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## TOWARD A SUBJECTIVE APPROACH TO INVESTMENT APPRAISAL IN LIGHT OF AUSTRIAN VALUE THEORY

JEFFREY M. HERBENER AND DAVID J. RAPP

*ABSTRACT:* Ludwig von Mises developed the theory of economic calculation in the context of his argument that the central planning of socialism cannot make economizing decisions concerning the use of resources in a division of labor economy. Focus on the problem of allocating resources in society led to a stress on the calculation used by entrepreneurs in making production decisions. Theory concerning other facets of economic calculation used by entrepreneurs in making investment decisions, i.e., decisions concerning the economizing combination of assets an entrepreneur should own in his enterprise, for instance, was left relatively underdeveloped. The purpose of this paper is to further explore the implications of Mises's theory of economic calculation for asset acquisitions and disposals, especially the acquisition and disposal of entire business enterprises. In particular the paper seeks to demonstrate that the subjective approach to investment appraisal developed in the German-language, business-management literature is compatible with Austrian value theory.

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*KEYWORDS:* value of the firm, appraisalment, investment appraisal, value theory, subjectivism, Austrian school, neoclassicism

*JEL CLASSIFICATION:* B31, B41, B53, G32

## I. INTRODUCTION

Carl Menger (1871), the founder of the Austrian school of economics, corrected the theory of price held by the British Classical School which had largely ignored the preferences of consumers.<sup>1</sup> In demonstrating the influence of consumer preferences on prices of goods, however, Menger did not fully integrate the realm of decision-making by entrepreneurs and the realm of decision-making by consumers in a general theory of value, choice, and action. For its part, the neoclassical wing of the Marginalist Revolution extended the profit-maximizing decision-making of entrepreneurs both to the income-maximizing decision-making of producers and to the utility-maximizing decision-making of consumers. Neoclassical economists adopted models of optimizing agents to cover all cases of human action.<sup>2</sup> Ludwig von Mises (1998), in contrast, worked within Menger's causal-realist framework to develop a general theory of action based on the reality of the human person and the logic of human action. He developed the proper relationship among the different decision-making circumstances in which persons find themselves in a division of labor economy under the general principle of action which he called economizing.<sup>3</sup>

The general theory of action encompassing any and all circumstances rests on personal valuation. Considering the objective circumstances in which a person finds himself, he envisions alternative courses of action, anticipates the likelihood of the realization of the alternative ends involved, and chooses the alternative he prefers, i.e., the alternative he values more highly than his next

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<sup>1</sup> On Menger's contribution to economics, see Salerno (1999).

<sup>2</sup> On optimization, see, e.g., Samuelson (1947). On extending optimization from market activity to human action in general, see, e.g., Becker (1976).

<sup>3</sup> On Mises's development of Menger's framework, see Salerno (1990). On Mises and economic calculation, see Salerno (2008).

most valuable alternative. Whatever his circumstances, a person economizes by making mental judgments of preference choosing more highly valued ends to attain and less valuable means to employ in attaining them. Even though Mises made the crucial distinction between valuation as the decision-making method in an autistic economy and appraisalment as part of the decision-making process in a division of labor economy, he was careful not to treat them as dichotomous but instead to recognize that appraisalment was a necessary step to an economizing valuation in decision-making in the division of labor.<sup>4</sup> While appraisalment is a crucial step to an economizing valuation in the division of labor, however, it is not always sufficient, particularly in case of investment decisions. These decisions rather require further preparation before the final valuation can be made. Mises (1998, p. 211) subsumed both a forward-looking computation aiming at the determination of planned action as well as backward-looking arithmetic calculations using past data, i.e., accounting, under the term “economic calculation.” He did not, however, extend his analysis to all of the different forms of economic calculation needed to make investment decisions. Concerning forward-looking computations in preparation of investment decisions, the term “investment appraisal” is well established, and will, consequently, be used below.

Mises’s development of the relationship between valuation and appraisalment was a crucial step in his justly famous argument demonstrating the impossibility of economizing decision-making by central planners concerning the use of resources in a division of labor economy. Having shown that imputation of value by the central planners to producer goods in the higher-stages of production was impossible, Mises then demonstrated that the backward-looking path of economic calculation, i.e., monetary

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<sup>4</sup> To explain the terms “valuation” and “appraisalment,” Mises (1998, p. 329) wrote: “Appraisalment must be clearly distinguished from valuation. Appraisalment in no way depends upon the subjective value of the man who appraises. He is not intent upon establishing the subjective use-value of the good concerned, but upon anticipating the prices which the market will determine. Valuation is a value judgment expressive of a difference in value. Appraisalment is the anticipation of an expected fact. It aims at establishing what prices will be paid on the market for a particular commodity or what amount of money will be required for the purchase of a definite commodity.”

accounting, used by entrepreneurs as a starting point for economizing decision-making was possible only in a market economy. Lacking monetary prices for factors of production determined by the interplay of supply by the owners of these factors and demand by the entrepreneurs who desire to obtain their productive services, central planners cannot efficiently allocate society's resources into the production of goods people desire (Mises 1998, pp. 324–353 and 694–711).

As Guido Hülsmann (2007, pp. 369–404) has argued, Mises's economic-calculation framework for dealing with the issue of decision-making under central planning has a wider application to other analyses of the division of labor. Entrepreneurs are not the only economizing decision-making investors in the market economy. Capitalists also invest in assets, and claims to assets, and thereby aid in economizing the process of capital formation in the market economy. In so doing, an investor *inter alia* requires an understanding of the future monetary benefits that a collection of assets, including an entire business, is able to generate; otherwise, an investor cannot make a proper valuation of the collection of assets he intends to acquire. Investment decisions must be based upon a genuine appraisal of the collection of assets acquired or disposed. It is inadvisable to purchase or sell an entire business or even a share package without an economic appraisal of the business concerned. Just like a valuation of a business's purchase or disposal requires an appraisal of the future income stream the business will presumably generate, it too necessitates an investment appraisal which avails of the appraisal conducted in advance. Investment appraisal aims at the calculation of the marginal price that the valuing subject can barely accept without suffering an economic loss.

The primary aim of this paper is to shed light on investment appraisal used by investors in preparation of a company purchase or disposal. Therefore, Section II of the paper will discuss *why* not only economic appraisal is necessary in preparation of a purchase or sale of an entire business or even parts of a business but also investment appraisal. Section III will point out *how* such an investment appraisal can be operationalized with respect to the implications of subjective value theory and, hence, be combined with Austrian value theory. Section IV will explain why the

neoclassical approach to investment is incompatible with Austrian value theory. Section V will conclude.

## II. THE VALUATION OF FIRMS AND THE NEED FOR INVESTMENT APPRAISAL

In an autistic economy, decision-making must rely on valuation without appealing to money prices. Every choice made by Robinson Crusoe, or the central planners of socialism, is guided solely by valuation. Crusoe does not need money prices to make economizing decisions concerning consumption or production. He can anticipate the contribution to his well-being made by a good as a means to attain the ends he values by making a mental judgment. He does not need to make a money-price computation for his mental judgment to be efficacious in economizing his action.

Participants in a market economy, in contrast, cannot make economizing decisions without the aid of current or anticipated future money prices, i.e., without appraisalment. In considering the purchase of a particular good, a consumer must employ the prices of other goods he could buy to compute the opportunity cost of the money he foregoes by making his purchase. Having made the computation of the purchasing power of money, he can then use valuation to establish a preference between the good he acquires and the purchasing power of the money he foregoes.

A producer in the market economy also must use money prices to make a computation as a requisite for establishing the value he places on the market-dependent alternative of his choice. He must use money prices to determine the purchasing power of the compensation he will receive from selling the services of his factors of production. Having made this computation, he can compare the value of the purchasing power of his compensation to the opportunity cost he foregoes in selling the services of his factors of production which is the personal use of his factors of production, e.g., the leisure he foregoes when selling the services of his labor.

