



# Rethinking Financial Capitalism and the “Information” Economy

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## Abstract

This talk examines the popular idea that “economic growth” can continue indefinitely in post-industrial capitalist economies through the shift of labor to “service” sectors, particularly finance and information-based activities, in the light of the classical-Marxian theory of value and the related categories of productive and unproductive labor. As the generally accepted classical theory of land rent exemplifies, many types of income in capitalist economies, including interest, financial fees, speculative trading profits, and intellectual property royalties, arise as parts of the surplus value generated by the exploitation of productive labor appropriated through the assertion of various property rights. The dramatic phenomena of highly profitable “business models” based on network externalities associated with the internet and other information-based technologies do not represent new modes of value production, but modes (in some cases not particularly new) of participation in the pool of surplus value. National income accounting conventions that impute a fictitious output as a counterpart to incomes generated in sectors such as finance, professional and business services, education and health, and government, where there are no market-based measures of output create a distorted and misleading picture of value production and growth in advanced capitalist economies. A clear understanding of the origin of value in the expenditure of productive labor and of surplus value in the exploitation of productive labor is essential to thinking through the problems of post-industrial capitalist growth, distribution, resource conservation, and environmental protection.

It is not so hard to believe in the labor theory of value. What is hard is to figure out what you believe when you believe in the labor theory of value.

–David Levine<sup>1</sup>

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\*I’d like to thank Vela Velupillai, Barkley Rosser, and the attendees at the session for helpful comments.

<sup>1</sup>I remember David Levine making this remark, and have repeated it from time to time over the years. Levine, in response to my recent inquiry, says that he does not think he put this in any publication.

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## I. The “new” economy

As the rich capitalist nations of the world de-industrialize in the context of globalization and enter a “post-industrial” phase, it occurs to many people (for example, Herman Daly 2008) to ask just how societies can maintain high real incomes without producing much, or perhaps anything at all, in the way of material goods and services. These questions are all the more poignant in the wake of an extended period (25 years or more) in which wages have stagnated despite continuing statistically measured increases in labor productivity, and the personal and household distributions of income and wealth have become dramatically more unequal.

Conventional economics sees these trends through the lenses of “Engel curves,” which plot the share of spending on various categories of goods and services as functions of real income. These relationships show that households spend a growing proportion of their incomes on services as incomes rise. From this point of view de-industrialization is a predictable and understandable consequence of rising material standards of living. As people become richer, their priorities shift from meeting primarily material needs for food, clothing, and shelter, to meeting less pressing and perhaps deferred needs for education, health care, improvement of the quality of life through psychological counseling, travel, and cultivation of avocations, higher levels of public order, and help with legal and financial problems. Economics is predisposed to see any “voluntary” monetary transaction as the sign of the production of some kind of real output, either a material good or measurable service, or, as the National Income and Product Accounts (NIPA) treat an increasing proportion of transactions, as an “imputed” output.

There are other ways of reading this pattern of social change. Education, for example, has become more expensive and less effective in part because of the breakdown of family and community institutions that the growth of the capitalist commodity production system systematically promotes. Capitalist production creates health problems through environmental degradation and increased stresses and dangers of production environments. It is not clear that there is any inherent human need for legal or financial services, which seem rather to be needs produced by the social relations of capitalism itself.

Furthermore, we live in an epoch where human population and economic production have reached a scale that is significant in relation to our finite planet’s resources, environment, and capacity to sustain human life. Industrial capitalism of the steam, railroad, electrical, and automobile ages thrived on cheap but non-renewable resources like fossil fuel energy. Continuation of this paradigm of economic growth is, to put it mildly, problematic.

In this context a vision of a “new economy” based on services that use small amounts of material resources, can grow indefinitely due to economies of scale, and generate high incomes to skills and knowledge, offers a welcome utopian escape valve. The transition to such an economy, first of all, does not seem to require revolutionary changes in the social relations of capitalism, since the service economy is firmly based on property rights, market exchange, and competition. If capitalism is indeed headed in the new economy direction, many of the contradictions that might seem to threaten it will be moderated or eliminated. Indefinite growth of real per capita incomes in line with the patterns of the industrial capitalist age might continue without limits in a new information-based service economy without encountering significant resource or environmental limitations, ratifying the exponential growth paths of innumerable neoclassical growth models.

