus the] … rate of profit.

For in striving, as they do, to undermine the security of property in their various capacities as ordinary robbers, members of guerilla bands, or officials of virtually all contemporary governments, they act to discourage saving and productive expenditure and thereby to increase the relative significance of net consumption. The message they send to businessmen and capitalists is: "Don't save, don't invest – because if you do, we will see to it that you do not benefit from doing so, for we will steal or destroy your property or tax it away. If you want to benefit from your wealth, you had better consume it before you lose it to us."

George Reisman
Capitalism: A Treatise on Economics (1996)

Today, staring fixedly back at the road they just traveled, most investors have rosy expectations. A … survey released in July shows that the least experienced investors – those who have invested for less than five years – expect annual returns over the next ten years of 22.6%. Even those who have invested for more than 20 years are expecting 12.9%. Now, I'd like to argue that we can't come even remotely close to that 12.9% … In my opinion, you have to be wildly optimistic to believe that corporate profits as a percent of GDP can, for any sustained period, hold much above 6%.

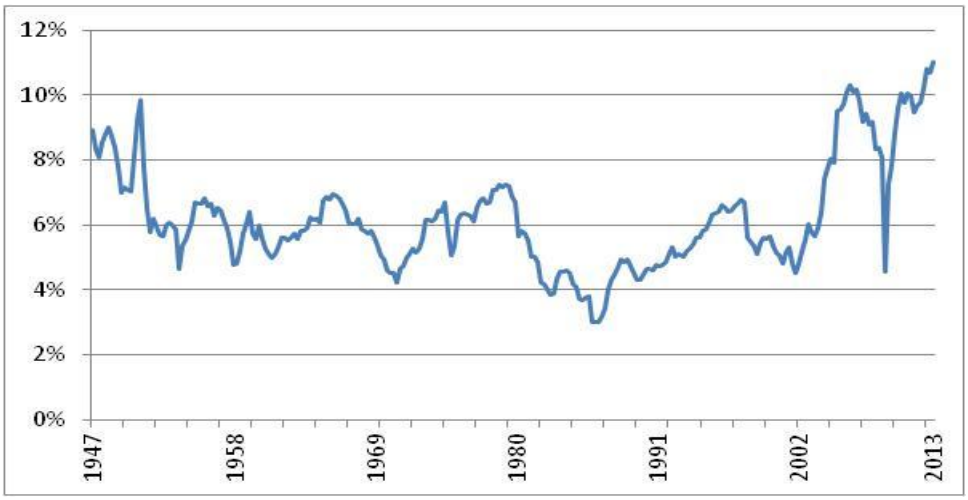
… Maybe you'd like to argue a different case. Fair enough. But give me your assumptions. If you think the American public is going to make 12% a year in stocks, I think you have to say, for example, "Well, that's because I expect GDP to grow at 10% a year, dividends to add two percentage points to returns, and interest rates to stay at a constant level." Or you've got to rearrange these key variables in some other manner. The Tinker Bell approach – clap if you believe – just won't cut it.

Warren Buffett
"Mr Buffett on the Stock Market"
(*Fortune*, 22 November 1999)

Of Artificial Profits and Inflated Stock Markets

Are high and rising profits, together with the expectation of more to come, an obviously and unquestionably good thing? Not according to *The Huffington Post* (Corporate Profits Soar To Record, Now More Than Double Their Peak Under Ronald Reagan, 17 January 2013). "Give yourself a hand, Corporate America," it sneered, "you have managed to post record profits despite the country being run by a socialist, fascist Muslin [that's really how they spelt it] dictator for the past four years." This time quite rightly, *HuffPost* continued to snarl: "No other president since World War II, when America was also run by socialist monsters, has seen such a profit increase." Figure 1 (which, like Figures 3-6, plots data compiled by the Federal Reserve Bank of St Louis) shows that, when expressed as a percentage of GDP, in 2010 after-tax corporate profits returned to the peak they reached in 2007-2008. Late in 2012, they rose further and to their highest level since at least 1947 (when record-keeping began). Profits presently exceed 10% of America's GDP. From more than 8% of the economy (as conventionally measured) during the late-1940s, for the next 35 years this percentage fell erratically and cumulatively drastically; by the mid-1980s, it had fallen by more than half to ca. 3% of GDP. Since then, apart from the plunge and equally sharp rebound in 2008-2010, profits have risen almost without interruption and more than trebled.

Figure 1: Corporate Profits After Tax as a Percentage of GDP, U.S., 1947-2013



In that sense, says Bloomberg (Corporate Profits Soar as Executives Attack Obama Policy, 16 January 2013), "American business has never had it so good." It continues:

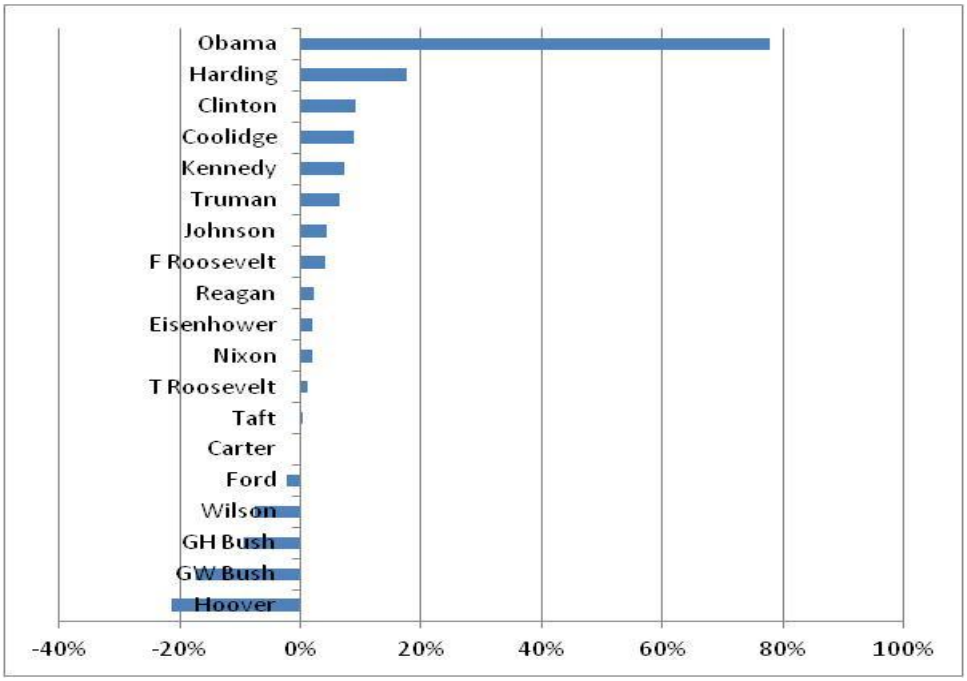
> U.S. corporations' after-tax profits … under Obama [have grown by] more than under any president since World War II, and are now at their highest level relative to the size of the economy since the government began keeping records in 1947, according to data compiled by Bloomberg. Profits are more than twice as high as their peak during President Ronald Reagan's administration and more than 50% greater than during the late-1990s Internet boom, measured by the size of the economy.

Morgan Housel (The Best Presidents for the Economy, *The Motley Fool*, 25 October 2012) puts these data into a longer-term historical perspective. He also adds some sage caveats:

> In general, presidents get too much credit for the economy when things are good, and too much blame when things are poor. We tend to imagine every blip in the stock market and every unemployment report as a direct reflection of a president's policies – particularly during election years. In reality, Congress and the Federal Reserve probably have just as much, if not more, sway over the economy than any president. And one president's policies can spill over into the next administration, making it difficult to sort out who is liable for what. We have a hard enough time accurately measuring what the economy is doing, let [alone] assigning responsibility for its moves. Still, everyone should know a little economic history. And the cleanest way to get a feel for how the economy has done under past presidents is to just lay the numbers bare.

Using data compiled by Robert Shiller, Housel ranked the administrations of American presidents during the 20th century (i.e., since Theodore Roosevelt, 1858-1919, 26th president 1901-1909) according to four criteria: (1) the S&P 500's percentage rate of return (adjusted for CPI and dividends); (2) growth of corporate profits; (3) increase of GDP (adjusted for CPI) per capita; and (4) rate of increase of CPI. Figure 2 reproduces his results with respect to the second criterion. These data show that, by a country mile, Barack Obama has presided over the strongest growth of profitability in recorded U.S. history.

Figure 2: Average Annualised Rate of Growth of Corporate Profit, U.S. Presidential Administrations, 1901-2012



Housel adds another important caveat which Figure 1 quantifies: "corporate profits were incredibly depressed from the financial crisis in January 2009, when President Obama entered office. That low starting point makes growth through today look massive. If, instead of January 2009, you use January 2008 profit levels as a starting base, average annual corporate profit growth under President Obama is 6.8%." Clearly, that's a small fraction of 77.9%; still, it's nearly three times faster than the rate of growth of profits during the Reagan administration. Both Presidents Bush actually oversaw declines of corporate profitability. Housel also shows that the rate of growth of "real" (i.e., adjusted for CPI) GDP per capita was far higher during Obama's first term (1.4% per year, which places him in the middle of the pack, behind Carter (1.6% per year), Clinton (2.5%), Reagan (2.6%) and Johnson (4.3%)) than it was under either of the Bush administrations (0.7% for George H. and 0.5% for George W.).