The valuations made by entrepreneurs and capitalists acting in a division of labor economy also require the assessment of current market prices and the anticipation of future market prices, i.e., appraisalment, in preparation of establishing their preferences and

making their choices. Every production decision an entrepreneur makes requires anticipating both the prices of the output he will sell and the prices of the inputs he will buy. Having computed the financial benefit he anticipates from production, he then makes his production decision on the basis of valuing such production and sale more highly than what he considers his next best alternative. To the extent that he considers investments in other lines of production as his best alternative, the entrepreneur also requires anticipating the prices relevant to other investments in production and the terms of available funding in making various investment decisions. If an entrepreneur made a production decision having computed only its monetary benefits, like a producer does in selling his factors of production, or only its monetary costs, like a consumer does in buying a consumer good, his decisions would not be economizing. Neither will an entrepreneur's nor a capitalist's investment decisions be economizing if he judges the value of either the assets acquired or the liabilities potentially incurred without appraising them, i.e., anticipating their monetary consequences over time.

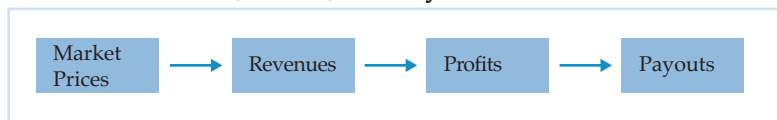
While every valuation in a market economy necessitates the consideration of market prices, most of them, however, do not require any *formalized* computation of a critical or marginal price, i.e., the price a person is individually barely willing to accept. For example, a consumer buying a good can rank the net benefit he anticipates obtaining by purchasing the good against the net benefit of his best alternative action. A person who buys a chocolate bar for \$1.00 need not estimate the maximum price he is willing to pay in order to rank the net benefit of his purchase above the net benefit of its best alternative. The consumer assesses the value of consuming the chocolate bar independently of computing the critical price. Likewise, a producer selling the services of a factor of production he owns need not necessarily formulate a critical price. The net benefit he anticipates by selling can be ranked by him against the net benefit of his best alternative action. The producer can assess the cost of foregoing the use of the services of his factor of production independently of computing the critical price. Entrepreneurs and capitalists in making investment decisions, however, cannot dispense with computing the critical price. This price is essential in comparing the monetary implications of different alternatives.

The money price realized by an asset in the division of labor depends not only on how many different alternative uses it has in the various production processes across the stages of production, but also on the manner in which it is bundled with complementary producer goods under the ownership of an entrepreneurial group in each alternative line of production. A characteristic example of a collection of assets to be so valued is a business enterprise as a whole. Companies are unique conglomerates of tangible and intangible factors (Matschke and Brösel, 2013, p. 4), including particular human persons. In general, a business consists of thousands of gear wheels that need to interlock in order to make the company function properly. Since entire businesses—or even share packages as detachable parts of such businesses—must exhibit a high degree of complexity (Olbrich, Quill, and Rapp, 2015, pp. 18–19), the contribution which any, and especially a big, company in its entirety can make to a person's well-being is not evident at first glance. Unlike, e.g., a consumer, who is able to assess the contribution to his well-being made by a good he desires independently of a formalized process and, consequently, can rank the good and the asking price properly, investors initially lack the knowledge of the magnitude of the investment's contribution to their well-being. An investor seeking to acquire a business enterprise cannot realize this business's contribution in attaining his ends without further considerations, because it is impossible to briefly look at the bundle of producer goods called "business enterprise" and really know whether or not one prefers it to a certain asking price, i.e., to make a proper valuation. A valuation of entire businesses lacking an investment appraisal beforehand must therefore be interpreted to be a more or less random *guess* as it lacks crucial information. Appraisement, in such cases, is not limited to assessing market prices of alternatively available goods but also covers the anticipation of monetary implications of the particular business enterprise concerned. The information acting man gathers from such appraisement serves as an important input parameter for investment appraisal. This path of economic calculation leads to a certain critical price for the investor that he is, at most, willing to pay when buying or at least willing to receive

when selling, from the perspective of improving his well-being.<sup>5</sup> This critical price is crucial information for an investor, because it is a requisite for him to make an end-oriented ranking of the business concerned and the asking price. As will be illustrated in detail in section III, the assessment of a particular person's critical price must be based upon the future payouts this person expects to receive (in case of a purchase) or to forego (in case of a sale).

According to Mises (1998, p. 329), appraisalment implies the anticipation of future market prices. Future market prices of goods sold determine a business's future revenues, profits, and finally payouts to the company's owners (see figure 1).

**Figure 1: Fundamental Interrelations between Market Prices, Revenues, Profits, and Payouts**



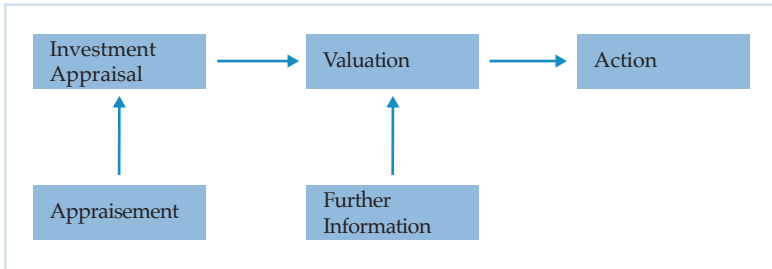
These future payouts are the decisive figure for an investor, because they determine the investor's willingness to accept a certain price in a transaction. An individual investor prepares a decision by considering the future payouts derived from the anticipated future market prices of goods applying investment appraisal.

As figure 2 illustrates, the valuation as well as the action finally taken should be—at least partly—based upon both appraisalment and investment appraisal, because the latter—drawing on the information gathered from the former—provides a person with the most crucial financial information regarding the business in question—the critical or marginal price that he subjectively considers barely acceptable.<sup>6</sup>

<sup>5</sup> For the importance of anticipating future payments for decision-making concerning acceptable prices in the present see, e.g., Davenport (1913, pp. 209–235). See also Fetter (1907, especially pp. 122–123).

<sup>6</sup> Concerning the relation of appraisalment and valuation, Mises (1998, p. 329) wrote: "The valuation of a man buying and selling on the market must not disregard the structure of market prices; they depend upon appraisalment. If an individual speaks of the costs incurred by the purchase of some goods already acquired or to be incurred by the purchase of goods he plans to acquire, he expresses these costs in terms of money. But this amount of money represents in his eyes the degree of

**Figure 2: Fundamental Interrelations between Appraisal, Investment Appraisal, Valuation, and Action**



Opponents of the necessity of investment appraisal in decision making about investing in a business might argue that such an appraisal can only incorporate financial ends<sup>7</sup> and, therefore, excludes various non-monetary ends a person may have in an action.<sup>8</sup> It is true that, in contrast to non-financial ends, financial ends can be readily measured and expressed in terms of money. But including investment appraisal in decisions concerning investments in businesses does not exclude considerations outside such appraisal. An investor is not forced to base his valuation and action solely on the financial perspective. As a matter of course, investors may complement financial information with non-financial considerations in their valuations. Investment appraisal's result should be understood as one piece of information that contributes—in addition to other information—to the valuation process (see figure 2). Moreover, as discussed above, subjective valuing of business enterprises without investment appraisal is arbitrary with respect to improving a person's well-being. Finally, even though investors can pursue non-financial ends with their

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satisfaction he could obtain by employing it for the acquisition of other goods. The valuation makes a detour, it goes via the appraisal of the structure of market prices; but it always aims finally at the comparison of alternative modes for the removal of felt uneasiness."

<sup>7</sup> For the exclusive consideration of financial ends within the most common investment appraisal approach see, e.g., Busse von Colbe (1957, pp. 18–19), Sieben, and Schildbach (1979, p. 459). For the consideration of non-financial ends in investment appraisal see Brösel (2002, pp. 160–166).

<sup>8</sup> For exemplary non-financial ends that investors might aim at with a business see Hering (2015, p. 9).

investments, focusing on monetary ends by applying a financial calculation nevertheless is essential to their decision-making because investors primarily aim at financial ends when purchasing or selling an entire business or parts of it (Taylor, 1980, p. 51; Hering, 2015, p. 9) or, at least, they aim to achieve financial ends more fully rather than less fully.

To serve in its role as an indispensable decision-making tool, i.e., one providing crucial information, a genuine investment appraisal must respect the subjectivity of value (e.g., Matschke, Brösel, and Matschke, 2010, pp. 34–35, Olbrich, Quill, and Rapp, 2015, p. 18). Investment appraisal has no merit if it relies on objective facts to the exclusion of a subjective element.<sup>9</sup> The next step, therefore, is to outline a subjective approach to investment appraisal that reflects the implications of Austrian value theory.

