

Fictitious Capital and the Crisis Theory

Introduction

Marx's theory of fictitious capital ties together the real and the monetary threads of his crisis theory. Despite the admitted gaps in Marx's incomplete analysis of fictitious capital, it represents an enormously valuable contribution. This enormously suggestive analysis serves as a corrective for some of the rather widely circulated, one-sided treatments of Marx's crisis theory. Moreover, it represents a remarkable anticipation of much of the recent mainstream macro-economic work on the role of asset values.

Engels must have believed that Marx attributed substantial importance to the theory of fictitious capital. He laboriously collected a mass of Marx's obviously unfinished writings on fictitious capital into a separate chapter of the third volume of Capital. This chapter leaves little doubt that Marx had intended this subject to be an important component of the crisis theory that he was attempting to fashion. In contrast to Marx's strong interest in the concept of fictitious capital, his readers have largely ignored the subject, perhaps because Marx had not progressed very far with this analysis.

Marx never gave a precise definition to the concept of fictitious capital, any more than he explicitly defined abstract labor, value or any of his other categories. For Marx, such concepts were to be understood in terms of their dialectical interrelationship with the whole body of analysis, which he offered. In his words, they are "a rich totality of many determinations and relations" (Marx 1974, p. 100).

This practice allowed Marx's readers to suggest a number of contradictory explanations of his concepts. As Pareto complained in a previous citation, "Marx's words are like bats: one can see in them both birds and mice" (Pareto 1902: ii, p. 332; paraphrased by Ollman 1971, p. 3).

No doubt, should the notion of fictitious capital come under more general scrutiny, it too would be given numerous interpretations. Let me merely say, at this point, that fictitious capital is basically the capitalization of future earnings (see Hilferding 1910, pp. 141 and 150), but this definition is far from exhaustive.

Fictitious capital is important because it deflects value relationships from what they might have been if they had been formed in an abstract system resembling perfect competition. In a more concrete situation, these value relations are disturbed by the action of credit, speculation, and restrictive business practices.

Despite the gaps in Marx's incomplete analysis of fictitious capital, it represents an enormously valuable contribution to his crisis theory. In the first place, it is suggestive in itself. Secondly, it serves as a corrective for some of the rather widely circulated, one-sided treatments of Marx's crisis theory. Finally, it represents a remarkable anticipation of much of the recent mainstream macro-economic work on the role of asset values.

Because Marx left so much of this work unfinished, it remains for us to reconstruct much of this analysis. That task will necessarily be somewhat circuitous, but the resulting contribution to the understanding of crisis theory will more than justify the effort.

My reconstruction of Marx's theory of fictitious capital follows the method that Marx used in Capital. Recall that he subtitled the first volume of Capital, "A Critique of Political Economy." Earlier, he had specifically referred to his work in political economy as a "critique of the economic categories" (Marx to Lassalle, 22 February 1858; in Marx and Engels 1975, p. 96). This reconstruction builds upon Marx's more or less complete analysis of the more familiar categories of classical political economy. Thus it requires a brief overview of Marx's method.

Consider how Marx generally developed his analysis of the categories of political economy. His presentation of the contradictory nature of these categories was predicated on the previous work of classical political economy. Originally, these notions began as "chaotic conception[s]" (Marx 1977, p. 100). For the most part, classical political economy achieved a degree of coherence by submerging the contradictory tensions inherent in such categories. It managed to "have investigated the real internal framework of bourgeois relations of production, . . . to reduce the various fixed and mutually alien forms of wealth to their inner unity" (Marx 1963-1971; Pt. 3, p. 500; and 1977, pp. 174-75n).

Marx, by contrast, explicitly took these contradictory forces into account. By incorporating such contradictions into his system, he discovered a richer level of analysis, with a more encompassing universe of coherence.

Classical political economy produced a static, or a smoothly developing world view. Marx's created a theoretical analysis, which allowed for, and even emphasized, convulsive changes that were part of an intricate, but comprehensible system that included the general economic laws of motion. These forces that Marx studied propelled society from one system of social organization to another.

These economic laws of motion characterized both society and the categories of political economy. The direction of this motion was two-dimensional: logical and historical. Logically, each category developed out of more abstract categories. According to this approach, historically, the most abstract categories took effect before the more concrete ones. Thus, Marx noted, "it is quite appropriate to regard the values of commodities as not only theoretically but also historically prius to the prices of production" (Marx 1967; 3, p. 177).

I believe that Marx was in the process of extending this same sort of analysis to the category of fictitious capital. Given the unfinished state of his study of this subject, one can only infer the final shape of his intended presentation of fictitious capital. Based on the pattern of his more finished work, I believe that, logically, fictitious capital would have been presented as an extension of the price system. Historically, he would have treated it as emerging once credit becomes accepted as a supplement to commodity money (gold).

The reconstruction of this process is complicated by the history of the analysis of fictitious capital within the literature of classical political economy. Unlike categories, such as wages, rent, or profits, fictitious capital had been inadequately processed by classical political economy. In fact, that category had never even achieved the status of an abstract category by classical political economy.

Instead of a well-defined body of analysis, Marx was left with a jumble of conflicting perspectives. Thus, for the study of fictitious capital, he could not rely on the prior work of classical political economy. He had to make sense out of an

amorphous mass of observations concerning fictitious capital. In addition, Marx himself had only belatedly recognized the importance of this category.

A final difficulty in analyzing Marx's study of fictitious capital concerns the sequence of study of such material. Marx himself had noted, "the method of presentation must differ in form from that of inquiry" (Marx 1977, p. 102). Much of Marx's work on fictitious capital had not progressed beyond the stage of inquiry. It remains raw and tentative.

So far, after asserting the value of studying Marx's analysis of fictitious capital, I have given what may seem to be a rather bleak appraisal of the prospects of such a study. Here is a category, not even recognized as such by classical political economy -- a category, which Marx had only begun to study. Could a review of such work ever be more than a Talmudic search for a few obscure phrases?

Indeed, with the work of most writers, not much more could be expected. Fortunately, Marx is an exception. Because of the nature of his Hegelian method of presentation, one can extrapolate from his earlier work to get a partial understanding of what might be expected to have evolved, had he been able to give more study to the category of fictitious capital.

To be sure, his analysis was somewhat sketchy, but it is highly suggestive. Even more fortunately, Marx frequently salted his notes on credit and fictitious capital with a number of very explicit passages, containing extraordinary insights concerning the nature of fictitious capital. In short, despite the obvious limitations of such material, it remains unsurpassed.

Before presenting what Marx wrote about the subject of fictitious capital, I offer a brief survey of the previous use of the term, "fictitious capital." It appears formless and contradictory, but no more so than what was written about, say profit, before that category was subjugated to a more thorough analysis by classical political economy. After reviewing this material, I hope that you can appreciate the challenge Marx faced in developing his analysis of fictitious capital.

Fictitious Capital

[T]rade is like gaming. If a whole company are gamesters, play must cease; for there is nothing to be won.

Samuel Johnson in 1773; cited in Boswell

1786: v,

pp. 231-32.

The expression, 'fictitious capital', has a long and varied history. According to Barry Gordon:

[T]he term was used quite frequently, . . . [but] rarely. . . with any precision.

At root, it probably meant the ability to contract debts without the backing of any realizable physical assets. [Gordon 1976, p. 204]

In fact, the term seems to have been applied to any type of credit that met with the disapproval of whomever used the term. Over and above this common thread, the diverse references contain many contradictory messages. I shall now review some of them.

Fictitious Capital Supposedly Encourages Individualistic Behavior

The earliest reference to fictitious capital that I have found comes from an anonymous writer during the South Sea bubble crisis of the early Eighteenth Century, commenting on the subject of the speculative fervor of the time:

The additional rise above the true capital will only be imaginary; one added to one, by any stretch of vulgar arithmetic will never make three and a half, consequently all fictitious value must be a loss to some person or other first or last. The only way to prevent it to oneself must be to sell out betimes, and so let the Devil take hindmost. [cited in Carswell 1960, p. 120]

This approach was common among the early mercantilists:

For them, money was . . . sometimes regarded as "artificial" wealth as distinct from the "natural" wealth. [Heckscher 1955; ii, p. 200]

Fictitious Capital Represents Intervention in the Market

In a somewhat similar vein, Cantillon, an active opponent of John Law's speculative ventures in France wrote:

[F]ictitious and imaginary money would have the same drawbacks as an increase in the real money in circulation, increasing the prices of land and labor and making goods and manufactures dearer. . . but this covert abundance vanishes at the first hint of discredit, and precipitates disorder. [Cantillon 1755, p. 343]

In contrast to Cantillon, who used the concept of fictitious values to argue against the abuses of paper money, Hume took up the phrase, fictitious value, to criticize Locke's hard money stance. Thus, he introduced his argument with the words, "money, being chiefly a fictitious value. . . ." (Hume 1752, p. 321).

Fictitious Value Supposedly Represents an Unjustified Reward

The idea of fictitious capital was also used to convey a crude version of the labor theory of value. This version of the concept of fictitious capital was employed for contradictory reasons. Some opposed the use of credit since it threatened the established way of life. Such people protested that the gains from fictitious capital allowed moneyed interests to reap rewards without a corresponding expenditure of labor. For such authors, the term, labor, referred to the activities of almost everybody other than those who profited from extending credit. The most eloquent representative of this perspective was John Taylor of Caroline, a brooding Virginia planter of the early Nineteenth Century. For Taylor:

Gain can never arise out of nothing because it is substantial. It must therefore be the product of labour, and labour only. [Taylor 1794, p. 10]

He roared out at the moneyed interests:

Mankind have suffered nearly as much from confounding natural with fictitious property as from confounding legitimate and fictitious power If the fruit of labour is private property, can stealing this fruit from labour, also make private property . . . ? Tyths and stocks, invented to take away private property, are as correctly called private property, as a guillotine could be called a head. [Taylor 1814, p. 259]

I might also suggest here that the similarity between the rhetoric of Taylor, an arch-conservative, and the so-called Ricardian socialists would make an excellent subject for further study. For example, Bray insisted that money is "no more than a representative of real capital -- a thing. . . standing in the place of houses,

implements, or food" (Bray 1939, p. 141). The pseudonymous Piercy Ravenstone, while not explicitly using the term, 'fictitious capital', showed how it could be given another turn. He declared that capital had "none but a metaphysical existence" and an "imaginary nature" (Ravenstone 1825, pp. 293 and 355). Conscious of the ideological importance of his attack on the concept of capital, he observed:

To teach that the wealth and power of a nation depend upon its capital, is to make industry ancillary to riches and to make men subservient to property. .

..

It is this growth of property, this greater ability to maintain idle men, and unproductive industry, that in political economy is called capital. But this increase of capital may be without any addition to a nation's wealth.

[Ravenstone 1824, p. 7]

The English working class press in the 1830s took up this approach to fictitious capital. According to the working class press, money created a fictitious capital (Thompson 1984, p. 142). For example, Bronterre O'Brien declared to the readers of the Poor Man's Guardian, that he believed:

Capital, in the money sense of the word [to be]. . . a fiction and a fraud. It is not wealth, but the means of abstracting wealth for others. It is but an instrument in the hands of certain classes, by virtue of which, these classes contrive to appropriate to themselves the real capital of the country at the expense of those who produced it. [O'Brien 1835; cited in Thompson 1984, p. 143]

Indeed, the previous year, the same paper insisted, "labour, not capital much less fictitious capital, is the source of wealth" (cited in Thompson 1984, p. 147). In the United States as well, workers attacked the "manipulators of 'fictitious capital'" (Wilentz 1984).

Fictitious Capital is Capital Applied to Unproductive Purposes

The concept of fictitious capital was used to evoke a financial equivalent to the distinction between productive and unproductive labor. For example, Henry Thornton noted:

The interest which traders have in being always possessed of a number of notes and bills, has naturally led to a great multiplication of them; and not only to the multiplication of notes given for goods sold, or of regular bills of exchange, but to the creation of numerous other notes and bills. Of these, some are termed notes and bills of accommodation: and the term fictitious is often applied to them.

. . . [T]he principal motive for fabricating what must here be called the real note, that is, the note drawn in consequence of a real sale of goods, is the wish to have the means of turning it into money. . . . A fictitious note, or note of accommodation, is a note drawn for the same purpose of being discounted; though it is not also sanctioned by the circumstance of having been drawn in consequence of an actual sale of goods.

"Real notes," it is sometimes said, "represent actual property. There are actual notes in existence, which are the counterpart to every real note. Notes which are not drawn in consequence of a sale of goods are a species of false wealth by which a

nation is deceived. These supply only an imaginary capital; the others indicate one that is real." [Thornton 1802, pp. 154-55]

This perspective was almost the reverse of Taylor's. Credit was acceptable only in so far as it facilitated the earning of profit. This turn of the concept of fictitious capital paralleled the abandonment of the crude labor theory of value espoused by the mercantilists, the traditionalists such as Taylor, and the Ricardian socialists such as Ravenstone.