Why did profits rise so sharply during Obama's first term? We've already observed one reason: they rebounded from a very low base – his immediate predecessor, George W. Bush, boasted the next-worst (only Herbert Hoover was worse) records in the 20th century. Some prominent businesspeople contend, not without reason, that Obama is merely the beneficiary of a regression of corporate profits towards their long-term (since the mid-1980s) trend. According to Bloomberg (Corporate Profits Soar as Executives Attack Obama Policy), "prosperity has come in spite of the president, not because of him, they say. 'I don't think he deserves any credit,' John Engler, president of the Business Round-table, a Washington-based association of CEOs, said in an interview."

Bloomberg adds: "Business leaders cite low labor costs in an era of high unemployment, the Federal Reserve's easy-money policies, and their own management savvy for the profit boom." Do low wages explain why corporate profits have risen to a record level? Data compiled the Federal Reserve Bank of St Louis also show that wages' and salaries' share of GDP has sunk to a record (post-1947) low. For this reason, Michael Swyers (Profit Margins: How They Got Here and Where They Are Going, Part I, 26 November 2012) alleges that "the rise in profit margins [has been] due to expense-cutting rather than organic revenue growth."

In Are US Corporate Profits Inflated by Fraud? (18 January 2013), Marshall Auerback of Pinetree Capital Ltd notes that "U.S. corporate profits under Obama [are] the highest since 1900 (interestingly enough, at the time the power of the Robber Barons was at its peak)." He exclaims "So much for the charge of socialism!" and asks a very pertinent question:

> But how much of that is real? Much of the high profit to GDP ratio comes from the financial sector, which has been the major recipient of government largesse via the bailouts, and a series of huge financial subsidies (such as tax holidays and zero percent interest rates). … What about the rest of the economy? Even if you adjust for that, the non financial sector profit to GDP ratio is wildly higher than the net business investment. Maybe the financial sector profit is one third of profits. Probably in the past it was 10% of profits. But that still leaves you with a non financial profit to GDP ratio way above average.

> Here's the other anomaly: …There is a massive divergence between [zooming] profits and [stable, except for the most recent few years] business net investment [see Figure 3 on p.13]. There is something astounding about that in terms of its implications for the markets. There is a strong possibility that the entire U.S. corporate sector is engaged in unimaginable systemic accounting fraud. … This is not accounting exaggeration. Not something on this scale. This is possible only if there is a very criminal corporate culture. It makes everything that Professor Bill Black has discussed about a "crimino-genic environment" seem like child's play if it is true.

On 4 April 2011, *The Wall Street Journal* ("The Great Debate on Margins: Can They Keep Going Higher?") noted:

> There seems to be consensus on the fact that corporate profit margins are going to be an important determinant in the future direction of stocks. But there's a raging debate about where profit margins are going to go. Some analysts suggest that with margins seeming to be bumping up against historically high levels, it would be natural to expect some declines … Others suggest that the current environment should allow profit margins to continue to rise.

For example, James Montier of GMO (What Goes Up Must Come Down! March 2012) states "U.S. profit margins are at record highs. More freakish still is that these record high profit margins are coming during the weakest economic recovery in post-war history. At GMO, we are firm believers in mean reversion, and as such record elevation in profit margins causes us much consternation." Montier's decomposition of margins, which is based upon an incorrect analytical framework (see footnote 1 below), nonetheless finds – correctly, as we shall see – that a "stand-out engine of corporate profits of late has been the [government's] fiscal deficit." He concludes

> It is almost unthinkable that [the deficit] will remain at current levels over the course of the next few years. As such, unless households start to re-leverage or the current account improves significantly, and assuming that the government moves toward some form of deficit reduction plan, corporate profits are likely to struggle. … So, for the time being we will continue to base our forecasts on the mean reversion [i.e., reduction] of profit margins. … When we look at the drivers of today's high profit margins, we find fiscal deficits behind the high profit margins of many countries. There is nothing "wrong" with this *per se*, but it does suggest that moves toward fiscal retrenchment will bring margins back toward more normal levels. It seems unlikely that "this time is different" when it comes to mean reversion in margins: what goes up must come down.

According to Jeremy Siegel, on the other hand, "profit margins are high, but they're not at an all-time high [sic]. There are two very good reasons why profit margins are high. … So I'm very sceptical that we're going to get a big reversion of profit margins to the mean. They're high, and they're going to stay higher than normal" (see Robert Huebscher, Jeremy Siegel on 'Dow 15,000', 18 December 2012).

This Newsletter explains why profits in the U.S. have risen to unprecedented heights. I also add my $0.02 whether the current trend can persist, whether it will plateau or reverse course. In Letter 151-154 (26 July-26 October 2012) I cited research conducted by the Federal Reserve Branch of New York that concluded, in effect, that the Fed has rigged the S&P 500. Here I reason to a related set of conclusions:

1. It is not *despite* Obama's strenuous interventionism (as *HuffPost* alleges) and his "socialism" (as Marshall Auerback states), but *because of it* (as well as George W. Bush's, George H. Bush's and Ronald Reagan's socialism), that profit as a percentage of GDP has risen to an unprecedented high. *Record profits, in other words, DO NOT reflect the rude health of America's free market economy. Quite the contrary: they reflect the terminal sickness of pervasive and thoroughgoing interventionism.* High profits do not cause low wages: instead, each is a consequence of monetary and fiscal interventionism. In this sense – which is the polar opposite of what it intends – *HuffPost* is correct: high and rising profits, together with the expectation of more to come, are clearly not a good thing.
2. Auerback is on the right track but misses his target. The Fed's greater doses of inflation and Congress's widening budget deficits have, since the 1980s, pushed corporate profitability to a record. Like all central banks, the Fed is a counterfeiter; and fractional-reserve banking, which central banks underwrite, is fraudulent. Without the Fed and commercial banks, the U.S. Government could not spend its way into bankruptcy. The constant and pervasive fraud of politicians, bankers and mainstream economists, not the rare and localised fraud of accountants, underlies today's record profitability.
3. Montier and GMO, too, are only partly correct. Strictly speaking, corporate profits are not meaning-reverting. To say that they are is to assert that unusually high profits cause subsequently lower profits, and that unusually lower profits cause subsequently higher profits. Not so: as we shall demonstrate, high time preference borne of intense inflation and unprecedented budget deficits (i.e., the government's crazed interventionism) have caused profits to zoom. Because this interventionism is ultimately "unsustainable," it can't and won't last; the receding tide of interventionism, in turn (and not the extremely high level of profit *per se*), will eventually cause profits – and the prices of stocks – to tumble.
4. For this reason, I think Jeremy Siegel is wrong: the record profitability that results from the Fed's monetary hysteria and the Congress's insatiable profligacy augur poorly for stocks' prices and investors' returns. When Americans finally confess the obvious truth that the U.S. Government is bankrupt (i.e., that it actuarially cannot and therefore financially will not meet obligations to recipients of Social Security, Medicare, etc.), and a crisis forces a drastic reduction of the central bank's inflation and the Congress's deficits, the tide pushing today's record corporate profitability – and the drastically inflated prices of stocks – will recede.
5. The good news is that Americans' eventual confession that Leviathan is bust may set the stage for the crisis that returns the economy to genuine and robust rather than sickly and artificial growth. Under these conditions (maybe I'm too sanguine) much lower profits will reflect the economy's improved health.

Whence Comes Profit?

Profit, as the classical economists conceived it and as today's accountants measure it, is essentially the surplus of revenues from sales over costs (i.e., both cash-based costs and costs accrued on a non-cash basis):

(1) Profit = revenues – costs

In Equation 1, "profit" is defined broadly as the overall amount of profit in an economy or country. The determinants of this profit are very different from those of profit defined narrowly – that is, the profit of a particular company or industry. At this more specific level, competitive factors are among the most important causes of profit. The company that introduces a new or improved product, for example, profits at the expense of the companies with which it competes: the increased profit of the innovator offsets the lower profit (or outright loss) of the laggard. Accordingly, in the wake of the new product's introduction these companies' overall amount of profit remains constant. Similarly, certain factors (such as the creation or adoption of new technology) occasionally benefit some companies and industries at the expense of others. In the 20th century, motor cars displaced horses-and-buggies and street railways. Similarly, at first cars and then aeroplanes displaced long-distance train travel, and jet planes displaced propeller-driven aircraft. Early in this century, mobile communications and digital imaging displaced fixed-line telephony, analog photography, etc.

These examples suggest something that is generally true: the introduction of new technology, or of some other factor that gives a firm or industry a competitive advantage, temporarily increases that firm's (or industry's) profitability. It also makes consumers permanently richer. Technology does not, however, whether in the short or long term, render all businesses more profitable. More generally, and because they are mutually-offsetting across the economy, competitive factors do not either in whole or in part determine an economy's overall amount or rate of profit. To explain this overall amount and rate, we need other factors, and George Reisman supplies them.[1] The two essential components of his theory of profit are net consumption and net investment. When added together, they equal the *total (aggregate) amount of profit* in an economy. This result follows from Equation 2 below (which is a seemingly trivial elaboration of Equation 1 above) and two additional definitions (Equations 3 and 4, which we elaborate further below):

(2) Profit = (sales – productive expenditure) + (productive expenditure – costs)
(3) Sales – productive expenditure = net consumption
(4) Productive expenditure – cost = net investment

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[1] See George Reisman, Capitalism: A Treatise on Economics (Jameson Books, 1996), particularly Chap. 16 ("The Net-Consumption/Net-Investment Theory of Profit and Interest"). See also Reisman, Where Profit Comes From (Daily Article, Ludwig von Mises Institute, 13 January 2011) and Ludwig von Mises, Profit and Loss (*Planning for Freedom,* Libertarian Press, 1952). James Montier's analysis of overall profits is based upon Michal Kalecki's and Joan Robinson's – which, in turn, contain egregious shortcomings. For a discussion of these shortcomings, see Reisman, pp. 801-803.