In this talk I will consider some of the key elements of the “new economy” vision from the rather old-fashioned (as Sraffa [1960] says, “submerged and forgotten”) perspective of classical political economy, particularly Marx’s theories of value, surplus value, and productive and unproductive labor.<sup>2</sup> This approach calls into question some of the more Pollyanna-ish (if not Pangloss-ish) promises of the “new economy.” Services are, after all, provided by people, who

<sup>2</sup>See Wolff (1987); Moseley (1983, 1988); Shaikh and Tonak (1994); Mohun (1996) on the significance of unproductive labor in the U.S. economy.

do need to eat, clothe, and house themselves, move themselves from place to place, and generally consume indubitably material goods and services that require usable energy and other scarce material resources to produce. The direct energy demands of information services, for example, are far from negligible.

The advocates of the “new economy” model fail to appreciate the distinctions fundamental to classical and Marxian political economy between value creation, surplus value generation, and surplus value appropriation. The glamorous successes of the information economy are best understood as innovative (though in many cases based on old and familiar economic phenomena) modes of surplus value appropriation, not novel methods of value creation. From a classical-Marxist perspective post-industrial capitalist society still faces the old dilemmas of resource scarcity, environmental limitations, and the unequal distribution of the fruits of human labor.

## 2. Value, surplus value, profit, and all that

The seemingly inexorable tendency of neoclassical economics to monopolize economics education has reduced the number of economically-educated people who have more than the vaguest and most cartoonish grasp of the ideas of classical political economy in Smith, Ricardo, and Malthus, and Marx’s elaboration and critique of those concepts. At the risk of caricaturing these subtle and powerful notions in an excessively brief summary, let me review the main points relevant to the topics of this talk (see Foley 1986).

Classical political economy regarded the expenditure of productive labor in the production of material goods and services as the source of the value of commodities expressed in money prices. Thus the total value added in, say, the world economy in a given year, is the monetary expression of the expenditure of productive labor time in that year. Given the “monetary expression of labor time,” the ratio of value-added to productive labor time, an increase in the value added, or value of net product, can arise only through an increase in productive labor time. (Since productive labor takes diverse concrete forms, differing in qualitative activity and skills, it is necessary to reduce these various forms to a single index of productive labor input. I will assume this reduction in the rest of this discussion.)

Much productive labor on a world scale is expended either in domestic production, where the output does not take the form of a commodity destined for the market, or in petty commodity production, in which the direct producers own their own means of production and appropriate the entire value of their product. But a very important part of the productive labor in the world economy takes the form of wage labor, hired by a capitalist owner of means of production for a limited period. Marx argued that what the wage worker actually sells to the capitalist is labor-power, the potential to do productive work; the value wage workers add to the means of production used up in production by expending labor typically exceeds the wage, which is the money price of labor-power. As a result a surplus value (in capitalist accounting terms gross profit on goods sold) is generated in wage labor production. The magnitude of this surplus value depends on the difference between the money wage and the value labor produces on average, the monetary expression of labor time.

We can see the generation of surplus value qualitatively in almost all capitalist production (the exception being the rare capitalist enterprises that fail to produce enough value added to cover their wage bill). Marx notes, however, the crucially important point that because competitively-determined prices of commodities may deviate from proportionality to the commodities’ productive labor content, surplus value is not necessarily realized in the productive enterprises in which it is generated. The obsessive concern of economists with the quantitative aspects of Marx’s sketchy treatment of the “transformation problem” has had the unfortunate consequence of obscuring the much more important qualitative point that capitalist exploitation generates a pool of surplus value for which each capitalist competes through some kind of business plan or market

position. In fact, it is not even necessary to be a capitalist in order to compete for a share of this pool of surplus value. As the widely accepted (both in Marx's time and our own) classical political economy theory of rent illustrates, enforceable property rights that permit the owner of productive resources (often called "land" in the terminology of classical political economy) to exclude capitalists from access to those resources create "rents." These rents are a part of the pool of surplus value generated in capitalist production, though they have no direct relation to the exploitation of productive labor in themselves. The owner of land resources such as fertile fields, waterfalls, mineral and hydrocarbon reserves, and the like, need not lift a finger or hire anyone else to lift a finger productively in order to share in the surplus value generated by productive wage labor.

