

VALUE AND PRICE

Controversy, Stasis, and Possibility

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Abstract: Controversy has prevailed since the problem of “transforming” values into prices first emerged in the late 19th century. Progress has, regrettably, been hampered by attempts to “vindicate” Marx’s work exactly, rather than treating him as a pioneer upon whom his successors must build, using the latest scientific methods. To make progress, the question must be faced squarely: what does the value dimension—assuming that we can define it and determine its properties with rigor and precision—actually *do*? How does a value-theoretic political economy provide superior insights into capitalist laws of motion, which could not be attained by critical study of the empirically received categories (prices, wages, profits, production) alone? Insights from Marx and Engels into the formation of a general balance of the opposing class forces of capitalist society may help us in our search for answers to these questions.

Keywords: value theory; capitalism; transformation problem; Marxist economics

Introduction

In his 1865 manuscript that eventuated in Volume III of *Capital*, Marx studied a general model of the capitalist economy. He discovered that commodity values, if these were determined by quantities of labor time expended in production, would be transformed into “prices of production” (i.e., changed from one set of quantitative proportions into another) *via* formation of a general (equal) rate of profit. This discovery launched a seemingly endless debate, in many countries and languages around the world, with positions ranging from claims

that Marx had committed “theoretical suicide,” to attempted vindications of his exact formulations as non-problematic and precisely correct.

In the 20th century, there emerged a mainstream consensus, to which both Marxist and non-Marxist economists contributed.¹ Building on Marx’s original formulations and correcting a few initial errors, a vision arose of the capitalist economy as a system of interrelated industries, in which unrestrained competition produces a completely general profit rate, associated with a unique set of real relative prices, which—notably—deviate systematically from the unit labor values of *Capital*, Volume I. Using the mathematical theorems of Perron and Frobenius on the properties of non-negative square matrices, the resulting system has impressive features: there is *always* a way to derive these benchmark prices (they must exist); there is *only one* way to derive them (they are unique); they can be shown to result from a convergent step-by-step competitive process, in which capitalists seek out the highest profit rates by moving capital among industries, starting from any arbitrary initial position (they are stable). If one insists on looking at this as a matter of “transforming” to these prices from Marx’s original prices based on “labor value” (the famous “transformation problem”), some anomalies do arise: certain intuitively plausible properties cannot hold, or at least cannot hold simultaneously with other such properties. On the whole, however, the system of equations that captures this vision of capitalist production, exploitation (formation of a surplus), competition, and price formation seems to serve well as the foundation on which a robust and fruitful political economy of the capitalist economy can be constructed.

I note, in passing, that within “Western Marxism” there is considerable resistance to this synthesis, presumably because the synthesis appears to be largely associated with “Eastern” Marxism; with thinkers whose political commitments see the major revolutionary events of the 20th century as exemplary of the Marxist principles that they profess; and indeed also with non-Marxist economists and mathematicians who do not share this commitment.² This suspicion combines with an apparent need to prove that “Marx was correct after all,” in a sort of almost Biblical vindication of texts. The result has been a series of “interpretations,” in which goods in some locations within the production–distribution structure have their prices “transformed,” while at the same time their prices are *not* transformed when the same goods are in other locations (i.e., as inputs rather than as outputs), or in which two different principles of price formation are forced to coexist within the same model.³ These proposals are arrayed against the “standard interpretation” (sometimes called the “Sraffa interpretation” or the “Sraffa system”—the model of consistent determination of profit rates and benchmark prices by the structure of capitalist production and social relations, described briefly above).

Aside from whether or not the latter view deserves the “standard” label, the very concept of “interpretations” must, I believe, be questioned. The term “interpretation” implies study of a text: the writings bequeathed to us by Marx.

A scriptural posture, rather than a scientific one, is therefore implied in this very way of framing the project. I propose, instead, that we forget about whether or not Marx would agree, if he were still alive, with a theoretical move we make, or a conclusion that we draw (we will, I fear, never know). Instead, we should consider whether a property that we observe is a necessary outcome of the inherent logic of the system we are studying; not whether it constitutes a faithful “interpretation” of 19th-century texts.

Is There a Labor Value Dimension Underlying Price?