If we substitute Equations 3 and 4 into Equation 2, we obtain

(5) Profit = net consumption – net investment

Net consumption is the primary, direct and most enduring determinant of aggregate profit. Assuming a medium of exchange and account (i.e., money) whose quantity is invariant, Reisman shows that over time net investment will tend to zero, leaving net consumption as the only determinant of aggregate profit (pp. 758–62). When he drops this assumption, and as we illustrate below, Reisman demonstrates that the rate of net investment tends to equal the rate of growth of the quantity of money, thus providing a permanent [but volatile] component of aggregate profit. Finally, the *average rate of profit* = aggregate profit ÷ aggregate invested capital.

Net Consumption

Assuming that the quantity of money is invariant and that businesses immediately consume capital goods (we will subsequently relax these assumptions), and thereby ignoring net investment and the government for the time being, Reisman shows that aggregate profit (Z) is the difference between two demands: X (the demand for the products of business) and Y (the demand for factors of production by business). Hence $Z = X – Y$. Usually, and always in the long run, $X \geq Y$; usually and always in the long run, therefore, $Z \geq 0$. X, which constitutes the total revenue from sales in the economic system, stems from three sources: (a) labour's demand for consumer goods, (b) capitalists' demand for consumer goods and (c) capitalists' demand for capital goods. Hence $X = a + b + c$. Y, which constitutes the total productive expenditure by capitalists in the economic system, comprises two categories: (c) capitalists' demand for capital goods and (d) capitalists' demand for labor. Hence $Y = c^* + d$.

Given these assumptions, we can consider capitalists' demand for capital goods from two points of view: as a component of X (i.e., the demand for the products of business) and also as a component of Y (i.e., the demand for factors of production by business). Also note that whether we express it as a component of X or of Y, $c=c^*$. This is because capital goods are by definition bought and sold exclusively by capitalists; further, capital goods are consumed immediately (i.e., within one year). Accordingly, the productive expenditure of one business is the sales revenue of another. Further, capitalists' demand for labor (d) is the source of labor's demand for consumer goods (a) ; and because the wages paid to labor by business are spent immediately and exclusively by labor on consumer goods, $a = d$.

From the foregoing we have

$Z = X – Y$
$Z = (a + b + c) – (c^* + d)$
$Z = a + b – d$
$Z = b$

The aggregate amount of profit in an economy is the excess of capitalists' revenue from sales over their productive expenditure. Capitalists' revenue minus their productive expenditure equals their net consumption, which equals aggregate profit. Notice, then, that the overall amount of profit does not derive from the "exploitation" of labour (as some economists, notably Karl Marx, contended); nor, as many other economists have long contended, does profit depend upon the demand for and the supply of capital. Rather, profit is the difference between the total demand for capitalists' output and capitalists' productive expenditure (for an elaboration and references, see the digression below).

In plain English, total economy-wide revenues comprise spending by companies (to purchase capital goods from companies that produce capital goods) and spending by individuals (to purchase consumer goods from companies that produce consumer goods). Together, these two sources of spending comprise all the revenues from sales received by all business enterprises. The spending by companies reflects the spending for capital goods (supplies, materials, tools, machines, etc.) that appears on their income statements. The spending by consumers is derived from — and reflects — businesses' payments of wages: workers receive wages and use them to buy consumer goods. Hence businesses undertake two basic forms of spending: they purchase capital goods and labour. Since the money that businesses receive derives in one form or another from the spending by businesses themselves, one might think (and mainstream economists often do think) that the total economy-wide spending that businesses undertake (i.e., economy-wide business costs) equal the total amount that businesses receive (i.e., economy-wide revenues). In this "circular flow" (to use the mainstream's phrase), one might infer that costs equal revenues, and therefore that aggregate profit tends towards zero.

Costs in fact do equal revenues. But in addition to business spending on capital goods and consumer spending on consumer goods, there exists another form of spending that does not have any corresponding prior costs. This is the spending by capitalists, businessmen and investors (derived from dividends, draws from partnerships or any other form of disinvestment from a business enterprise) on consumer goods. When funds invested in companies are withdrawn and used to purchase consumer goods, the total economy-wide spending exceeds the spending derived from purchases of capital and labour. This spending begets revenue from sales but does not generate corresponding costs. Dividends from companies, draws from partnerships and the like are not regular company expenses; they are not, in other words, required in order to maintain the business as a going concern. To be sure, dividends, distributions and draws are less regular than payments of wages; at the same time, however, businesses routinely pay dividends, etc., that their owners consume and thus do not reinvest. The spending of these monies causes sales revenues to exceed costs. (Similarly, money extracted from under the mattress and spent on consumer goods, which this analysis ignores, would also help revenue from sales to exceed costs.)

We can attach units of money to these concepts in order to illustrate the source of aggregate profit. The income statement in Exhibit 1 represents an entire economy; for the sake of simplicity it also describes an economy in which both the quantity of money and aggregate

sales revenues are fixed at $1,000. Similarly, goods are either consumer goods (i.e., goods for final consumption) or capital goods (i.e., goods used to produce consumer goods) and people are either capitalists or non-capitalists (i.e., labour). Exhibit 1 assumes that revenue from sales occurs on the first day of the financial year, and that the production of next year's supply of capital goods and consumer goods occurs during the remainder of the year. Given these assumptions, this economy's only possible source of profit ($200) is capitalists' demand for consumer goods (b).

Exhibit 1: A Simple Example of the Source of Aggregate Profit

Revenue from Sales		
	(a) Labour's demand for consumer goods	$300
	(b) Capitalists' demand for consumer goods	$200
	(c) Capitalists' demand for capital goods	$500
	(X) Total demand for the products of business	$1,000
Productive Expenditure		
	(c*) Capitalists' demand for capital goods	$500
	(d) Capitalists' demand for labour	$300
	(Y) Total demand for factors of production	$800
Profit		$200

The information in Exhibit 1 also allows us to specify this economy's average rate of profit. $1,000 of cash (which is an asset, some of which capitalists own and the rest of which workers own) is available to buy and sell capital goods and consumer goods. Further, the $800 of productive expenditure (Y) represents the value of the capital goods and consumer goods produced during the year; at year end, the $800 takes the form of inventory, plant and equipment. Thus, total capital in this economy is $1,000 + $800 = $1,800. Net consumption (i.e., profit) is $200. Profit divided by total capital invested – that is, the rate of profit – is thus 11.1%. We can also think of the rate of profit as the rate of net consumption.

A Digression into Fundamentals

Reisman's teacher, Ludwig von Mises, has influenced him greatly. So have classical economists such as John Stuart Mill. But "in its most original aspects," said one of the reviewers of Reisman's book, "*Capitalism* stands somewhat apart from any school or living tradition." Its recognition of the productive role of businessmen and capitalists, and therefore its conception of profit, is perhaps its most original aspect. In Reisman's own words, "this is the radical opposition between a major insight of my book and an erroneous basic assumption that is shared by, among others, Adam Smith, Karl Marx, and the leading representatives of the Austrian School, notably, Eugen von Böhm-Bawerk and Murray Rothbard."[2] In particular,

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[2] See Alexander Tabarrok, "Review of George Reisman's *Capitalism: A Treatise on Economics,*" *Review of Austrian Economics*, vol. 10, no. 2, 1997, pp. 115-132; and George Reisman, "Reisman on *Capitalism,*" *Quarterly Journal of Austrian Economics*, vol. 1, no. 3, Fall 1998, pp. 47-55.

> This later idea, which is held by virtually all economists other than myself, I call *the primacy of wages doctrine*. It is the belief that wages are the original, primary form of income and that all other incomes, such as profit and interest, come into existence as a deduction from what is originally all wages. Profits appear, allegedly, only after the accumulation of capital and with the emergence of capitalists, as a deduction from what otherwise would be wages. According to Karl Marx, the deduction is unjust and constitutes the exploitation of labour. Adam Smith thinks virtually the same thing. Böhm-Bawerk and Rothbard think the deduction is justified, on the basis of time preference, and thus does not constitute any kind of exploitation of labour.

Reisman demonstrates that profit is not a deduction from what is originally all wages. Exactly the opposite is true: wages are a deduction from what is originally all profit. Profit, in other words, is the primary form of income; and profit-earners, not wage-earners, are the primary producers. "The productive status of the wage earners," says Reisman,

> is best characterised by the word "help." They are the profit earners' helpers in the production of what fundamentally are *his* products, not theirs. The actual consequence of the emergence of capitalists and the accumulation of capital, I hold, is the creation of productive expenditure, wages and costs, and the consequent reduction in the proportion of income what is profit.