### III. A SUBJECTIVE APPROACH TO INVESTMENT APPRAISAL COMPATIBLE WITH AUSTRIAN VALUE THEORY

Investment theory, which allows a genuine real-world approach to investment appraisal from the perspective of the acting person, has been developed by German-speaking authors over more than the last century and a half.<sup>10</sup> Its lineage is traceable generally to the marginal utility concept and specifically to the works of Hermann Heinrich Gossen (1854) as well as early Austrian economists, including the founder of the Austrian school Carl Menger (1871).<sup>11</sup>

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<sup>9</sup> Mises (1998, p. 346–347) wrote: “Attempts to establish cost accounts on an ‘impartial’ basis are doomed to fail. Calculating costs is a mental tool of action, the purposive design to make the best of the available means for an improvement of future conditions. It is necessarily volitional, not factual.”

<sup>10</sup> E.g., König (1813, pp. 223–224) already mentions the subjectivity of value that needs to be considered in investment appraisal in his essay on the appraisal of forest value. An historic overview about the consideration of subjectivism in the German economic theory even before the Marginalist Revolution can be found in Priddat (1998).

<sup>11</sup> On the lineage of investment theory which is traceable to the works of Gossen and Menger, see, e.g., Kreutz (1909, p. 31), Berliner (1913, pp. 12–13, 25), Mirre (1913, pp. 156–158, 160, 165), Liebermann (1923, pp. 9–10), Schmalenbach (1937, p. 27), Brösel, Matschke, and Olbrich (2012, p. 240), Brösel, Toll, and Zimmermann (2012,

In discussing the distinction between valuation and appraisal, Mises recognized the lineage of subjective value in price theory back to, in particular, Gossen and Menger. He (Mises, 1998, p. 331) wrote:

The tasks incumbent upon the theory of the prices of factors of production are to be solved by the same methods which are employed for treatment of the prices of consumers' goods.... This method we owe to Gossen, Carl Menger, and Böhm-Bawerk. Its main merit is that it implies the cognition that we are faced with a phenomenon of price determination inextricably linked with the market process.

Mises was also familiar with the application of subjectivism in the early German business management theory, citing the work of Eugen Schmalenbach who was a major driving force in the development of German business management theory and investment theory in particular. Mises (1933, p. 197 [2003a, p. 221]) wrote:

Whoever wishes to form some idea of the importance of the theory of marginal utility has only to look at any presentation of the theory of the market in one of the current textbooks on the subject and to try separating out all the ideas contained in it that we owe to the modern subjective theory of value. Let him pick up the leading books on business management—for example, the works of Schmalenbach—and he will understand the contribution that subjectivism has made to this subject.

Thus, both Austrian value theory and investment theory spring from the same source. It is unsurprising, therefore, that they are closely related to each other, blood brothers in fact. Investment theory is a business management oriented operationalization of Austrian value theory. The theoretical foundation of genuine investment appraisal, which provides entrepreneurs with crucial information they need for their decision making (Hering, 2015, p. 3), is Austrian value theory (e.g., Schmalenbach, 1937, p. 27, Matschke and Brösel, 2013, p. 6, Hering, 2014, pp. 27–28).

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p. 89), Matschke, and Brösel (2013, p. 6), Hering (2014, pp. 27–28), Olbrich (2014, p. 141), and Rapp (2014a, p. 155). Concerning Menger, Mises (2003b, p.1) wrote, "What is known as the Austrian School of Economics started in 1871 when Carl Menger published a slender volume under the title, *Grundsätze der Volkswirtschaftslehre*.... Until the end of the Seventies there was no 'Austrian School.' There was only Carl Menger."

Investment appraisal serves this function because it adheres to three main principles: subjectivity, appraisal as an entity, and future orientation.

First, the principle of *subjectivity* preserves the thoroughly subjective nature of any valuation and hence any genuine investment appraisal.<sup>12</sup> Value must be understood as a *subject-object-object-relation* (Sieben, 1968, p. 285)<sup>13</sup> that investment appraisal has to consider: Value refers to the benefit which a specific valuing *subject*<sup>14</sup> expects the underlying *object* being valued to gain compared to the benefit he associates with an alternatively available *object* (i.e., the alternative action given up). Investment appraisal must respect the nature of value and choice, otherwise it could not serve as a useful element of decision-making.

Second, the principle of *appraisal as an entity* refers to the idea that an entire company should be appraised, normally, as complementary assets that form an economic organization rather than appraising the company's assets individually and then adding up the total sum.<sup>15</sup> Appraisal as an entity rests on the principle that, generally, the pooling of goods makes a higher contribution to a person's well-being than the sum of the individual parts. In deciding whether to acquire or dispose of an entire entity, it is crucial for a person to distinguish between the benefit that he gains by possessing the entity and the sum of the benefits a person would obtain by owning each asset individually, because usually these benefits do not coincide. The discrepancy is caused by combination effects which can either increase or decrease the entity's benefit

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<sup>12</sup> On the subjectivity of investment appraisal, see König (1813, pp. 223–224), Kreutz (1909, p. 34), Schmalenbach (1917/1918, p. 4), Liebermann (1923, pp. 3, 6, 30, 59–61, 75), Busse von Colbe (1957, pp. 143–144), and Moxter (1983, pp. 23–24).

<sup>13</sup> Guido Hülsmann shows in his introduction to Mises's book, *Epistemological Problems of Economics*, that Ludwig von Mises recognized the same point. See Mises (2003a, p. xxxvi).

<sup>14</sup> The valuing *subject* accords with the person for whom the investment appraisal is conducted. The valuing subject's perspective is therefore the decisive one. In contrast, the valuation *object* is the good that needs to be appraised in preparation of the valuing subject's valuation. In this paper we focus on entire companies or share packages as valuation objects.

<sup>15</sup> On appraisal as an entity, see Schmalenbach (1911/1912, pp. 484–485), Schmalenbach (1912/1913), Mirre (1913, pp. 167–169), Schmalenbach (1917/1918, pp. 6–7), and Schmalenbach (1966, pp. 60–61).

compared to the sum of the benefits of the individual goods (e.g., Küting, 1981).<sup>16</sup>

Third, the principle of *future orientation* postulates that the only benefits which can contribute to a person's well-being are future benefits.<sup>17</sup> For investment appraisal purposes, therefore, it does not matter what net income the underlying object being appraised has yielded in the past.<sup>18</sup> The only thing that really matters is the benefit that the company in question is (subjectively) expected to gain in the future. Past observations, however, may be used as a starting point of forecasting (e.g., Hering, 2014, p. 31), since ignoring historical facts aggravates the problem of uncertainty (Mises, 1998, pp. 333–335). Mises (1998, p. 333) wrote:

In drafting their plans, the entrepreneurs look first at the prices of the immediate past.... Of course, the entrepreneurs never make these prices enter into their calculations without paying regard to anticipated changes. The prices of the immediate past are for them only the starting point of deliberations leading to forecasts of future prices.

Aside from complex general models,<sup>19</sup> a properly applied income approach is the only suitable method for an investment appraisal concerning the purchase or sale of an entire business.<sup>20</sup> In contrast to its alternatives, i.e., the cost approach and the market

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<sup>16</sup> Peter Klein (2010, pp. 109–114) argues that the very act of organizing a business is a subjective judgment of a particular entrepreneur or entrepreneurial group who must assess the value of different configurations of both assets and persons that could be organized within his business.

<sup>17</sup> On future orientation, see von Oeynhausen (1822, p. 306), Kreutz (1909, p. 34), Liebermann (1923, p. 69), Münstermann (1966, pp. 20–21), Schmalenbach (1966, pp. 36–37), and Hülsmann (2000, p. 4).

<sup>18</sup> Münstermann (1966, p. 21) depicts the principle of future orientation with his phrase “for what has been, the businessman does not pay.” Mises (1998, p. 329) wrote: “Appraisal is the anticipation of an expected fact. It aims at establishing what prices will be paid on the market for a particular commodity or what amount of money will be required for the purchase of a definite commodity.”

<sup>19</sup> For an approach to investment appraisal based upon a complex general model see, e.g., Matschke, Brösel, and Matschke (2010, pp. 12–22).