This analysis of the pool of surplus value and its distribution through competition and bargaining has a further, less often remarked, implication. The contribution of even the largest capitalist enterprises to the whole world pool of surplus value is negligible. The direct contribution any particular capitalist enterprise makes to the pool of surplus value by raising the productivity or depressing the wages of its particular productive workers is dwarfed by the magnitude of the world pool of surplus value for which that enterprise is competing. An enterprise that manages to over-exploit its workers is profitable not because it increases the whole pool of surplus value, but because it can divert a larger share of the pool of surplus value to itself through lowering its costs of production relative to the competitively determined market price of its products. This is one time-honored method of increasing profitability, but, as in the case of the resource-owning rent recipient, it is by no means the only, or perhaps even the typical, method of appropriating surplus value.<sup>3</sup>

As this example makes clear, paradoxically capitalist exploitation is what economists call an *externality* from the point of view of capitalists as a class. (Marx says that competition functions only to impose the logic of the mode of production on the individual producers. Many commentators have taken this remark as a critique of competition as a determining factor in market equilibrium, but it also underlines the point that each capitalist is in effect a free-rider on the whole system of generation of surplus value.) One way to appropriate surplus value is to exploit productive wage workers by lowering costs through raising their productivity or depressing their wages, but this is far from the only way.<sup>4</sup> The actual exploitation of productive wage workers is important because it is the mode of appropriation of surplus value that contributes indirectly to the global pool of surplus value. There are many other modes of appropriation of surplus value, such as monopolization of sectors of the market; marketing and advertising; establishment of intellectual property rights through patents, copyrights, and trademarks; ownership of scarce energy or other natural resources; superior cleverness in arranging financial transactions or structuring financial property rights; and controlling medical treatment.

Smith and Ricardo were aware (as are modern economists who struggle to establish a consistent distinction between "rent-seeking" and "production") of this issue, and tried to address it by

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<sup>3</sup>Apparently as the result of cultural and historical factors pre-revolutionary Russian society never gave birth to an indigenous bourgeoisie capable of exploiting Russian workers. The czarist regime's resort to farming this function out to foreign, particularly French, German, and British, capitalists destabilized the Russian empire and contributed to the Europe-wide crisis of the First World War. The Soviet system found a distorted and grotesque substitute for capitalist exploitation based on the ideology of socialist development and communist monopoly of political power. With the collapse of the Soviet system, the pre-revolutionary weakness of the Russian bourgeoisie has reasserted itself. Russia does not contribute much to the world pool of surplus value, but is able to appropriate a substantial share of it through resource and energy rents.

<sup>4</sup>As Marx is at pains to point out in his discussion of absolute and relative surplus value, raising the productivity of labor, though it may increase social standards of living, increases the pool of surplus value only to the degree that it cheapens workers' subsistence, and thus holds down wages.

making a distinction between “productive” and “unproductive” labor. Smith (1937: book II, ch. 3), however, did as much to muddy these waters as to clarify them in two ways. First, he introduced the basically irrelevant question of whether productive labor is embodied in a “tangible, vendible commodity” or a perishable “service.” Clearly this has no bearing on whether or not productive labor contributes to the pool of surplus value. Second, Smith’s examples of unproductive labor centered on domestic service (not surprisingly, given the social milieu of eighteenth century British society in which he operated), the employment of maids, footmen, grooms, butlers, housekeepers, gardeners, and so forth to maintain the splendid country estates of the landed gentry. These are certainly examples of unproductive labor maintained out of the pool of surplus value, but they are rather idiosyncratic in having a very indirect relation to the appropriation of surplus value itself. The rising capitalist (perhaps before amassing enough wealth to buy a country estate) also employs bookkeepers, salespeople, security guards, foremen, personnel departments, and so forth precisely in order to compete effectively for a share of the pool of surplus value. Particularly from the point of view of our contemporary capitalist economy, these examples of unproductive labor are much more to the point.