Adam Smith represented a transition in this process of reinterpreting the concept of fictitious capital. He maintained the labor theory of value in part of his work, but he also espoused another theory, in which value was determined by the monetary rewards of the three factors of production. According to that newer conception of the world, labor was important, but that which facilitated its employment (i.e., capital, capitalists, and credit) also merited a reward.

Smith's theory of productive labor was an important component of his alternative theory of value since it emphasized the role of those who determined the employment of labor rather than the laborers themselves. In Smith's world, both unproductive labor and fictitious bills were more commonly employed by the gentry than the middle class. Just as labor hired by those intent on earning a profit was regarded as productive labor, bills drawn to finance profitable business were termed real bills. Credit extended to earn a profit was deemed acceptable; So was labor employed for the same purpose. The sort of credit used by the gentry, as well as the use of labor employed by the gentry, was judged to be detrimental to society.

Fictitious Capital Supposedly Heightens the Abuse of Credit

Despite of its obvious benefits, Smith held that credit had to be used with caution. He allowed that even the middle classes might abuse it. Thus, he also used the idea of fictitious capital to refer to dishonesty in obtaining credit. For example, in The Wealth of Nations, he condemned the practice of two parties taking out bills on each other so that each could discount them with a bank, with the intention of repaying their debts with a new set of bills:

This payment. . . was altogether fictitious. . . . [Sometimes] the same two persons do not constantly draw and redraw upon one another, but occasionally run the round of a great circle of projectors, who find it for their interest to assist one another in this method of raising money, and render it, upon that account, as difficult as possible to distinguish between a real and a fictitious bill of exchange. [Smith 1937, Bk. ii, Ch. 2, p. 296]

Significantly, the origin of the term "real bills" is found in this discussion (Ibid., p. 288).

Thus, for Smith the use of credit required the utmost caution. Good credit had to be distinguished from bad credit. In an apt analogy, Smith described the economy as "suspended upon the Daedalian wings of paper money, as when they travel about upon the solid ground of gold and silver" (Smith 1776, p. 305).

In fact, Smith's concern with the possibility of speculative excesses was so strong that he even appeared to be ready to countenance limits on interest to restrict the use of credit for speculative purposes (Smith 1776, p. 339). He reasoned that with a ceiling on interest, speculative borrowers, who would otherwise attract money by paying higher rates, would be excluded from the credit markets.

Fictitious Capital Highlights the Distinction between the Real and Monetary Sectors

Ricardo used the expression, 'fictitious capital' in still another sense. Unlike Thornton, who used the term to refer to the backing of credit, Ricardo applied the expression, 'fictitious capital', to distinguish monetary from real phenomena. He suggested that purely monetary phenomena would have no effect on real economic magnitudes, at least in the long run (for an exception to his practice, see Carr and Ahiakpor 1982; and Ahiakpor 1985). Consider the occasion when Ricardo was asked by a questioner from the House of Lords Committee on Resumption of Cash Payments:

State what in your Opinion is the difference between that State of Things, in which a Stimulus is given by fictitious Capital arising from an Over-abundance of Paper in Circulation, and that which results from the regular Operation of real Capital Employed in Production? [cited in Ricardo 1953-71: v, pp. 445-46]

He responded:

I believe that on this Subject I differ from most other People. I do not think that any Stimulus is given to production by the Use of fictitious Capital, as it is called. [Ibid., p. 446]

Ricardo's use of the term, 'fictitious capital', was common during the parliamentary debates surrounding the resumption of payments in 1819. A similar interpretation was repeatedly articulated by the Prime Minister, Lord Liverpool during the following decade, although the frequency of the use of the expression dropped off sharply from the mid-1820s (see Gordon 1979, p. 126; 1983; Hilton 1977, pp. 61 and 96-97). However, even today, some writers hold that Ricardo's position is more correct than the modern theories that seek to manipulate the economy by affecting monetary variables (see Barro 1974; see also Ricardo 1951-1973: i, Ch. 17). In this sense, and perhaps in this sense alone, the putative New Classical Economists deserve the name that they have adopted.

Say did not explicitly address the category of fictitious capital, although he did describe the payment of foreign debts by bills of exchange in a similar vein as a "fictitious mode of payment" (Say 1821, p. 266). He added:

But this is a mere delusion. A bill of exchange has no intrinsic value. . . Bills of exchange are a mere representative of sums due. . . .

There is, indeed, a species of bills, called by commercial men, accommodation-paper, which actually represents no value. [Ibid., pp. 266-67]

Say also observed that "[T]he real interest of a government is, to look not to fictitious, disgraceful, and destructive resources, but to such as are really productive and inexhaustible," referring to Steuart's notion that governments will attempt to manipulate the money supply to increase their ability to command resources (Ibid., p. 238; Steuart 1767; ii, p. 306).

Fictitious Capital Supposedly Stimulates Accumulation

In contrast to Ricardianism, another tradition held that the ability to create debt could have a profoundly constructive impact on society. This possibility greatly appealed to the early Eighteenth Century, when society was struck with the

mysteries of banking. In the words of William Paterson, the inspiration of the Bank of England:

The bank hath benefit of all the interest on all moneys which it creates out of nothing. [cited in Hollis 1975, p. 30; emphasis added]

The beneficial effects of debt also cropped up in a discussion in 1716 between Abbe Dubois, former tutor to the French regent, Philippe, and James Stanhope, the chief minister and secretary of state of England. Dubois argued that the French king was the most powerful ruler because "he owns all the land in the kingdom." Stanhope countered that the English king had the advantage because the English national debt was capable of almost unlimited expansion (cited in Carswell 1960, pp. 71-72). Similarly, Montesquieu observed that access to public credit had allowed England "to undertake things above its natural strength, and employ against its enemies immense sums of fictitious riches, which the credit and nature of the government may render real" (Montesquieu 1748: i, p. 310).

This belief, that an increase in the stock of debt could have a beneficial effect, was especially frequent in the United States, where complaints of a shortage of specie were commonplace. Perhaps the most famous exponent of this idea was Alexander Hamilton, who claimed:

[T]here is a species of Capital actually existing within the United States which relieves from all inquietude on the score of a want of Capital -- This is the funded debt. [Hamilton 1791, p. 277]

This idea was later taken up by Malthus, who speculated:

It is, I know, generally thought that all would be well, if we could but be relieved from the heavy burden of our debt and yet I feel perfectly convinced that, if a sponge could be applied to it to-morrow, and we could put out of our consideration the poverty and misery of the public creditors, by supposing them to be supported in some other country, the rest of the society, as a nation, instead of being enriched, would be impoverished. [Malthus 1820, p. 486].

Fictitious Capital Supposedly Impedes Capital Accumulation

One of the most trenchant discussions of fictitious capital, prior to Marx, is found in the anonymous pamphlet, The Source and Remedy of the National Difficulties (Anon. 1821), apparently written by Charles Wentworth Dilke (see Dilke 1875, pp. 14-15). Marx began his own chapter devoted to the so-called Ricardian Socialists with a discussion of this work (Marx 1963-1971, Pt. 3, Ch. 21). Although Marx regarded the work favorably, he remarked that the "pamphlet is no theoretical treatise" and that "the author remains a captive of the economic categories as he finds them" (Ibid., p. 254). However, Marx seemed to have taken no note of the pamphlet's treatment of the subject of fictitious capital. This silence may suggest that Marx had not yet learned to appreciate the importance of that category.

In the tradition of the Ricardian socialists, the author of the pamphlet associated the existence of fictitious capital with unproductive labor. He differed from that school in one important respect. He interpreted fictitious capital more in an economic than a moral sense. He believed that fictitious capital was responsible for "misdirecting" the labor of society and interfering with the accumulation process (Anon. 1821, p. 8).

The pamphlet contains a more important economic analysis of fictitious capital, which is quite modern in its analysis of fiscal policy. The author argued that the natural increase of capital should result in a fall in its reward. This effect is the result of a diminution in the value of capital, what Marx later termed, 'devalorization':

The natural consequence of an increased capital I have shown to be its decreased value. [Anon. 1821, p. 22]

This natural tendency toward devalorization was forestalled by military actions, which consumed much capital (Ibid., p. 24). The author then poses the paradox:

Well then, . . . if the capital were destroyed as it was created how could the capital increase? . . . Capital did not increase actually. . . , but it did increase nominally. . . . [Ibid.]

In other words, the national debt functioned as capital by drawing upon the surplus, which labor produced. In other words:

[T]he capital is gone but the interest remains in perpetuity. . . . All the false capital then that was created during the last thirty years was an available source of revenue. [Ibid., pp. 24 and 30].

This drain on the surplus was not felt during the war. The funds spent by the government flowed back into society (Ibid., pp. 30-31). The author traces:

the origin of our difficulties . . . [to] the increase of capital, real or fictitious, without the natural and necessary decrease in the interest to be paid for its use. [Ibid., p. 35]

The appropriate remedy is:

to reduce the capital by getting rid of the fictitious capital altogether, and leaving as far as practicable the new made capital to accumulate. [Anon. 1821, p. 35]

Apparently, the author assumed that fictitious capital could be associated with any sort of asset. For example, according to this pamphlet, the corn laws were also said to have created "false capital" in land (Ibid., p. 36). Consequently, the "permanent reduction of rental" through elimination of the Corn Laws would also be "a reduction in capital" (Ibid., p. 38).

The distinction between the divergent paths of real and nominal capital, which lies at the heart of this pamphlet, come tantalizingly close to Marx's conception of fictitious capital. Considering that Marx began the section on the authors now known as Ricardian socialists with this work, his interest in this pamphlet probably centered on its clear exposition of the labor theory of value.

This achievement alone would have been sufficient to merit a continuing interest in The Source. That the development of the concept of fictitious capital in this pamphlet was so advanced, makes the continuing neglect of this work a mystery, as well as a loss for students of political economy.

Sismondi's Treatment of Fictitious Capital

The most complex treatment of fictitious capital, prior to Marx, is found in the works of Sismondi. In truth, Sismondi never actually used the term, "fictitious capital." I cannot even be sure that he was consciously locating his work in the tradition of those who wrote about fictitious capital. However, he did write about

what he called, "immaterial capital," the subject of the final chapter of his E'tudes (Sismondi 1837-38).

I find Sismondi's expression, "immaterial capital," to be more descriptive than the more traditional "fictitious capital." In other respects, Sismondi's language lacks precision. To show the intimate connection between the terms, "value, exchange value, and capital," Sismondi often refers to all three concepts as "value," relying on the context to clarify his meaning.

For the most part, this practice does not present any difficulties. The social context is generally clear, because of the manner in which it is bound up with Sismondi's critique of what he called, "commercial society." For Sismondi, value originally meant embodied labor values. With the rise of commercial society, use values become capital, and value becomes exchange value.

In this vein, Sismondi concluded that "value is a commercial idea" or "a social idea" (Sismondi 1837-38: ii, pp. 273 and 263). But Sismondi had little use for the society that created this value form. Some have assumed that he wanted to go back to a more primitive society, but he himself denied that he preferred that course (see Weiller 1971, pp. 33-34). He wanted the technological advantages of modern society, without its deprivations (Sismondi 1824, p. 356).

In effect, Sismondi set out to show that the economic calculations, common to capitalist society, were an unnatural method for organizing society. In traditional societies, value represented the quantity of labor embodied in commodities. Once commerce takes hold, profound changes occur. In a passage, which echoes the discussion between Stanhope and the Abbe' Dubois, Sismondi rhetorically asked:

Where then is the wealth of the people who are without a doubt the richest in the universe.

The rich Englishman, the rich of all mercantile and industrial nations will respond to you in opening up his wallet. [Sismondi 1837-1838, ii: p. 309]

Under the capitalist organization of society:

The entire national fortune, in the eyes of commerce, is itself trust; considered abstractly, it is the exchange value of everything, which forms the capital of each individual, as well as of the nation. [Ibid.: ii, p. 300]

And what is credit? Sismondi interpreted this "capitalization of the future" (Ibid.: ii. p. 311) as:

an exchange of a reality against a hope. . . . It disposes over the future and it gives it the past in exchange. [Ibid., ii: pp. 310-11]

In the process, "value detaches itself from that of [the commodity] . . . it has created" (Sismondi 1827, p. 111). Sismondi was struck by this:

strange real movement of the chresmatic, which have changed the largest part of the national riches into an immaterial property. [Sismondi 1837-38: ii: p. 309]

Sismondi, like the Ricardian socialists, concluded that under capitalism, exchange value or capital becomes "a metaphysical and insubstantial quantity" (Sismondi 1827, p. 111; see also p. 97). I interpret this statement to be parallel to Marx's theory of fetishism. Once value becomes detached from labor values, people adopt a perspective that obscures the underlying real economic processes. Coordination

becomes impossible. Instead, people are forced to rely on guesses about the future, which inevitably lead to rounds of boom and bust.

