

Demystifying Financial Instruments

(draft)

Duston Moore

Introduction

The current crisis of the economic system of capitalism and perhaps capitalist ideology was decades in the making with a number of overlapping causes. I intend to highlight one of the prominent factors viz the role of synthetic financial instruments. I shall do so in rather simple terms for the crisis avoiding, as much as possible sophisticated technical terms. I do this because the crisis we face, as grave as it is, is also an opportunity for critical theorists and indeed anyone committed to social justice to make a point about capitalism and capitalist ideology with a clarity and efficacy that was previously impossible.

The rise of credit swaps and securities backed by mortgages has featured prominently as an element contributing to the current crisis. And I need to make the title of my paper clear. I do not intend to demystify these financial instruments. Rather, it is my contention that these financial instruments are obscenely transparent and they themselves will act as the instruments of demystification. The capitalist system has provided us with the vary means of exposing the rotten heart of the ideology. In terms of financial capitalism, there is nothing exceptional about these products. Certainly they are very sophisticated and elaborate in their creation. But at their core they are simply the intersection of the money circuit capital and the circuits of commodity and productive capital. These pieces of paper are created fictitious capital necessary to sustain financial capitalism and represent the hardcore reality of capitalism. The massive crisis that these

pieces of paper have created clearly exposes the vapid reality of financial capitalism and the fact that they are tied to home property values forces the question of the capitalist system into the homes of ordinary citizens. Further the crisis also raises questions about the legitimacy of the dominate economic methodology of the neoclassical synthesis.

Real income, savings, and debt

Without being too detailed, I shall list briefly a number of key economic indicators that will be useful to keep in mind when considering the demystification function of financial instruments within the current crisis. Real median income for male full-time workers has declined over the last 30 years despite increases in education levels (Hodges, 2009). Female income has slowly risen over this time although this may be explained by the gradual redress of historical inequality. The median family income grew 3.7% per year above inflation between 1947 and 1970. However after 1970 the real income compound growth of a family was 0.26% between 1970 and 2007 (Hodges, 2009). In short, despite the increase in two-income families as well as the increase in education and training of workers, the last 30 have seen an almost complete stagnation in real income.

One of the clear consequences of the stagnation in real income has been the dramatic fall in personal savings from around 8 to 10 % of disposable income in the late 1970's to almost 0% today. The most dramatic of these declines were in the 1990's (U. S. Department of Commerce, 2009). In addition to saving less, the amount of household debt also increased dramatically. For instance between 1946 and 1974 American household borrowing went from 7.2 billion to 55.6

billion almost an 8 fold increase in 28 years. Over the next 28 years, from 1975 to 2002 borrowing when from 56.9 billion to 830.8 billion, an almost 15 fold increase (Federal Reserve, 2009). This dramatic increase in the rate of household borrowing has been accompanied by a decrease in home owner equity. From almost 85 % in 1950, the rate of owner equity has fallen to near 45% in 2008 (Hodges, 2009). This figure is even lower if one excludes older people who own their home free and clear.

In terms of the creation of wealth however the picture is one of sustained increases. The productivity of the American worker has increased: from 1979 to 2007 the annual change in output per hour manufacturing was an increase of 3.9% (United States Department of Labor, 2009). The rate of increased productivity is one of the highest in the world and when considered how sustained this increase has been it can be said that for the past 30 years the American worker has been among the most productive if not the most productive on the planet.

The trend is clear and has been known for some time. Although real income has stagnated spending has maintained pace if not increase. This has come at the cost of home equity, increased indebtedness, and lower personal savings. A significant vehicle of this increased debt has been home equity. Since the early 1980's the financial industry has developed an increasingly complex array of asset based securities based upon home equity. This is the topic of the following section.

Financial Instruments

Over the past 30 years, lending institutions have added to the traditional home mortgage a number of different alternative mortgages aimed at different clients. Concurrent with this has

been the processing and selling of the income streams from these mortgages as asset based securities. The practice of such structured debt is intended to reduce the exposure of the holder of the debt as well as create an array of different debt products aimed at different clients with different risk tolerances. The process of structuring debt can be repeated several times, creating a different product with each re-structuring. The result frees up capital and allows for dramatic increases in profits.