Marx (1971: part I, ch. 4) saw both the importance of the distinction between productive labor and unproductive labor, and the shortcomings of Smith’s attempt to explain it. He unfortunately framed his basically correct critique and correction of Smith’s definition in what now appears to be a somewhat back-handed way. Marx makes the distinction that productive labor exchanges against capital, while unproductive labor exchanges against revenue. (I. I. Rubin 1972 makes the further necessary qualification that productive labor is wage labor that exchanges against capital and is employed in the productive phase of the circuit of capital rather than in the realization or financial phases. This qualification is crucial because many financial, advertising, accounting, legal, and similar activities are organized formally as for-profit capitalist enterprises, and thus are easily confused with instances of genuinely productive labor.) This is a somewhat indirect way of making the point that the expenditure of productive labor contributes to the pool of surplus value as a whole, while unproductive labor does not.

To sum up, the global pool of surplus value emerges from the social relations of capitalism as an unintended by-product of the competition to appropriate surplus value. Its magnitude is an emergent and contingent phenomenon beyond the influence of any individual capitalist, responsive only to broad political, cultural, and social factors. The immediate competitive challenge for all capitals is the appropriation of a larger share of this pool of surplus value. Some modes of appropriation indirectly contribute to increasing the size of the pool of surplus value, but many, including a wide variety of methods of generating rents, do not. There are some self-correcting mechanisms built into the social relations of capitalism, and these are relevant to the main topics of this talk. If, for example, capitalists relentlessly shift capital from the generation of surplus value to the unproductive pursuit of the appropriation of surplus value, sooner or later profit rates in productive sectors will rise and profit rates in unproductive sectors will fall, according to the general law of competition.

### 3. Finance

The period of globalization has seen very rapid growth in financial assets and liabilities, as well as in financial sector incomes (though not so much in financial sector employment: see Basu and Foley 2011). Financial sector incomes are distributed very unequally, which has contributed to the “99%–1%” split in measured gains to total incomes in the advanced capitalist countries, where recent increases in national income have benefitted primarily the very top of the income distribution. Thus an understanding of the origins and significance of dramatic income growth in the financial sector is an important political economic issue. What does the

Marxian analysis based on the theory of surplus value described here have to say about these questions?

Marx (1981: part VI) discusses various aspects of the financial system and its participation in the pool of surplus value. The most straightforward situation arises when a financial capitalist lends money to an industrial capitalist to participate in the latter's circuit of capital in exchange for part of the surplus value the industrial capitalist hopes to appropriate. This transaction is transparent: the industrial capitalist can use the borrowed money capital to finance productive transactions that he anticipates will yield surplus value, and the financial capitalist will not lend the money without some recompense in the form of a part of the surplus value from the productive circuit of capital. Marx, in a brilliant passage that illuminates many aspects of his way of thinking of social phenomena, explains how competition among lenders and borrowers establishes a uniform interest rate for loans of a given risk and maturity, and erases any trace of dependence of the return on loans on the actual profitability of the borrower's activity. Marx is at considerable pains to emphasize that, in contrast to the "natural prices" or "prices of production" of produced commodities, which have a determination based in the available techniques of production, there is no general theoretical determination of the rate of interest, which varies with the business cycle, the availability of money capital, and other factors. This uniform interest rate, in turn, as Marx explains, leads to the phenomenon of the capitalization of flows of revenue such as parts of state tax revenue paid as interest on state debt, as "fictitious capital." One important conclusion from this analysis is the need to distinguish actual money capitals participating in the productive circuit of capital from the whole mass of financial assets and liabilities in measuring, for example, the rate of profit.

If we are interested in the profit rate in the social circuit of capital, it does not make sense to count the money capital loan twice, once as part of the financial capitalist's circuit of money capital, and again as part of the industrial capitalist's circuit of productive capital. It also does not make sense to count the interest twice, once as part of the surplus value appropriated by the industrial capitalist and once as a surplus value appropriated through the purely financial transactions of the financial capitalist. National income and flow of funds accounts recognize these points in distinguishing net interest and allowing for the calculation of the net financial position of productive capitals. From this Marxist point of view the appropriate way to account for financial incomes is as transfers from the surplus value appropriated from the pool of surplus value by particular capitalist firms.

