Binary Economics: Paradigm Shift or Cluster of Errors?

Timothy D. Terrell

Binary economics is a theory of economic growth that places emphasis upon the distribution of capital, rather than the quantity of capital or the productivity of labor. Its roots are found in the late 1950s, in the work of Louis Kelso, originator of the Employee Stock Option Plan. Regarded as a paradigm shift by its proponents, binary economics maintains that capital is productive independent of the labor input, and that most economic growth occurs as a result of capital accumulation, exclusive of increases in the knowledge or skills of humans. As binary economists Robert Ashford and Rodney Shakespeare explain,

> [Binary analysis] says that while humans undoubtedly make contribution to the growth, the capital assets such as machines and technological processes are making an even bigger, ever-increasing, contribution. . . . So, from a binary perspective, growth is primarily a function of increasing capital productiveness rather than increasing labor productivity. (Ashford and Shakespeare 1999, p. 7)

Those who rely exclusively on their labor input as a means to earn income are therefore consigned to increasing poverty, since labor productivity is shrinking in importance relative to capital productivity.

Interestingly, binary economists assert that growth is best promoted by spending on consumer goods, and that investment in capital by existing capital owners "sterilizes" the production of that additional capital. If the typically wealthy capital owners have a lower marginal propensity to consume (as

---

Timothy D. Terrell is assistant professor of economics at Wofford College. This essay was originally delivered as a speech at the 9th Annual Austrian Scholars Conference on March 14, 2003. The author is indebted to the attendees at the 2003 Austrian Scholars Conference in Auburn, Alabama, and to two anonymous referees for valuable criticism and guidance. Of course, the author bears all responsibility for errors and omissions in his work.

THE QUARTERLY JOURNAL OF AUSTRIAN ECONOMICS VOL. 8, NO. 1 (SPRING 2005): 31–50

the binary economists argue) than the laboring poor, then distributing capital more evenly would produce greater spending and therefore growth.

> Binary growth is a distribution-based growth that is presently impeded by the prevailing pattern of concentrated capital acquisition. Thus the binary paradigm reveals a potent distributive relationship between capital ownership and economic growth, a growth which is not comprehended by conventional economics and which is suppressed by conventional economic practices and institutions. (Ashford and Shakespeare 1999, p. xi)

Binary economists may be few but they are prolific writers (Kelso and Adler 1958, 1961; Kelso and Hetter 1967; Kelso and Kelso 1986; Ashford 1990, 1996; Gauche 1998; Ashford and Shakespeare 1999; Kurland 2001), and have at least two active "think-tanks" devoted to promoting their work.[1] Though binary economists are not highly influential among orthodox economists, they do have a following (particularly among legal scholars, and other non-economists interested in economics). Recently binary economists have attempted to establish links between binary economics and the social justice, environmentalist, and corporate social responsibility movements. It is in these areas that binary economists have enjoyed most of their recent success. Some economists have taken an interest,[2] but few criticisms of binary economics have appeared (there is a significant "sympathetic" criticism in Roth [1996], discussed below). However, given the persistence of the theory, and its resurgence under the umbrella of "socio-economics," it deserves enough attention to expose its shortcomings.

This paper examines the basic assertions of binary economics, and suggests that the proposed paradigm shift is plagued with theoretical difficulties.

---

[1]These are the Kelso Institute (www.kelsoinstitute.org) and the Center for Economic and Social Justice (www.cesj.org).

[2]Binary economics has indeed found a home, of sorts, within "socio-economics," an interdisciplinary approach to the study of human behavior. Socio-economics seems almost agnostic about economic theory:

> Although seeing questions of value inextricably connected with individual and group economic choice, . . . socio-economics does not entail a commitment to any one paradigm or ideological position, but rather is open to a range of thinking that treats economic behavior as involving the whole person and all facets of society (within a continually evolving natural context). (Ashford 2002a, p. 1194)

Socio-economics

> aspires to a rigorous, "holistic understanding of economic behavior" that is both paradigm conscious and value conscious, and yet largely paradigm-neutral and value-neutral. Being largely paradigm-neutral, socio-economics does not require the adoption of any particular school of economic thought. (Ibid., p. 1195)

In the second section, the binary concept of independent capital productivity is discussed. The third section covers the binary view of savings and consumption, and the implications of Say's Law for binary economics. The fourth section evaluates the binary economists' plan for capital distribution. The fifth section contends that binary economics is fundamentally incompatible with a free market economic system, despite binary economists' declarations to the contrary. The sixth section concludes the paper with an assessment of the claims of binary economists as to the potency of their new paradigm.

The Independence of Capital Productivity

Binary economics relies heavily on the idea that capital is "independently productive." The productivity of labor is viewed as being independent of the availability of capital. Additional capital, therefore, is entirely responsible for the increase in output that results from it. Thus, binary economists argue that additional capital does not increase the productivity of labor but "displaces" it. Ashford writes,

> assume that in a pre-tool age, a person could dig a hole in four hours by hand. After the invention of a shovel, she can dig the same hole in one hour. . . . In binary terms, the productiveness has changed from 100% labor . . . to 25% labor and 75% capital . . . the worker contributes only one-fourth as much input, so her labor productiveness . . . has been reduced to only one-fourth of its former value. (Ashford 1996, p. 10)

Because binary economists fail to recognize that labor productivity has increased with additional capital, and insist that gains in productivity have accrued solely to capital owners, they argue that the only way for laborers to reliably and consistently increase their income is to acquire capital *as owners*. If wages are related to the value of the marginal product of labor, merely to use another's capital as an employee would not increase income.