<sup>20</sup> For the uselessness of the application of other approaches within investment appraisal in preparation of a purchase or sale of a business see, e.g., Olbrich, and Rapp (2012, p. 235).

approach,<sup>21</sup> the income approach is able to incorporate both the subjective future benefits of an opportunity under consideration and the alternative opportunities relevant to the person making the valuation. Because of this, the income approach can be used for investment appraisal, i.e., to calculate the requisite personal critical price. The income approach is based upon the well-known present-value technique. Thus, this approach appraises a certain business by discounting its future benefits. It can be expressed in the commonly-used formula, in which  $FB_t$  reflects the future benefit in period  $t$  and  $r$  embodies the interest rate applied for discounting purposes:

$$\text{Appraised firm value} = \sum_{t=1}^T \frac{FB_t}{(1+r)^t}$$

Whether or not the income approach conforms to Austrian value theory, however, depends upon the input parameters' specific characteristics. Not every variant of the income approach allows a subjective investment appraisal. For example, the current mainstream in investment appraisal, which is unacceptable from the view of Austrian value theory, also relies upon an application of the income approach. For the investment appraisal to be suitable and in line with Austrian value theory, however, the income approach's actual input parameters must comply with the three main investment appraisal principles mentioned above.<sup>22</sup>

First, the principle of *subjectivity* impacts both the numerator (future benefits) as well as the denominator (discount rate) of the income approach. Future benefits must be forecasted from the perspective of the person who is valuing and choosing. Predictions of future benefits depend upon personal factors, such as the dividend policy, individual tax rates including potential tax loss carry-forwards, and individual synergies, e.g., if the person who is valuing already owns a competing object to the one being valued

<sup>21</sup> For the market approach (which might also be called "relative valuation") e.g. see Damodaran (2012, pp. 19–23). For the unmasking of the market approach with regard to investment appraisal see Olbrich (2000). For a comprehensive overview on the cost approach see Matschke, and Brösel (2013, pp. 315–325).

<sup>22</sup> Olbrich, Quill, and Rapp (2015, pp. 17–20) illustrate the (historic) relation between the above presented investment appraisal principles and Austrian value theory.

(Matschke, and Brösel, 2013, p. 18, Hering, 2014, p. 28).<sup>23</sup> Moreover, the principle of subjectivity is closely connected to the principle of future orientation. Because there is no objective and universally valid forecast, the anticipation of future developments must necessarily be based upon subjective estimates and the person's appetite for risk (Hering, 2014, p. 30). It is crucial to state that the appraiser's subjective expectations are not necessarily definitive in forming both a genuine appraisement, and, consequently, investment appraisal. If the appraiser is not the same person as the one who is valuing and choosing, e.g., because the appraisal is conducted by an audit firm, then the appraiser must consider his client's perspective instead of his own (Matschke, and Brösel, 2013, p. 3).

Besides future benefits, the principle of subjectivity also affects the interest rate applied for discounting purposes. The relevant interest rate serves to make comparisons (e.g., Sieben, and Schildbach, 1979, p. 460). The business concerned must be compared to the best alternative action that is available (e.g., Hering, 2014, pp. 28–29, Hering, 2015, p. 144). Instead of purchasing a business, one person may undertake a different investment opportunity, whereas another person might use his money to pay back an expensive loan. Clearly, the best alternative application, i.e., the optimal *marginal use* of funds, depends upon both the specific person's investment and funding opportunities and financial ends and these will differ from one person to another. In order to reach an economically relevant result by assessing the contribution that the business's benefits can make to a person's well-being, investment appraisal must necessarily consider the underlying person's optimal marginal use of money within the income approach instead of applying an "objective" market interest rate (e.g., Hering, 2014, pp. 28–29). Because the interest rate that the last invested or funded dollar yields in the person's overall investment and financing program represents the best known alternative, it should serve as the discount rate. This rate has been called the *endogenous marginal interest rate* (e.g., Hering, Toll, and Kirilova, 2014, p. 44). It reflects the internal rate of return of the last invested or funded dollar, i.e.,

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<sup>23</sup> The subjective estimation of future benefits should also consider the time aspect with regard to artificial boom and bust cycles and, therefore, the findings of Austrian business cycle theory. For the fundamentals of Austrian business cycle theory, see Rothbard (2009).

the internal rate of return of the so-called *marginal object* (Hering, 2015, p. 144). The marginal object may be the least profitable investment opportunity or the most expensive funding alternative that is ranked and chosen by the person making the valuation as suitable to achieving one of his financial ends.

Second, the principle of *appraisal as an entity* points out that the contribution made by a business as a whole to a person's well-being usually exceeds the contribution that the sum of the business's assets, appraised individually, can make. This principle affects the measurement of future benefits and, therefore, the numerator of the income approach which is derived from appraisement. In order to serve as a genuine investment appraisal tool, the application of the income approach, normally, must include future benefits that the business is able to generate as an entity. In addition, the numerator also must consider individual synergies that might occur along with the benefits of the object being valued, if the business comes into the person's possession. A presumptive seller also needs to take possible personal synergies into account that he foregoes by selling his business.

Third, the principle of *future orientation* requires the exclusive consideration of future benefits (and discount rates) in investment appraisal. The net income that a certain business gained in the past cannot contribute to the well-being of its future owner (e.g., Rapp, 2014a, p. 162). Only future income can increase that person's wealth. A simple extrapolation of past developments, therefore, can neither be an appropriate approach to appraisement nor, consequently, to investment appraisal.<sup>24</sup> At any moment, the future might reveal first-time developments, which cannot be part of the past's extrapolation. Therefore, it is a fallacy to believe that longer periods under observation of past events automatically lead to better forecasts of the future (Rapp, 2013, p. 361). Moreover, forecasting the consequences of human action requires a person's judgment. The array of prices of goods, patterns of production, and other data generated by human action are the result of human choices and human choices are not determined by empirical influences alone. As Mises (1998, p. 105) put it:

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<sup>24</sup> On the inadequacy of extrapolation, see Schmalenbach (1966, pp. 37–38), Moxter (1983, pp. 97–99), Frey (2011, p. 70), Olbrich, and Rapp (2012, p. 2006).

Natural science does not render the future predictable. It makes it possible to foretell the results to be obtained by definite actions. But it leaves unpredictable two spheres: that of insufficiently known natural phenomena and that of human acts of choice. Our ignorance with regards to these two spheres taints all human action with uncertainty. Apodictic certainty is only within the orbit of the deductive system of aprioristic theory. The most that can be attained with regard to reality is probability.<sup>25</sup>

The problem of uncertainty, then, can never be completely solved.<sup>26</sup>

In the face of uncertainty in making their investment appraisals, investors (have to) rely on heuristics. A Monte Carlo simulation is one suitable example (Hertz, 1964, pp. 95–97, Coenenberg, 1970, pp. 793–795). It allows a person making a decision, in the absence of statistically given objective probabilities, to transparently structure possible future developments based on individual forecasts and to subjectively decide which scenario he expects to occur. Such a simulation has three steps (Hering, 2015, pp. 334–339). First, the person making the valuation estimates the distributions of the underlying input parameters, which are future benefits and interest rates. The estimate need not be restricted to particular distributions. The person making the final valuation might, e.g., apply the simulation using different distributions, since he lacks the knowledge of the actual one. Second, a computer-based simulation process is generated, which randomly combines future benefits and interest rates depending on the estimated distributions. After the simulation has generated thousands of combinations, the distribution of the target value can be transparently illustrated using a frequency distribution and/or a risk profile. Third, with this transparent illustration of the investment project's chances and risks in hand, the person making the valuation is able to select a single appraised firm value out of the distribution based upon

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<sup>25</sup> About forecasting in the face of uncertainty, Mises (1998, p. 107) wrote: "There are two entirely different instances of probability: we may call them class probability and case probability. The field for the application of the former is the field of the natural sciences, entirely ruled by causality; the field for the application of the latter is the field of the sciences of human action, entirely ruled by teleology."

<sup>26</sup> As Sieben, and Diedrich (1990, p. 807) note: "Uncertainty cannot be outwitted." Or, as Mises (1998, p. 106) put it, "Every action refers to an unknown future. It is in this sense always a risky speculation."

his personal future expectations as well as his appetite for risk as a typical entrepreneurial act.