There is, then (or should be), no longer any doubt about the determination of *relative prices* in a capitalist economy under fully competitive conditions. (“Competitive conditions” refers to the unrestricted flow of capital and labor among the industries comprising the economy—what Marx referred to as full operation of the “law of value”; “relative prices” are the $n - 1$ real exchange ratios among n commodities.) This set of benchmark prices is no longer controversial—although it should be noted, it is *not known at all* to many economists trained within the neoclassical mainstream of the advanced capitalist economies. It takes the form of *money prices*—quantities of money per unit—a fact that is important for the study of the historical evolution of money, the role of the state in that evolution, liquidity preference and the possibility of crisis, the impact of monetary policy in various stages of capitalist development, etc., but *not* central to analysis of the core structure of production and class in the abstract capitalist economy. Finally, the model of the price–production structure is entirely static—*as it should be*. We are—appropriately—abstracting from the complexities of continuous technical and social struggle and transformation, as required for scientific study of any initially un-theorized reality.

Putting aside the concerns of opponents of the “standard interpretation,” however, we still need to ask: What remains of the value concept? Are there any issues that remain unresolved? There are, in fact, three questions, all closely interrelated, that need to be addressed. First, is there a *substance of value*—a “third thing,” *not* itself a commodity possessing an exchange value like all other commodities, whose magnitude is present in those commodities and determines their exchange ratios with each other? Second, can we substantiate the claim that the substance of value in question is in fact *labor*—the abstract, average, homogeneous socially necessary labor time that Marx posited as occupying that role? Third (and most consequentially), suppose we *do* choose to assert that the substance of value exists, and consists of abstract social labor: *what difference does this choice make for our understanding of the core nature of capitalist reality?* In other words, what can we learn about capitalism from this central commitment of Marxist value theory that

we could not learn without it, simply by using the observed relative and money prices to study the actual institutional and ideological mechanisms of capitalist power, incentives, choice, coercion, and social control?

This is like asking: does Marxist political economy, after all, make a difference? It is, I must admit, amazing to me that generations of post-Marx Marxists (myself included!) have been preoccupied with technical matters of “invariance conditions,” “money equivalent of labor time (MELT) coefficients,” “twin equalities,” etc.; *or* with endless empirical descriptions of diverse historical experiences and political struggles; instead of focusing in on the question: What does value *actually do*? If the value dimension really matters for socioeconomic analysis and political vision and movements, that would presumably go a long way toward vindicating and justifying the never-ending search for answers to the conundrums of value theory (in all of its “interpretations”). We would be able to provide a satisfying answer to the counter-claim that all of this is just “Marxist economics for the sake of the Marxist economists.”

In the remainder of this article, I will try to sketch out, if not an “answer” to this question, at least a line of thinking that might lead to an answer.⁴

Value and the Core of Capitalism

The key to this must lie—as we might expect—in the curious admixture of elements that is the capitalist production relation. We have agents, pursuing rational ends as they interact in markets—for production goods, consumer goods, and labor power. Thus, competition among suppliers of goods enforces a law of one price for each good; competition among workers enforces a uniform wage rate, as workers strive to maximize that rate; and competition among firms enforces a uniform profit rate, as firms seek maximum profits. But this constrained optimization occurs across a class divide: the struggle between the two great classes of capitalist society. The terms of that divide—the power of capitalists to extract surplus value, the power of workers to resist that extraction, and the conditions that reproduce and shape those conflicting powers—are also determined within the same social relation.

Competitive rational maximizing behavior among individuals (agents) is the stuff of what sets up the core variables of the price–profit equations of the Sraffa model (Sraffa 1960): the elements of the price vector (p), the wage rate (w), and the profit rate (r). If the classes are simply sub-aggregates of those maximizing individuals, distinguished by differential ownership of productive assets, then the story is complete: the *only* forces for systematization are the rational choices that shape the uniform set (p, w, r). The profit rate is a *ratio* between two aggregates of the system (profits, divided by some measure of the value of the means of production).