Let us take a rather simple example of the creation of a CDO (collateralized debt obligation) created from home equity loans (HEL). A CDO is a generic term for an asset based security while a home equity loan has been an increasingly common way for homeowners to finance home improvement projects, college tuition, medical costs, and the like. The initial transaction involves an institution lending the homeowner a sum of money backed by the homeowner's equity. The popularity of HELs was in part motivated by the continual increase in the value of the house prices. Further, since the loan was backed by the home owners equity, a lower rate of interest was charged than an unsecured loan. The lending institution would then pool and divide these debts and into different tranches. Each tranche would have a different coupon value based upon the seniority of the tranche and the consequent risk involved. For example dividing the pool into three levels where holders of the senior coupon would receive a lower percent of the value but would be paid first while the mezzanine and subordinate levels coupon holders would receive higher rates of return but would be paid only after the level senior to them. The institution creating and selling the coupons would also take a certain percent for maintenance of the pool. The risk of default or prepayment would thus be mitigated because the coupon holders does not own any particular mortgages but rather a slice of the whole value of the pool. These coupons are asset based securities (ABS) whose value is based on their marginal

utility for the investor- the greater the investor risk the greater the potential return. What happens next is where the workings of financial capitalism become crystal clear. Out of these ABSs it is possible to create further CDOs. An institution could purchase a pool of mezzanine and subordinate coupons and divide this pool into a number of tranches. Just like the original HEL ABS, the most senior tranche would be paid first and so on down to the junior tranche. There are additional ways to protect the investors when the pool is comprised of loans of lower quality such as overcollateralization where the pool is sold for a value less than the value of the original coupons. Or excess spread where the interest rate of the new CDOs is lower than that of the pooled ABS. Both these strategies are intended to protect investors against default and prepayment. What is of primary importance in terms of the current financial crises is that the senior tranches of these CDOs were rated as AAA even though the underlying assets of which they were composed were, when initially securitized, considered less than AAA. The reasoning for this was that the pooled ABSs that went into making the new CDOs were of such a diverse nature (geographically and demographically) that default risks were minimized. This plus overcollateralization or excess spread would protect the investors and thus earned these CDOs AAA ratings. And of course the price of houses never goes down.

There are many more and rather exotic sounding products that can be created using the same principles of credit tranching and payment tranching. Debt can be restructured many times over, for example splitting the coupon into interest only and principle only coupons, sequential tranching, parallel tranching, Z bonds, schedule bonds and so forth. While the division of pools into these various products becomes highly sophisticated, the underlying reasoning remains the same. The initial pool of assets is repackaged in such a way as to create new products that appeal to a wide range of investor clients.

The problem of building new derivatives out of previous derivatives is that in this way a small percentage default on home equity loans could translate into huge losses for the holders of CDOs. Because of the AAA rating that these CDOs held, these losses affect not only high risk speculators but institutional investors such as pension funds.

Two significant presuppositions about the value of these products must be noted. The first has since August 2007 become painfully obvious and that is the assumption that house prices would continue to rise indefinitely, or at least not fall significantly. House prices have fallen and the dramatic rise in defaults has led vast amount of these financial instruments to become 'toxic'. The second assumption involved is more subtle and involves the methodology of value calculation. The increase in complex synthetic financial instruments such CDOs has been made possible through the general acceptance and refinement of an economic analysis wherein value has no intrinsic existence. Rather the neoclassical synthesis that dominates contemporary economics bases value upon the subjective appraisals of the consumers. The value of each of these pieces of paper can only be considered as arising out of the desire on the part of the investor. The assets that supposedly back the CDO are themselves several times removed and divided from the CDO itself. Indeed the value of such a financial instrument makes sense only within the neoclassical framework of marginal value wherein the demand for these CDO was the cause of their value. This demonstrates one of the most the salient questions of the current crisis and that is the question of value.

A Question of Value

One of the enabling factors that facilitated and sustained the creation and trade of fictitious capital was the hegemony of neoclassical economic theory. The contemporary neoclassical synthesis is a direct decedent of the marginalist schools of the early 20th century. The marginalists argued that analysis should start with “the mental relation between the individual and the finished goods, rather than the social relation between men and men in the production of commodities” (Meek, 1956, p. 249). The idea that there is an intrinsic value in a commodity is disposed of and replaced with the analyses of costs and benefits that turn upon the psychology of the consumer.