Fictitious Capital: An Overview

In one sense, all early commentators on the subject of fictitious capital were unanimous. All agreed that the term, 'fictitious capital', implied a standard whereby bad, if not all credit should be avoided. Even those who accepted some role for credit would agree with Sir James Steuart, who noted, "Credit . . . must have a real, not an imaginary object to support it" (Steuart 1767: iii, p. 139), although opinions differed widely as to what exactly constituted a real or an imaginary object. Moreover, so long as knowledge of the future is imperfect, repayment of debts must remain in doubt. Why must the risk be less in loaning money to a small merchant than to a wealthy member of the gentry, waiting for the rents to be paid? One need only recall the interminable debates over the classification of productive and unproductive labor to recognize the futility of attempting to create a universal standard for determining good credit.

The contradictory discussions of fictitious capital can be reconciled, but only with a substantial effort. For example, fictitious capital, like credit, can both promote and impede capital accumulation, depending upon the state of the business cycle. By producing a more analytical category, which incorporates all the contradictory forces mentioned above, Marx could create a concept capable of expressing the complex dialectic of the interplay between the monetary and real sectors of development.

The concept of fictitious capital has attracted relatively little notice among Marx's readers, with the exception of Hilferding. Although Hilferding titled one part of his book, "The Mobilization of Capital: Fictitious Capital," his analysis of fictitious capital is not as useful as it might be. Hilferding mostly treated fictitious capital as an aspect of finance capital, without integrating this analysis into Marx's theory of value (Hilferding 1910). Moreover, Hilferding ignored Marx's key observation that the operation of fictitious values tended to allow capital to behave as if it were independent of the underlying value system (see Harris 1985).

One other author who may possibly have been influenced by Marx's concept by Marx's concept of fictitious capital might be Dennis Holme Robertson. Robertson might seem to be an unlikely follower of Marx. He is usually identified as a critic of Keynes. In fact, his early work on business cycle theory began with Marx's theory of replacement cycles (Robertson 1914, p. 164). Later, Robertson gave more emphasis to financial forces. In changing his direction, Robertson used the term, "Imaginary Capital," in a manner somewhat similar to Sismondi's immaterial capital (Robertson 1926, pp. 40-45).

The Evolution of Fictitious Capital as a Category of Marxian Political Economy

The undisputed importance of the labor theory of value seems to have predisposed students of Marx to go no further than his metallist theory of money, at least until recently.

Since money has both an exchange value and a value, like any other commodity, its analysis requires going beyond the assumption that all money is gold. As Schumpeter, who suffered from the usual misconception that Marx's

theory was limited to a metalist conception of money, noted, this defect substantially "impaired . . . [his] analysis of money and credit" (Schumpeter 1954, p. 700). Although Schumpeter was mistaken regarding Marx, his verdict was appropriate for many of Marx's followers.

In reality, Marx's theory of money and credit was far richer than Schumpeter and even most marxists had realized. As Joseph Ricciardi has pointed out, already in 1850 in his Class Struggles in France, Marx realized that credit was a central factor in the upheavals that occurred in France in 1848 (see Ricciardi 1985; and Marx 1850). Unfortunately, Marx was more suggestive than analytic at this stage.

Only later did Marx integrate his analysis of credit into his economic theories. The lynch pin that connects this analysis with his theory of value is the notion of fictitious value. This same concept allowed Marx to integrate both the real and the monetary dimensions of the economy into his crisis theory.

Marx obviously recognized the importance of money. He had also understood that the evolution of the economy involved "[t]he historical broadening and deepening of the phenomenon of exchange" (Marx 1977, p. 181). Despite these early insights, after the publication of the first volume of Capital, Marx came to recognize that he had underestimated the importance of the financial sector. For example, he wrote in the third volume:

[S]ince 1865, when the book was written, a change has taken place which today assigns a considerably increased and constantly growing role to the stock exchange. . . , so that the stock exchange becomes the most prominent representative of capitalist production itself. [Marx 1967; iii, p. 909]

In this revision, the notion of fictitious capital would prove to be invaluable. In summary, prior to Marx, the concept of fictitious capital had been but a rudimentary category that had been used in many different, and even contradictory senses. Nobody troubled to explore its theoretical implications. Most authors contented themselves to follow in the tradition of Thornton, who held that one must distinguish between good credit and bad credit, which earned the pejorative label, 'fictitious.' Sismondi stands out as a major exception.

A Digression on Sismondi

Marx did not comment much about Sismondi's work. Despite the absence of an extended commentary, in all likelihood, Sismondi was an important inspiration for Marx in many respects (see Grossman 1924). Nonetheless, Marx's few scattered references to Sismondi in Capital, as well as in the Theories of Surplus Value give hints that Marx may have noticed Sismondi's theory of immaterial capital.

Marx did cite Sismondi's notion of value detaching itself from labor values in his unpublished chapter of the first volume of Capital (Marx 1977, p. 1001). This citation is especially interesting, because it comes quite close to a key aspect of Marx's theory of fictitious capital.

This citation is not exact. Marx had translated it into German. He had also incorporated his own ideas within the citation:

[Value] maintains itself, endures, multiplies itself, detaches itself from the commodity that has created it and remains, like a metaphysical and

insubstantial quality, always in the possession of the producer (i.e., the capitalist). [Marx 1977, p. 1001]

In the original value did not multiply itself; it also belonged to a cultivator, not a capitalist (Sismondi 1827, p. 111). The inaccuracies are excusable. They come from Marx's private notes that he had left unpublished. They represent his impressions of the material rather than an exact scholarly citation. In this sense, they are more revealing than an exact citation would be.

I note these differences because they suggest to me that Marx was actively incorporating Sismondi's ideas on immaterial capital into his own thought processes, where they lay dormant until he was working on the third volume of Capital. Indeed, in the first page of his first of three chapters on "Money-Capital and Real Capital," Marx cites Sismondi on "imaginary capital" (Marx 1967; 3, p. 477). Perhaps more revealing is the fact that Marx repeatedly used the term, 'imaginary capital', rather than the expression, 'fictitious capital' in this section.

Marx's Initial Treatment of Fictitious Capital

Marx's interest in fictitious capital was not surprising. He always attributed great significance to financial affairs. From the first, Marx recognized that fictitious capital could be a very useful theoretical category for analyzing the effects of both speculation and the credit system, although he did not always utilize the notion of fictitious capital to its fullest.

At times, Marx did little more than those less inspired writers who preceded him, especially those writers who thought that the root of crises was wholly monetary. On some occasions, his remarks on fictitious capital could sound downright superficial. For example, in 1856, he wrote to Engels:

Newspaper writing is now very burdensome, since in England itself nothing is happening, and the turn in economic relations is very unclear. The decisive factor here for the most part is stock swindling. [Marx to Engels, 12 February; in Marx and Engels 1974: 29, p. 15]

In an article, "British Commerce and Finance," published in the Tribune in 1858, he explained to his readers in the United States about the nature of fictitious credit:

For a system of fictitious credit to spring up, two parties are always requisite -- borrowers and lenders. That the former party should at all times be eager to enrich themselves at other people's risk, seems so exceedingly simple a tendency that the opposite would bewilder our understanding. The question is rather how it happens, that among all modern industrial nations, people are caught, as it were by a periodical fit of parting with their property upon the most transparent delusions, and in spite of tremendous warnings repeated in decennial intervals. What are the social circumstances reproducing almost regularly, these seasons of general self-delusion of overspeculation and fictitious credit? If they were at once traced out, we should arrive at a very plain alternative. Either they may be controlled by society, or they are inherent in the present system of production. . . .

The facts dwelt upon by the Committee [Report of the Commercial Distress of 1847], with a view to illustrate the system of fictitious credit, lack, of course, the interest of novelty. The system was in England carried on by a

very simple machinery. The fictitious credit was created through the means of accommodation bills. [Marx 1858a, p. 33-34]

In 1860, Engels wrote to Marx that the Indian trade was "operating on fictitious value" (Engels to Marx, 26 January 1860; in Marx and Engels 1985, p. 8). Even in the third volume of Capital, many of the extracts that Marx gathered on the subject of fictitious capital cited by Marx, also stressed that bills of exchange were also liable to abuse and fraud (Ibid., pp. 408-13). Others more or less repeated the perspective of Thornton rather than the more advanced notions of Sismondi or even the author of the pamphlet, The Source (Marx 1967; 3, Ch. 25).

Keep in mind that, in his articles for the Tribune, Marx was writing to earn his income. Of course, he wanted his pieces to have an effect, but he never gave any indication that he was attempting to capture the subtle analysis of his political economy in these writings. Even in the case of the final volume of Capital, his work on fictitious capital remained in a very preliminary state. As Engels complained:

The greatest difficulty [in editing Volume III of Capital] was presented by Part V which dealt with the most complicated subject in the entire volume [i.e., money, credit, and fictitious values]. And it was just at this point that Marx was overtaken by . . . serious attacks of illness. Here, then, was no finished draft, not even a scheme whose outlines might have been filled out, but only a beginning of an elaboration -- often just a disorderly mass of notes, comments and extracts. [Marx 1967; 3, p. 4]

Whereas Engels edited the second volume of Capital in barely a year, the third volume took a full decade (King 1985).

In short, in both his newspaper articles and even in the final volume of Capital, Marx may not have been as careful these words as he would have been if he were consciously engaging in a finished theoretical analysis.

Marx's discussion of fictitious capital is quite extensive. Despite the unfinished state of this material, it is extremely valuable, although, when taken by itself, it can give the false impression that crises are the result of purely financial phenomena. Yet, Marx clearly understood that to go no further than to observe that crises are bound up with speculative ferment, would be tantamount to abandoning analysis before it develops beyond the level of appearances. Marx left no doubts that his writings on financial matters were intended to be integrated into his previous studies of the production process. Engels appended a note to the third German edition of Capital concerning monetary crises. He observed:

The monetary crisis. . . a phase of every crisis, must be clearly distinguished from that particular form of crisis, which is also called a monetary crisis, but which may be produced by itself as an independent phenomena in such a way as to react only indirectly on industry and commerce. The pivot of these crises is to be found in moneyed capital. [Marx 1974, p. 236]

Nonetheless, Marx still held that the fundamental forces responsible for the crisis are not monetary, but real. At some point, purely monetary changes cannot provide an adequate solution. Referring to a particular type of a credit crisis, Marx wrote:

In a system of production, where the entire continuity of the reproduction process rests on credit, a crisis must obviously occur when credit suddenly ceases and only cash payments have validity. At first glance, therefore, the

whole crisis seems to be merely a credit and money crisis. And in fact it is only a question of the convertibility of bills of exchange into money [although it affects real economic forces] The entire artificial system of forced expansion of the reproduction processes cannot, of course, be remedied [by the Bank of England adopting a policy to] . . . buy up all depreciated commodities at their old nominal values. [Marx 1967: iii, fn. p. 490]

In a rare discussion of the relationship between crises and fictitious capital in the second volume of Capital, Marx noted:

Hence what appears as a crisis on the money market is in reality an expression of abnormal conditions in the very process of production and reproduction. [Marx 1967: ii, p. 318]

Unfortunately, Marx never managed to transform his scattered suggestions into a sustained and coherent theory of money and credit, let alone fictitious capital. Nonetheless, reading Marx's analysis of fictitious capital in light of what we now know of his method, provides us with the germ of an important side of Marx's analysis of the dynamic of political economy.

Fictitious Capital and Speculation

Fictitious capital relates to the capitalization process (Marx 1967: iii, pp. 466-67). Elsewhere, Marx identifies fictitious capital as "interest bearing paper," just before discussing securities as fictitious capital (Ibid., p. 493). In any case, fictitious capital is closely bound up with, but not identical to speculation. For the present, I shall put off a fuller description of fictitious capital, making no distinction between the fictitious capital and speculation.

Marx had long understood the connection between the credit system and production. During the course of a boom period, the market value of financial assets comes to be based on excessively overoptimistic expectations. In Marx's words, to some extent, investors take on debt based on "only a low [current] rate of profit on enterprise" because of anticipated "profit . . . partly speculative and prospective" (Marx 1967; 3, p. 512; see also p. 467). He believed that, especially, with the extension of markets, which required more long distant trade, "the speculative element must thus more and more dominate transactions" (Ibid., p. 481).

In addition, investors, either because of inadequate information or poor judgement, commit their funds to projects of a "spurious character" (Ibid., p. 493). For example, Marx remarked:

[D]uring the past year. . . the railways have been flourishing. In truth, railways keep up an appearance of prosperity by accumulating debts, increasing from day to day their capital account. [Marx to Danielson, 10 April 1879; reprinted in Marx and Engels 1975, p. 297]

He compared an earlier bout of railway speculation with the South Sea Bubble (Marx and Engels 1850, p. 338). In any case, speculation leads to what Minsky has called an increasingly fragile financial system, in which minor financial tremors can lead to bankruptcies.