In summary, the widely-applied income approach can be used to render a subjective investment appraisal, which is compatible with Austrian value theory. In order to apply that approach usefully, the anticipated future benefits must reflect the actual payment flows that the person anticipates gaining as he considers the business as an entity, including individual tax rates and synergy effects. The interest rate that is applied to discount the future payment flows also needs to be assessed personally. It is reflected in the internal rate of return of the marginal object of the person making the valuation. The problem of uncertainty, however, cannot be definitively solved. One way investors can handle this problem is a Monte Carlo simulation, which generates a transparent decision basis. The final selection of the appraised firm value out of the derived distribution of potential firm values is a typical entrepreneurial act that is up to the person making the valuation.

The subjective approach to investment appraisal presented in this paper can be smoothly combined with Austrian value theory. Subjective investment appraisal accepts and is built upon the subjectivity of value and therefore, can provide entrepreneurs with the most crucial information they need to make their valuations leading to the purchase or sale of a company—the marginal price they can at most pay to purchase or they can at least accept to sell without suffering an economic loss. This information is crucial for the subjective valuation process which determines the entrepreneur's final action.

#### **IV. FUNDAMENTALS OF THE NEOCLASSICAL FINANCE-THEORY- BASED MAINSTREAM AND ITS INCOMPATIBILITY WITH AUSTRIAN VALUE THEORY**

The current mainstream<sup>27</sup> in investment appraisal relies on input parameters within the income approach that are much different

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<sup>27</sup> For potential reasons why neoclassical finance theory is applied almost axiomatically in both academia and practice see Olbrich, Quill, and Rapp (2015, pp. 7–8).

from what *investment* theory requires. It is based upon neoclassical *finance* theory and neglects the crucial personal perspective in favor of a questionable “objective” market perspective (Matschke, and Brösel, 2013, pp. 26–27). Though the prevalent mainstream discounted cash flow (DCF) methods are also based upon the income approach, they are inadequate as a decision tool (e.g., Rapp, 2014b, p. 1067). The main reason for this diagnosis is the application of finance-theory based models within current DCF methods (Hering, 2014, p. 263).

In these methods, the discount rate is usually, at least partly, assessed using the capital asset pricing model (CAPM) (Koller, Goedhart, and Wessels, 2010, p. 234). Instead of considering the essential personal endogenous marginal interest rate, the CAPM aims at the determination and application of an “objective” discount rate (Hering, 2015, p. 307). In order to measure an, at least hypothetically, objective discount rate, the CAPM must rely upon several restrictive assumptions (e.g., Perridon, Steiner, and Rathgeber, 2012, p. 546, Hering, 2015, p. 297).<sup>28</sup> These include a perfect capital market (which includes the existence of a single market interest rate for both investments and lending; unlimited access to lending independent of debt ratio, credit-worthiness, credit amount and time pattern; symmetric distribution of information; and the absence of taxes as well as transaction costs) and economic agents with both homogeneous expectations and a standardized risk appetite ( $\mu$ - $\sigma$ -principle). Basically, CAPM’s assumptions supplant heterogeneous human persons with an army of homogeneous robots. Because the subjective values of homogeneous robots coincide, the model can generate a (hypothetical) single objective market value (Matschke, and Brösel, 2013, p. 27). The uniformity of economic agents in the CAPM leads finally to

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<sup>28</sup> Brealey, Myers, and Allen (2014, p. 204)—as the authors of one of the world-wide leading textbooks in mainstream neoclassical corporate finance—admit: “The capital asset pricing model rests on several assumptions that we did not fully spell out.” After this avowal, they only exemplify some of CAPM’s assumptions. Regardless of that fact, they finally claim: “It turns out that many of these assumptions are not crucial, and with a little pushing and pulling it is possible to modify the capital asset pricing model to handle them.” In contrast to that, Hering (2015, p. 306) illustrates that even the assumption of homogeneous expectations alone is drastic, because it excludes the real fundamental problems of investment and funding decisions by definition.

the *market portfolio* which includes *every* risky asset and which is held by *every* single investor. In other words, in the CAPM world, everybody owns everything (Hering, 2015, pp. 298–299). The sole ownership of any company is, by definition, impossible. Thus, the purchase or sale of an entire company is excluded as well. Nevertheless, the CAPM is applied for the investment appraisal of *entire* businesses in preparation of merger and acquisition decisions all over the world every single day. In addition to this logical flaw, the market portfolio view makes the CAPM a quasi-communist model (Hares, 2011, p. 124, Rapp, 2013, p. 361, Hering, 2015, p. 305, footnote 2). Because everybody is invested in the unified market portfolio, every asset is owned by the collectivity of investors. Even though the CAPM grants private property rights (which makes it different from an actual communist case), the market portfolio concept is, at least, evocative of a communist society.

As a matter of course, its assumptions make the CAPM an escapist model (e.g., Hering, 2015, p. 304). The assumed unlimited access to lending, e.g., implies the impossibility of bankruptcies (Rapp, 2014a, pp. 167–168). If you can borrow as much money as you want at any given time, there will not be an issue of illiquidity (Hering, 2014, p. 336). In addition, the assumption of homogeneous expectations implies the expendability of stock markets (Hering, 2015, p. 304). If both seller and buyer held the same expectation, why would the buyer buy when they both expected a negative stock price performance, or why would the seller sell when they both expected a positive stock price performance? But bankruptcies (e.g., Lehman, Enron) and frequent trading on stock markets are part of the real world. By failing to incorporate crucial features of the real world, the CAPM cripples itself as an adequate decision tool in practice. A model that ignores core elements of the real world will make predictions inferior to an approach that incorporates them. In fact, finance-theory-based investment appraisals cannot even provide entrepreneurs with their personal marginal prices, which are the critical elements in their valuing and choosing. Instead such a formulaic appraisal generates a number (“market value”), which is purely hypothetical and more or less unrelated to real world investment decisions.

In claiming the existence of an objective market value, the current mainstream contravenes Austrian value theory. It cannot

serve, therefore, as a reasonable basis for subjective valuations and corresponding actions. The finance-theory-based mainstream must be rejected both on theoretical and practical grounds with regard to investment decisions.

## V. CONCLUSION

The valuation of entire businesses or even parts of them made by persons in their purchase or sale follows the same economic laws, outlined in Austrian value theory, as the valuation of any other good. The crucial question that needs to be answered by a person is whether he prefers the ownership of the business over a certain amount of money, i.e., the negotiated price, or vice versa. However, the valuation of an entire company necessitates a consideration beyond valuation for a simple good. A person can only establish a relevant preference for a business, if he is aware of specific financial information. A relevant valuation of a presumptive purchase or sale of a business is impossible as long as the subject making the valuation does not know how the business in question can contribute to his personal well-being. This essential information cannot be gathered just looking at the good called a "business enterprise." Instead, the person needs to conduct a genuine investment appraisal. The purpose of such an appraisal is to let the subject making the valuation know what price he can barely accept without suffering an economic loss in conducting the transaction in question.

A relevant approach to investment appraisal can be found in the mature German investment theory. This theory shares with Austrian economics its approach to the marginal utility concept and the theory of subjective value. According to investment theory, investment appraisal must consider three main principles: subjectivity, appraisal as an entity, and future orientation. Because subjective investment appraisal respects the fundamental relations of Austrian value theory, it can be smoothly combined with Austrian value theory as a useful information tool, which in turn should be conducted by an investor in preparation for a purchase or sale of, e.g., an entire company.

In contrast to *investment* theory, the current mainstream in investment appraisal is based upon neoclassical *finance* theory. It

supplants a personal perspective of valuing in favor of a pseudo-objective market view. Mainstream appraisal's main aim is the assessment of an objective market value for goods, which can only be deduced within a hypothetical world based upon various restrictive and unrealistic assumptions. Being incompatible with Austrian value theory, the current mainstream in investment appraisal cannot support entrepreneurs in making their real-world decisions.

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## 100 PERCENT RESERVE BANKING AND THE PATH TO A SINGLE-COUNTRY GOLD STANDARD

HOSSEIN ASKARI AND NOUREDDINE KRICHENE

**ABSTRACT:** One hundred percent reserve banking is an essential foundation and prerequisite for a country to establish long-term financial stability and sustained economic growth. It is also an essential element for a country contemplating the adoption of a stable gold standard monetary system. Debt money, i.e., debt created by banks, was once called *malum per se*, a thing that is evil in its nature. It has supported excessive government debt, inflated speculative bubbles, fueled inflation, reduced investment and growth, and resulted in an unjust redistribution of wealth. In this paper, we discuss some of the detrimental consequences of fractional reserve banking and outline its abolition as the principal reform before one or more countries can establish a viable gold standard.