Reisman's radically pro-capitalist conception of profits, and of the relationship between capitalists and wage-earners, stems ultimately from the insights of the classical economists. Above all, it derives from John Stuart Mill's proposition that "demand for commodities is not demand for labour."[3]

Higher Time Preference Boosts Net Consumption – and Thus Aggregate Profit

Where does the notion of time preference fit into Reisman's theory? "Net consumption," he says, "is not an ultimate cause of profit. It itself reflects the operation of time preference" (p. 743). Time preference denotes the extent of people's desire to consume today versus consume at some point in the future. All else equal, people prefer jam now rather than jam tomorrow; still more do they prefer it today rather than at some point in the more distant future. Why, then, don't people live exclusively in the present? Simply put, the prospect of profit earned today and profitably reinvested tomorrow may enable greater consumption thereafter. How much profit renders the individual indifferent between the choice of consumption today versus greater consumption in the future? People whose time preference is low place a relatively low value on the present vis-à-vis the future; accordingly, they require a relatively low reward (profit) today in order to entice them to await the prospect of greater consumption tomorrow. In contrast, people whose time preference is high attach a high value on the present vis-à-vis the future; for this reason, they require a relatively high reward

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[3] For an extended discussion and analysis, see Reisman, *Capitalism*, pp. 473-485.

(profit) today in order to entice them to delay the gratification of today's appetite and await tomorrow's reward.

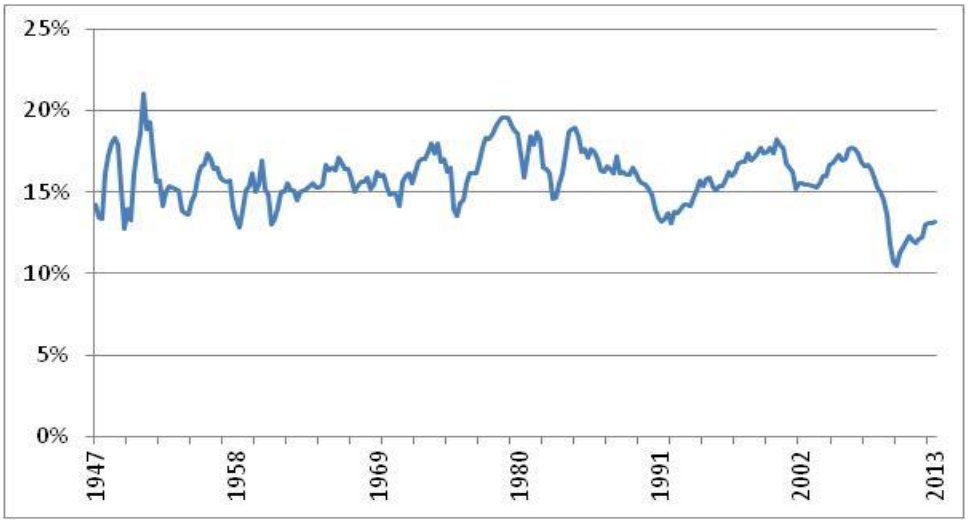
Time preference, in Reisman's words, determines "the proportions in which people devote their income and wealth to present consumption versus provision for the future," and thereby sets the rate of capitalists' net consumption (p. 743). A lower degree of time preference (that is, a higher propensity to provide for the future through a higher current demand for capital goods) leads to a lower rate of net consumption – and therefore a lower rate of profit. In Exhibit 1, if capitalists' demand for capital goods increases from $500 to $600 and labour's demand for consumer goods remains constant, then profit falls from $200 to $100. A higher degree of time preference (that is, a lower rate of provision for the future through a lower current demand for capital goods), on the other hand, increases profit.

This result will strike many people as counterintuitive – and some as diametrically incorrect. How on earth can fear of the future beget high profits? How can confidence produce low profits? The mainstream, after all, relentlessly insists the polar opposite: namely that high and rising confidence causes high and rising profits. That's why governments, advised by the mainstream, strive ceaselessly to contrive confidence. The truth, as Reisman shows, is that a decrease of time preference causes the rate of *current* net consumption – and therefore *today's* rate of profit – to fall. In turn, higher current demand for capital goods (which underlies the lower net consumption), will, if capitalists invest and manage this greater quantity of capital goods astutely over time, increase their *future* revenue from sales – and thus, if their demand for capital goods does not rise commensurately, eventually increase their net consumption. Given a low time preference, capitalists sacrifice profits today in exchange for the expectation of higher profits tomorrow.

The influence of time preference upon aggregate profit and the rate of profit is (via capitalists' demand for capital goods) indirect; net consumption is the direct determinant of profits. In Reisman's words, "one can say that the ultimate cause and determinant of the rate of profit, insofar as it depends on net consumption, is time preference." The higher is the time preference, the higher is capitalists' propensity to disinvest; and the greater is their desire to disinvest, the greater is the rate of profit. In plain English, if you fear for the future, increase your profits now – and consume them yourself before somebody else does. What, then, underlies capitalists' time preference? Among other things, their confidence about/fear of the future. Reisman elaborates:

> The fact that time preference is itself profoundly influenced by the degree of rationality and freedom that prevails in a society implies that as far as the rate of profit depends on the rate of net consumption, it will be lower, the more rational and freer a society is (footnote 46). Special emphasis must be placed on the implication that the rate of profit will be the lower the greater is the respect for property rights and thus the security of property. This is the case because to the degree that property rights are respected and property is secure, the more are people motivated to make provision for the future relative to present consumption, and thus the lower will be the rate of net consumption and the rate of profit (p. 744).

Figure 3: Private Domestic Fixed Investment as a Percentage of GDP, U.S., 1947-2013



Net Investment

Net investment is the difference between productive expenditure and costs. In the real world, these two terms seldom equal one another. Although the outlay of cash required in order to purchase a capital good usually occurs at a discrete point in time, its cost is typically recorded continuously over an interval of years – either as increments of depreciation or, in the case of inventory, as the cost of goods sold. "In essence," says Reisman, "today's productive expenditures for the most part show up as costs in the future, while today's costs for the most part reflect productive expenditures made in the past." Accordingly, in Exhibit 1 $c \neq c^*$; specifically, $c \geq c^*$. The gap between the current year's productive expenditure and cost (this year's cost, remember, results in large part from prior years' productive expenditure), is called net investment. This net investment, Reisman reminds us, is a component of aggregate profit (pp. 744–50). For example, if the capital goods under the heading "Productive Expenditures" in Exhibit 1 are depreciated over two years, then $250 of the $500 that is not depreciated will appear in the bottom line as profit.
Hence we have

$$Z = X - Y$$
$$Z = (a + b + c) - (c^* + d)$$
$$Z = (a + b) + (c - c^*) - d$$
$$Z = b + (c - c^*)$$

Given the assumption of an invariable money, net investment $(c - c^*)$ tends over time to disappear, leaving net consumption (b) as the only determinant of aggregate profit (Reisman, pp. 758–62). If capital goods worth $500 per year are purchased and depreciated over 10 years at the rate of $50 per year, then from Year 10 net investment will be $0. This occurs because costs (depreciation) increase relative to (and eventually equal) productive expenditure. In Year 1, total depreciation charged against productive expenditure ($500 per year) is

$50; in Year 2, it is $100; in Year 3, it is $150, and so on until Year 10. In Year 10, total depreciation is $500 – the same as productive expenditure. In Year 10 and thereafter, current depreciation offsets current productive expenditure for durable capital goods, such that net investment is $0.

When the marginal productivity of capital exceeds the average rate of profit, net investment can be prolonged – that is, productive expenditures can be depreciated over a greater number of years than the current average. The marginal productivity of capital is the reduction of cost (or increase of sales) per unit of capital invested. When it exceeds the average rate of profit, capitalists possess an incentive to direct new investment into more capital-intensive lines of business. But this process is self-limiting. For example, an economy whose capitalists invest $500 of capital goods yearly and depreciate these investments continually over two years will after two years show no net investment. A shift (brought about, for example, by an increase of the marginal productivity of capital to a level that is greater than the average rate of profit) to more-capital-intensive lines of business, one which requires capital goods lasting (say) 10 years instead of two, will create 10 years of net investment. This process, however, is self-limiting because the new (and more productive) net investment increases the rate of profit – thus causing a movement toward equality with the marginal productivity of capital. As the spread between the marginal productivity of capital and the average rate of profit declines, the incentive to move into more capital-intensive lines of business also decreases.

Inflation Boosts Net Investment, Which Increases Aggregate Profit

Clearly, in the real world the quantity of money is not fixed. In a monetary régime based upon precious metals (such as that which prevailed during most of the 19th century), the mining of gold and silver causes the quantity of money to rise slowly (i.e., by ca. 1-2% per year); and under the "fiat standard" that has prevailed roughly since the early-20th century and certainly since the Second World War, the quantity of money has risen much more rapidly. The quantity of fiat money has increased in some countries more than others and during some intervals of time more than others. A rough average in developed countries is an increase of ca. 5-10% per year – i.e., 2-4 times more quickly than under a commodity (gold) standard. In the U.S. from 1959 to 2011, for example, the Austrian School measure of money supply (AMS, see Figure 4) grew at a compound rate of growth of 6.8% per annum.