Moreover, the corporate form of business, wherein ownership and management are separated, allows those who control firms to use their position to their own advantage (Marx 1967; 3, pp. 441, 466, and 407; also see Marx and Engels

1859, pp. 490-91). When a crisis appears, such speculations come to light.

Commenting on this phenomenon, Marx wrote:

The English railway system rolls on the same incline plane as the European Public Debt system. The ruling magnates amongst the different railway-nets directors contract not only -- progressively -- new loans in order to enlarge their network, i.e., the "territory," where they rule as absolute monarchs, but they enlarge their respective networks in order to have new pretexts for engaging in new loans which enable them to pay the interest due to the holders of obligations, preferential shares, etc., and also from time to time to throw a sop to the much ill-used common share-holders in the shape of somewhat increased dividends. This pleasant method must one day or another terminate in an ugly catastrophe. [Marx to Danielson, 19 February 1881; in Marx and Engels 1975, pp. 316-17]

Consequently, speculation was fueled by a combination of excessive optimism, incorrect information, and outright fraud. Obviously, such speculation had significant ramifications that were not entirely confined to the sphere of circulation. More importantly, crises themselves were not merely monetary phenomena.

Toward the Integration of Production and Circulation

Just about the same time as the publication of his article, "British Commerce and Finance," Marx was experiencing doubts about interpreting crises in terms of purely monetary conditions. This sort of dissatisfaction with an analysis that was restricted to monetary phenomena seems to have led Marx to create his chapter on capital in the Grundrisse, which presages the method later used in Capital. Nonetheless, even in the Theories of Surplus Value, written in the early 1860's, Marx sometimes described crises in terms of the lack of co-ordination between purchase and sale. For example, in condemning economists for not facing up to the importance of crises, Marx lectured his readers:

In the crises of the world market, the contradictions and antagonisms of bourgeois production are strikingly revealed. Instead of investigating the nature of the conflicting elements which erupt in the catastrophe, the apologists content themselves with denying the catastrophe itself and insisting in the face of their regular and periodic recurrence that if production were carried on according to the textbooks, crises would never occur.

[P]urchase and sale. . . represent the unity of two processes, or rather the movement of one process through two opposite phases. . . . [T]he independence of the two correlated aspects can only show itself forcibly, as a destructive process. It is just the crisis in which they assert their unity. . . .

Thus the crisis manifests the unity of the two phases that have become independent of each other. [Marx 1963-1971, Pt. 2, p. 500; see also p. 509]

Marx used similar wording in Capital:

[T]heir unity violently makes itself felt by producing -- a crisis. [Marx 1977, p. 209]

This last citation is found in the third chapter, devoted to the subject of money. Despite the apparent association of crises and money, Marx understood that crises were not merely monetary phenomena. The analysis of monetary forces had to be

grounded in the labor process. A few pages after the previous citation from Theories of Surplus Value, Marx noted "the qualitative characteristic [of money], that individual labour must present itself as abstract, general social labour only through its alienation" (Ibid., p. 504). The above citation from Capital continued:

There is an antithesis, imminent in the commodity, between use value and value, between private labour which must simultaneously manifest itself as directly social labor . . . which simultaneously counts as merely abstract universal labour. [Marx 1977, p. 209]

Time and again, Marx would discuss crises in monetary terms, only to drop a hint that monetary analysis alone was insufficient.

How then should one transcend a purely monetary analysis of crises? Marx provided three legacies that were usually left unintegrated. First of all, he bequeathed his method to us. I have tried to show in Chapter III how the most of the necessary analytical categories emerged in the process of extending his analysis of the commodity. To expand this method to include fictitious capital theoretically presents no substantial difficulties, except that political economy had not made advances in the theory of fictitious capital comparable to those for the more familiar concepts of that discipline.

Secondly, Marx made considerable progress in developing elements of an analysis of crises, which abstracted from the workings of the credit system. The reproduction schemes of the second volume represent a prime example of this sort of work.

Finally, Marx left numerous pointers to what he seemed to consider the correct direction of a more complete analysis of crises would be, especially in Part V of Capital, Volume III. This material is made all the more valuable when it is linked together with the analytical scaffolding of the two previous points.

Marx's Method and the Analysis of Fictitious Capital

Marx's method is particularly well suited to the analysis of fictitious capital, although one major change was required in this regard. Marx's usual practice was to build upon the work of classical political economy, which had developed theoretical categories of analysis. The classical political economists generally distilled the most important features of the capitalist economy into these categories, including contradictory forces of which even they were unaware. In the case of the notion of fictitious capital, no such groundwork had been laid.

Not surprisingly, Marx often expressed discontent with much of what previously had been written on the subject of fictitious capital, since it failed to integrate the notion of fictitious capital into the analysis of the process of production. Sometimes Marx dismissed such analysis of fictitious capital as vulgar (Marx 1967; 3, p. 419). Elsewhere, he complained that "in this credit gibberish of the money-market all categories of political economy receive a different meaning and a different form" (Ibid., p. 496). Given this perspective, Marx warned that:

the analysis of the actual intrinsic relations of the capitalist process of production is a very complicated matter and very extensive; if it is a work of science to resolve the visible, merely external movement into the true intrinsic movement, it is self-evident that the conceptions which arise about the laws of production in the minds of agents of capitalist production and

circulation will diverge drastically from these real laws and will merely be the conscious expression of the visible movements. The conceptions of the merchant, stockbroker, and banker, are necessarily quite distorted. [Ibid., p. 312-13]

On one occasion, Marx even seemed to suggest that the category of fictitious capital was in the process of experiencing the same sequence of metamorphoses as the more familiar categories of classical political economy had experienced earlier. In discussing the subject, he reflected upon the "conception . . . , transferred from the banker's office to political economy" (Ibid., p. 428).

In keeping with his analysis of the more abstract concepts of political economy, Marx could be expected to derive the concept of fictitious capital from the same Hegelian logic that he had earlier applied to the concept of the commodity, when beginning his analysis of the first chapter of Capital. In fact, Marx seems to have been adopting that very approach in order to develop the inherently contradictory nature of fictitious capital.

This incorporation of new categories into his system of analysis was an important aspect of his theoretical method. These categories of political economy are not static vessels of analysis. They change as society develops.

In Marx's words:

Conceptions which have some meaning on a less developed stage of capitalist production, become quite meaningless here [with the rise of joint stock companies and the growing importance of credit]. [Ibid., p. 439]

Thus, as the possibilities of capitalist society become more realized, as credit, fictitious capital, and speculation were taking on more importance, the meaning of economic categories is correspondingly modified. In this regard, Marx remarked that, just as:

economic categories appropriate to earlier modes of production acquire a new and specific historical character under the impact of capitalist production. [Marx 1977, p. 950]

By the same token, on a theoretical plane, the introduction of new categories modify the meaning of more basic categories. In this sense, the category of fictitious capital represents an important addition to Marx's overall system of analysis.

Marx's Theory of Monetary Crises

The second of Marx's legacies to which I referred above was his non-monetary theory of crises, especially that found in his reproduction scheme. Given the understanding that this work represented, he was particularly well prepared to analyse phenomena that might appear to be strictly monetary, such as crises. To his credit, long before Capital appeared, Marx had seen through all the financial haze, realizing the primary importance of production. In an early article, written even before his days with the Tribune, we read:

The crisis first breaks out in the field of speculation and only seizes hold of production later. Not over-production, but overspeculation, itself is only a symptom of over-production, therefore appears to the superficial view as the cause of the crisis. [Marx and Engels 1850b, p. 490; emphasis added]

Marx's recognition that speculation was only a symptom was remarkably advanced. He was convinced that crises "must be regarded as the real concentration and

forcible adjustment of all the contradictions of bourgeois economy" (Marx 1963-71; Pt. 2, p. 510). He continued:

The individual factors, which are condensed in these crises must therefore emerge and must be described in each sphere of the bourgeois economy and the further we advance in our examination of the latter, the more aspects of this conflict must be traced on the one hand, and on the other hand it must be shown that its more abstract forms are recurring and are contained in the more concrete forms. . . .

The contradictions inherent in the circulation of commodities, which are further developed in the circulation of money reproduce themselves automatically, in capital, since developed circulation of commodities and of money, in fact, only takes place on the basis of capital. But now the further development of the potential crisis has to be traced -- the real crisis can only be educed from the real movement of capitalist production, competition and credit -- in so far as crisis arises out of the special aspects of capital which are peculiar to it as capital. [Marx 1963-1971; Pt. 2, p. 510; first parenthesis added]

Elsewhere, on a more general level, Marx explained:

Within the value relation and the value expression included in it, the abstractly general counts not as a property of the concrete, sensibly real; but on the contrary, the sensibly-concrete counts as the mere form of appearance or definite form of realization of the abstractly general. [Marx 1867, pp. 139-40; also cited in Fischer 1982, p. 31]

This last statement is very important methodologically speaking. It suggests that any valid analysis demands careful consideration of the more abstract categories of political economy.

Recall that Samuelson (1971) and Robinson (1967), who agreed on little else, both insisted that the concrete analysis of prices does away with the need to consider the underlying system of values. Their case might seem even stronger when it is applied to the analysis of fictitious capital, a subject that at first appears to be wholly rooted in the sphere of prices.

In reality, to carry out an analysis of fictitious capital without reference to values would do considerable violence to Marx's method. Marx was specifically warning against such a procedure in the above citation. By the same reasoning, speculative market prices must be understood in terms of the more abstract formation of normal prices, which requires, in turn, further consideration of the nature of the creation of surplus value.

In making this connection between Marx's discussion of the financial dimensions of the economic system, Marx's historical judgement on the level of mercantilist political economy is very relevant. He wrote:

The real science of modern economy only begins when the theoretical analysis passes from the process of circulation to the process of production. . . . It is always the direct relationship of the owners of the conditions of production to the direct producers . . . which reveals the innermost secret, the hidden basis of the entire social structure. [Marx 1967; 3, pp. 337 and 791]

Exchange and circulation are important. Indeed, Marx devoted his second volume of Capital to the subject, but, as Engels wrote to Conrad Schmidt on October 27, 1890, "in the last instance production is the decisive factor" (Marx and Engels 1975, p. 397). In a description of his method of analysis, Marx explained:

Production predominates not only over itself, . . . but over the other moments as well. [Yet] mutual interactions take place between the different moments. [Marx 1974, pp. 99-100]

At times, Marx was quite clear about relationship between monetary phenomena and the labor theory of value. As early as 1848, he recognized:

Credit depends on the confidence that the exploitation of wage labour by the bourgeoisie, of the petty bourgeois by the big bourgeois, will continue. Hence any political stirring in the proletariat, whatever its nature, even if it takes place under the direct command of the bourgeoisie, shakes this trust, impairs credit. [Marx 1848a, p. 170]

Thus, a proper analysis of circulation had to be carried out with the underlying system of production and reproduction in mind.

The Evolving Status of Marx's Theory of Credit and Fictitious Capital

The third legacy to which I had referred concerned Marx's writings on fictitious capital. I do not claim that Marx had a complete theory of credit, let alone fictitious capital. Not only were the most pertinent chapters unfinished, he had not even begun to draft the parts required to complete his analysis of fictitious capital. Thus, he introduced his chapter entitled "Credit and Fictitious Capital," with the disclaimer:

An exhaustive analysis of the credit system and of the instruments which it creates for its own use lies beyond our plan. [Marx 1967; 3, p. 400]

A similar statement is found in the chapter entitled, "The Trinity Formula," although the context might be construed to be more limited:

[W]e leave aside . . . movements of market-prices, periods of credit, industrial and commercial cycles, alternations of prosperity and crisis [Marx 1967; 3, p. 831]

Yet he had already presented credit as evolving out of money, continuing the Hegelian pattern underlying his presentation of the theory of capitalism:

The so-called credit-economy is merely a form of the money-economy, since both terms express functions or modes of exchange among the producers themselves. In developed capitalist production, the money-economy appears as the basis of the credit-economy. The money-economy and the credit-economy thus correspond only to different stages in the development of capitalist production. [Marx 1967: 2; p. 116]

In summary, Marx developed a method of analysis by which each element evolves from the more abstract elements. He more or less brought his system to the point at which the category of fictitious capital was about to emerge as a full-blown analytical concept. Moreover, in his scattered notes, he left considerable hints as to how that concept would function in the analysis of the capitalist system. Despite its incompleteness, Marx's analysis of the subject of fictitious capital remains unsurpassed.