**KEYWORDS:** fractional reserve banking, financial repression, gold standard, inflation, money

**JEL CLASSIFICATION:** E00, E4, E52, F33, G01, G21

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## INTRODUCTION

The most challenging monetary reform in any country is the adoption of 100 percent reserve banking, or 100 percent money. Governments and banks have resisted this reform. A domestic gold standard becomes simply an appendix to 100 percent reserve banking or money by connecting money to the supply of gold. A 100 percent reserve banking system separates money from debt obligations; a bank can no longer create money in the form of demand deposits; and money would be independent of fluctuations in debt. A 100 percent reserve banking system was practiced by the Bank of Amsterdam (1609), the Bank of Hamburg (1619), the Postal System, and other 100 percent depository institutions that restricted their business to purely safe depository and transfer functions.

A fundamental condition for establishing a stable banking system has been the abolishment of fractional reserve banking, i.e., debt money, in favor of 100 percent reserve banking. This condition was stipulated by David Hume (1752), William Gouge (1833), Amasa Walker (1873), Charles H. Carroll (1850s), Frederick Soddy (1934), the authors of the Chicago Plan<sup>1</sup> (1933), Irving Fisher (1936), Ludwig von Mises (1953), Murray Rothbard (1962), Maurice Allais (1999), and a number of other economists and authors. They essentially proposed a two-tier banking system:

- i. 100 percent reserve banking strictly for depository and payments operations
- ii. Investment banking for financial intermediation and channeling savings into investments

One hundred percent reserve banking has been recommended for a number of reasons that include avoiding: (i) frequent bank failures and losses suffered by depositors;<sup>2</sup> (ii) wide expansion and

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<sup>1</sup> The authors of the Chicago Plan were: Henry Simons, Frank Knight, Aaron Director, Garfield Cox, Lloyd Mints, Henry Schultz, Paul Douglas, and A. G. Hart. Professor Irving Fisher of Yale University was a strong supporter of the Plan. His book, *100 Percent Money* (1936), was an attempt to win support for the plan among academics and policy makers.

<sup>2</sup> The Bank of England, founded in 1694, suspended convertibility of its notes into gold and silver as early as 1696, and not infrequently thereafter. It suspended convertibility during 1797–1821.

contraction of the money supply that created speculative bubbles, crashes, deep recessions, and loss of output and employment; (iii) unjust wealth redistribution via fictitious credit in favor of borrowers and speculators; (iv) debt money that was too costly to use, since interest has to be paid on outstanding debt; and (v) debt money contracts if interest cannot be paid. With fractional reserve banking, many banks have been bankrupted with ominous financial losses for their depositors, or by taxpayers through subsidized deposit insurance schemes and bailouts. Hence, many writers deemed it essential to separate the deposit of money from the lending and debt obligations.<sup>3</sup> This separation was needed to sever the relation between the money supply and debt, so money would not fluctuate with debt, and to insure that banks hold and lend true savings and do not issue fictive credit. Money should not be created and destroyed through debt expansion and contraction via the credit multiplier.

The depository system is a fundamental feature of a modern economy and could be provided by private banks, or the state (e.g., Bank of Amsterdam and Bank of Hamburg). It accepts deposits for safekeeping and undertakes domestic and foreign payments against fees paid by the depositors. Some authors have suggested that the government could provide the deposit system through a banking and postal system so as to minimize fees and increase the quantity of money for the economy (Gouge, 1833; Simons, 1947). Investment banks in implementing their investment banking function create no money and accept no demand deposits; they borrow or issue equities and debt securities; and lend or buy securities. Essentially, investment banks would operate as other businesses, they issue shares and attract capital that they invest on behalf of their shareholders.

Debt-based money is associated with the advent of fractional reserve banking. By definition, the state grants a charter for a bank to create money. In countries with fractional reserve banking, debt money made economies navigate from booms to busts (Juglar,

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<sup>3</sup> With this separation, there is no need for insuring the safety of bank deposits through corporations such the Federal Deposit Insurance Corporation (FDIC).

1862) and destroyed the gold standard.<sup>4</sup> Ironically, it was the United Kingdom, the cornerstone of the gold standard and the world financial center, that dealt a fatal blow to the gold standard in 1931, which many of its eminent economists called a barbarous system. It was followed immediately by the United States, another model of the gold standard, abolishing gold money and sequestering the gold from its citizens in 1933, with the rest of the world following along. Proponents of debt money referred to the gold standard as gold shackles. But it was debt and paper money that have led to frequent financial crises after the gold standard was abolished (e.g., Greece 2009–2015, US and Eurozone 2009–2015, etc.). Moreover, debt-money system cannot stand on its own; it needs a central bank for liquidity and occasional government bailouts. It was the debt system that undermined the Bretton Woods gold exchange standard in 1971. Endless regulations in the 19<sup>th</sup> and 20<sup>th</sup> centuries have not prevented rapid creation of debt and financial booms and busts.

Money has been considered a principal pillar of the human civilization; it has enabled the development of commerce, industry, exchange and travel within and across countries and continents, and high level of scientific progress. If this pillar is undermined, economic decline follows, and social stability is put at risk.<sup>5</sup> With the advent of fractional reserve banking, debt-based money has risen to prominence. In the pursuit of gains from interest on fictitious loans, banks and central banks kept issuing debt money, out-of-thin air, until the breakout of a financial crisis. Debt money calls for more debt to provide for rapidly rising prices, replace repaid debt, and pay interest. The central bank and banks validate any price and wage rise through more debt money. As soon as the debt process slows down or hits general bankruptcy, a severe financial crisis breaks out and wipes a large part of the debt money causing

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<sup>4</sup> Eminent writers stressed that debt money would certainly evict gold: David Hume (1752), Charles Jenkinson (1805), US Presidents Thomas Jefferson and Andrew Jackson, William Gouge (1833), Charles Holt Carroll (1850s), and Amasa Walker (1873).

<sup>5</sup> Examples of horrifying hyperinflations that ruined the real economy were John Law's system in France (1716–1720), the French assignats (1789–1795), the US continental currency (1785–1790), and the German hyperinflation (1919–1923). In all these episodes, paper became worthless, the economy lost its money, and famine spread in the country.

severe economic and financial disorders.<sup>6</sup> With debt organized as currency (Carroll, 1850s), financial crises became frequent; the most ominous was the Great Depression (1929–1936). The 2008 financial crisis was another ominous collapse of the debt money. Each financial crisis destroys money (Frederick Soddy, 1934; Irving Fisher, 1936), paralyses the economy, and spreads bankruptcies and human hardship. Governments resort to even pushing more interest-debt in order to cope with the disorders of the financial crisis. Hence, each economy is entangled in a vicious circle of debt followed by crises.

A 100 percent (or at least a long way toward 100 percent) reserve banking system or 100 percent money has become pressing in view of growing money disorders in the world. Many eminent writers had urged the abolition of debt-money and proposed reforms along the principles of 100 percent reserve banking and risk-sharing investment banking.<sup>7</sup> Despite repeated calls for reforms during the 18<sup>th</sup>–20<sup>th</sup> centuries, both governments and financial interests have remained adamantly against abolishing debt money. In what follows, we address the following themes:

- The nature of debt money
- Inherent inflationism, instability, and uncertainty of debt money
- Some notable rejections of debt money and proposals for 100 percent reserve banking
- Suggested reforms for reintroducing 100 percent reserve banking and a domestic gold standard
- 100 percent reserve banking and a convertible 100 percent domestic gold standard
- Structural reforms to support 100 percent money

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<sup>6</sup> Irving Fisher (1936) noted that US money was reduced by 35 percent during 1929–1933 following the collapse of debt money. He strongly advocated 100 percent reserve money so to eliminate the banks' power in creating and destroying money.

<sup>7</sup> We may cite David Hume (1752), Thomas Jefferson, Andrew Jackson, William Gouge (1833), Charles. H. Carroll (1850s), Amasa Walker (1873), Irving Fisher (1936), the numerous authors of the Chicago Plan (1933), Ludwig von Mises (1953), Murray Rothbard (1994), and Maurice Allais (1999).