When the quantity of money increases, the amount of investment, i.e., capitalists' demand for productive goods (item c* in Exhibit 1), virtually always exceeds the cost of investment. As a result, net investment will comprise a semi-permanent component of aggregate profit. In other words, an increase of the quantity of money causes aggregate profit to rise. Why under these conditions will the amount of investment usually exceed its cost? Why, in other words, will net investment seldom fall to zero? Today's increase of the quantity of money causes today's prices but not yesterday's costs to rise. The cost of investment (i.e., depreciation) reflects the past purchases of capital goods, which were made at the lower prices prevailing in the past. If quantity of money constantly increases at a fixed rate, a permanent gap opens between productive expenditures (at today's prices) and costs (which reflect yester-

day's prices). "Indeed," concludes Reisman," *the rate of net investment tends to equal the rate of increase in the quantity of money, thus providing a permanent component of aggregate profits caused by the increase in the quantity of money"* [italics added]. In plain English, the more pronounced is the inflation, the greater is the profit.

Exhibit 2: The Effect of a Constantly-Increasing Quantity of Money and of a Rising Volume of Spending on the Nominal Rate of Profit

		Year 1	Year 2	Year 3	Year 4	Year 5
Supply of Money		$1,000	$1,100	$1,210	$1,331	$1,464
Revenue from Sales	(a) Labour's demand for consumer goods	$300	$330	$363	$400	$440
	(b) Capitalists' demand for consumer goods	$200	$220	$242	$266	$293
	(c) Capitalists' demand for capital goods	$500	$550	$605	$666	$733
	(X) Total demand for the products of business	$1,000	$1,100	$1,210	$1,331	$1,464
Net Investment		$0	$80	$88	$97	$106
Productive Expenditure	(c*) Capitalists' demand for capital goods	$500	$550	$605	$666	$733
	(d) Capitalists' demand for labour	$300	$330	$363	$400	$440
	(Y) Total demand for factors of production	$800	$880	$968	$1,065	$1,171
Profit		$200	$300	$330	$363	$399
Capital		$1,800	$1,900	$2,090	$2,299	$2,529
Rate of profit		11.1%	15.8%	15.8%	15.8%	15.8%

Exhibit 2 illustrates these points. The figures in Year 1 duplicate Exhibit 1 (which, remember, assumed that the quantity of money is invariable). In Years 2-5 we assume a fiat monetary standard in which the quantity of money rises at a rate of 10% per year for four years. For simplicity, we also assume that the volume of spending grows at the same rate as the quantity of money. The figures in Years 2-5 show these assumptions' consequences.

The amount of profit increases from $200 in Year 1 to $399 in Year 5 – that's a compound rate of growth of 18.9% per annum. An increase of the quantity of money at the rate of 10% per year has caused a much greater increase of the amount of profit. In Year 2, the amount of profit is $300 rather than the $200 which existed under conditions of an invariable quantity of money. This is because revenues from sales (comprising $550 of demand for capital goods and $550 of demand for consumer goods) are $1,100; costs, however, representing $800 of productive expenditure of Year 1, are still just $800. In Year 3, with sales revenue at $1,200 and cost at $880 (the latter reflects the 10% rise in demand for capital goods and labor in Year 2), profit rises to $330. And thereafter, the amount of profit continues to rise at the rate of 10% per year – that is, at the same rate as the increase in the quantity of money and the volume of spending. According to Reisman, "the rate of increase of the quantity of money and, accordingly, the volume of spending in the economic system, tends to cause an

approximately equivalent increase in the rate of profit." The rate of profit has increased from 11.1% in Year 1 to 15.8% in Year 5 – that's a compound rate of growth of 9.2% per annum.[4] He also observed (p. 769) "the fact that the net investment rate tends toward equality with the rate of increase in the quantity of money and volume of spending." From Year 2 to Year 3, the rate of net investment is 10% (i.e., (88-80) ÷ 80); from Year 3 to Year 4, the rate is 10.2%, and from Year 4 to Year 5 the rate is 9.3%.

Exhibit 2 shows that the constant inflation of the supply of fiat money has caused the economy to become nominally more *profitable*: it has not, however, caused it to become fundamentally more *productive*. The economy is not more capital intensive: the demand for capital goods (c) remains a constant (50%) percentage of the total demand for the products of business (X). Production has risen only in nominal terms; net of the increase of the supply of money, in other words, however, production hasn't risen one iota. Similarly, the quantity of capital hasn't risen relative to the supply of money. Indeed, capital has grown more slowly than the quantity of money. In nominal terms, the amount of profit has doubled (from $200 in Year 1 to $399 in Year 5). Profit has risen relative to capital (which increases from $1,800 in Year 1 to $2,529 in Year 5) because capital has risen relatively sluggishly. Profit, in short, has risen not as a consequence of a positive and productive force (namely an increase of capitalists' demand for capital, which, if invested wisely, begets an increase of the volume of production). Quite the contrary: profit has increased as a result of a negative and non-productive force (namely an increase of the supply of fiat money).

The higher the rate of inflation, the wider are profit margins. This is why companies in countries with very high inflation tend to have high profit margins. Says Reisman:

> In the case of fiat paper money, of course, it is inappropriate to add the increase in the quantity of money itself to the amount of aggregate profit in the economic system. This is because the increase in the quantity of fiat paper money is not at all

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[4] The rate of profit can be computed simply by dividing the amount of profit in each year by the amount of capital that has been invested up to that year. Exhibit 2 shows that the rate of profit rises from 11.1% in Year 1 to 15.8% in Year 2. That's an increase of 42.3% (i.e., (15.8 – 11.1) ÷ 11.1 = 0.43) and of 4.7 percentage points (i.e., 15.8 – 11.1 = 4.7). An increase of the quantity of money causes a jump of the rate of profit; the continuation of inflation at a constant rate, causes no further jump of the rate of profit: only an acceleration of the rate of inflation will cause a further rise of the rate of profit.

How do we reconcile these results with Reisman's expectation that the rate of profit would grow at roughly the same pace (i.e., at 10% per year) as the quantity of money? The disparity stems from "the enormously large role played by the quantity of money in the calculation of capital invested." In Years 1-5, "the quantity of money in the possession of business firms represents over half of their total capitals. This unduly large role of the quantity of money as a component of capital results from the simplifying assumption that all spending in a year takes place on the opening day of the year and is financed out of the pre-existing cash holding of business. The effect of such a large role being assigned to the quantity of money in the calculation of capital is to add a corresponding dead weight, as it were, in the calculation of the rate of profit." On p. 774 he adds: "in the real world, the quantity of money held by business is small relative to capital and sales revenues, and thus the 'dead weight' aspect of counting money in capital is minimal."

> analogous to the sales revenues of a business. It is the fruit of a virtual counterfeiting operation, not of any kind of productive venture (p. 773).

Figure 4a plots the "Austrian School" conception of the supply of $US (AMS) since 1959.[5] The supply has grown from $0.283 trillion in January 1959 to $7.999 trillion in December 2011. That's a compound rate of growth – that is, of inflation – of 6.8% per year.

Figure 4a: "Austrian School" Supply of Money, Trillions of $U.S., 1959-2011

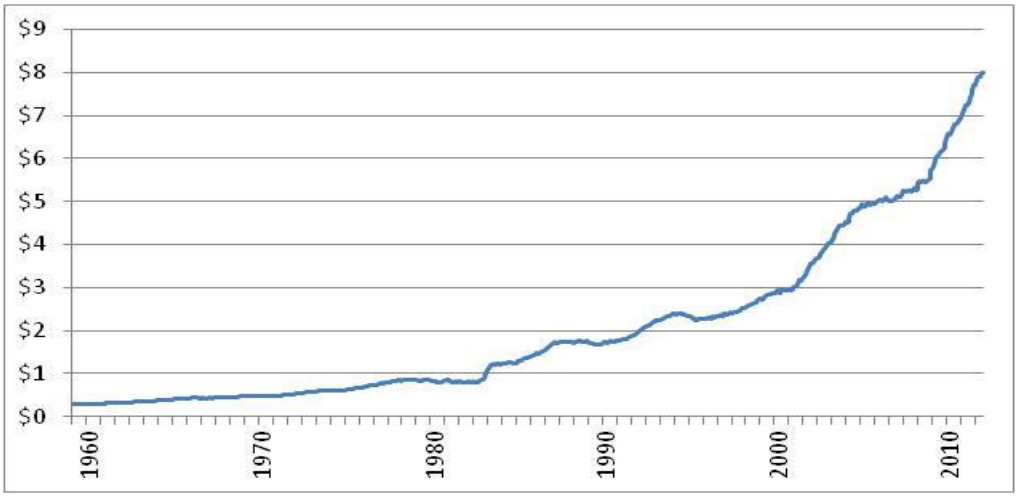

Figure 4b expresses the AMS as a percentage of GDP since 1959. The percentage fell steadily – indeed, halved – from the mid-1960s (60%) to the early 1980s (below 30%). From then until ca. 2000 it remained at ca. 30%, and since then has risen sharply. Presently, the AMS exceeds 50% of GDP. That's the highest percentage since the late 1960s.