This is not, however, how the national income accounts treat incomes arising in the financial sector. The complication is that frequently the "financial capitalist" is a bank or insurance company or other financial intermediary, which is lending funds that it has itself borrowed from households, productive capital firms, or other financial intermediaries. This process, which Marx describes, has the effect of economizing on money capital across the whole social circuit of capital, because finance allows the same money capital to function simultaneously in different circuits of capital. Rather than holding its reserves of money capital in gold coins or cash, a productive capitalist firm can deposit them in a bank. Following the well-known statistical principles underlying fractional-reserve banking, the bank can reliably meet the demands of the depositing firm to use the deposits in its circuit of capital by keeping only a small fractional reserve of coins or cash (or deposits at the central bank), and lending the rest to other industrial capitalists who are in need of financial capital. As a result the net money capital of a closed social circuit of capital takes the form of the liability position of the central bank. In this way quite small amounts of capital tied up in the money form of value can finance enormous volumes of financial and real transactions. (If the circuit of capital is open internationally, the net short-term liability

position of the system with respect to the “rest of the world” is also part of the net money capital.)<sup>5</sup>

The problem financial institutions pose for national income accounting is that the financial institutions on the whole pay a lower interest rate to depositors than they receive on loans, the difference constituting a major part of their income. National income accounting practice has evolved away from treating these interest flows as transfers (in which some of the surplus value sticks to the hands of the financial sector). If the net interest of financial transactions were treated as transfers, the incomes in the form of salaries and profits of the workers and owners of financial institutions would represent a cost with no offsetting sales income, and the value added by financial institutions would be negative. (This is in fact in line with the Marxian treatment of interest payments as transfers of surplus value.) National income accounting, to avoid the embarrassment of representing finance, a major sector of the economy, as producing negative national income and output, evolved the practice of “imputing” an output to financial activities whose value offsets the incomes arising in the sector. Thus as financial incomes rise, national income accounting measures of output like real GDP rises, too. In the period of globalization much of the measured increase in real output in the advanced capitalist countries has taken this form. If national income accounting conformed to the Marxist analysis of these transactions as transfers, growth rates of real GDP in the advanced capitalist countries would have been significantly lower (see Foley 2010).

It is possible to understand the reasons why financial institutions have been able to appropriate a larger share of the pool of global surplus value in recent decades. Financial intermediation functions by creating an asset (such as a demand deposit) with one set of properties (such as high liquidity) on the basis of liabilities (such as business or household loans) with a different set of properties (such as much lower liquidity). The inherent contradictions of these positions come to light only sporadically, typically in the context of financial crises. Long experience with the instability of *laissez-faire* policies in respect to banks has led to the establishment of state financial regulation of banking and related financial activities in advanced capitalist economies. Regulations limiting the promises (or positions) financial intermediaries can take inevitably reduce their incomes. One important factor in the growth of financial incomes in the globalizing period has been deregulation of financial intermediaries, and the consequent and predictable expansion of riskier but more profitable positions. Another major source of financial incomes is brokerage fees. These arise, like the broker’s fees in buying and selling houses in the U.S. real estate market, from situations in which the holder of an asset values it subjectively less than some other agent. The realization of an “economic surplus” in the neoclassical sense is latent in these situations through the sale of the asset at a price somewhere between the two parties’ valuations. A frequent example is an “initial public offering” in which the owners of a promising capitalist enterprise sell a share of it in the form of common stock to the public. The public values this share of the company at a higher price than the owners (who would prefer to free up some of their investment for other purposes). A broker or deal-maker, such as an investment bank, can

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<sup>5</sup>The operation of banks and financial intermediaries has evolved significantly since the nineteen-eighties. To an increasing extent productive capitals find that markets, such as the commercial paper market, offer smaller spreads between borrowing and lending rates, and have turned to these markets as a major source of short-term finance. Commercial paper, however, consists of promises to pay that are not secured by collateral, and therefore the commercial paper market is typically available only to large, reputable, and well-established borrowers. One way that smaller capitals can get access to the commercial paper market is by buying a line of credit from a bank that guarantees their liabilities in that market. An increasing proportion of bank income arises as fees for these and similar lines of credit.

appropriate some part (often small as a proportion of the economic surplus being realized, but large in absolute money terms) of the economic surplus in these transactions as fees. It is a settled and consistent principle of national income accounting not to include purchases and sales of existing assets in measures of the value of newly produced goods and services like GDP, but the practice of imputation effectively does include the proportion of these transactions that take the form of fees in measures of output, because the fees appear as the incomes (salaries and profits) of financial firms. It is not hard to understand why globalization increases the gaps between the prices owners of assets are willing to accept and potential owners of assets are willing to pay, and thus the economic surpluses realized in financial transactions and indirectly the incomes arising in the financial sector.