## THE NATURE OF DEBT MONEY

Debt money has been rising without limit in almost every country at rates that far exceed real GDP growth. Money supply, measured by M2 (currency plus deposits) may increase at a double-digit rate for decades in many countries. The source of this increase is simply debt. Simons (1947) stated:

We have reached a situation where private-bank credit represents all but a small fraction of our total effective circulation medium.... Thus the State has forced the free-enterprise system, almost from the beginning, to live with a monetary system as bad as could well be devised.... An enterprise system cannot function effectively in the face of extreme uncertainty as to the action of the monetary authorities or, for that matter, as to monetary legislation. We must avoid a situation where business venture becomes largely a speculation on the future of monetary policy. (p. 55)

If we examine the balance sheet of the US Federal Reserve (Fed), we see that gold and foreign assets (\$30 billion) are negligible in relation to total liabilities (\$4,452 billion), i.e., 0.6 percent. All money expansion was through money creation, with money becoming overly dependent on domestic debt. Moreover, as the latter expands, imports tend to rise faster while exports tend to shrink, which results in reduced net foreign assets. Moreover, debt money is costly; banks earn interest and commissions on the outstanding debt.

Debt money has fueled inflation.<sup>8</sup> The latter has been considered as a form of fraud, which has to be eradicated.<sup>9</sup> It is a fallacy that

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<sup>8</sup> Two definitions of inflation are proposed. The most common one is a persistent general rise of prices. Another definition considers the general rise of prices as an effect of a rise of money supply that is not offset by a corresponding increase in the demand for broad money so that a fall in the objective exchange-value of money must occur. In this definition, inflation is measured by the increase in broad money supply.

<sup>9</sup> Inflation is an inherent feature of paper and debt money. It emanates from money created out-of-thin air in form of a monetization of fiscal deficits or issues of un-backed loans. Commodities are purchased against paper and not commodities. The practice of appropriating wealth unjustly was severely condemned by John Locke (1691).

inflation stimulates employment and growth.<sup>10</sup> Inflation is a tax that unduly transfers free wealth to one group at the expense of another group. The income distribution is altered by a heavy inflation tax, which deprives labor from a sizable part of its real contribution to real GDP. At a high rate of money depreciation, holders of cash will get rid of it as soon as they receive it. Financial savings is discouraged (McKinnon, 1973; Shaw, 1973). Forced savings will replace voluntary savings, imposed upon creditors and workers through the inflation tax (Hayek, 1932). Production will be discouraged as producers hike prices and reduce output.<sup>11</sup> Exports will be reduced. Figure 1 portrays the Consumer Price Index (CPI) for the US and the Retail Price Index (RPI) for the UK under the metallic system during 1800–1913. In both countries, there was a significant trickling down of productivity gains and technical change in form of long-term trends of price declines. In 1913, the US CPI stood at 79 (1800 = 100) and the UK RPI stood at 82 (1800 = 100). Workers had shared in the fruits of growth (Farrer, 1898). Such sharing has been diminished under the debt money in almost every country where this system is in effect. Figure 2 portrays the inherent inflationary feature of the debt-money system supported by central banking in the UK and the US. Inflation tax has become permanent, penalizing the holders of the currency, workers, pensioners, and creditors. The inflation tax benefits the government, debtors, and speculators. Inflation is vital for the perpetuation of the debt system. There has been little trickling down of productivity gains to consumers.<sup>12</sup> In 2013, US CPI stood at 1,294 (1945 = 100), and the UK RPI stood at 3,766 (1945 = 100).

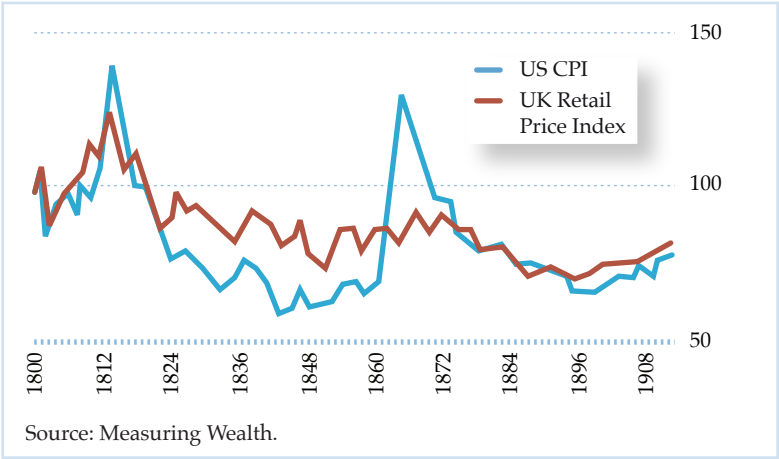
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<sup>10</sup> Bastiat, *The Seen and the Unseen*, 1877.

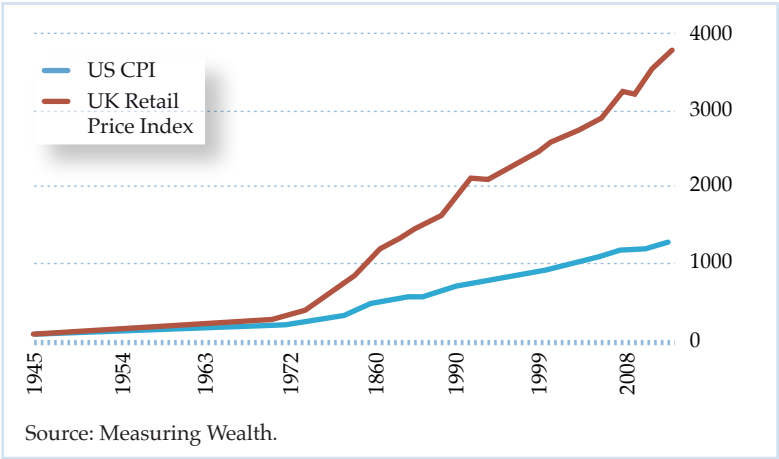
<sup>11</sup> In an inflationary context, producers reconstitute their money working capital through increasing prices and reducing quantities. In a non-inflationary context, they have to generate money working capital through higher quantities sold. They are compelled to produce much more to generate cash. The drop in prices improves in turn external competitiveness and exports.

<sup>12</sup> Mises (1953) noted that CPI underestimated inflation during 1922–1929, a period characterized by high productivity gains. Let the recorded CPI be 3 percent, let productivity gains be 7 percent; the true CPI would be 10 percent.

**Figure 1: The United Kingdom and the United States Annual Price Indices, 1800–1913**



**Figure 2: The United Kingdom and the United States Annual Price Indices, 1945–2013**



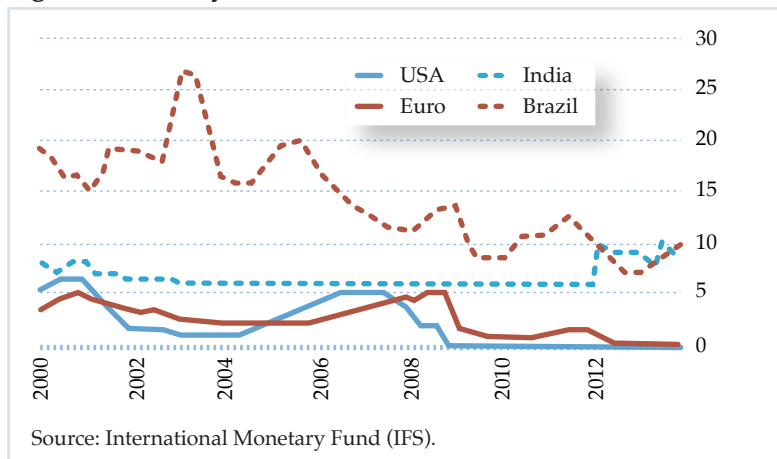
## THE INHERENT INFLATIONISM, INSTABILITY, AND UNCERTAINTY OF DEBT MONEY

The debt money model has resulted in adverse social consequences in many countries where it has been adopted.<sup>13</sup> Recurring financial crises and ensuing economic dislocation have been its inherent features. In each debt crisis episode, economic prosperity was reversed into decline and mass-unemployment as demonstrated by the 2008 financial crisis. Being inter-related by a web of trade, banks and capital flows, a crisis breaking out in one country spreads to other countries. Fractional reserve banking was a violation of the original and authentic 100 percent reserve banking that characterized goldsmith houses as well as the Bank of Venice, the Bank of Amsterdam, and the Bank of Hamburg.<sup>14</sup> It developed very fast in Europe and the US during the 18<sup>th</sup>-19<sup>th</sup> centuries mainly because of the leverage it provides to bank owners from the emission of banknotes and discounts, and ease of obtaining charters.