> As the production of goods and services changes from labor intensive to capital intensive, it is clear that the way in which every household participates in production and earns income must similarly change from labor to capital intensive. The workability of the economy—the continued democratization of its economic power and the continuous economic autonomy of its consumers—requires that capital ownership of undercapitalized consumers be progressively enlarged. This is the only alternative to income redistribution for providing consumer demand. (Kelso and Kelso 1986, p. 17)

Roth has effectively pointed out some of the salient problems with this view of productivity (Roth 1996, pp. 58-59). Referring to Ashford's hole digger example, Roth argues that someone with human capital had to invent the shovel before it could be used, so the presence of the shovel is not independent of human capital. Also, Roth notes the presumption that the hole digger

has no role in the "productiveness" of the shovel. Yet, absent the acquisition of the requisite knowledge—human capital—the hole digger could not use the shovel. Moreover, if the hole digger did not use the shovel, its "productiveness" would be zero. The labor and the capital together produce far more than the two factors could produce separately. Thus, it is not at all clear that "capital productiveness" replaces "labor productiveness." It seems clear that the stocks of human and nonhuman capital are—even in this simplified example—mutually interdependent; that the use of the shovel increases the value of the hole digger's human capital; and that use of the shovel by the hole digger enhances the shovel's value (Roth 1996, p. 60).

The binary economists have failed to recognize the importance of labor and innovation in the development of capital.

> What will happen to most workers as ever more work is done by robots, computers and other forms of capital? . . . Unfree market theorists allege that it does not matter if capital assets substitute for labor in the productive process because, in some unspecified way, service and other jobs will increase and everyone will benefit. However, most of those service jobs are hardly likely to pay good wages (assuming there will be sufficient jobs). (Ashford and Shakespeare 1999, p. 60)

This entirely ignores those jobs that are necessary to make *capital*, not consumer goods. While some labor might be replaced by a machine, new opportunities for labor will appear in the creation of that capital equipment.

> It is often said that the skills required to enable workers to use modern technology are higher skills that command higher competitive prices simply because a longer formal education is required to qualify such persons for these skills. These alleged "higher" skills are really only *different* skills and generally involve less overall knowledge, less effort, less risk, and less learning time than the skills they displaced. For example, the modern jet pilot requires less skill than the original bush pilot, even though he navigates with far more sophisticated and expensive capital instruments. A modern production line worker requires vastly less skill than the craftsman who preceded him in the marketplace; he may be needed only to check the behavior of robots. The function of human intellect in the economic world is to push the burden of production off labor and onto capital workers with their machines, that is, to "save work." (Kelso and Kelso 1986, p. 17)

What of the value of the innovative labor that produced the jet engine, the satellite navigation system, or the robots? The operators may not need more skill, but the inventors are exhibiting quite a bit of skill.

"Capital Workers"

Binary economists have developed the term "capital worker" to describe someone who manages, or allocates, capital to its most valuable uses. Kelso and Kelso define a capital worker as "One who engages in economic production and earns income through his or her privately owned capital. A capital

worker is not generally required to be personally present at the scene of production, although astute management of the ownership interest in capital is constantly required" (Kelso and Kelso 1986, p. 165). How is this different from someone described as a labor worker: "An individual who engages in economic production and earns income by employing his or her physical and mental abilities" (p. 168)? Of course, "astute management of the ownership interest in capital" would be impossible without employing "physical and mental abilities." As Ludwig von Mises wrote,

> [C]apital or capital goods [do not have] in themselves the power to raise the productivity of natural resources and of human labor. Only if the fruits of saving are wisely employed or invested, do they increase the output per unit of the input of natural resources and of labor. If this is not the case, they are dissipated or wasted. (Mises 1956, pp. 84–85)

Thus, the distinction between the labor worker and the capital worker, which is critical to binary economics, is not at all clear. Binary economists roll the "astute management" of capital into their concept of "ownership" and do not consider it to be labor at all. Ashford and Shakespeare state that people "can . . . be productive merely by owning capital" (Ashford and Shakespeare 1999, p. 28). And, "from the binary perspective, the whole point of private property in capital is to enable people to earn *without personally laboring*" (p. 30; emphasis in original). Perhaps the absence of physical labor might be considered a distinguishing characteristic of a "labor worker." Yet even a person who sits in a chair trading stocks is laboring physically, if only to think and communicate by voice or keystrokes. To base the definition on the degree of physical exertion required would miss the point of the distinction.

As we have seen, to be a successful capital worker requires labor in the form of insight and skill. Like physical abilities, insight and skill are not uniformly distributed across the population, and that is why capital is not uniformly distributed across the population. Not everyone is well-qualified to be a "capital worker." Yet binary economists perceive a great injustice in the failure of market economies to distribute capital evenly.

Independent Productivity in Nature

Binary economists frequently allege that there are many examples of independently productive nonhuman factors. In an example similar to the hole-digging example above, Ashford and Shakespeare write,

> A man carries a heavy sack on his back for a mile and is exhausted. But with the help of a donkey, *five* sacks can be carried twice as far in half the time, leaving the man with enough energy to go dancing. From the conventional viewpoint, human productivity has increased by a massive 2000%.
>
> However, from the binary viewpoint, the great increase in per-capita output is *not* caused by an increase in human productivity. Rather it is caused by the fact that the nonhuman factor (the donkey) is doing most, if not all, of the extra work. Indeed, the man is doing *less* work by employing the

> donkey rather than doing the carrying himself. The *productiveness* of the donkey has both replaced and vastly supplemented the former labor *productiveness* of the man so that the donkey is doing approximately nineteen times as much work. (Ashford and Shakespeare 1999, p. 23. See also Ashford 2002b, p. 1540)

A donkey is part of nature, and in its state of nature should be considered a natural resource rather than nonhuman capital. Humans together with only natural resources will have a very low standard of living indeed. Capital is necessary to have economic growth, and for a donkey to be considered capital instead of a natural resource, it must be "modified" in some way. Certainly, a donkey will move around independently of any action taken by humans. Yet it is still necessary for a human to alter the donkey from its natural state to make it useful for doing work. It must be domesticated, fenced in, and guided about for any cargo transportation to be accomplished. Humans thus convert, through their labor, a natural resource to capital and contribute to the productivity of that capital.