It stands to reason, then, that that key ratio will not be affected by the *scale* of the system. Every element in the system is a quantity of “value,” either in the everyday sense of a quantity of money or in the theoretical sense of a unit labor value \times quantity of the corresponding product. The former will reflect the amount of money in existence and its velocity of circulation, for either a commodity-money world or the more relevant modern world of fiat money and electronic banking; none of this is directly relevant to our problem. The latter—the scale of the system of unit and absolute labor values—is where we must focus, and a bit of thought convinces us that, for a given real wage (quantities of wage goods per unit of labor expended), an equal and generalized rate of profit is consistent with *any* scale of the system, i.e., with any set of quantities of labor time, in either relative (per unit) or absolute (aggregate) terms.

So we find: rational choice (wage and profit maximization by individuals in the two classes, workers and capitalists, respectively) does not take us beyond the level of *relative* valuation—as the best representatives of mainstream economics have indeed made abundantly clear (see, e.g., Samuelson 1971). If *value*, as absolute quantities of social labor time, is to be determinate, this will be because of *some other* systematizing process.⁵

Now I believe that the matter turns on the connection between the fundamental balance of class forces, on the one hand, and the way in which workers and society as a whole perceive that balance, on the other. Perception, as working-class activists well know, is crucial to winning battles at the worksite, in local or economy-wide confrontations with capital, and in the political (electoral) arena.

In a world where class antagonism plays out in connection with quantitative systematization (the law of value, as revealed in the results of competitive optimization), this systematization must also take shape as a measure of contending class power—the balance of power between the two great classes, workers and capitalists. The measure of that balance—call it ω —can be a pure number between 0 and 1, 0 in the notional extreme case of maximum power accruing to capitalists, and 1 in the opposite conceptualization, when all power in the class relation is in the hands of the workers. The experience of that balance leads us to a notion of total power, available to either pole in the struggle between classes that defines the relations of production. ω , then, is the *worker share*—the ratio of the power retained by the workers (the power that is prevented from being extracted by the capitalists *via* exploitation) to the hypothetical total power available.

Notice that, even though we know that the class power relation measured by ω takes shape in the production process, where the performance of and control over labor is the core ingredient, we are *not* postulating or assuming that the total power or its components, the shares of workers and capitalists, are quantities of labor. A postulate of this sort must emerge from the analysis; it cannot therefore be presumed at the outset.

If the *worker share*, ω , is the ratio of social power retained by workers to the total of that power generated during the production process, the *wage share* is the much less abstract ratio of output received by workers (as wages) to the total net output resulting from labor. Both numerator and denominator are available to experience, most commonly in money form (and, thus, perceived).⁶ One wants to assume that the two ratios—worker share and wage share—are identical, but that identity is the result of a process, an aspect of *what capitalism is* that we are seeking.

The key insight: The *worker share* is the basic underlying relation that concentrates all of the forces shaping the conflictual relative strengths of the opposed classes. These forces are, importantly, not confined to the narrowly conceived bargaining space where the wage rate and other conditions of the labor process are determined. They cannot be reduced to matters of consciousness on the part of the “agents” (capitalists; workers) in this process.

Consider what it might mean for the wage share to be different from (greater or less than) the worker share. The worker share is the underlying reality—what Marx sought to reveal by distinguishing between the *value* of labor power and the *price* of labor power, which fluctuates around the underlying value. If, for example, the wage share is greater than the worker share, workers are retaining a larger portion of their product than objective conditions can sustain. The state of divisions and stratifications within the working class, including the strategic importance of racism, misogyny, religious and ethnic bias, and national antagonism; the general level of social consciousness regarding trade unions, laws, government policy; and the institutional determinants of popular belief (education, media, churches, etc.)—all of this is poised to force the wage to deteriorate, and bring the wage share down, i.e., more into alignment with the worker share. The same of course holds, in reverse, for the case in which the wage share lags behind the worker share.

Now, we move to the final fateful step. Consider the benchmark situation in which the two shares have finally converged. These shares, as a pure number, must be the wage *rate* (whose dimension is A/labor) times a number with the reciprocal dimension (labor/A). This latter number is the *fully determined (absolute) labor value of A*.⁷ With all of the relative prices known, it translates easily into the entire list of labor values (production prices) of all of the goods in the economy.⁸

If, then, we carry through with the intention behind Marx’s distinction between the price and the value of labor power, and all of its consequences, we conclude: Insofar as the wage share tends to converge toward its underlying determinant—the worker share—a labor-time substance of value, fully determined and unique, takes shape. The worker share concentrates all of the factors, both within and outside of social consciousness, shaping the correlation of class forces. The value dimension thus captures this entire range of forces—including, crucially, those that cannot be

assimilated into the core paradigm of conventional economic theory, restricted as that theory is to constrained optimization (rational choice).