In short, the central bank's inflation of the money supply is an important driver of profits. When the central bank prints money, companies' revenues eventually and inevitably rise faster than their costs (which are partly fixed and entirely historical); accordingly, profits rise. (By contrast, on those rare occasions when the supply of money and the volume of spending contract, revenues fall more quickly than costs and profit margins shrink.) The expenditure of this funny-money – not healthy economic growth borne of falling time preferences – has since the 1980s put a rocket under profitability. Clearly, however, this rising profitability is a

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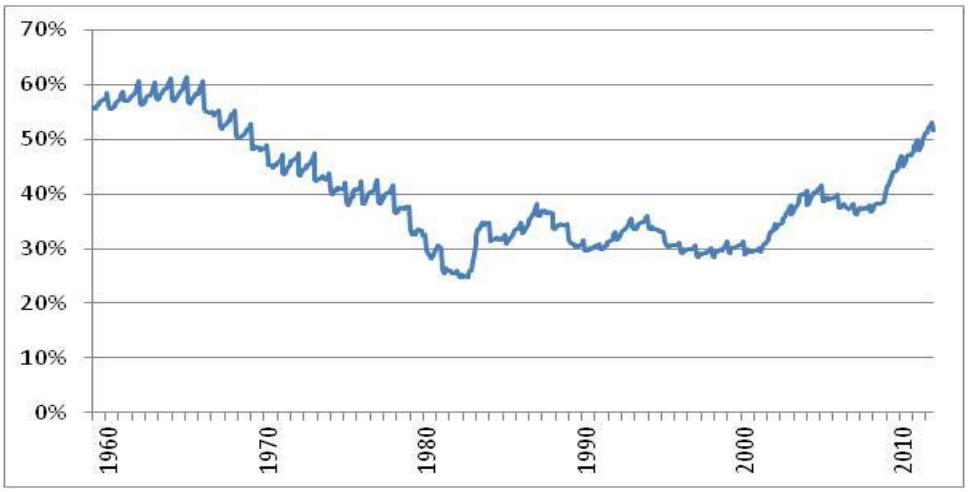
[5] AMS is the sum of standard money and money substitutes. In today's fiat money system, standard money is easy to define. It's simply the sum of the Federal Reserve's notes and the Treasury's coins, i.e., what's popularly termed "currency." The definition and measurement of money substitutes, on the other hand, is a challenge. "To paraphrase the Austrian masters," says Michael Pollaro, "money substitutes are perfectly secure and *immediately* convertible, *par-value* claims to standard money which, by virtue of this immediate convertibility substitute *fully* for standard money in individual's cash balances, and, as such, are used by individuals as a surrogate for cash – namely, a *thing that all other goods and services are traded for, the final payment for such goods and services on the market.* On this basis, not only are all the Federal Reserve's M1, M2, and M3 components not money, but some are not even money substitutes" [italics in the original]. For details, see Murray Rothbard, Austrian Definitions of the Money Supply; Joseph Salerno, The True Money Supply: A Measure of the Supply of the Medium of Exchange in the US Economy; and Michael Pollaro, Money-Supply Metrics, the Austrian Take.

symptom of sickness rather than health: true economic growth would result not in increased (monetary) revenues and profits but instead in steady revenues and falling prices.

Figure 4b: "Austrian School" Supply of Money as a Percentage of GDP, U.S., 1959-2011



The Taxation of Profit and the Amount and Rate of Profit

The taxation of profits causes the pre-tax amount of profit as well as the pre-tax rate of profit to rise. This result, too, is counterintuitive. How to explain it? Recall that capitalists do not earn income: the capital which they own generates profits. Accordingly, the impact of the taxation of profits falls mainly and directly upon capital. Its impact upon labour is not trivial, but is indirect and less significant.

It is precisely because the taxation of profits falls mainly and directly upon capital that it raises pretax profit. Exhibit 3 illustrates this counterintuitive point. The column labeled "No Tax" reproduces the figures in Exhibit 1 and in Year 1 of Exhibit 2; the column labeled "50% Tax" adjusts the figures in the first column for a tax of 50% upon profit. Because it falls upon capital, the taxation of profits reduces productive expenditure. Funds which capitalists would have used in order to purchase plant, equipment, etc., and to pay wages are instead diverted towards the payment of taxes. Given the aggregate profit of $200 that prevailed before the introduction of the tax, and its flat rate of 50%, let's assume that capitalists' demand for capital goods falls by $50 and that their demand for labour also falls by $50. The agents of the state (or the people to whom the state redistributes the proceeds of the tax) spend these funds. Accordingly, total revenue from sales remains unaffected; only the source of this revenue changes. Because capitalists' demand for labour falls, employees' demand for consumer goods also falls by a corresponding amount; similarly, because capitalists' demand for capital goods falls, so too does this source of revenue from sales. (As long as their capital remains intact, the consumption of businessmen and capitalists is not substantially reduced by the reduction in their disposable income that the tax causes.) The demand for consumers' goods by the government, or those to whom the government gives the

tax money, rises by an amount equal to these reductions. Although revenue remains the same ($1,000), the reduction of productive expenditure (from $800 before the imposition of the tax to $700 after its imposition) causes aggregate pre-tax profit to rise correspondingly.

Exhibit 3: The Impact of Taxation of Profit upon Pre-Tax and Post-Tax Profit

Revenue from Sales		**No Tax**	**50% Tax**
	(a) Labour's demand for consumer goods	$300	$250
	(b) Capitalists' demand for consumer goods	$200	$200
	(c) Capitalists' demand for capital goods	$500	$450
	Government's demand for consumer goods	$0	$100
	(X) Total demand for the products of business	$1,000	$1,000
Productive Expenditure			
	(c*) Capitalists' demand for capital goods	$500	$450
	(d) Capitalists' demand for labour	$300	$250
	(Y) Total demand for factors of production	$800	$700
Pre-tax profit		$200	$300
Tax		$0	$150
Post-tax profit		$200	$150

Of course, this rise of aggregate profits is on a pre-tax basis only: post-tax, profits are lower than they were before the imposition of the tax. Similarly, the rate of profit (which before the imposition of the tax was $200 ÷ $1,800 = 11.1%) is 16.7% (pre-tax) but just 8.3% (post-tax). What occurs, in effect, is that costs in the form of taxes displace normal business costs such as machinery, materials, labour, etc. "In an economic system with an increasing quantity of money," Reisman elaborates, "the effect is that the growth in productive expenditure is less than it otherwise would have been. The effect of this, in turn, is that aggregate costs come to stand at a lower level than they otherwise would have reached. Thus, aggregate profit and the average rate of profit, on a pre-tax basis, are correspondingly increased."

Equally clearly, additional assumptions underlie the figures in Exhibit 3. Perhaps most importantly, after the imposition of the tax, capitalists' demand for capital goods – that is, their quantity of investment – decreased. Yet they continued to produce the same quantity of goods and services. Clearly, unless the efficiency of their diminished base of capital suddenly rises, or unless imports fill the shortfall, etc., this is unlikely to occur (see pp. 831-833 for an analysis of the impact upon profit of a deficit in the balance of trade). Clearly, an increase of taxation is likely to degrade the base of capital. "Obviously," as Reisman concludes, "at some point the taxation of profits becomes capable of stopping economic progress altogether and causing economic retrogression." He continues:

> The precise effect of the taxation of profit depends on the type of monetary system a country has. Under an invariant money or under a fiat money, the effect is clearly a rise, in the ways just explained. Indeed, under a fiat money system, it is almost certain that as a result of its negative effects on capital accumulation and economic progress, a rise in the taxation of profit will be followed by a more rapid rate of increase

> in the quantity of money and by a further corresponding increase to the rate of profit. This is because the government will be tempted to print money all the more rapidly to the degree that a lesser rate of economic progress – let alone economic stagnation or outright economic retrogression – diminishes the real revenues at its disposal while at the same time increasing the demands made upon it by the public (p. 828).

The Government's Budget Deficit Boosts the Level and Rate of Profit

Given the foregoing analysis, the impact of a government's budget deficit upon the overall amount and rate of profit is straightforward. If it has been financed by the creation of new and additional money (that is, by inflation), then the effect of the deficit upon profits is akin to the impact of inflation upon profits (see Exhibit 2). If new and additional money hasn't financed the deficit, then the sale of securities has. Unless it completely monetises its deficit, government exchanges these securities for funds that otherwise would enter into productive expenditure. As a result, and just as taxation crimps productive expenditure, capitalists' demand for capital goods falls. So too does their demand for labour, and thus employees' demand for consumers' goods. An equivalent increase of demand for consumers' goods by the government (or by those to whom it redistributes money) offsets the reductions of demand for capital goods and for consumers' goods. Accordingly, and as in the case of taxes' impact upon productive expenditure, revenues from sales in the economic system remain unchanged. Similarly, as in the case of taxes, the reduction of productive expenditure causes an equivalent reduction of aggregate business costs that are deducted from sales revenues in computing profits. As a result, the aggregate amount of profit rises correspondingly. The average rate of profit is raised by virtue both of the rise in the aggregate amount of profit and the reduction in the aggregate amount of capital invested.