Labor's Income Share

Binary economists confront serious problems in attempting to determine the shares of income that can be attributed to the different inputs to production. In discussing similar attempts by the Marxists, Mises criticized "the illusion that it is possible to determine the shares that each of the various complementary factors of production has physically contributed to the turning out of the product" (Mises 1956, p. 86).

> If one cuts a sheet of paper with scissors, it is impossible to ascertain quotas of the outcome to the scissors (or to each of the two blades) and to the man who handled them. To manufacture a car one needs various machines and tools, various raw materials, the labor of various manual workers and, first of all, the plan of a designer. But nobody can decide what quota of the finished car is to be physically ascribed to each of the various factors the cooperation of which was required for the production of the car. (Mises 1956, pp. 86–87)

Binary economists must also deal with the obvious fact of the increase in real wages over the last several centuries, that has coincided with the increase in capital. Roth presents data indicating that human income's share of aggregate personal income has been fairly stable over several decades. Furthermore, contrary to the binary economists' claims that only existing capital owners have been able to acquire new capital, Roth shows that capital asset ownership has increased consistently with the aging of the workforce, indicating that the workforce has not had any trouble adding new capital owners (Roth 1996, pp. 61–62).

Roth concludes that there is "no unambiguous, 'scientifically correct' way to determine the effect of changes in the stock of nonhuman capital on human capital's income share (or vice versa)" (1996, p. 59). Even the binary economists recognize this difficulty: "there is great dispute . . . as to how to measure

and understand the separate inputs of capital and labor" (Ashford 1996, p. 8). If the increase in real wages is not linked to the increased productivity of labor (made possible with additional capital and improved technology), then it must be artificial. Kelso and Kelso write,

> [Technological] advance does not generally make labor, as such, more productive. In fact, the opposite is true. As capital work supersedes labor work, the demand for labor work diminishes, and the value of labor tends to fall. Free-market forces no longer establish the "value" of labor. Instead, the price of labor is artificially elevated by government through minimum wage legislation, overtime laws, and collective bargaining legislation or by government employment and government subsidization of private employment solely to increase consumer income. (Kelso and Kelso 1986, p. 17)

In addition, binary economists cite labor's decreasing productiveness as the primary reason for poverty and state redistribution programs (Roth 1996, p. 61). "The myth of the 'rising productivity' of labor is used to conceal the increasing productiveness of capital and the decreasing productiveness of labor, and to disguise income redistribution by making it seem morally acceptable" (Kelso and Kelso 1986, p. 8).

It would seem, then, that binary economists are begging the question. With no real evidence that capital productivity is increasing relative to labor productivity, binary economists assume that this shift is in fact occurring. We are then asked to believe that government intervention is masking the labor-to-capital shift they claim, and that market valuations showing an increase in real labor incomes are misleading.

Binary Economics on Savings and Consumption

Binary economists tend to see savings in the Keynesian sense as detrimental to economic growth. In a remarkable disconnect in their system, binary economists fail to see the link between savings and the availability of funds to finance capital acquisition. Thus, the borrowing that they see as key to dispersed capital acquisition must occur without anyone having to postpone consumption and make those funds available. Kelso and Kelso write, "The business genius tightens his belt only in the first stage of his quest for real capital riches. Not thrift but his ability to finance capital acquisition out of the wages of his capital is the secret of almost all of his impressive fortune" (Kelso and Kelso 1986, p. 114). Ashford and Shakespeare say that "the patience and abstinence of the owner who may invest or consume" is not needed for "efficient capital acquisition" (Ashford and Shakespeare 1999, p. 128). This contrasts sharply with Mises's explanation of capital accumulation and of the source of the "impressive fortune" of the "business genius":

> The accumulation of new capital, the maintenance of previously accumulated capital and the utilization of capital for raising the productivity of

> human effort are the fruits of purposive human action. They are the outcome of the conduct of thrifty people who save and abstain from dissaving, viz., the capitalists who earn interest; and of people who succeed in utilizing the capital available for the best possible satisfaction of the needs of the consumers, viz., the entrepreneurs who earn profit. (Mises 1956, p. 85)

"Sterile" Savings

The Kelsos see savings as a leakage out of the economy and therefore "sterile."

> A market economy is essentially a double-entry bookkeeping system based on the fact that each household in market economies has a double role of consumer and producer. Costs paid for production on one side of the ledger become personal incomes earned for consumption on the other. The economy itself is a vital organism engaged primarily in the current production of consumer goods and services for current consumption. Any sustained accumulation of capital-produced income in excess of that actually used to pay for things consumed will inevitably be channeled into the ownership of progressively greater capital-earning power. At the time when such capital-earning power exceeds the demands of a household's consumer lifestyle, it becomes sterilized and unusable, so far as the economy is concerned; it also actively violates the common law of individual property rights. (Kelso and Kelso 1986, p. 20)

Because investing in more capital does not contribute to growth (in the binary view), any use of income for nonconsumptive purposes slows the economy. To some binary economists, apparently, capital is useless ("morbid," in their terms) if the owner decides to reinvest any income from it. Kelso and Kelso (1986) make this plain: "The earnings of morbid capital—capital in excess of that which can or will be used to support the consumer lifestyles of the owners—are altogether diverted out of the market economy for useful goods and services" (p. 128). Thus, anyone who owns such capital—who fails to spend every dollar earned through capital ownership and management, is being irresponsible and selfish: "A participant in production who, through his or her superproductive power (normally excess capital accumulation), earns more income than he chooses to devote to consumption, necessarily beggars his neighbors" (pp. 35–36). And, "[morbid capital] beggars others by depriving them of the economic opportunity to increase their earnings as capital workers" (pp. 36–37).