A nexus of factors motivated the marginalist approach. First was that by appealing to the subjective dispositions of the consumer the marginalist approach could answer Adam Smith’s water diamond paradox.¹ Second, the marginalist approach takes as its point of departure inequality between humans. To what extent the early marginalists were reacting to Marx is much debated but I tend to agree with Mattick: “The marginal utility school arose in defense of capitalism, and its apology consisted in the construction of a value concept which justified the prevailing class and income differentiations. The existing inequalities based on the exploitation of labor were explained as an undefeatable natural law of diminishing utility” (Mattick).

Third and perhaps even more incedious, the marginalist approach lead to ever increasing claims of the superiority formalisation. The neoclassical synthesis of contemporary economics represents a widely accepted consensus and has proven exceptionally powerful in terms of formalized expressions. The mathematical elegance the marginalist revolution opened up seems

¹ Why are diamonds that are useless ornamentation (in Smith’s day) valued more than water which is necessary for life?

to have become a virtue in itself. As economics, the so called dismal science attempted to become more analytically rigorous, the attempts of classical economic theories were viewed as crude pre-scientific efforts that were difficult if not impossible to adequately formalise. For example the fact that classical economics required “‘separate’ accounts of rent, wages, and profits has been widely held to be evidence of their ‘unscientific’ character (Meek, 1956, p. 255). The marginalist revolution in economics thus changed the very character of economics itself. Economic theory was to be ‘valueless’, purely descriptive with no ethical and minimal philosophical content. Such a ‘naturalist scientific’ view devoid of any moral ground and without any intrinsic value lends itself to formal modelling. And as the 20th century advanced the preeminence of economic within the social sciences and the power of formal modelling spread to other social sciences and humanities disciplines. In doing so the very nature of the disciplines were transformed. The relevance of questions was sacrificed for purity of method. Alternatives were institutionally excluded to the point where the neoclassical synthesis achieved an almost total and unquestioned authority. In the process mainstream economics has become a tool for the advancement of capitalist ideology rather than the critical study of economic activity.

As has become evident, the pieces of paper, these CDOs, have a very curious value. How is it possible that so many financial institutions became so involved with what is now so clearly worthless fictitious capital? The answer I wish to suggest is not criminal intent, negligence, or anything so simple. Rather, the CDOs are simply the necessary result of the workings of capitalism. For these pieces of paper were nothing fundamentally new, capitalists have been buying and selling debts for decades. Indeed the capitalist system requires the creation and movement of this fictitious capital otherwise capital gets tied down (say in a 30 year mortgage).

What is unique about the current 'toxic debts' is the degree to which they make transparent, that is demystify, to one and all the vacuous and non-productive nature of financial capitalism.

Intrinsic Value

The collapse in value of the pieces of paper also represents a collapse in the assumed authority of the neoclassical theorists. The demystification of the neoclassical assumptions are on display for all to see with these synthetic financial instruments. What is called for is a re-evaluation of our theory of value.

Marx takes it as a central analytic element of his economic critique that there is an intrinsic value in the things produced. Capitalism as a value producing system makes sense only when one considers there to be a 'third element' independent of the exchange value shared between the commodities exchanged (Kliman, 2000, p.99). There is a distinction made between the form and the content of the exchange value. The worker is paid in money, a form that has the appearance of the value being exchanged. But in point of fact the labour that is being exchanged is not equivalent to the form of the exchange value. There is a surplus-value to labour the contents of which are distinct from the exchange value at which and through which it is traded. Value is thus for Marx both labour itself and determined by labour. It is the third element common to traded commodities that allows for exchange. It becomes attached to objects through fetishism and reification until at last something like gold becomes understood as the embodiment value. As Pomeroy writes: "Therefore, the common substance of the commodities is sought: socially necessary labor time" (Pomeroy, 2004, p. 95).