Exhibit 4 illustrates these effects. Its first column repeats the figures in Exhibit 2 and in the first column of Exhibit 3. Exhibit 4's second column repeats the figures in the second column of Exhibit 3, and its third column illustrate the effects of a deficit of $100. Exhibit 4 shows that budget deficits (comparison of figures in columns 2 and 3) and taxes (comparison of figures in columns 1 and 2) reduce productive expenditure. The difference is that budget deficits increase the amount and the rate of profit not merely on a gross (pre-tax) basis but also on a net (after-tax) basis. On a pre-tax basis, the deficit causes the rate of profit to increase (relative to the rate of profit in column 2) to 22.2%; post-tax, the rate of profit rises to 11.1%. Reisman cautions

> Of course, just as in the case of a fall in productive expenditure caused by taxation, the decline in productive expenditure caused by budget deficits is inimical to economic progress, and, if carried far enough, must cause economic retrogression. In both cases – that is, taxes or budget deficits coming at the expense of productive expenditure – the rise in the amount and rate of profit signifies merely that in the context of an invariant money, an inverse relationship exists between aggregate profit on the one side and economic progress and prosperity on the other" (p. 830).

Exhibit 4: The Impact of the Government's Budget Deficit upon Profit

Revenue from Sales		No Tax	Tax (Pre-Deficit)	Tax (Post-Deficit)
	(a) Labour's demand for consumer goods	$300	$250	$200
	(b) Capitalists' demand for consumer goods	$200	$200	$200
	(c) Capitalists' demand for capital goods	$500	$450	$400
	Government's demand for consumer goods	$0	$100	$200
	(X) Total demand for the products of business	$1,000	$1,000	$1,000
Productive Expenditure				
	(c*) Capitalists' demand for capital goods	$500	$450	$400
	(d) Capitalists' demand for labour	$300	$250	$200
	(Y) Total demand for factors of production	$800	$700	$600
Pre-tax profit		$200	$300	$400
Tax		$0	$150	$200
Post-tax profit		$200	$150	$200

To what extent has the U.S. Government "stimulated" the economy? Let us count two primary ways. First, Figure 5 shows that its budget deficits are the largest (as a percentage of GDP) in recorded history.

Figure 5: U.S. Government Budget Deficit as a Percentage of GDP, 1947-2013

During the late 1940s, in the immediate wake of the Second World War, the budget's surplus exceeded 4% of GDP. For the next 40 years the budget deteriorated: by the mid-1980s, the deficit was equivalent to 6% of GDP. From then until the George W. Bush administration, the budget improved: indeed, during the Clinton years in the late 1990s, a surplus of ca. 2% of GDP (the only surplus of any description since the late 1950s) briefly appeared. During the George W. Bush administration, of course, the budget disintegrated: by 2009, the deficit exceeded 10% of GDP. Obama's deficits aren't quite so bad (ca. 7-8% of GDP). Still, they

are worse than even during the Second World War – that is to say, except for George W. Bush's, Obama's deficits are by far the worst in U.S. history.

Figure 6 shows that, since the Reagan era, the U.S. Government has utterly abandoned orthodox Keynesianism. In other words, not only has it run "counter-cyclical" deficits during genuinely bad times: it has also (except in Clinton's second term) run "pro-cyclical" deficits during apparently good times. As a result, since the early 1980s the national debt (i.e., accumulated deficits) as a percentage of GDP has risen almost without interruption. Who in his right mind says that Ronald Reagan and his successors of whatever partisan stripe (perhaps except Bill Clinton) have been anything other than big government socialists? Today, the U.S. Government is more heavily indebted than at any time since the Second World War.

Figure 6: Gross Federal Government Debt as a Percentage of GDP, U.S., 1947-2013

The bottom line is that the U.S. Government's negative bottom line, namely its deficit, is a major driver of corporate profits. This is no mere "one-off" stimulus: the accumulation of ever growing deficits, namely rising debt as a percentage of GDP, has, together with the inflation that underlies it, driven corporate profits since the Reagan years. Joe Wiesenthal (Every Investor and CEO Needs To See This Chart Before The Fiscal Cliff Is Hit, 21 October 2012) is correct. In his words, "investors need to take note that a … decrease in [annual deficits and cumulated debt] could mean murder for corporations' bottom line."

The Intensity of Capital and the Generation of Genuine Profit

Reisman's insights and framework help us to understand the determinants of profit in the broad sense, i.e., how total economy-wide business revenues can and do, year in and year out, exceed total economy-wide business costs. We can thereby explain things that the mainstream finds inexplicable and indeed abhorrent. We can also avoid the investment follies borne of their economic and financial misconceptions. Perhaps most notably, as the average rate of profit falls in a sound economy (like the one in Exhibit 1, which is characterised

among other things by an invariant quantity of money and no taxes) capital-intensive lines of business become attractive. This is because (as discussed above regarding net investment and the marginal productivity of capital) investments that are more capital-intensive tend to produce lower costs than investments that are less capital-intensive. As Reisman puts it, "as the average rate of profit declines, the rate of profit of the more-capital-intensive lines of business becomes more attractive relative to that of the less-capital-intensive lines of business. A capital improvement, for example, that generates a 10% return will be undertaken when the average rate of profit falls below 10%." A more capital-intensive structure of production tends over time to produce output at lower cost (or more output at the same cost) than a less capital-intensive structure. And because wages remain constant and the quantity of money is invariant, the purchasing power of money rises – and workers' standard of living rises. In a nutshell, the sentences in this paragraph roughly describe economic development during much of the 19th century.

In diametric contrast, the *higher* rates of profit analysed in Exhibits 2-4 *reduce* standards of living. When capitalists' demand for capital goods stagnates and falls, businesses invest less; when they invest less, capital depletes and eventually produces fewer goods. Under these circumstances, unless rapid advances of technology intervene (i.e., enable capitalists to produce more goods with the same quantity of capital) consumer prices rise relative to wages. In other words, the purchasing power of wages stagnates and falls. Ask the average American about the purchasing power of her wages since the 1970s: her answer will likely approximate the truth more closely than the fantasies of an Ivy-League economist. To the mainstream, it sounds not just paradoxical but profane. Nonetheless, it's true: lower profits and lower prices, not higher profits and higher prices, reflect economic progress. Taxes upon profits, interest, etc., are taxes financed with funds that would otherwise support productive processes. These taxes thereby retard and reduce economic growth.

Conclusion

Why is profit presently at a record high? Because private domestic fixed investment stands at an all-time (since 1947) low; the supply of money as a percentage of GDP has reached a 40-year high; the government's deficit has scaled unprecedented heights; and the government's debt relative to GDP has returned to a level unknown since the Second World War. *In short, the sickness – and NOT the strength – of the U.S. economy explains why profit has attained an unparalleled level.* Capitalists' saving, investment and *pursuit* of profit is the key to a higher standard of living. Their *achievement* of very high profits, on the other hand, reflects their fear of the future, particularly of the actions of the state (which Robert Higgs dubs regime uncertainty). Reisman shows that a high rate of profit does not reflect a healthy pace of economic growth. Quite the contrary: it is a consequence of harmful circumstances – particularly unprecedented doses of the state's monetary interventionism and fiscal profligacy. The mainstream does not grasp the fact that the existence of high profits is not (from the point of view of society as a whole) economically beneficial. It does not realise that to a significant extent the profits of recent decades are – because they derive from the government's deficits and inflation – artificial and fraudulent (see pp. 26-27, 514-517, 927-928 and 957-963).

Implications for Investors

If (1) Reisman is correct, (2) I have understood him correctly and (3) deficits and debt cannot rise forever, then (4) at some point profits will cease to rise ever further into the stratosphere. The critical question is: will they plateau, recede gradually (i.e., as a result of the Fed's astute "withdrawal of stimulus" and a "grand bargain" in the Congress) or abruptly (i.e., through a crisis)? Whether gradual or sudden, the end of unprecedented monetary and fiscal interventionism implies poorer profits; and if earnings drive stocks' prices, as the mainstream stoutly maintains (they'll likely change their mind if and when profits change course), then significantly smaller profits mean considerably lower prices. Perhaps shrunken profits and prices will encourage the mainstream finally to recognise the egregious errors they have committed for decades. In Marshall Auerback's words (Are US Corporate Profits Inflated by Fraud? 18 January 2013), "it may be that investors will never know or care that U.S. corporate profits are greatly inflated by … fraud. But it is possible that such a reality may matter someday. It would be a negative for U.S. equity prices." That's putting it mildly.

How to evaluate the U.S. stock market? Researchers have found that some measures of valuation possess some (but hardly an exact or foolproof) ability to forecast long-term returns. Particularly noteworthy as a yardstick of valuation and forecasting is the ratio of price to earnings ("PE ratio"): for every dollar you invest, what return will you tend to receive (either in the form of dividends or capital gains)? The ratio's numerator ("price") is well-defined and thus the subject of little disagreement. Its denominator, on the other hand, is subject to much dispute. One can use "operating" or GAAP earnings, or forecasts or past ("trailing") earnings; and if one uses trailing earnings, one can use last quarter's, last year's, etc., or even longer periods. Many other adjustments and methods are possible.

I use what's commonly called the "Shiller PE" to value the Australian, American and other markets. Robert Shiller and John Campbell devised it in 1988 in a research paper entitled Stock Prices, Earnings and Expected Dividends. Shiller popularised it in his book *Irrational Exuberance* (Princeton University Press, 2000). It's also called the CAPE (cyclically adjusted price-to-earnings ratio). I use it because its pedigree stems reasonably closely (and to my knowledge closer than any other measure of valuation) from Benjamin Graham and David Dodd, the authors of the value investor's bible *Security Analysis* (McGraw-Hill, 1934).