The Importance of Monetary Phenomena

Monetary phenomena, such as speculation, credit, and fictitious capital, were not merely unnecessary intrusions into the capitalist economy. They were an integral part of the development of capitalism. Consequently, an understanding of monetary phenomena had to be linked to the analysis of the social relations of production. In this vein, after having begun his Grundrisse with an analysis of money, Marx asked himself:

Can the existing relations of production and the relations of distribution which correspond to them be revolutionized by a change in the instrument of circulation, in the organization of circulation? Further question: Can such a transformation of circulation be undertaken without touching the existing relations of production and the social relations which rest on them? [Marx 1974, p. 122]

For example, Marx believed that even medieval usury, often simply dismissed as a parasitic intrusion into the economy, actually prodded the economy to advance (Marx 1967; 3, p. 596-97). In the modern age, credit gives its owners command over real resources:

[C]redit offers to the individual capitalist, or one who is regarded a capitalist, absolute control within certain limits over the capital and property of others, and thereby over the labour of others. The control over social capital, not the individual capital of his own, gives him control of social labour. [Marx 1967: iii, pp. 438-39; see Schumpeter 1961, pp. 106-107]

Hence credit facilitates the centralization of capital, which Marx associated with technical progress (Marx 1977, pp. 777-80; and 1963-1971, Pt. 1, p. 170). In an advanced capitalist society, this phenomenon permeates the economy. In this vein, referring to the credit system, Marx observed:

In its first stages, this system furtively creeps in as the humble assistant of accumulation. . . , but soon it becomes a new and terrible weapon in the battle of competition. [Marx 1977, pp. 777-78]

Marx's understanding credit was, like so many his insights, two-fold. He wrote: The credit system appears as the main lever of over-production and over-speculation in commerce solely because the reproduction process, which is elastic by nature, is here forced to its extreme limits, and so is forced because a large part of the social capital is employed by people who do not own it and who consequently tackle things quite differently than the owner, who anxiously weighs the limitations of his private capital in so far as he handles it himself. This simply demonstrates the fact that the self-expansion of capital based on the contradictory nature of capitalist production permits the free development only up to a certain point, so that it constitutes an imminent fetter and barrier to production, which are continually broken through by the credit system. Hence, the system accelerates the material development of the productive forces and the establishment of the world-market. It is the historical mission of the capitalist system of production to raise these material foundations. At the same time credit accelerates the violent eruptions of this contradiction -- crises -- and thereby

the elements of the disintegration of the old mode of production. [Marx 1967; 3, p. 441]

Given this perspective, Marx was as alert as any orthodox monetarist to the problems posed by the arbitrary expansion of fiat money (Marx to Engels, 29 October 1862; in Marx and Engels 1942, pp. 138-40). In this same spirit, Engels criticized Duehring's superficial discussion of John Law's monetary scheme.

Nonetheless, Marx and Engels recognized that money was not wholly neutral. It had real effects. Thus, Engels acknowledged, Law was printing "paper butterflies," but butterflies that gave the state access to more specie (Engels 1894, p. 278).

Engels' response to Duehring was consistent with Marx's requirement that the analysis of circulation must consider the intricate dialectical relationships between circulation and production. The very high standard, implicit in Marx's goal of an analytical integration of circulation and production, was no simple matter, especially considering the underdeveloped theoretical status of the category fictitious capital.

Towards an Analysis of Fictitious Capital

Unlike the bankers and financiers, who saw the world through monetary spectacles, Marx was particularly attuned to the underlying production system. Armed with his understanding of the concept of value, he was able to recognize the partial truths of, say, Ricardo, on the one side, and Hamilton, on the other.

Moreover, Marx's investigations of the distinction between value and price provided him with a unique vantage point from which he was able to recognize the parallelism between the pricing mechanism for non-produced real assets, such as land, and the price of financial assets. Such values were fictitious, in the sense that they were indeterminate. More precisely, the market value for both types of assets was fictitious, in the further sense that it was unrelated to any underlying embodied labor values.

On several occasions, Marx used similar expressions in other contexts, suggesting a very different sense of the word 'fictitious'. In the first work that he published jointly with Engels, he suggested that all value may be irrational:

Value is determined at the beginning [of theoretical analysis] in an apparently rational way, by the cost of production of an object and by its social usefulness. Later it turns out that value is determined quite fortuitously. [Marx and Engels 1845, p. 32]

With regard to the land, Marx declared that it "the earth is not the product of labour and therefore has no value (Marx 1967: iii, p. 623). He specifically referred to "the price of . . . uncultivated land . . . [which], is quite illusory" (Ibid., p. 669).

Consequently:

[the] determination [of] . . . market-value . . . on the basis of capitalist production through competition . . . creates a false social value. [Ibid., p. 661]

Also, "wages of labour, or the price of labour is but an irrational expression for the value, or the price of labour-power" (Marx 1967: iii, p. 823; see also Ibid., p. 819).

Elsewhere, he made the same point, remarking "It is an expression as imaginary as the value of the earth" (Marx 1967: iii, p. 677). Interest, too, was described as "an

irrational expression" (Ibid., p. 354). Marx even referred to conscience and honor as being sold as a commodities having an "imaginary-price form" (Marx 1977, p. 197). Marx also referred to prices as imaginary gold. He wrote:

To establish its price it is sufficient for it [a commodity] to be equated with gold in the imagination. But to render its owner the service of a universal equivalent, it must actually be replaced by gold. . . .

Since the expression of the value of commodities in gold is a purely ideal act, we may use purely imaginary or ideal gold to perform this operation. Every owner of commodities knows that he is nowhere near turning them into gold when he has given their value the form of a price of or of imaginary gold, and that it does not require the tiniest particle of real gold to give a valuation in gold of millions of pounds worth of commodities. In its function as a measure of value, money therefore serves only in an imaginary or ideal capacity. This circumstance has given rise to the wildest theories. But, although the money that performs the functions of a measure of value is only imaginary, the price depends entirely on the actual substance that is money. [Marx 1977, pp. 197 and 189-190; emphasis added]

In describing the gradually changing values of goods, resulting from the introduction of money into a precapitalist society, Marx observed that the "greater part of all . . . commodities, especially at the less developed stages of bourgeois society, will continue to be estimated in terms of the former measure of value, which has now become antiquated and illusory" (Marx 1977, p. 214).

This last extract is especially interesting for its ambiguity. In this example, illusory values also apply to goods that result from human labor. The context of the citation, with its reference to different 'stages of bourgeois society', suggest that illusory or fictitious values could apply to produced commodities in an advanced capitalist society, as well as to the transitional society he was describing. This possibility that real commodities could have fictitious values lies at the heart of his theory of fictitious capital.

Marx's use of the words, 'imaginary, illusory and irrational' were certainly consistent with his use of the expression, 'fictitious', in the third volume of Capital. The extent to which these terms were actually informed by his work on fictitious value remains a matter of speculation.

Marx's analysis of fictitious capital bears some resemblance to his theory of rent. The following citation, concerning the price of a waterfall, is instructive in demonstrating the parallel between rent and fictitious capital:

[The] price of . . . [a] waterfall on the whole is an irrational expression [in spite of its ability to supplant labor], but behind it is hidden a real economic relationship. The waterfall, like land in general, and like any natural force has no value because it does not represent any materialized labour, and therefore, it has no price, which is normally no more than the expression of value in money terms. Where there is no value, there is also eo ipso nothing to be expressed in money. This price is nothing more than capitalised rent. . . . [Ibid., p. 648]

The relationship of a portion of surplus value, of money-rent -- for money is the independent expression of value -- to the land is itself absurd and

irrational; for the magnitudes which are here measured by one another are incommensurable -- a particular use value, a piece of land. . . on the one hand, and value, especially surplus-value on the other. This expresses in fact nothing more than that, under the given conditions, the ownership of so many square feet of land enables the landowner to wrest a certain quantity of unpaid labour, which the capitalist . . . has realized. [Ibid., p. 799; see also p. 623]

To his credit, Marx understood that a similar mechanism was at work in the market for financial assets. The following long extract illustrates the underlying similarity between the markets for land and financial assets:

The formation of a fictitious capital is called capitalisation. . . For the person who buys this title of ownership, the annual income of 100 pounds represents indeed the interest on his capital invested at 5% [i.e., a 2000 pound bond, MP]. All connection with the actual expansion process of capital is thus completely lost, and the conception of capital as something with automatic self-expansion properties is thereby strengthened.

Even when the promissory note -- the security -- does not represent a purely fictitious capital, as it does in the case of state debts, the capital-value of such paper is nevertheless wholly illusory. We have previously seen in what manner the credit system creates associated capital. The paper serves as title of ownership which represents the capital. The stocks of railways, mines, navigation companies, and the like, represent actual capital. . . . This does not preclude the possibility that these may represent pure swindle. But this capital does not exist twice, once as the capital-value of titles of ownership on the one hand and on the other hand as actual capital invested. . . . It exists only in latter form, and a share of stock is merely a title of ownership to a corresponding portion of the surplus-value to be realized by it. . . .

The independent movement of the value of these titles of ownership, not only of government bonds but also of stocks, adds weight to the illusion that they constitute real capital alongside of the capital or claim to which they may have title. For they become commodities, whose price has its own characteristic movements and is established in its own way. Their market-value is determined differently from their nominal value, without any change in the value of the actual capital. On the one hand, their market-value fluctuates with the amount and reliability of the proceeds to which they afford legal title. . . . Their value is merely capitalised income, that is, the income calculated on the basis of a fictitious capital at the prevailing rate of interest. Therefore, when the money-market is tight these securities will fall in price for two reasons: first, because the rate of interest rises, and secondly, because they are thrown on the market in large quantities in order to convert them into cash. This drop in price takes place regardless of whether the income that this paper guarantees its owner is constant. [Marx 1967: iii, p. 466-67]

Here we have a brief summary of many of the essentials of Marx's theory of fictitious capital. In the first place, fictitious capital is a capitalization. Marx

lumped numerous forms of capitalization together into his category of fictitious capital: capitalizations of debt, equities, and real capital goods.

The capitalization of real capital goods is extremely important since these capitalized values are a major determinant of market prices. In other words, prices do not simply equal values, adjusted to allow for equal profit rates. In a more developed capitalist economy, prices are also affected by the existence of fictitious capital.

Fictitious Capital and the Capitalization Process

The fiction of fictitious capital can be enormous. Both Hilferding and Veblen give examples from the U.S. Industrial Commission of 1901 to show the extent to which the market price of financial paper could diverge from the value of the underlying capital goods (Hilferding 1910, pp. 396-97 and Veblen 1904, pp. 145-46).

From this perspective, fictitious capital is fictitious, in the sense that its 'capital-value paper is . . . wholly illusory', but such illusion is not foreign to the capitalist mode of production, as some of the earlier critics of fictitious capital had argued. It is an essential aspect of capitalism. In Hilferding's words:

On the stock exchange capitalist property appears in its pure form, as a title to the yield, and the relation of exploitation . . . , upon which it rest, becomes conceptually lost. Property ceases to express any specific relation of production and becomes a claim to a yield, apparently unconnected with any particular activity. . . . The value of any property seems to be determined by its yield, a purely quantitative relationship. . . . The number alone is real, and since what is real is not a number, the relationship is more mystical than the doctrine of the Pythagoreans. [Hilferding 1910, p. 149]

In this sense, fictitious capital is illusory. The illusion of fictitious capital goes one step further. For Marx:

Gains and loss through fluctuations in the price of these titles of ownership . . . become, by their very nature, more and more a matter of gamble, which appears to take the place of labour as the original method of acquiring capital wealth. [Marx 1967; 3, p. 478]

These appearances and illusions are of the same genre as those, described in Marx's chapters on "The Fetishism of Commodities" or "The Trinity Formula." Recall that for Marx, fetishism was more than the defective perception of individual agents in a market economy. Fetishism is a natural and even necessary outgrowth of the market. Along the same line of thought, Marx's three chapters in the third volume of Capital on "Money-Capital and Real Capital" are analogous to his chapter in the first volume on "The Labour Process and the Valorization Process," in the sense that both emphasize that the market distorts the underlying real labor process.

In both cases, illusion is necessary when capitalist relations prevail. Marx's analysis of fictitious capital bears a close resemblance to Schumpeter's understanding of credit. Schumpeter wrote:

By credit, entrepreneurs are given access to the social stream of goods before they have acquired the normal claim to it. It temporarily substitutes, as it were, a fiction of this claim for the claim itself. [Schumpeter 1961, p. 107; emphasis added]

The substitution of fictions of claims for the claims themselves significantly alters the pricing process, especially the relationship between prices and values.

The price for both land and financial assets can change because of purely market forces unrelated to conditions of production. Recall Marx's assertion that "illusory, fictitious capital, . . . this fictitious capital has its own laws of motion" (Marx 1967: iii, p. 465). This statement may have special significance, in light of Marx's parallel expression found in the Postface to the first edition of Capital. There we read: "[I]t is the ultimate aim of this work to reveal the economic law of motion of modern society" (Marx 1977, p. 92).