From the point of view of the Marxist theory of surplus value, however, all these different forms of financial incomes are part of the global pool of surplus value, essentially similar to land and resource rents. The mechanisms through which financial capitalists can divert part of the realized surplus value to themselves involve manipulations of expectations and contingent contracts that are different from the monopoly power of owners of land and resources, but the result in terms of the distribution of surplus value is the same.

The critical point to appreciate is that the growth of financial incomes, contrary to the results of national income accounting principles, does not represent an increase in the global pool of surplus value, only its re-distribution between financial capitalists and others. If other factors, such as resource or energy limits to productive labor, limit the growth of the pool of surplus value, it is futile from a Marxist point of view to believe that the growth of financial activities that redistribute the pool can do anything to offset these limits.

#### **4. Intellectual property and network externalities**

The growing importance of technical innovations, artistic excellence, and athletic prowess in securing high incomes for some, and the dramatic success of some internet-based business models, has raised hopes that these “knowledge-” or “information-based” activities represent a new clean mode of value production that can circumvent some of the limits of old-fashioned dirty industrial capitalist production.

Here again the basic principle is that incomes to knowledge- and information-based activities, like resource and land rents, are a part of the pool of surplus value. The growth of these incomes in one sector of the global economy has to result in a reduction in surplus-value based incomes in the rest of the global economy. The global pool of surplus value is very large. Global real GDP, to a very rough approximation, might be around \$60-\$70 trillion. Of this, extrapolating from economies where the division of value added between profits and wages is known, perhaps half or three-fifths is surplus value, so a conservative estimate of the pool of surplus value might be about \$30 trillion. The largest corporation, Exxon, had peak profits of about \$36 billion, on the order of one-thousandth the global pool of surplus value. From the point of view of even the largest and best established capitalist enterprises, the global pool of surplus value looks essentially infinite. Even an enormous growth in the surplus value realized in one firm or sector can be absorbed in this pool without a ripple; a very small reduction in the surplus value of all the other competitors for surplus value can make up for an enormous increase in the share of any one.

Two factors are central to the dramatic growth of knowledge- and information-based incomes: intellectual property rights and network externalities. Intellectual property rights secure the power of owners of highly sought-after knowledge or information, popular songs, key technologies, sophisticated medical treatment, databases, and the like, to appropriate part of the pool of surplus value by controlling access to them. This appropriation of intellectual property is from a political economic point of view parallel to the enclosure of the commons that was a feature of the transition from feudalism to capitalism in the early modern period in Europe. Once a



particular person or entity has established property right control over a waterfall, for example, a rent constituting a share of the global pool of surplus value springs into existence. (If the exploitation of the waterfall increases the productivity of labor sufficiently, and this increase in the productivity of labor reduces the share of wages in global value added, the pool of surplus value might increase, but the same consequences would follow from the exploitation of the waterfall under any other form of control, such as through a government “authority,” or a local community compact.)

The owner of a waterfall can secure a rent by allowing one productive capitalist to exploit the hydropower it generates. The owner of a waterfall, however, cannot simultaneously rent the waterfall to more than one capitalist, since the power it generates is a finite and rival resource. The situation is very different for the owner of the copyright to a popular song, which can be duplicated at negligible cost through media such as internet downloads. In effect the owner of the copyright (or a patent) can rent the property to any number of users, hugely multiplying the owner’s potential share of the pool of surplus value. Similarly, a widely used computer operating system such as Microsoft Windows can be rented or sold over and over again in very cheaply produced copies. In this case the demand for the operating system is mediated by the widely-analyzed “network-externality” effect (which also has an influence on popularity of artistic productions), where the usefulness of the commodity to each buyer is enhanced by the total number of buyers. Given the extremely large size of the global pool of surplus value, these increasing-returns effects can create the illusion that information and knowledge-based commodity production can create value with effectively no inputs at all beside human creativity and ingenuity. But the creators of knowledge and information are human beings who need to eat, have somewhere to sleep, clothe themselves, and so forth. The incomes that arise from strategically located intellectual property can be enormous, but they come from the global pool of surplus value generated through the exploitation of productive labor.