One problem in understanding Marx is that the depths and subtlety of his analyses can be overlooked. The philosophical and ethical considerations of humans as a species being and the intrinsic value of their efforts can be overlooked especially if one is reading Marx as if he were like contemporary economists that is devoid of a metaphysics. However Marx was not trying to be a metaphysically neutral scientist and his economic analysis contains many metaphysically and ethically charged elements most significantly the presupposition that all humans beings are creators of value. This presupposition drives his critique of capitalism as an ideology of exploitation. Within the ever complex circuits that develop in capitalism, the flow of individuals' creativity is channeled from the workers to the capitalists. The value that is created is therefore created by the workers. A feedback like loop emerges wherein the workers can only meet their subsistence needs by being employed and must therefore sell their labour to the capitalists. Now labour certainly is not unique to capitalism; pre-capitalist economic systems saw labour being put into products that in turn were traded or sold. What capitalism does is delineate the field wherein labour has value thus the efforts of the workers are not simply embodied labour. "Instead of being 'embodied', abstract labour must have socially 'congealed' as value" (Brown, 2008, p. 138). The raw creativity of the individual is sold to the capitalist; labour becomes a commodity exchanged for an objective value which is determined to be the value necessary for the workers' subsistence. Yet the creative and original power of the individual is of a different order than the mere value of a day's subsistence. Each individual bring with them the capacity for novelty. This capacity is ontologically distinct from the raw materials of production and it is the human capacity for creative novelty, ingenuity, and adaptation that adds value to the materials. It is the creativity of human labour that accounts for surplus-value and lies at the heart of capitalism. The ethical claim of this position concerning labour is significant. "The essential

dignity of the creative being of each and every human being, existentially violated on a daily basis, produces the totality of capitalism as irrational at best, tragic, most certainly, and not, as some would have it, amoral but clearly, decidedly, and most incontrovertibly immoral” (Pomeroy, 2004, p. 105). There is within Marx’s labour theory of labour a profound ethical dimension a dimension that was threatening to capitalists not simply because of the support that Marx gave the workers but because his real analysis of the intrinsic value of commodities gave strong theoretical support to the claim for redress of social and economic injustices.

The contrast between Marx and the supposedly ethically neutral marginalist or neoclassical approach could not be clearer. As the early 20th century Marxist Rudolf Hilferding writes concerning the marginalists theory of value: “Very different is Marx's outlook. In his view, that goods contain labor is one of their intrinsic qualities; that they are exchangeable is a distinct quality, one solely dependent on the will of the possessor, and one which presupposes that they are owned and alienable” (Rudolf Hilferding: Böhm-Bawerk's Criticism of Marx Chapter Three THE SUBJECTIVIST OUTLOOK). And again quoting Hilferding on the difference between Marx and the marginalist analysis “What he sees in exchange is not a difference of individual estimates, but the equation of a historically determined relationship of production. Only in this relationship of production, as the symbol, as the material expression, of personal relationships, as the bearer of social labor, does the good become a commodity; and only as the expression of derivative relationships of production can things which are not the products of labor assume the character of commodities” (Hilferding, Rudolf trans. Eden and Cedar Paul, 2000).

What would Marx make of the so called toxic assets that have triggered the world financial crisis? The value created by the worker is real. Due to the workers' lack of capital they are required to borrow against their future labour. The exchange value of their future labour equals, for the worker, the use-value of the home even though considering the interest accrued this value is far greater than the sale price. For the money lender however, the simple interest derived from the worker repaying the loan is not enough and the game of fictitious capital transactions begins ostensibly to maintain liquidity and thus create more wealth but in reality what wealth is created comes from the workers' labour. The buying and selling of debt simply distributes this value amongst the financial capitalists. Again quoting Hilferding: "Profit originates in production and is equivalent to the surplus value incorporated in the surplus product of the worker, which has cost the capitalist class nothing. Varying degrees of risk, or to put it another way, varying degrees of certainty that the profit which originates in production will actually be realized in circulation, can only bring about variations in the distribution of profit" (Hilferding, 1981, 157). In other words, all the machinations of the capital markets add no value rather the surplus value of the worker is distributed amongst the capitalists. In August 2007 the value of the CDOs became suspect and the financial markets realised that the nature of the game was up. This multibillion dollar sector of the economy that dwarfs all others is built on mirrors and shadows. There is nothing to it for, as a labour theory of value makes perfectly clear, there is no productivity in trading fictitious capital.