Now consider the economic law of motion of fictitious capital. According to Marx, the "money or capital value" for paper assets "represents either no capital at all, as in the case of state debts, or is regulated independently of the value of real capital which it represents" (Ibid., p. 468). In the paragraph where he cites Sismondi in a footnote, Marx observed:

The accumulation of the capital of the national debt has been revealed to mean merely an increase in a class of state creditors, who have the privilege of a firm claim upon a certain portion of the tax revenue. By means of these facts, whereby an accumulation of debts may appear as an accumulation of capital, the height of distortion taking place in the credit system becomes apparent. [Ibid., p. 477].

Marx continued with a discussion of private placements:

[T]hese titles become paper duplicates of the real capital it is as though a bill of lading were to acquire a value separate from the cargo, both concomitantly and simultaneously with it. They come to represent nonexistent capital. . . . [A]s duplicates which are themselves objects of transactions as commodities. . . , they are illusory and their value may fall or rise quite independently of the real capital for which they are titles. [Ibid]

It is just such distortions and illusions that Marx set out to reveal. Recall the framework of the first volume of Capital. Originally, Marx connected his labor theory of value with his monetary theory by beginning his analysis with gold as the only monetary form. Since the price of any good, including gold, will be approximately equal to its value, money prices will bear a relatively close relation to the underlying values. Within this framework, each commodity has a value proportional to the quantity of socially necessary abstract labor embodied into it.

Had Marx stopped there, he would be open to the criticism that his monetary theory was crudely metallist. Fortunately, he did not. Later, he extended this law to allow the rate of return on each investment to tend to a common level. Prices are further modified according to the relative importance of variable and circulating capital, as well as the turnover time of investment. Nonetheless, prices will still roughly conform to values.

The concept of fictitious capital opens Marx's system up to a much richer monetary analysis. The metallist conception of pricing system allowed for some deviations of price from value. The existence of fictitious capital stretches the pricing process even further, permitting prices to deviate from values by a significant margin, allowing for a much more complex, indeterminate structure of deviations.

The evolution of Marx's understanding of fictitious capital is paralleled by that of Duncan Foley, one of the most subtle students of Marx's monetary analysis. On the most primitive level of analysis, capitalization rates will depend on the discount rate, which should be closely linked to the interest rate. At one point, Foley suggested that for Marx the interest rate "depends on the relative objective strength of financial and industrial capital" rather than Keynes' speculator (Foley 1975a, p. 28). About the same time, Foley acknowledged that speculation lay at the heart of market decisions, even for producers (Foley 1975). More recently, he has incorporated this idea into his understanding of Marx's monetary theory-- a theory that leaves the links between prices and values become increasingly elastic (Foley 1983).

Fictitious Capital and the Dynamic Labor Theory of Value

The lack of a rigid correspondence of prices and values, even ignoring the technicalities of the so-called transformation problem, was fundamental to Marx's understanding of the market. He insisted, "Capital . . . can be understood only as a motion, not as a thing at rest" (Marx 1967; 2, p. 105). Marx's initial presentation of constant capital within the labor theory of value was static. The value of a unit of fixed capital originally depends on the labor embodied in it. The value embodied in the capital is gradually transferred into the commodities that it is used to produce.

This static treatment was only provisional. In reality, the value of capital goods depends on their cost of reproduction, not their cost of production. Reference to reproduction rather than production values makes capital values dynamic. Improved methods of production constantly diminish the embodied value of capital, or in Marx's terminology, devalorize it (see Chapter 5). This devalorization can sweep away the values of existing capital with frightening rapidity. In Marx's words:

[The] value [of a unit of capital] is no longer determined by the necessary labour-time actually objectified in it, but by the labour-time necessary either to reproduce it or the better machine. . . . When the machinery is first introduced into a particular branch of production, new methods of reproducing it more cheaply follow blow upon blow. [Marx 1977, p. 528] Marx cited Babbage's example of the frames for making patent net (Marx 1977, p. 528; Babbage 1835, p. 286). A machine that originally sold for twelve hundred pounds, according to Babbage, cost only sixty pounds after a few years. Babbage claimed that "the improvements succeeded each other so rapidly that machines which had never been finished were abandoned in the hands of their makers, because new improvements had superseded their utility" (Babbage 1835, p. 286). His rule of thumb was that the cost of a original machine was roughly five times the cost of a duplicate (Ibid. p. 266).

In this regard, Marx's discussion of changing capital values in general is worth recalling. He noted:

The value of machinery, etc., falls . . . because it can be reproduced more cheaply. This is one of the reasons why large enterprises frequently do not flourish until they pass into other hands, i.e., after their first proprietors have been bankrupted, and their successors, who buy them cheaply, therefore begin from the outset with a smaller outlay of capital. [Marx 1967; 3, p. 114]

These changes in the reproduction costs of capital goods represent an important element of Marx's value theory. He wrote:

The comparison of value in one period with the value of the same commodities in a later period is no scholastic illusion. . . , but rather forms the fundamental principle of the circulation process of capital. [Marx 1963-1971; Pt. 2, p. 495]

In addition, the continual threat of devalorization introduces uncertainty into capital values. These extensions are related to the concept of fictitious capital. Up till now, fictitious capital has been treated as if it were the result of a simple capitalization process. This capitalization depended on the income risk of holding an asset. The possibility of devalorization adds the dimension of capital risk to the notion of fictitious capital. In fact, capital risk is even more important to the notion of fictitious capital than income risk is.

Keep in mind that value, in the sense of embodied labor, has no meaning for a waterfall. By the same token, the value of a previously installed machine is of limited relevance. New machines may be produced with only a fraction of the labor that took to produce an existing machine. They may also be more efficient.

Although the historical values may be irrelevant, value cannot be ignored. Nonetheless, value is necessary to co-ordinate a market economy, which is devoid of any form of social control. Within his more concrete analysis, Marx assumed that economic agents were unaware of underlying values; that they only observe prices (see Marx 1963-1971; Pt. 3, p. 163).

The pricing system provides signals regarding the underlying real production system when prices approximate values (see Hayek 1945). Once the formation of fictitious values breaks the link between prices and values, the pricing system no longer provides the adequate information regarding the real costs of production. Nonetheless, it is only by conveying information about the underlying values, especially future values, that the price system can guide the economy with any degree of efficiency.

Of course, business is unconcerned about efficiency. Its goal is profit. Despite Jevons' aphorism that bygones are forever bygones, profits are measured relative to past investments that firms carry on their books. Rather than recognize the losses due to devalorization, business adopts conventional accounting practices that ignore at least some of the capital loss (see Perelman 1986). Business also attempts to follow price setting practices that allow for the recapture of past investments. Often, when firms fail in this regard, they cannot repay debt obligations. They face bankruptcy. In the process, as Marx observed in another context, to some extent the value of this capital "will continue to be estimated in terms of the former measure of value, which has now become antiquated and illusory" (Marx 1977, p. 214).

These conventional pricing and accounting practices are fictions, in the sense that Bentham used the word to describe useful fictions that aid in communication. When devalorization proceeds rapidly, price ratios may change faster than firms can process the information contained in such prices. By adopting conventions or fictions, business maintains a relatively fixed reference point, albeit an obsolete one.

In effect, business makes the price system appear to have more coherence than it actually does.

In the process, business creates fictitious capital. For Marx, such fictitious capital allows the link between market values and labor values to become tenuous (see Foley 1983, pp. 11 and 17). As the price of any particular intermediate good moves further away from its value, the cost to other firms will be affected. When large deviations of prices from values become common, the whole price structure becomes so deformed that the underlying connection between the money form of commodities and their corresponding labor values is altogether lost.

Changes in the prices compound the rapid shifts in the value structure due to technical change or altered conditions of production. Price movements are especially violent in the case of fictitious capital.

The more uncertainty that enters into the system, the more capitalists' attention will be captured by movements in the prices of fictitious capital. The underlying value system will be made more obscure in the process.

Of course, the fiction of fictitious value cannot be maintained indefinitely. At some unknown time in the future, prices will have to move into rough conformity with values. This likelihood makes the ownership of capital become a speculative venture. Within this context:

The movements of capital appear as the action of some individual capitalist who performs the functions of a buyer of commodities and labour, a seller of commodities, and an owner of productive capital, who therefore promotes the circuit by his activity. If social capital experiences a revolution in value, it may happen that the capital of the individual capitalist succumbs to it and fails, because it cannot adapt itself to the conditions of this movement of values. The more acute and frequent such revolutions in value become, the more does the automatic movement of the now independent value operate with the elemental force of a natural process, against the foresight and calculation of the individual capitalist, the more does the course of normal production become subservient to abnormal speculation, and the greater is the danger that threatens the existence of the individual capitals. [Ibid., pp. 105-106]

In summary, Marx only provisionally began with commodity money, an approach that implied that prices bore a close resemblance to values. Similarly, he began by equating values with production, rather than reproduction, values. In short, he was well aware that "there exists an accidental rather than a necessary connection between the total amount of social labour applied to [an] . . . article" and the labor embodied in other goods that exchange for an equivalent amount of money (Marx 1967; 3, p. 187). Finally, fictitious capital is, in part, a reflection of the extent to which capital goods lose their relationship to their underlying values.

The Positive Side of Fictitious Capital

Naturally, firms would prefer to protect the values of their investments (Marx 1967; 3, pp. 249, 254, and 262). In Marx's words, the "actual depreciation of the old capital could not occur without a struggle, and that additional capital. . . could not assume the functions of capital without a struggle" (Ibid. p. 252). Business contrives to protect its fictitious capital values with monopolies, cartels and other

anti-competitive practices. These efforts succeed only temporarily. Eventually, competition "compel[s] the old capital to give up its place and withdraw to join completely or partially unemployed additional capital" (Ibid., p. 253). In the process, a "portion of the old capital has to lie unused. . . ; it has to give up its characteristic quality as capital" (Ibid.).

Not only does business strive to protect its fictitious capital, as in the case of pure speculation, sometimes it fraudulently attempts to create fictitious capital by deceptive business practices. Despite the obvious problems associated with the creation of fictitious capital, Marx was convinced that the motion of fictitious capital indirectly promoted economic development, in the same sense that speculation temporarily speeds up the accumulation process (see Marx 1977, pp. 775-81). What Marx wrote about the consequences of 'fictitious demand', resulting from merchants' capital, no doubt held for the distortions introduced by fictitious capital in general:

[B]y virtue of its independent status it moves, within certain limits, independently of the bounds of the reproduction process and thereby even drives the latter beyond its bounds. . . . [Marx 1967: 3, p. 304]

In a later chapter of the same work, Marx repeated this idea with a significant addition:

[B]anking and credit thus become the most potent means of driving capitalist production beyond its own limits, and one of the most effective vehicles of crises and swindle. [Ibid., p. 607]

Marx went well beyond this idea, observing:

[T]here is no doubt that the credit system will serve as a powerful lever during the transition from the capitalist mode of production to the mode of production of associated labour. [Ibid.]

In this respect, Engels was wrong to dismiss the stock exchange merely as an institution, where "different capitalists despoil one another of their capital" (Engels 1894, p. 330). For example, the ability to maintain inflated asset values increases business confidence, minimizing the perceived threat of moral depreciation of capital and thereby promoting investment.

Even the fraudulent creation of fictitious capital has certain advantages. It serves to place capital in the hands of those willing to take risks. This transfer of resources is important, especially considering business' well known reluctance to invest in long-lived capital goods resulting from the threat of devalorization. For example, Marx, describing the railroad industry of the United States, where financial abuses were rampant to say the least, claimed:

The world would still be without railroads if it had to wait until accumulation had got a few individual capitals far enough to be adequate for the construction of a railroad. Centralization, however, accomplished this in a twinkling of an eye, by means of joint-stock companies. [Marx 1977, p. 780].

Significantly, this reference occurs in the same section in which Marx discussed the rising organic composition of capital. A similar association between the credit system and the rising organic composition of capital is found in the discussion of 'The Working Period' (Marx 1967; 2, Ch. 12). There, he explained:

At the less developed stages of capitalist production, undertakings requiring a long working period, and hence a large investment of capital for a long time, such as the building of roads, canals, etc. especially when they can be carried out only on a large scale, are either not carried out on a capitalist basis at all, but rather at communal or state expense. [Ibid., p. 233; see also Marx 1974, p. 531].

The above citations do not mean that credit necessarily eliminates firms' reluctance to invest in long-lived fixed capital. In the first citation, the United States railroad builders had to be induced to invest by massive grants of public land, as Marx himself was well aware (see Marx to N. Danielson, 10 April 1879; in Marx and Engels 1975, p. 298). The example of investment, used in the second citation, was tract housing in London that was expected to be sold within a short period of time.

To the extent that fictitious capital promotes investment, it should have a further effect on prices. When borrowers bid resources away from those who might have obtained them in the absence of credit, they do so by paying a higher price. Unless final demand turns out to be proportional to what it would have been, relative prices are altered.