The idea and observation, attributable ultimately to Graham, that one-year earnings are highly volatile and probably mean-reverting, spawned the Shiller PE. When earnings are high and rising, the one-year PE might emit a false signal (namely that stocks are too cheap); conversely, when earnings are low and falling, the one-year PE can emit the opposite false signal (namely that stocks are too dear). The Shiller PE adjusts for this problem imperfectly but still simply and (I believe) effectively: instead of one-year trailing earnings, it uses the average of the past 10 years of CPI-adjusted trailing earnings. A decade is, of course, arbitrary: you'd be hard-pressed to find a theoretical argument for 10 rather than, say, eight or 12 years. Still, a decade is reasonable and intuitive. It extends over one or two business cycles without extending too deeply into the distant past. Put simply, the one-year PE represents what an in-

vestor pays for the last year's earnings (which tends to be a very volatile number). In contrast, the Shiller PE represents what an investor pays for the average of the past 10 years of "real" earnings. This 10-year average is usually more stable than one-year trailing earnings; accordingly, it provides a better estimate of long-term earnings – and a better insight into long-term returns.

Figure 7 plots the Shiller PE of the Standard & Poor's 500 Index from January 1881 to December 2012. Previous figures showed that inflation, deficit, debt and profit have zoomed since the 1980s: Figure 7 shows that the Shiller PE has, too. Presently, in January 2013, its value (22.2) is almost exactly half its peak value during the Internet bubble, two-thirds its height in late 1929 – and one-third above its historical average (16.5). Although it is not near these epochal peaks, today's Shiller PE is nonetheless very high: only during the "New Era" of the late-1920s and the Internet bubble of the 1990s-2000s was it much greater than it is today. In fact, it's presently higher than it has been 85% of the time since 1881, and 80% of the time since 1926.

Figure 7: Ten-Year (Shiller) PE Ratio, Standard & Poor's 500 Index, 1881-2012

Why should anybody care that the Shiller PE is currently so high relative to its historical average? *Because on previous occasions when it's risen to 22.2 or more, the S&P 500 has subsequently generated sub-normal ("disappointing") returns.* Exhibit 5 sorts the S&P 500's CPI-adjusted returns during every possible rolling decade since 1926 into deciles ranked by their starting PE's. January 2013's PE of 22.2 places us in the 9th decile (bold red font).

As the starting Shiller PE increases (that is, as one reads down the columns), the S&P 500's subsequent ten-year average CPI-adjusted return falls nearly in lock-step. Also, as starting Shiller PEs increase, the best-case returns weaken and the worst-case returns become even worse. The ninth decile, the one to which current conditions apply, is ugly. It implies that during the next decade the average real rate of return will be less than 1% per annum. If it prevails, then he who invests $100 in January 2013 and collects dividends during the decade will, in January 2023, possess (net of CPI) $109.37. The worst case is a rate of return of mi-

nus 4.4% real return per annum: at this rate, he who invests $100 today and collects dividends would, after 10 years, have (net of CPI) $63.76. Those who think that disappointing decade-long results stem only from super-high PEs are simply mistaken (see also Robert Shiller's S&P 500 Forecast for 2020: Is He Overly Optimistic? 3 January 2011).

Exhibit 5: CPI-Adjusted Returns, S&P 500, from Ranked Shiller PEs 1926-2012

Decile	Starting PE		Avg Subseq 10-Yr Return	Worst Subseq 10-Yr Return	Best Subseq 10-Yr Return	Std Dev
	Low	High				
1	5.2	9.6	10.3%	4.8%	17.5%	2.5%
2	9.6	10.8	10.4%	3.8%	17.0%	3.5%
3	10.8	11.9	10.4%	2.8%	15.1%	3.3%
4	11.9	13.8	9.1%	1.2%	14.3%	3.8%
5	13.8	15.7	8.0%	-0.9%	15.1%	4.5%
6	15.7	17.3	5.6%	-2.3%	15.0%	5.1%
7	17.3	18.9	5.3%	-3.9%	13.8%	5.1%
8	18.9	21.1	3.9%	-3.3%	9.9%	3.9%
9	**21.1**	**25.1**	**0.9%**	**-4.4%**	**8.2%**	**3.8%**
10	25.1	46.1	0.5%	-6.1%	6.3%	3.6%

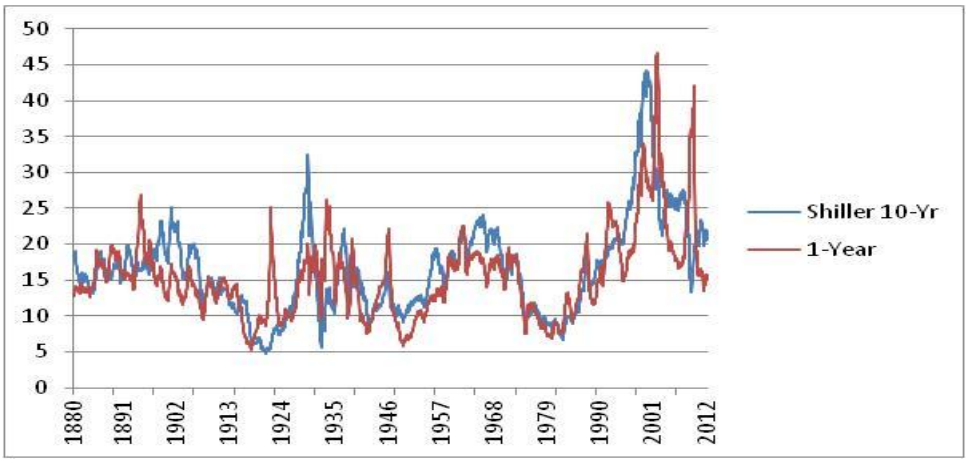
How, then, to interpret Exhibit 5? If you're a short-term trader (which most people are) then it makes little sense to give the Shiller PE much weight. If, however you're a true long-term investor, then Exhibit 5 should set your expectations about the next decade's returns. These expectations should chasten you: given today's Shiller PE, if your long-term plan assumes a 10% nominal (or a 7-8% "real") return from stocks, then – whether you realise it or not – you are assuming that the best-possible return (given the results in the ninth decile of Exhibit 5) will prevail. In plain English, given the historical record you're assuming results that drastically exceed the historical average. In even plainer English, you're assuming that – at least during the next ten years – "this time it will be different." Perhaps you'll be right. For instance, perhaps – particularly if the Fed slams the accelerator through the floor, and Congress becomes even more profligate, the deficit widens and the debt deepens – profits will continue to surprise significantly to the upside for a long time to come. But if you're unwilling to adopt that assumption, or to suppose that some other big positive surprise will occur, then you should attach more weight to the lower average returns from history.

One final point might trouble you. Analysts assume that the amount of profit grows over time. Reisman shows that in one sense this is true: if the government leaves capitalists alone, then capitalists will invest and thereby lengthen the structure of production; and as a result, profits will grow. But governments clearly haven't left capitalists alone. Earnings have not just grown: thanks not least to the government's inflation and budget deficits, they've soared. Prominent academics such as Jeremy Siegel concede that henceforth the government likely won't provide such a strong tailwind, but nonetheless insist that profits will continue to grow over time (see Siegel, The Case for Dow 17,000, 19 November 2012, and Robert Huebscher, Jeremy Siegel on 'Dow 15,000', 18 December 2012). Hence they believe that last year's earnings will continue to exceed the average of the past ten years' earnings. Siegel and others are

confident, in other words, that the Shiller PE will continue to exceed the one-year PE. As Figure 8 shows, it usually has: in 1881-2012, the Shiler PE averaged 16.4 and the one-year PE 15.8; since 1926, the Shiller PE has averaged 17.5 and the one-year PE 16.7; and since 1981 (after removing a few outliers), the Shiller PE has averaged 21.6 – not far, the bulls would say, from its current level – and the one-year PE has averaged 20.1.

This regularity has prompted critics to brand the Shiller PE as overly-bearish. But what if, as the foregoing analysis suggests, profits cease to shoot towards the heavens, plateau and even fall significantly? *If henceforth earnings tend to stagnate and shrink, then the average of earnings during the past ten years will generally be higher than the most recent year's earnings; accordingly, henceforth the one-year PE will usually exceed the Shiller PE. If so, then a measuring stick that has hitherto emitted overly-bearish signals will henceforth emit an overly-bullish one – and vice versa. If so, then the tenth decile might most accurately describe current conditions – and investors' prospects are even bleaker than Exhibit 5 projects.*

Figure 8: One-Year and 10-Year PE Ratios, S&P 500, 1881-2012



Investors in the U.S. – and more generally, throughout the Western world – stand between Scylla (namely governments' untenable deficits and debt) and Charybdis (stocks and bonds whose prices the crazed policies of governments have inflated to artificially-high levels). *Rhetorically*, the mainstream readily agrees that the U.S. Government and other Western governments must balance their budgets and trim their debts – *at some point*. Like St Augustine's plea to God, their refrain is: "Grant me chastity and continence, but not yet." In the meantime, they insist, the bacchanalia must continue because the alternative – living within one's chastened means – is too heretical for the secular religion to contemplate. To confess the reality of the future is to renounce the fantasy of the past: in particular, it is to disavow the destructive policy that inflation, deficit, debt – and hence artificial profit – can increase indefinitely. Is today's calm merely the eye of the storm? I believe it is. When will the gales resume? I wish I knew.

Chris Leithner