The potential for confusion on the economics of information- and knowledge-based commodity production is further enhanced by the existence of business models that generate revenue without any direct payments of users at all, such as social networking and web search. The connection to the global pool of surplus value in these cases is rather direct, in that the incomes supporting these activities come from advertisers who are willing to pay to divert spending toward themselves (a perennially important competitive strategy in fighting for shares of global surplus value). The “end-user” (who might just as well be viewed as a free input to the production process) receives a use-value (access to social networking or organized information) with no apparent payment at all. These business models seem to defy basic laws of economics, and promise an expansion of welfare without the expenditure of resources, but in reality they are applications of old (and sometimes ancient) economic ideas to new technological possibilities.

The advocates of the “new economy” view are, if not perfectly, at least substantially correct as to the unlimited possibilities for individual income growth knowledge- and information-based commodity production offers. The problem, as so often in social science, is a fallacy of composition. What holds for individuals may not, and in this case does not, hold for the system as a whole. Any individual creator can expand her or his income effectively without limit, but this does nothing to expand social value production or surplus value appropriation. The unreliability of national income measures like real GDP in correctly accounting for these activities further obscures the real political economic issues involved.

## **5. The “new economy” and classical political economy**

The existence of a large and growing world pool of surplus value generated by the exploitation of productive labor is, in a certain sense, the unstated presumption of contemporary bourgeois economics, although bourgeois economists are unlikely to use this terminology. But if we unpack

the rhetoric about the “power of markets” and the “innovative creativity” of market-based (that is, capitalist commodity-) production that underpins what passes for political economic analysis among politicians and the press, this kind of talk expresses a view that the exploitation of labor is a “natural” self-reproducing process as sustainable a source of surplus value as the solar flux is a source of usable energy. The only question for national economic development policy is how to set up property rights schemes, taxes, subsidies, and regulation in such a way as to facilitate the appropriation of surplus value as national income. The bedrock consensus beliefs of “mainstream” economics, for example, that the global and national economies have stable long-run growth paths determined by population growth, capital accumulation, and technological progress, and will return to those paths sooner or later after shocks, encode this basic economic world-view.

The questions the classical/Marxist analysis of the origin of value and surplus value for this complacent set of presumptions have to do with inter- and intra-national equality of the distribution of income, the internal balance of national economies between productive and unproductive labor, and looming limits to the employment and exploitation of productive labor posed by environmental, energy, and other resource constraints.

The neoliberal vision of the world economy concentrates the production of value and generation of surplus value in low-wage regions of the world, while the appropriation of surplus value becomes the specialized activity of high-income societies. For the reasons discussed above, this pattern implies widening income inequality both between and within national economies if for no other reason than the tendency of financial and other surplus value-appropriating sectors to generate highly skewed distributions of income. Can the current high-income nations of the world rely on this type of division of labor between value and surplus value production and surplus value appropriation to sustain economies in which unproductive sectors (in the classical/Marxian sense) dwarf productive sectors? The example of the ability of energy-exporting (particularly oil-exporting) economies to operate decade after decade on the basis of scarce resource rents encourages advanced capitalist countries to believe they can accomplish the same trick through specializing in finance and intellectual property rents. It is not hard to guess, however, that as this pattern becomes more and more entrenched and produces more and more unequal outcomes, the institutions to sustain it will come under more severe political and social pressure.

It is also not hard to predict that national economies that have a high per-capita income as a result of spectacular financial, intellectual property, and information rents, are also going to have increasingly unequal distributions of income and higher degrees of social and political polarization. This is because financial, intellectual property, and information rents tend, especially taking account of network externalities, to be highly unequally distributed. In the classical/Marxian model of productive capitalism mobility of labor and capital tend to equalize wages or rates of surplus value and profit rates. Capital itself can become highly concentrated, leading to very skewed distributions of income. But the introduction of increasing returns from information externalities in the appropriation of surplus value greatly increases the potential inequality compatible even with vigorous competition.