One could argue that this supply and demand effect demonstrates the limits of the labor theory of value. Marx drew a very different conclusion. Labor values are important. To the extent that capitalism fails to take labor values into account adequately, it will function badly. Marx assumed that even "after the abolition of the capitalist mode of production, . . . the determination of value continues to prevail in the sense that the regulation of labour-time and the distribution of social labour among the various groups [continues to be important and] ultimately the book-keeping encompassing all this becomes more essential than ever" (Marx 1967; 3, p. 851).

In this respect, the large deviation of prices from values not only strengthens the labor theory of value, but it speaks to issues that modern economists are just beginning to recognize in their analysis of bubbles. For Marx, the substantial deviations of prices from the underlying values created the preconditions for a crisis, which could only be avoided by keeping the underlying values in mind. He insisted:

As long as the social character of labour appears as the money-existence of commodities, and thus as a thing external to actual production, money crises -- independent of or as an intensification of actual crises -- are inevitable. . . . [The] . . . mad demand [for money] grows necessarily out of the system itself. [Marx 1967; 3, p. 516-17 and 574]

Engels alluded to this two-fold interrelationship between the real system of production and its financial representation in a letter to Conrad Schmidt:

As soon as trade in money becomes separate from trade in commodities it has -- under definite conditions determined by production and commodity trade and within these limits -- a development of its own, specific laws determined by its own nature and distinct phases. Add to this the fact that money trade, developing further, comes to include trade in securities and that these securities are not only government papers but also industrial and transport stocks, consequently money trade gains direct control over a

portion of the production by which it is on the whole itself controlled, thus the repercussions of money trading on production become still stronger and more complicated. The money-dealers become owners of railways, mines, iron works, etc. These means of production take on a double aspect: their operation is governed sometimes by the interests of direct production, sometimes however also by the requirement of the shareholder, in so far as they are money-dealers. The most striking example of this is furnished by the North American railways, whose operations are entirely dependent on the daily stock exchange transactions of a Jay Gould or a Vanderbilt, etc., which have nothing whatever to do with the particular railway. [Engels to Conrad Schmidt, 27 October 1890; in Marx and Engels 1975, pp. 396-402; see also Marx to Danielson, 19 February 1881; in Marx and Engels 1942, pp. 383-86]

Take a moment to put Marx's theory into perspective. In a perfectly competitive economy with static technology, the absence of credit, and relatively stable expectations, the price system more or less accurately conveys information about the underlying production system. However, the elimination of the restriction that market prices must more or less equal values imparts considerable flexibility to the system, especially in promoting investment.

Where technology is improving, especially when these improvements involve long-lived capital goods, prices become a less adequate guide to economic behavior. Mistakes may be recognized only after a significant lag. Consequently, the price system becomes somewhat imperfect since it conveys only limited information about future values. Moreover, because of risk, investors are reluctant to commit themselves to long-lived investments (see Perelman 1986).

Credit and fictitious capital help to overcome the resistance to invest in durable plant and equipment, although prices lose some of their relationship to values in the process. In Marx's words:

The possibility. . . of a quantitative incongruity between price and magnitude of value; i.e., the possibility that the price may diverge from the magnitude of value, is inherent in the price-form itself. This is not a defect, but, on the contrary, it makes this form the adequate one for a mode of production whose laws can only assert themselves as blindly operating averages between constant irregularities. [Marx 1977, p. 196]

Although the divergence of prices and values offers substantial advantages to the capitalist mode of production, it entails dangers as well. Recall Smith's imagery of Daedalian wings.

Fictitious Capital and the Disarticulation of Values

In the course of a cycle, the distortions created by fictitious capital eventually begin to outweigh the advantages of the flexibility that finance allows. The existence of fictitious capital makes the price system less informative. The extraction of knowledge about the economy from price signals becomes more problematic.

Movements in price may reflect movements in the circuit of fictitious capital rather than changes in the underlying production system. These movements may be self-validating for a considerable period of time, while investors are swept along by

waves of optimism. Eventually, the formation of fictitious values allows the divergence of values from market prices to become excessive.

Marx referred to this situation, in the first volume of Capital, where he alluded to the "qualitative contradiction [that] price ceases altogether to express value, despite the fact that money is nothing but the value form of commodities" (Ibid., p. 197). In addition, recall Marx's above cited discussion of capitalization, where he noted that in the process:

All connection with the actual expansion process of capital is thus completely lost, and the conception of capital as something with automatic self-expansion properties is thereby strengthened. [Marx 1967; 3, p. 466]

Marx also observed:

the actual process of production, as a unity of the direct production process and the circulation process, gives rise to new formations, in which the vein of internal connections is increasingly lost. [Ibid., p. 828]

The financial system interferes with the pricing system in another important respect: Because of the need to obtain credit, a certain level of display is required to convey a sense of prosperity to potential lenders. In Marx's Veblenian language:

When a certain stage of development has been reached, a conventional degree of prodigality, which is also an exhibition of wealth, and consequently a source of credit, becomes a business necessity. [Marx 1977, p. 741]

The failure of the monetary system to take the actual underlying values into account ultimately sets the stage for a crisis. In the meantime, a sort of fetishism takes hold:

[E]verything here appears distorted, since in this paper world, the real price and its real basis appear nowhere. . . [T]he entire process becomes incomprehensible. . . .

[Financial] wealth assumes the aspect of a world beyond, of a thing, matter, commodity, alongside of and external to the real elements of social wealth. So long as production is in a state of flux this is forgotten. Credit . . . crowds out money and usurps its place. It is faith in the social character of production which allows the money-form of products to assume the aspect of something that is only evanescent and ideal, something merely imaginative. [Marx 1967; 3, pp. 490 and 573-74]

Unfortunately, such faith is not always rewarded. The real costs of the underlying system of production cannot be ignored forever. By losing any relationship to the underlying system of values, strains eventually build up in the sphere of production until a crisis is required to bring the system back into a balance, whereby prices reflect the real costs of production.

The strains building up in the economy resulting from the disarticulation of prices and values may be unseen. High fictitious values are presumed to be an indication of the health, rather than fragility of the economy. Business continues to take on more debt, based on a price structure that is severely deformed by fictitious capital. Suddenly, possibly because of what would now be called a supply shock -- in Marx's dramatic phrase, some event "by acting like a feather which, when added to the weight of the scales, suffices to tip the oscillating balance definitely" -- some businesses cannot meet their obligations, setting off a chain reaction as other firms that count upon receipts from the original firm (Marx 1967; 3, p. 571). With the

realization that the returns from its investments are inadequate to service its debt, asset prices collapse, setting off a crisis. In this sense, the maintenance, and even the accumulation, of fictitious capitals is essential to postponing a crisis.

The strength of the economy may be sapped, just when the appearance of prosperity is most pronounced. In the process, trivial monetary disruptions can have enormous effects. Suddenly, capitalists retrospectively see the warnings that they had failed to notice before. A panic sweeps across the world of business. As Marx wrote:

when credit contracts or ceases entirely, money suddenly stands as the only means of payment and the true existence of value in opposition to all other commodities. Hence the universal depreciation of commodities, the difficulty or even impossibility of transforming them into money, i.e., into their purely fantastic form. For a few millions in money, many millions in commodities must be sacrificed. [Ibid., p. 516; see also p. 574]

The crisis shakes very foundation of the financial structure. Many firms go bankrupt. Even the government is unable to put things right. Marx wrote:

The entire artificial system of forced expansion of the reproduction process cannot, of course, be remedied by having some bank, like the Bank of England, give to all the swindlers the deficient capital by means of its paper and having it buy up all the depreciated commodities at their old nominal values. [Ibid., p. 490]

In Marx's words:

The chain of payment obligations due at specific dates is broken in a hundred places. The confusion is augmented by the attendant collapse of the credit system, which . . . leads to violent and acute crises, to sudden and forcible depreciations, to the actual stagnation and disruption of the process of reproduction, and thus to a real falling off in reproduction. [Marx 1967; 3, p. 254]

Crotty interprets this aspect of Marx's crisis theory as an anticipation of the financial fragility theory of Hyman Minsky (Crotty 1985). According to Minsky, capitalist society comes to depend upon an increasingly intricate network of credit relations. During the boom, firms take on expanding financial obligations that they are unable to repay when the economy eventually cools off. In the face of a cycle, bankruptcy becomes contagious and the credit system collapses (Minsky 1975).

I believe that the relationship between financial fragility and fictitious capital in Marx's crisis theory might prove fruitful. At present, I shall leave that aside. Instead, I propose that the crisis can be understood in terms of the fictitious values, which accumulate during extended boom periods, and are subsequently shed in the course of the bust (Marx 1967; 3, p. 493). This shake-out "unsettle[s] all existing relations" (Marx 1967; 3, p. 516).

Of Marx's students only Paul Mattick seems to have taken up this point, and in this case, it came in an aside in which he mentioned:

Speculation may enhance crisis situations by permitting the fictitious over-valuation of capital, which cannot satisfy the profit claims bound up with it. [Mattick 1969, p. 24]

Yet Marx himself was relatively clear about his understanding of the effects of fictitious capital. He explained:

The periodical depreciation of existing capital disturbs the given conditions, within which the process of circulation and reproduction of capital takes place, and is therefore accompanied by sudden stoppages and crises in the production process. . . .

[D]efinite, presupposed price relations govern the process of reproduction, so that the latter is halted and thrown into confusion by a general drop in prices. This confusion and stagnation paralyses the function of money as a medium of payment, whose development is geared to the development of capital and is based on those presupposed price relations. [Ibid., pp. 249 and 254]

As a result:

Violent price fluctuations . . . cause interruptions, great collisions, even catastrophes in the process of reproduction. [Ibid., p. 117]

Crises serve a necessary function in a capitalist economy. As Marx noted:

Crisis is nothing but the forcible assertion of the unity of phases of the production process that have become independent of each other. [Marx 1963-1971; Pt. 2, p. 509]

At the time, Marx was discussing crises from the standpoint of capital in general. The disarticulation of the sort that I am discussing was not the issue. Rather, he was referring to the separation of the phases of circulation and production. The importance of the citation is its emphasis on crises as a means of producing a necessary rearticulation of capital. A few pages later, he suggested that his future research would indeed apply the same method to the contradictions between different capitals, much in the fashion that I am suggesting:

1. . . . In so far as the development of money as means of payment is linked with the development of credit and of excess credit the causes of the latter have to be examined, but this is not yet the place to do it.
2. In so far as crises arise from changes in prices and revolutions in prices, which do not coincide with changes in the values of commodities, they naturally cannot be investigated during the examination of capital in general, in which the prices of commodities are assumed to be identical with the values of commodities.
3. . . . [T]he separation, in time and space, of purchase and sale. . . . is never the cause of the crisis. For it is nothing more than the most general form of crisis, i.e., the crisis in its most generalized expression. [Ibid., p. 515]

Marx made a similar point about crises and the disarticulation of prices and values in Capital. He suggested:

This internal dependence and external independence push . . . capital to the point where the internal connection is violently restored through a crisis. . . .

[I]n capitalist society . . . social reason always asserts itself only post festum. [Marx 1967; 3, p. 304; and 1967; 2, p. 315]

The 'reason' to which Marx referred did not imply either a return to the status quo or a strict adherence to the law of value. Marx noted:

The crises are always but momentary solutions of the existing contradictions. They are violent interruptions which for a time restore the disturbed equilibrium. [Marx 1967; 3, p. 249; emphasis added]

In this sense, in the course of a crisis, prices would regain some correspondence with the underlying value system.

I have purposely altered the context of the above citation about reason asserting itself post festum. I did so to express what I consider to be an important aspect of Marx's theory of fictitious capital. In that section, where part of the citation originally appeared, Marx was referring to the connection between the movement of merchant capital and industrial capital. He was in the process of explaining why:

crises do not come to the surface, do not break out, in the retail business first, which deals with direct consumption, but in the spheres of the wholesale trade, and banking, which places the money-capital of society at the disposal of the former. [Marx 1967; 3, p. 304]

I have intentionally placed the citation in question in a context that suggests the inner connection to which Marx alluded is between prices and values. The basic principle, which I wished to express through the citation is unchanged by the altered context. In any case, credit sets the system free from the constraints imposed by underlying relations. Within the context of pure exchange, these relations are manifest in the demand by purchasers of commodities. Within the context of value analysis, the relevant relations are expressed in the amount of socially necessary labor required for the production of commodities.

My altered context is very much in the spirit of Marx's theory of fictitious capital, especially with respect to the crisis associated with the uncontrolled application of fictitious capital. This dimension of Marx's crises theory relates to the earlier discussion of the map of commodity networks in Chapter 5. Recall that the flow of commodities and the reciprocal flow of money represented roughly equal values at the level of abstraction of the first volume of Capital. The restriction maximized the informational content of the pricing mechanism in so far as it concerned the existing state of the economy, but it proved to be unduly restrictive.