To some binary economists, there is a ceiling on consumer "needs," above which a person will choose only to invest in "morbid capital." Ashford and Shakespeare go so far as to say that existing capital owners "generally have little or no unsatisfied consumer needs and wants" (Ashford and Shakepeare 1999, p. 39). Of a household earning $10 million a year on "capital-earned income," Kelso and Kelso write,

> The family may live luxuriously indeed on a modest part of these earnings, spending $1 million or possibly as much as $5 million. But the rest

> will most certainly be invested in the most productive capital assets (and tax shelters) that skilled advisers can find. This will further increase the owner's excess capital income rather than channel it back into the system as payment for consumer goods and services. Such excess income has thus been sterilized with regard to the production-consumption market. It can only be used to acquire more producer goods. (Kelso and Kelso 1986, pp. 34–35)

For binary economists, then, the key to economic growth is the increasing of demand for consumer goods, *à la* Keynes, rather than the increasing of the capital stock to allow greater production of consumer goods at lower cost. Yet capital goods must be produced if the capacity to produce consumer goods is to increase, and increases in the capital stock are actually integral to Kelso's "general theory" plan for capital dispersion and growth.

Somehow, binary economists have even managed to conquer the capital/consumption tradeoff that has been with us from time immemorial.

> In a mature capitalist democracy, labor-earned income ordinarily would not be needed or used for capital asset acquisition. Commercially insured capital credit would be used instead. The costs of a capital asset would be defrayed in the financing process before its income yield would become available for personal use. Thus the economy would no longer have to choose between current consumption and capital investment—an artificial necessity that has long depressed market demand in Western industrial societies. (p. 37)

Again, it seems that binary economics is missing a critical link between "capital credit" and the postponing of consumption. For someone to borrow for the purpose of acquiring capital, someone else must ultimately reduce current consumption. Through money creation by a central bank, that link can be temporarily stretched, but only at the cost of a subsequent recession. As Section IV indicates, this money creation is in fact the means by which binary economists hope to put their plans into effect.

Ashford and Shakespeare go on to confuse the reason for the gains that occur from choosing capital accumulation over current consumption. "[I]n the conventional analysis, the rich are being productive by waiting. But, in the binary analysis, the rich are being productive by owning, *not* waiting" (Ashford and Shakespeare 1999, p. 126n). Capital owners do not prosper because they own, or because they wait. In addition to postponing consumption, they must do something requiring considerable skill—evaluate alternative uses for the unconsumed resources they own and choose the most productive. This task of evaluation may be contracted out to professionals, but the risk belongs to the capital owner alone. Also, capital owners still must evaluate the professionals they put in charge of allocating their capital.

Binary Economics and Say's Law

Of course, binary economists take issue with Say's Law (Roth 1996, p. 61). In their view, all income earned (through any means) must be respent on

consumption if the economy is to grow. "Sustained economic prosperity in a market economy requires that earners and their dependents devote currently earned income to current consumption" (Kelso and Kelso 1986, p. 36). The output of the economy will be purchased in full only through consumption (p. 34). Production goods, one must suppose, do not count. Strangely, the presence of government redistribution is put forward as evidence of the impossibility of Say's Law:

> In assuming that employment-generated purchasing power will be adequate, both from the consumer's standpoint and the economy's, conventional finance makes a disastrous error and compounds it by ignoring the massive contradictory evidence. If consumers could afford to buy the economy's output from their employment earnings, income redistribution through government-levied taxes would be unnecessary. People would not need welfare, open or concealed. (p. 40)

Supposedly, even consumer borrowing proves that the economy's output cannot be entirely purchased by "labor workers," so that economic growth is stunted unless their purchasing power can be increased (by distributing capital ownership to those who will spend it on consumer goods). In the absence of this purchasing power, consumers must borrow. In a world in which everyone is earning "adequate" income through labor *and* capital earnings, welfare and consumer credit both would disappear. In a binary economy, Kelso and Kelso argue, "[c]onsumer credit would not be desired, or even tolerated. No one derives consumer satisfaction by paying interest to others" (p. 40).

This displays a fundamental misunderstanding of interest. Interest itself may not produce consumer satisfaction, but borrowers pay interest to persuade others to postpone consumption—so that the borrowers may enjoy the goods now. As long as people prefer goods and services now to goods and services in the future, there will be interest. Yet binary economists contend that consumption is unrelated to the interest rate: the conventional theory says that people will defer more (or less) from current personal consumption depending on the anticipated rewards for deferring consumption (or "waiting") (Ashford and Shakespeare 1999, p. 125).

> this prospect of deferred income (which determines the value of the capital) is itself seen as a function of consumer demand for the output of the capital which is in turn based on the individual worker's decision to work for consumer goods at the prevailing wage or remain idle. Thus, in the conventional analysis, the value of all goods and services (both consumer and capital) is basically a function of the work decision, which is in turn a function of human productivity. (Ashford and Shakespeare 1999, p. 126)

It is apparent from this that the binary economists' misunderstanding of the interest rate is related in some way to a misapprehension of value theory. The Austrian understanding of value, at least, does not fit the description

provided here. It is true that the demand for capital is derived from the value placed on the consumer goods that the capital produces. The demand for labor, as well, comes from the value placed on the consumer goods that the labor produces. But, to Austrian economists, the value of consumer goods is related to the subjective assessment by individual consumers of the ability of each good to satisfy personal goals.

It is true that wages, and thus some part of the work decision, are based on productivity. But the productivity of labor is based partly on the availability of capital, and is not independent of capital (as pointed out above). The work decision is based on the opportunity cost of one's time—which may include the value attached to leisure time. To argue that the value of consumer goods depends on the work decision would be to reason in a circle. People choose to earn wages (versus remaining idle) to pay prices for consumer goods—prices which are dependent on the amount of wage-earning (versus remaining idle)? This is not the Austrian perspective, nor can it be reasonably called "conventional."