Pieces of paper are used to trade against different pieces of paper- the whole exercise continues to make money for those who speculate successfully.

Marx saw the inherent danger in capitalism and addresses this very question in *Capital 3*. As was noted earlier, the buying, selling, and speculating on debt is nothing new it is a fixture of capitalism that allows for capital flexibility. These pieces of paper, nothing more than fictitious negative quantity that appears as capital and, according to Marx “is the fountainhead of all manner of insane forms, so that debts, for instance, can appear to the banker as commodities...Just as everything in this credit system is doubled and trebled and transformed into a mere phantom of the imagination” (*Capital 3* ch 29). The whole edifice is created out of manipulation and speculation- no value is added except for what the workers creates and passes on in payments. And it is this system that has for the past 30 years siphoned off the creativity of workers in the form of debt and it is this system that has been at last exposed for the fraud that it is- not by any academic treatise or polemic but through their own deeds and by the magnitude and sheer audacity of the fraud that has been perpetuated.

Conclusion

Let us return to the initial consideration of the financial situation of the average American worker. The flat rate of real income, the increased borrowing, the decreased home equity coupled with the increased productivity was well documented long before August 2007. What the synthetic financial instruments have done is to call into question on a large popular scale, the very premises of the economic policies that have been at work for the last 30 years. This is because they are so obscenely valueless that the production-less absconding of wealth by the financial

industry has been exposed. But it is also because these synthetic financial instruments also directly touch upon an area where most Americans would agree with Marx against the neoclassical theorists and that is the intrinsic value of their homes.

Americans have perhaps a unique relationship with their house. As a republic founded with property rights as paramount, the United States of America grew in the 20th century to regard homeownership as a central element in their democracy. There is a long tradition of government involvement in promoting homeownership. Founded in 1938 as a part of Roosevelt's New Deal, Fannie Mae was a government-sponsored enterprise that bought and securitized mortgages. No doubt this had a number of purposes: primarily to insure that lenders had the necessary liquidity. But it certainly was an opportunity to expand property ownership. Workers who have a mortgage may be less likely to strike and further the very act of becoming a property owner enmeshed the working class in the financial capitalist system. Even today the American government effectively subsidizes home ownership through tax incentives.² This homeownership culture has congealed a sense of value in the home not simply as a mere commodity and primary investment but as the place where people live and create themselves. When the market for securitized mortgage assets evaporated so did a substantial amount of the value of the American home. along with existential commitment of Americans to their home is a significant source of possible potential discontent. While the marginalist games that have characterized the financial industry have been tolerated, never have these schemes endangered the value of the American home. The current economic crisis has changed this. Americans have seen the value of the homes dramatically fall. Hard working families who followed all the rules,

² This has contributed to urban sprawl and the decay of the inner cities which other governmental agencies have spent the last decades trying to prevent.

and were told it was financially prudent to take out a home equity loan to finance their children's education now find themselves owning more than their house is worth. These people are still making payments and are waiting in the hope that the housing market somehow recovers.

The current crisis presents critical theory with opportunities and obligations. Because the neoclassical theories are devoid of any intrinsic value which is plainly at odds with how most Americans understand their own property value, there is an opportunity to call into question the legitimacy of neoclassical economic theory as regards the notion of value. Moreover, the very motivation and methodology of neoclassical economic theory is thus open to a sustained critique. The economic data with which this paper began tells a tale of an increasingly productive population that is increasingly in debt. In the current crisis, this trend has come to a head. It is ridiculous to suppose that the neoclassical theory of value, the facilitator of this crisis, has the tools to be able to redress the problems. If there is one thing that these financial instruments can do is to demystify the current theories of value as being a sham and a fraud. Despite the bleak nature of the situation we are not without resources. In the words of Özel "The labour theory contains the ethical and ontological tools that could demystify the workings of marginal capitalism and display the corruption of the creative transformative power of human into simple exchange-value" (Özel, 2008, p. 448). To this end I can think of no better tool than the CDOs and other synthetic financial instruments.