Credit allowed for a more flexible organization of production, but credit cannot be disassociated from the creation of fictitious capital. As fictitious capital accumulates, the informational content of the pricing mechanism becomes incapable of providing sufficient guidance to coordinate the activities of the independent producers of commodities. Economic performance deteriorates until a crisis rectifies the excessive imbalances between prices and values.

Students of the collapse of the German economy during the 1930s independently came to an interpretation of crises that bore some similarity to Marx's (see Hudson 1985). For example, Schumpeter wrote, "The essence of what occurs in depression periods. . . is the fitting of the new organism of the economy, the elimination of what has ceased to be viable, and the re-organization of values and prices of the economy, a fumbling for a new equilibrium" (Schumpeter 1931, p. 419). Such crises are not an accidental feature of capitalism. The fetishism of the financial system (see *Ibid.*, p. 399) ensures that they will recur.

Crises and the Destruction of Fictitious Capital

Recall the various non-market forces, mentioned so far that intervene in the pricing system. The catalogue includes most of the phenomena, mentioned in the pre-marxian literature on fictitious values, ranging from fraud to credit. To this list, Marx added a most important contribution. Recall his supposition that business is able to maintain fictitious capital values by temporarily forestalling the devalorization of capital values, brought on by technological advances (Marx 1967; 3, p. 249).

Marx identified the contradiction associated with this particular form of fictitious values as a principal cause of crises (Ibid.). The accumulation of these values works to drag down the economy. By inflating the base on which profit is earned, the existence of these fictitious values reduces the rate of return, just as the anonymous author of the pamphlet, "The Source," had noted much earlier (Anon. 1821; see also Marx 1967; 3, p. 252). Moreover, analogous with the case of land values, a fall in the rate of profit will drive up fictitious values based on a constant expected absolute return (see Marx 1967; 3, p. 623).

In the course of a crisis, the elimination of fictitious values serves to increase the rate of profit, at least to the extent that fictitious values and the burden they place on firms are eliminated at a rate that exceeds the fall of prices in general (Marx 1967; 3, p. 254; see also Alberro and Persky 1981, p. 35). Such would likely be the case for those firms that had gone through bankruptcy. The clearing away of these fictitious values removes an important barrier to investment. Consequently, with their elimination, the economy strengthens and the cycle of accumulating fictitious capital begins again.

The destruction of this fictitious capital is closely bound up with the phenomenon of capital devalorization. Marx began such analysis in the final volume of Capital. There he identified:

the contradiction . . . that the capitalist mode of production involves a tendency towards the absolute development of the productive forces, regardless of the value and the surplus value it contains; . . . while, on the other hand, its aim is to preserve the value of the existing capital and promote its self-expansion . . . The specific feature about it is that it uses the existing value of capital as a means of increasing this value to the utmost. The methods by which it accomplishes this include the fall in the rate of profit, depreciation of existing capital, and the development of the productive forces of labour at the expense of already productive forces. [Marx 1967; 3, p. 249]

A few pages later, Marx asked:

How is this conflict settled and the conditions restored which correspond to the "sound" operation of capitalist production. . . ?

But the equilibrium would be restored under all circumstances by the withdrawal or even the destruction of more or less capital. [Ibid., p. 253]

What follows is especially significant. Marx continued:

This would extend partly to the material substance of capital. . . .

The main damage, and that of the most acute nature, would occur in respect to capital, and in so far as the latter possesses the characteristic of value it would occur in respect to the values of capitals. That portion of the

value of a capital which exists only in the form of claims on perspective shares of surplus-value, i.e., profit, in fact in the form of promissory notes on production in various forms, is immediately depreciated by the reduction on the receipts on which it is calculated. . . .

[Once the cycle runs its course], [p]art of the capital, depreciated by its functional stagnation, would recover its value. For the rest, the same vicious circle would be described once more under expanded conditions of production. [Marx 1967; iii, pp. 254-55]

Several comments are in order concerning this material. Firstly, Marx implicitly counts fictitious values as part of the value of capital. Admittedly, he did little to reconcile this approach with the more fundamental analysis of value as an effect of labor embodied. Secondly, Engels included this citation as part of the internal contradictions to the law of the tendency for the rate of profit to fall. Thus, the accumulation of fictitious values represents a significant drag on the rate of profit.

In this sense, Marx noted that once fictitious values collapse significantly in the course of a crisis, new business opportunities present themselves, even though the underlying productive structure remains unchanged. Referring to this process, Marx observed:

[The] destruction of capital through crises means the depreciation of values. . . . This is the ruinous effect of the fall in the prices of commodities. It does not cause the destruction of any use values. What one loses the other gains. . . . The old capitalists go bankrupt. If the value of the commodities from whose sale a capitalist reproduces 12,000 pounds, of which say 2,000 pounds were profit, and their price falls to 6,000 pounds, then the capitalist cannot meet his contacted obligations

In this way, 6,000 pounds have been destroyed. . . . A large part of the nominal capital of society . . . is once and for all destroyed, although this very destruction, since it does not affect the use-value, may very much expedite the new reproduction. [Marx 1963-71: Pt. II, p. 496; see also 1967; 3, pp. 104 and 114]

Marx found a similar thought many years before in A. Anderson's The Recent Commercial Distress or the Panic Analysed:

The difference between a nation and an individual [is that] a panic does the nation no real harm, except as far as they [sic] put a stop to the employment of labour. Individuals are sacrificed by the hundred; but the nation retains all its wealth. [Anderson 1847, p. 42; cited in Marx 1849-1851, p. 67]

After the crisis, lower wages, together with the 'universal depreciation of commodities', referred to above, work to the advantage of capital, even though individual capitalists may suffer business failure. For Marx, this depreciation of commodities "constitutes one of its [the capitalist mode of production's] beauties" (Marx 1967; 3, pp. 516).

In summary, crises have several positive effects for the functioning of the capitalist economy. Firstly, crises produce a closer articulation between prices and values, thereby strengthening the underlying production process. Secondly, crises create more favorable financial conditions by eliminating fictitious values. Consequently, the cost of capital is diminished. In addition, crises serve to replenish

the reserve army of the unemployed, thereby reducing economic demands made by labor.

The ebb and flow of fictitious values affect the overall economic structure in other important ways. Just as access to credit facilitated centralization of capital during the upswing, Marx observed that the resulting depreciation of paper capital "in times of crisis serves as a potent means of centralising fortunes" (Marx 1967; 3, p. 468). Thus, it will contribute to the further growth of those businesses that are most integrated with the credit system, adding to the instability of the economy. In the process, the more that instability is introduced into the economy, the more firms find themselves dependent on financial institutions (see Marx 1967; 2, p. 107). These same financial institutions serve to reflate the fictitious values. Consequently, expectations take an optimistic turn. Thus, the crisis serves to reinforce the very processes that set the crisis off in the first place.

In short, crises serve a dual function. These same crises, which produce so much immediate havoc, create the foundation for a new round of future accumulation, providing that the shock is not too great. Thus, so long as the system survives a crisis, it emerges with renewed vigor for several reasons.

On the Delayed Destruction of Fictitious Capital

Why should these crises recur? Business failures occur daily with only local effects. What could explain such a rash of bankruptcies that could set off a major liquidity crisis? In other words, assuming that fictitious capital can, in fact, affect prices, how could deviations of prices from values be allowed to become so extreme that they create tensions severe enough to set off a crisis? Marx's imagery, when touching on this subject, was often decidedly Schumpeterian, often harkening to the canal or railroad booms of the United States. This example was apt.

James Wilson, the chief theoretician of the Anti-Corn Law League, estimated in October 1845, that projectors were seeking Parliamentary approval for 1200 railroad projects for 10,000 miles of track, costing 300 million pounds. Despite the abandonment of numerous projects as a result of his warnings, 70 percent of total fixed capital formation in the United Kingdom went into railway construction in 1846-48 (Boot 1983). In retrospect, this commitment of resources into railway construction was clearly excessive, but it took the crisis of 1848 to bring this fact home to British investors.

What set off the crisis? Marx seems to have assumed that supply shocks, especially in raw material production, could initiate the panic (see Chapter 2). For example, Dornbusch and Frenkel attribute the panic of 1848 to a crop failure in 1847 (1984). So did Marx and Engels, but with an important difference. They associated the devastating impact of the agricultural crisis with the build-up of what Marx latter called fictitious capital. As a result of this conjuncture, "England was simultaneously experiencing an industrial crisis and an agricultural crisis" (see Marx and Engels 1850, p. 340).

The cotton crisis brought on by the Civil War in the United States that I discussed earlier provides another excellent example (see Ch. 2). Ironically, although this economic upheaval prompted Marx to integrate the role of scarcity into his analysis, some modern scholars now believe that the initial impetus for crisis

conformed to a more familiar version of Marx's theory of crises (Farnie 1979, pp. 142ff).

British cotton capacity had grown by 25 per cent. between 1856 and 1861. The story goes that the crisis was set off by a crop failure in India, which restricted the market for British textiles. Thus, if scarcity were actually responsible for setting off the crisis, it supposedly acted through the demand side, rather than the supply side.

According to this version, speculators, expecting a short conflict, initially kept prices in check by taking a short position. Only when British cotton brokers came to believe in 1863 that a prolonged war was possible, did speculators begin to hold large stocks of cotton at the British ports, thereby exacerbating the cotton famine (Farnie 1979, p. 143). One modern author has gone so far as to conclude that "the main effect [of the cotton famine] was that of inducing expectations of a future input shortage" (Brady 1963, p. 157). The price increases merely served to check the production, while the glut of textiles cleared (Ibid.).

Regardless of whether Marx's more credible version is accepted or not (see Ch. 2), the cotton famine, like other rapid increases in important raw material prices, served to "cause convulsions . . . through depreciation of capital" (Marx 1967; 3, p. 118). In effect, the Cotton Famine cleared away fictitious values, which had been built up in the cotton industry, so that prices could align themselves more closely with the underlying labor values.

In effect, the accumulation of fictitious values, together with the inelasticity of raw materials production, creates a significant drag on the rate of profit. When these two phenomena move too quickly they are especially liable to trigger a crisis.

Conclusion

In an economy without credit, where technology is static and expectations are stable, prices will be roughly in line with the underlying values. In a modern economy, the growth of fictitious capital creates a wedge between prices and values. The existence of these fictitious capitals imparts flexibility to the economy, but over time they become an impediment to the health of the economy.

The more fictitious capital distorts the price signals, important information about the economy disappears. Decisions about production become increasingly unrelated to the underlying economic structure. Pressures build up in the economy, but they are not visible to those who make decisions about production. Fictitious capitals retain values that would evaporate if participants in the market were fully aware of the future. These fictitious values drag down the calculated rate of profit. They also serve as collateral for a growing network of debt. In effect, the financial system becomes increasingly fragile.

Under such conditions, the economy is particularly vulnerable to shocks in natural resource production or demand shocks as was the case during the 1970s. Similarly, excessive capitalization in the industrial sphere can cause strong deflationary pressures on raw materials, as Itoh suggests happened in the United States during the 1920s (Itoh 1980, p. 145).

Demand shocks or some other event set off a crisis that clears away fictitious capitals and makes the price structure more coherent. Marx took his analysis no

further, but as it stands it represents an excellent vantage point to view our contemporary economy.

Marx's Method and Fictitious Capital

In fact, the attempt to circumvent crises only intensifies their force when they eventually make themselves felt. In Marx's words, written in a slightly different context:

Capitalist production seeks continually to overcome these imminent barriers, but overcomes them only by means which place these barriers in its way and on a more formidable scale. [Marx 1967: iii, p. 250]

Just as credit has a two-fold nature, both promoting and threatening the capitalist mode of production, crises have their contradictory aspects. The increased demand for money, results in unemployment and bankruptcies that temporarily paralyze capitalism.

Veblen and the Extension of Marx's Theory of Fictitious Capital

Recall Marx's statement that fictitious capital is created by capitalisation. In a narrow sense, that statement could mean nothing more than the calculation of a present value from a projected revenue stream. For a more pregnant description of this phenomenon, I would turn your attention to the work of Thorstein Veblen, writing at the turn of the century, only a few decades after Marx. Veblen was particularly well suited contribute to the marxian concept of fictitious value. Unlike Boehm-Bawerk (1949), who saw the distinction of prices and values as a flaw in Marx's analysis, Veblen recognized it as an important strength:

Marx's critics commonly identify the concept of "value" with that of "exchange value," and show that the theory of "value" does not square with that of the facts of price under the existing system of distribution, piously hoping thereby to have refuted the Marxian doctrine; whereas, of course, they have for the most part not touched it. . . . Marx's severest strictures on the iniquities of the capitalist system is that contained by the implication in his development of the manner in which the actual exchange value of goods systematically diverges from their real (labor-cost) value. [Veblen 1906, p. 422]

True, Veblen seems to have ignored the beneficial aspect of the deviations of prices from values, but his work was valuable nonetheless. A reading of Veblen is especially rewarding in addressing the question of the interaction

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