I have argued above that the hopes of the advocates of the “new” information-based economy that these modes of appropriation of surplus value can extend the patterns of economic growth and development based on exploitation of productive labor in the face of resource, environmental, and energy constraints, are fallacies of composition. If resource and energy constraints limit the output per worker of productive labor, either wages of productive labor will have to be repressed or there will just not be that much surplus value to go around, no matter how ingeniously business plans seek to concentrate it. Growth theorists need to incorporate these constraints into their models.

Whether the dramatic conflicts over the distribution of surplus value we are experiencing in the advanced capitalist world in the wake of the financial crisis of 2007-8 are the first harbingers

of these contradictions in the neoliberal model or only a passing growth pain of globalized capitalism remains to be seen. From the classical/Marxist point of view we would need better and more comprehensive data on global surplus value generation in order to form a considered opinion on this question.

## 6. What do we believe when we believe the “labor theory of value”?

Classical political economy rested on the powerful and emancipating insight that the wealth of nations stemmed ultimately from the organization of productive labor in a coherent division of labor rather than from monopolies of land and natural resources, and the Physiocrats thought, or from control of money and finance, as the Mercantilists argued. It is in this larger sense that classical political economy is founded on a “labor” theory of value, since the theory of value is just a shorthand way of referring to the analysis of the organization of production and distribution. By and large political economy of all hues continues to preach this Smithian sermon, and thus remains in the broad church of the labor theory of value. Economists’ quarrels over Marx’s attempt to resolve the “transformation problem” and their hair-splitting over Walrasian general equilibrium theory’s claims to have generalized the theories of rent, profit, and wages are perhaps less important than this broad unity.

In the context of the debate over the “new” economy models the fundamental questions of the origin of value in productive labor take center stage, and the questions of just how prices represent values and competition distributes it through rents recede in importance. In this context perhaps we can see the relevance of the claim that value originates in productive labor more clearly.

### References

- Basu, D. and Foley, D. K. Forthcoming. Dynamics of output and employment in the U.S. economy. *Cambridge Journal of Economics*.
- Daly, H. E. 2008. *Ecological economics and sustainable development, selected essays of Herman Daly*. Edward Elgar Pub.
- Foley, D. K. 1986. *Understanding Capital: Marx’s economic theory*. Cambridge, MA: Harvard University Press. Japanese trans. 1988; Italian trans. 1994 edition.
- Foley, D. K. 2010. Mathematical formalism and political-economic content. <http://ineteconomics.org/paper/mathematical-formalism-and-political-economic-content>.
- Marx, K. 1971. *Theories of surplus-value* Vol. 4 of *Capital*. Moscow: Progress Publishers.
- Marx, K. 1981. *Capital*, vol. 3. London and New York: Penguin Books. [1894].
- Mohun, S. 1996. Productive and unproductive labor in the labor theory of value. *Review of Radical Political Economics*, 28(4):30–54.
- Moseley, F. 1983. Marx’s concepts of productive labor and unproductive labor: An application to the postwar U.S. economy. *Eastern Economic Journal*, 9(3):180–89.
- Moseley, F. 1988. The increase of unproductive labor in the postwar U.S. economy. *Review of Radical Political Economics*, 20(2–3):100–106.
- Rubin, I. I. 1972. *Essays on Marx’s theory of value*. Detroit: Black and Red. 1928.
- Shaikh, A., and E. A. Tonak. 1994. *Measuring the wealth of nations: The political economy of national accounts*. Cambridge UK: Cambridge University Press.
- Smith, A. 1937. *An inquiry into the nature and causes of the wealth of nations*. New York: Random House. [1776].
- Sraffa, P. 1960. *Production of commodities by means of commodities: Prelude to a critique of economic theory*. Cambridge UK: Cambridge University Press.
- Wolff, E. N. 1987. *Growth, accumulation, and unproductive activity: An analysis of the postwar U.S. economy*. Cambridge, New York, and Melbourne: Cambridge University Press.

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