The social reality of the worker share, or rate of exploitation, is thus normally not directly perceived by social actors (or social scientists!). This is the crossover from economics to political economy: The worker share draws upon every aspect of social structure and conflict that enters into the power of capital to exploit. By contrast, if everything were reduced to individual preferences, motivations and choice, the value dimension would disappear, and we would be left with the observed prices, wages, profits, etc.

The “labor theory of value,” then, is neither a foregone conclusion, nor an atavistic holdover from a pre-scientific past. It is a work in progress! The concept of abstract labor as the underlying substance of value emerges from the long debate, vindicated but also transformed. If the right questions are asked, there are no obstacles—technical, logical, or otherwise—to using the value dimension within a theory of capitalism that grasps its reality in Hegel’s sense: deep structure, surface structure, *plus* the articulated combination of these.

When I started thinking about all of this (50 years ago!), I decided a) that value is a project worthy of continuing exploration; further, b) that we do need to get the math right if any progress is to be made. I still think this inquiry, however incomplete, is important, whatever the timeline may turn out to be.

Notes

1. The literature is too vast to be covered in this short article. In addition to Engels and Marx, see works by, among many others, von Bortkiewicz, Sweezy, Dobb, Meek, Seton, Sraffa, Morishima, Samuelson, Steedman, Laibman, Fine, Shaikh, Elson, Pasinetti, Brody, Dumenil, Foley, Kurz and Salvadori, and Moseley. For some recent discussion in this journal, Laibman (2018); Moseley (2018). Detailed references will be found in Laibman (1973–1974); Laibman (2002).
2. Marxism, beginning with Marx, has always drawn intensely on non- and pre-Marxist sources, viz., Marx’s engagement with Smith and Ricardo, and with the British parliamentary sources on industrial conditions, and indeed with all of the mainstream authors of his time. This engagement with bourgeois science only becomes suspect, apparently, in the 20th century and beyond.
3. The best source for the reader who wishes to pursue and sort out all of these “interpretations” is Moseley (2016).
4. In conference sessions on Marxist value theory, presenters seem to divide into two groups: the True Believers for whom the evocative power of Marx’s texts is completely convincing; and the Stubborn Skeptics, who cannot be convinced that anything exists other than actual (relative or money) prices and rational actors who engage in constrained optimization. In short, I have tried to carve out a space between those who see the value problem as inherently false and therefore unsolvable, and those for whom no “problem” exists in the first place. For a dramatic dialogue between True Believer and Stubborn Skeptic, see Laibman (1984–1985).
5. The following paragraphs draw heavily on Laibman (2021).

6. We may think of the wage rate as being given in terms of one of the commodities—call it A —which serves as the representative of the entire bundle of commodities contained in the wage. In effect, we convert all of the other commodities in the wage into equivalent quantities of A , and add all of those A -quantities together. Again, we are not concerned here with the prices used for this purpose; they can be whatever they are. The (real) wage rate, then, is the total-wage quantity of A per unit of labor. Finally, note that this A -wage can be converted into its money equivalent (using the money price of A), so that the wage rate appears as the money wage rate that is familiar to experience. None of this affects the argument that follows.
7. Remember, again: this unit labor value is consistent with profit rate equalization; it is a “price of production.” The key is to finally drop the deeply ingrained notion that the labor content of a good, its unit labor value, is identical to the quantity of labor expended in its production.
8. In algebraic terms: w = A -wage rate; ω = worker share; A_N = A -equivalent of the net product; L = current labor input. The wage share = wL/A_N , and this = ω , which implies $L/A_N = \omega/w$. L/A_N is the fully determined unit labor value of A . Note that the rate of exploitation, as Marx originally defined it, is $(1 - \omega)/\omega$. Note also that this resolves the old conundrums of the “invariance postulate,” the “twin equalities,” and so forth.

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