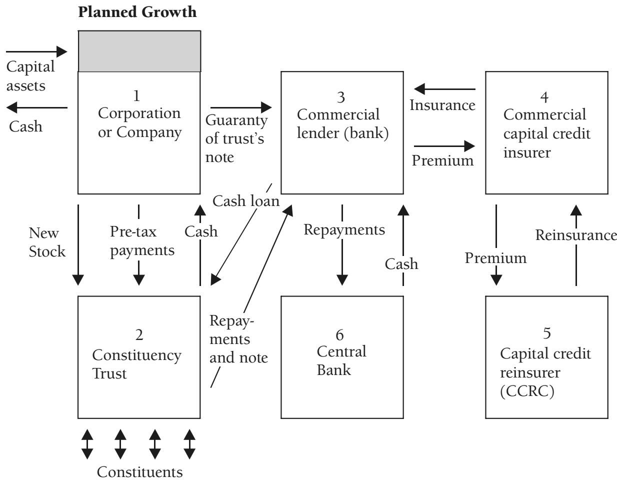
The "General Theory" Diagram

Binary economists have devoted a great deal of effort to developing a plan for dispersing capital ownership. This plan is intended to allow the poor to obtain capital quickly by setting up "constituency trusts," which would hold capital for constituents in the manner of an employee stock ownership plan. Part of the plan would necessarily include restrictions on "cashing out" funds held in trust, so that the laboring constituents would not convert the invested funds to current income.

Louis Kelso explained that these trusts would be funded by loans from commercial lenders, which would in turn obtain the funds from the central bank through discount lending. The loans would be insured by a commercial capital credit insurer, which would obtain reinsurance from a tax-supported public corporation. Kelso planned for the repayments on the loans to be made from the trust's initial earnings on the capital purchased (see Figure 1).

The binary economists' plan would create a massive credit bubble. When the central bank lends money to the commercial lenders via the discount window, it would temporarily increase the money supply. The bank loans to the trusts would be used to purchase new stock from corporations, whereupon the corporations would purchase capital assets to expand. What binary economics overlooks is that in order to acquire these capital assets, the firm must entice people to give up current consumption of goods and services in order that resources may be devoted to production of capital goods. However, money creation by the central bank does not alter time preferences. People have the same internal interest rate, dictated by the intensity with which they prefer present goods to future goods. When capital goods are bid up in price through bidding from the constituency trusts, production shifts to capital goods instead of goods for immediate consumption.

Figure 1
General Theory Diagram



Source: From Ashford and Shakespeare (1999, p. 237).

From this point on the inflation caused by the central bank begins to work its way through the rest of the economy. Workers employed in the production of capital goods have not become more willing to put off consumption, so as their higher wages are used to purchase consumer goods, the prices of consumer goods begin to increase. As consumer goods prices rise, workers in the capital goods industries require higher nominal wages to compensate for the decline in the purchasing power of their wages. The wage increases reduce the profits to capital asset production relative to production of lower-order goods. Firms engaged in production of higher-order goods must reduce production, or face bankruptcy. The capital production bubble bursts.[3]

Now the constituency trusts begin to suffer, as the value of the stock they hold falls. Dividend payments fall, and constituents face lower incomes. Some of the loans from banks may not be repaid by the trusts, and the capital credit insurer must step in to cover the losses. If the losses are large enough, then the capital credit reinsurance corporation (CCRC) may have to cover the losses of the capital credit insurer. Since the CCRC is ultimately a taxpayer-backed corporation (like the FDIC or Freddie Mac), the taxpayers bail out the CCRC. The capital distribution to the "labor workers" has been funded with tax dollars, and the gross earnings on capital are no greater than when the plan was initiated. In sum, the entire scheme is nothing more than the sort of government-backed wealth redistribution that binary economists claim is inevitable with "conventional" economics. The scale of their envisioned plan would make this a far larger redistribution than is currently occurring.

[3]For a more complete treatment of the Austrian theory of the business cycle described so briefly here, see Mises (1981), Mises *et al.* (1996), or Rothbard (1993, pp. 850–79).

The level of inflation under such a plan would be severe. Ironically, the binary economists insist that their capital distribution plan would *eliminate* inflation. Kelso and Kelso write, "The entire design is calculated to negate inflation because it eliminates the chief cause of inflation, namely redistribution" (Kelso and Kelso 1986, p. 111; Kurland 2001). The logic here is inscrutable. Roth contends that the Fed's independence would be jeopardized as "need" is introduced to the criteria for these central bank loans (Roth 1996, pp. 65–66).

The amount of discount lending that would occur under the binary economists' plan is not clear, but it would necessarily be large. Yet, if more discount lending would promote more rapid growth, why not make the initial discount window loan truly enormous, perhaps ten times the current U.S. GDP? Certainly this would allow even more rapid capital accumulation, if the binary economists are correct. The limits to such lending are not made clear.

Binary Economics, Property Rights, and Freedom

As we have seen, the binary economists' plan for capital dispersion would produce a massive business cycle. It is also important to show that the plan is in no way compatible with a free market economy—as the binary economists claim. At its core is the government, reinsuring credit acquisition loans and setting up need-based criteria for such loans. As Roth wrote, "Good intentions notwithstanding, the binary property system would simply substitute a new political redistribution process for the extant process" (1996, p. 64). Besides, as Roth points out, the federal government already is the largest underwriter of financial risk in the United States (with student loans and home mortgage loans figuring prominently in the mix). The redistributive nature of these underwriting programs produces enormous losses (p. 64).

> more likely than not, the government's decisions would reflect the concentrated benefit-dispersed cost calculus: credit would generally be allocated to well-defined constituencies, while the (largely hidden) costs would be broadly dispersed across all taxpayers. This would be the inevitable consequence of binary financing; an outcome which would hardly be congruent with the goals of binary economists. (Roth 1996, pp. 64–65)

Where the binary economists' antagonism toward the free market is most plainly seen is, perhaps, their proposed limitation on capital ownership. Kelso and Kelso want to set a limit on the amount of capital that a family can own. "[The state] must prohibit the sterilization and morbidization of capital ownership by those who seek too much capital-productive power" (Kelso and Kelso 1986, p. 33). Saving, apparently, would be a crime: "Economic health also requires vigilance in preventing families from accumulating more capital-earning power than they can or wish to spend on their own consumption" (p. 20).

Kelso and Kelso also want to restrict or even eliminate bequests, as an extension of their proposed "principle of limitation." The state would step in to regulate intergenerational transfers and distribute assets after death.

> Property ceases at death. . . . The right to make gifts of one's capital and assets ceases at death. Transfers of property at death, either through institutions or by will, including their taxation, belong to the domain of positive law and public policy. This is also true of limitations on transfers, such as those to charitable foundations, intended to circumvent laws regulating testamentary gifts. Thus the principle of limitations extends to, and countermands, all stratagems to subvert it.
>
> The legal implementation of the principle of limitation—its application to every situation—is, of course, a task for federal and state legislatures. No specific legislation regulating a capitalist economy is more critical than this. (Kelso and Kelso 1986, p. 27)

At least binary economists want to privatize public property in order to sweep more capital into the constituency trusts they have concocted (Kelso and Kelso 1986, pp. 121–22; Gauche 1998).

The Kelsos argue from the *de facto* existence of government involvement in the economy, and prevalent opinion that it should be so involved, that this constitutes an *obligation* to be involved. "Is the federal government responsible for the health and prosperity of the American economy? . . . Today, both voters and officeholders take it for granted that the answer is yes" (Kelso and Kelso 1986, p. 109). *Vox populi, vox dei.* "At issue, then, is not *whether* government will assume responsibility for economic prosperity, but *how* it will choose to discharge its obligation to do so" (p. 110). The Kelsos are emphatic, and will brook no dissent:

> there can hardly be any basis for questioning the establishment of the Capital Diffusion Reinsurance Corporation (CDRC [CCRC in Figure 1]) as a U.S. government-backed capital credit reinsurance underwriter, supported by the full faith and credit of the U.S. government. This entity would fulfill a function that is already the government's but that the government is not carrying out in the most rational and purposeful way. (Kelso and Kelso 1986, p. 111)
>
> Federal and state governments have the duty to adopt a sound economic policy. It is also government's duty to take primary responsibility for interpreting, administering, and enforcing the policy of redemocratizing economic power. . . . If we want to redemocratize economic power, we must do it through a new binary national economic policy. (p. 122)

To remove all doubt as to the legality of the binary economists' proposal, Kelso and Kelso suggest a modification of the 1946 Employment Act (15 U.S.C. 1021) to include reference to "capital workers" (p. 123).

Ashford and Shakespeare argue that a true free market obviously has failed, because there are so many government interventions—bailing out big firms, subsidizing farming, research, etc., redistribution of income, etc. "[T]he redistributions continue and on a very large scale precisely because

the market distribution of income has proved economically and politically unacceptable to almost everybody" (Ashford and Shakespeare 1999, p. 65). This is begging the question. A true free market does not work, they argue, because the government is in fact intervening to correct failings. Ashford and Shakespeare condemn hypocritical defenders of the "free market" for favoring all these interventions. Then they want to say that their hypocrisy implies that the free market must not work. This is clearly an *ad hominem* attack.

Incredibly, Ashford and Shakespeare claim that binary economics is "more faithful to free market principles than the theories, critiques and proposals of even the most ardent 'free market' advocates" (p. 17). They refer to free market capitalism as "unfree, unfair, and inefficient market capitalism" (p. 10). It is called unfree because "although everyone is theoretically free to acquire productive capital, effective freedom to acquire it is unnecessarily denied to the many and enjoyed by only a few" (p. 11).

> Moreover, the binary economy is structured to operate in a way more faithful to free market principles than any existing economy. It is a true free market effectively open to everybody instead of a few. In accordance with true free market logic, it eliminates unnecessary market barriers so as to allow the law of supply and demand to work more efficiently for all people individually. It therefore offers a level of efficiency well beyond that which can be achieved in the existing unfree market economies. (p. 17)

Later, Ashford and Shakespeare write, "In binary terms, true free market principles are those of open participation, voluntary exchange, and respect for private property" (p. 19n).

This is a semantic game with the term "free market." These binary economists want to redefine a free market as an economy in which there is freedom from all constraints that might prevent a person from attaining command over capital assets. This definition inserts equality of individual capability as a precondition of a free market. A free market, properly understood, is one in which two individuals are free to voluntarily exchange their property without the coercive intervention of a third party. The binary economists' concept of freedom is egalitarianism. One might well ask, what if that person who owns so little capital in the "unfree" economy is less capable of sending those capital assets to their highest and best uses? What if that person has a time preference that is inconsistent with the postponing of consumption that is necessary to invest in capital? Is that person therefore less free? Yet the binary economists are arguing in their ideal world of dispersed capital ownership, everyone would be able to handle capital asset management with an equal degree of skill.

The so-called "binary property right" actually strikes at the core of property rights. It is not mere hubris, then, when Ashford and Shakespeare call the binary property right a "paradigm-altering concept." It is "at the heart of the

binary private property system and is the right of all people to acquire, on market principles, private and individual ownership of wealth-creating capital assets" (p. 7). And, "the basic binary property right is *the right to acquire capital on non-recourse corporate credit and to repay the loan with the earnings of the capital acquired*" (p. 47).

> The binary property right is . . . a right to participate in production and in market transactions with willing buyers and sellers of goods and services with respect for everyone's private property. It is *not* the right to compel a transaction or to barge in on, or prevent, the voluntary transactions of others. . . .
>
> Nevertheless, although the binary property right is a market right which respects the rights of others and requires voluntary transactions for its implementation, it is intended to be an *effective* right and not a merely theoretical one. In other words, it is intended to enable people without capital to compete *in practice* with existing owners for new capital acquisition. This is done by modifying the present legal and administrative structure to make the right effective in practice. (p. 48)

Again, the binary economists want to have the voluntary nature of a free market but none of the constraints that might prevent a person from attaining command over capital assets. According to the binary economists, each individual has the right to engage in voluntary transactions to acquire capital (and a substantial amount of it). If an individual lacks sufficient wealth, creditworthiness, or income to purchase this capital, it must mean that he doesn't have an *effective* right. To grant the effective right to that individual means that someone is going to have to increase his wealth, creditworthiness, or income. Transferring wealth to that person, or requiring others to ignore certain factors relevant to his creditworthiness, is inconsistent with "respect for everyone's private property." Yet this is exactly what is required by the binary proposal for capital dispersal. In the view of binary economists, no one should be denied credit for the purpose of buying capital for any reason. Inadequate collateral, a poor repayment history, or any other justification a lender might provide for denying a loan are all swept aside as violations of the binary property right. Even the U.S. Constitution is supposedly consistent with the binary proposal:

> The essence of economic democracy lies in the elimination of differences in earning power resulting from denial of equality of economic opportunity, particularly equal access to capital credit. Differences of economic status resulting from differences in advantages taken and uses made of economic opportunities are natural, proper, and desirable. But all differences based on inequality of economic opportunity, particularly those that give access to capital credit to the already capitalized and deny it to the non- or undercapitalized, are flagrant violations of the constitutional rights of citizens in a democracy. (Kelso and Kelso 1986, p. 115)

The alleged "right . . . to be adequately capitalized" (p. 25) is violated whenever someone accumulates "more capital than is required to meet the owner's consumption needs and wants and to free him or her from subsistence toil" (pp. 24–25). Any returns to productive work that are not immediately consumed are apparently illegitimate, to binary economists. The Kelsos go on:

> This is the essence of social injustice. It denies the capitalless majority of citizens their right to be productive—a right dependent in our industrial age upon effective opportunity to acquire, own, [p. 26] and protect capital. It denies them equal protection of the laws, which would give them equal access to the freedom and independence that capital ownership provides and enhances.
>
> It follows that if every household must own *enough* capital, no household can or should own *too much* because the aggregate of what is produced equals the aggregate power to consume generated by production. If the few produce what must be consumed by the many, the many are deprived of their power to produce for themselves and either become wards of charity or die of privation. The condition of too much is reached when a household or consumer unit's capital holdings produce more income than its members wish to spend and in fact do spend on consumption patterns, freely chosen by the individuals concerned, and to the prevailing state of technology. (Kelso and Kelso 1986, pp 25–26)

Similar "rights" are mentioned elsewhere: a "right to good livelihood" is implied (p. 12), and Franklin Delano Roosevelt's claim that "every man has . . . the right to make a comfortable living" is approvingly quoted (p. 23). Binary economists also refer to a "right to produce goods and services" (p. 11). A right to produce requires the right to command resources necessary for production—and this implies an obligation on the part of others to provide those resources. If they are not voluntarily tendered to the person with the "right to produce," they may presumably be taken. A position more consistent with private property rights acknowledges that before trade no one has a "right" to the property of another. The "economic democracy" of the Kelsos strikes at the foundation of property rights. Ironically, even in the same page they celebrate the free market.

How large, exactly, is the capital portfolio that each person should have? Binary economists link the size of the portfolio to the indeterminate "physical capacity of the economy," a nonsensical concept.[4] Ashford and Shakespeare say that the goal should be a "capital estate large enough to supply sufficient current consumer income to support at least one half of an affluent life style (measured in the context of what society as a whole can efficiently produce)" (Ashford and Shakespeare 1999, p. 49). "Reasonable" people, it seems, will stop increasing their consumption after a certain standard of living has been

[4]Binary economists apparently regard the existence of temporarily idle capital (factory downtime at night, etc.) as evidence of unused physical capital.

attained. "When one has acquired sufficient capital-sourced earning power to satisfy one's consumer needs and wants, sufficient to reasonably provide the living one wishes to enjoy, one has *enough* capital-oriented earning power." (Kelso and Kelso 1986, p. 29). Once one has "enough" capital, any excess would be violating the rights of the capital-deprived, so that government intervention is necessary. The state will also need to decide what a "reasonable" standard of living is:

> What constitutes a viable capital estate? How large should it be? In a free society that is a question for each household to decide for itself, subject to the power of government to enforce the limitation set forth in the common law of property. But the logic to which Congress must resort, both under the concept of economic justice and under the philosophy behind the Declaration of Independence and the Constitution, is the equal right of each consumer unit to the opportunity to produce under competitive conditions the income necessary to enjoy the standard of living it reasonably chooses for itself. "Reasonably" refers to the physical capacity of the economy. If its physical capacity is smaller than the aggregate of chosen living standards—a condition that modern technology makes highly unlikely—then Congress must, with equal protection to each, define a lower limit of viability that will prevent any capital-owning family from injuring anyone else's person or property or the public welfare. Social policy concerning family size will here become an essential political consideration. (Kelso and Kelso 1986, p. 27–28)

Clearly, the binary proposal amounts to a severe attenuation of basic individual property rights. Savings would be illegal, caps would evidently be set on standards of living, and even family size would be regulated.

Conclusion

The claims of binary economists can be quite extravagant, and they lack no confidence in the ultimate success of their new paradigm. Ashford and Shakespeare write that "the binary view of production . . . has momentous implications which will reshape the way people look at everything economic and much else besides. Those implications will eventually fill articles and books" (Ashford and Shakespeare 1999, p. 32). Kelso and Kelso make other bold claims:

> We can, in time, inoculate people against poverty. . . . [W]e can raise the earning power of the underproductive and prevent the sterilization of excess capital productive power accumulated by those who will not and cannot use it for their own consumption. We can tame, if not wholly eliminate, the business cycle in the American economy. We can plan and deliberately effect economic health, both for the national economy and for each consumer unit within it. We can indeed demonstrate for the world how to produce goods and services in such a way as eventually to make all consumers economically autonomous, as they were under

> nature's original economic plan for preindustrial humanity. (Kelso and Kelso 1986, p. 21)[5]

In this society of evenly dispersed capital, there will be no need for welfare or charity. "Welfare, private charity, boondoggle employment, and other modes of redistribution might well be necessary as temporary political or emergency expedients. But once the democratic capitalist goals have been attained, charity and other forms of redistribution should no longer be needed" (Kelso and Kelso 1986, p. 37).

The benefits of binary economics are said to extend even to a change of human nature, so that people will become happier with less:

> as all people acquire an increasingly secure capital base, it is conceivable that there will be a diminution in perceived human needs (which, in the case of some people today, amount to almost limitless dreams of conspicuous consumption) to a more balanced understanding of what is really required for human happiness. Fear of, and the reality of, material insecurity are probably the main reasons why some humans come to have almost limitless wants and greedy, highly possessive attitudes. . . . The binary economy, however, holds a potential for greatly improving attitudes because it provides a profound material security for all. (Ashford and Shakespeare 1999, p. 54)

Elsewhere the Kelsos claim that their "economic democracy" will eliminate inflation as well (Kelso and Kelso 1986, p. 26). Other binary economists believe that binary economics is also going to produce environmental purity and habitat preservation, because incomes will be so high that we can afford to produce using more expensive methods that are less damaging to the environment (Ashford and Shakespeare 1999, pp. 54–55).

Binary economists stress the uniqueness of their "new paradigm." Yet the theory is riddled with severe problems. Milton Friedman, who once debated Kelso, called Kelso's "two-factor economics" a "crackpot theory," and with considerable justification, it seems. It is not clear from reading binary economists that they understand the "conventional" economics that they are criticizing. Many binary economists are not formally trained in economics.[6]

---

[5]Kelso and Kelso (1986), p. 21. Note here the goal of "economic autonomy" or self-sufficiency. If this means that people have greater ability to fulfill their own economic goals, this is fine. But if this means less reliance on others through specialization and trade, then this autonomy will lead to poverty.

[6]This is not necessarily a problem, as many of the greatest insights in economic thought came from people who had no such training. Yet, for an organized effort to reform the discipline of economics, binary economics reveals surprisingly little participation from those schooled in the discipline. Louis Kelso himself had degrees in law and finance, Robert Ashford is trained in law, and Rodney Shakespeare has a degree in history. Shakespeare, co-author (with Ashford) of a major work defending binary economics, states that he "tried to study conventional economics but found that every book on economics gave him a headache" (Ashford and Shakespeare 1999, p. 464). From which he concluded that economics was fundamentally flawed.

Binary economics is, in sum, a cluster of significant theoretical errors masquerading as a market-friendly solution to our worst economic problems. Kelso's employee stock option plan is a legitimate method of simultaneously compensating employees and solving a pervasive principal-agent problem. Binary economics takes the ESOP and turns it into a fantastic Wolkenkuckucksheim, heedless of the massive inflation that would necessarily accompany its policy proposals.

REFERENCES

Ashford, Robert. 2002a. "What Is the 'New' Corporate Social Responsibility?: The Socio-Economic Foundation of Corporate Law and Corporate Social Responsibility." *Tulane Law Review* 76: 1187–205.

——. 2002b. "What Are the Ways of Achieving Corporate Social Responsibility?: Binary Economics, Fiduciary Duties, and Corporate Social Responsibility: Comprehending Corporate Wealth Maximization and Distribution for Stockholders, Stakeholders, and Society." *Tulane Law Review* 76: 1531–578.

——. 1996. "Louis Kelso's Binary Economy." *Journal of Socio-Economics* 25 (1): 1–53.

——. 1990. "The Binary Economics of Louis Kelso: The Promise of Universal Capitalism." *Rutgers Law Journal* 22: 3–120.

Ashford, Robert, and Rodney Shakespeare. 1999. *Binary Economics: The New Paradigm* Lanham, Md.: University Press of America.

Gauche, Jerry N. 1998. "Binary Economic Modes for the Privatization of Public Assets." *Journal of Socio-Economics* 27 (3): 445–59.

Kelso, Louis O., and Mortimer J. Adler. 1961. *The New Capitalists.* New York: Random House.

——. 1958. *The Capitalist Manifesto.* New York: Random House.

Kelso, Louis O., and Patricia Hetter. 1967. *Two-Factor Theory: The Economics of Reality.* New York: Vintage.

Kelso, Louis O., and Patricia H. Kelso. 1986. *Democracy and Economic Power.* Cambridge, Mass.: Ballinger.

Kurland, Norman G. 2001. "A New Look At Prices and Money: The Kelsonian Binary Model for Achieving Rapid Growth Without Inflation." *Journal of Socio-Economics* 30 (6): 495–15.

Mises, Ludwig von. 1981. *The Theory of Money and Credit.* Indianapolis: Liberty Fund.

——. 1956. *The Anti-Capitalistic Mentality.* Princeton: Van Nostrand.

Mises, Ludwig von, Gottfried Haberler, Murray N. Rothbard, and Friedrich A. Hayek. 1996. *The Austrian Theory of the Trade Cycle and Other Essays.* Auburn, Ala.: Ludwig von Mises Institute.

Roth, Timothy P. 1996. "A Supply-Sider's (Sympathetic) View of Binary Economics." *Journal of Socio-Economics* 25 (1): 55–68.

Rothbard, Murray N. 1993. *Man, Economy, and State.* Auburn, Ala.: Ludwig von Mises Institute.