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<sup>13</sup> Interest-based bank money has been severely condemned by Thomas Jefferson, William Gouge, Charles Holt Carroll, Frederick Soddy, Amasa Walker, and many others. Mises, Rothbard, Irving Fisher, authors of Chicago Plan, Maurice Allais, and many authors proposed abolishing debt money and its replacement by a non-interest money.

<sup>14</sup> These institutions were created as depository and payments institutions and not to economize on gold and silver, which were abundant in supply to the point of causing high inflation worldwide.

**Figure 3: Monthly Central Bank Interest Rates, 2000–2013**

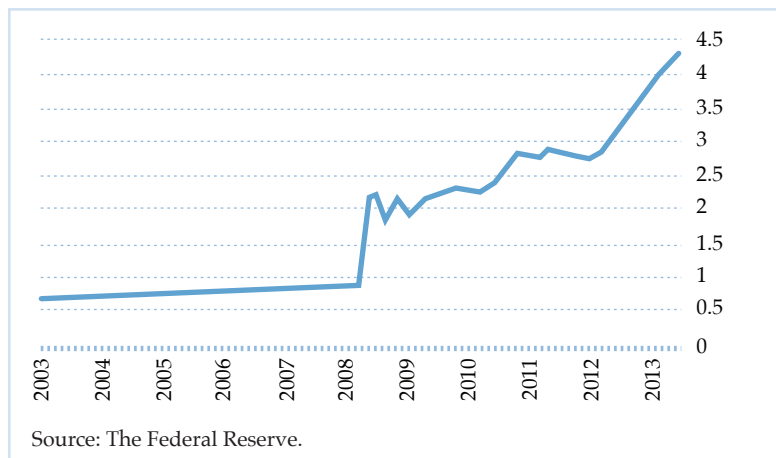
By turning money into a policy tool, to secure full-employment of labor, devalue exchange rates, and inflate asset and housing prices, central bank actions could become somewhat arbitrary.<sup>15</sup> Simons deplored money as an instrument policy and called discretionary policy as a form of lawlessness. He urged the abolition of fractional reserve banking and central banking, and the creation of a “National Monetary Authority” that controls money according to fixed rules. The systemic risk and uncertainty could be described by the cheap money policy of major central banks as portrayed by the interest rates in Figure 3. The Fed practiced a repressive policy, which lowered money rate to 1 percent during 2002–2004 under the guise of fighting deflation at a time the economy was operating at near full-employment for more than a decade. Credit rose at 12 percent year at the expense of creditworthiness; asset, housing, and commodities prices spiked. A financial collapse followed thereafter in 2008, creating massive unemployment in the US and Europe. After 2008, the Fed forced interest rates to near zero, this time, to fight unemployment. Hence, the Fed used a cheap money

<sup>15</sup> Friedman (1959) opposed the discretion power of the Fed; he proposed a fixed rule according to which money supply ought to increase at about 2 percent-3 percent. He reiterated that the Fed could only control the money supply; it cannot control the unemployment rate, the interest rate, or the rate of inflation.

policy as a panacea for both diseases. The Fed decided to inflate money under quantitative easing programs; it hiked up without any restraint its credit to \$4.5 trillion in 2015 from \$0.8 trillion in 2008 (Figure 4).<sup>16</sup> This gigantic money-out-of-thin air printing was aimed at monetizing record fiscal deficits and pushing cheap loans in the economy. The Fed, and most politicians and academics are convinced that near-zero interest and unlimited money were most appropriate policy for full-employment and economic growth.

Fed's policy has in part led the Eurozone and other countries into monetary difficulties. As long as the dollar is a reserve currency, the Fed faces no external constraint in printing as much money as it wishes and in setting interest rates at near zero. The latter measure is dangerously distortive and assumes that real capital supply is overly abundant in relation to demand for capital. The danger of this policy was already established by the 2008 financial crisis.

**Figure 4: The Federal Reserve Credit, 2002-2014**  
(Trillions of Dollars)



Debt money created too much uncertainty. The monetary base, credit, interest rates, exchange rates, asset prices and commodity

<sup>16</sup> Excess reserves of banks at the Fed were \$2.5 trillion in December 2015. If this amount is drawn down, credit expansion will be too gigantic and will increase credit risk as well as inflation.

prices are all moving in a most unpredictable and volatile way. Huge resources are devoted to hedging against high volatility of exchange rates and asset prices, which increases inefficiencies. In stable markets, hedging resources would have been used for productive investment.

With near-zero interest rates and cheap money, the US government debt skyrocketed to about \$18 trillion in 2014 (103 percent of US GDP) and is still rising due to large deficits. Private debt had already reached bankruptcy point in 2008 and is still rising fast. The huge indebtedness makes inflation the only way out of debt. Most likely, the Fed will maintain ultra-cheap policy for some time, since any tightening of money policy will send debt into bankruptcy and result in a crash of asset prices.

Only reserve currency countries, today principally the United States, can afford the luxury of near-zero interest rates without setting off hyperinflation as happened in Germany 1919–1923. In 2015, central bank interest rates were 0.08 percent (US), 0.20 percent (Eurozone), 10 percent (Brazil), and 10 percent (India) (Figure 4). The contrast is obvious. Being non-reserve currency countries, Brazil and India could not afford to set interest rates at near zero. They face a foreign exchange constraint. Low interest rates would fire up inflation, undermine their banking sector, and destroy their export sector.

Setting interest rates at zero or near zero is most distortive policy. It leads to unlimited borrowing by subprime markets, encourages consumption through loans that may never be repaid, it consumes savings and depletes capital, and by introducing distortions enables mal-investment. It confiscates real capital from one group in favor of the group who benefits from cheap money. It exposes the banking sector to significant interest and credit risks. It pushes up asset and commodity prices, and creates an environment of economic uncertainty. Speculation becomes intense. Income and wealth inequality becomes aggravated. The harmful effects of cheap money policy appear only when a financial crisis breaks out. Abolition of fractional reserve banking is the reform that would reduce the depletion of capital, volatility, and ominous free redistribution of wealth via inflationism. Under a gold standard, low interest rates would immediately drain all the gold from the country, and force gold suspension as happened in the UK in 1931 and the US in 1971.

## **SOME DISTINGUISHED CRITICISMS OF DEBT MONEY AND PROPOSALS FOR 100 PERCENT RESERVE BANKING**

Fractional reserve banking has provided the foundation for high leverage<sup>17</sup> and swindling schemes, inflation of banknotes, financial crises resulting in economic dislocation and bankruptcies. As a result, numerous authors have called for a definitive end of fractional reserve banks, a cancellation of their charters, and the re-introduction of 100 percent reserve banking and money. A partisan of gold and 100 percent money, David Hume (*Political Discourses*) wrote: "of those institutions of banks, funds, and paper credit, with which we are in the kingdom so much infatuated. These render paper equivalent to money (i.e., gold), circulate it throughout the whole state, make it supply the place of gold and silver...." (Hume, 1752) The same discredit was held by Charles Jenkinson, Earl of Liverpool (1805): "Paper currency, which is carried to so great an extent, that it is become highly inconvenient to Your Majesty's subjects, and may prove in its consequences, if no remedy is applied, dangerous to the credit of the kingdom."

Aware of the danger of debt-money, the US Third President Thomas Jefferson wanted to abolish fractional reserve banking and preserve metallic money. In fact, he opposed the renewal of the charter of the First Bank of the United States. Witnessing the severe dislocation caused by banks and their corrupt nature, President Andrew Jackson pronounced to a delegation of bankers discussing the re-charter of the Second Bank of the United States in 1832: "You are a den of vipers and thieves. I intend to rout you out, and by the eternal God, I will rout you out." He abolished central banking in the United States and allowed the country to enjoy sustained prosperity. The re-establishment of central banking in 1913 with the Federal Reserve inflicted on the US its worst economic depression during 1929–1936, and has been since destabilizing the economy and falsifying prices and income distribution.<sup>18</sup>

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<sup>17</sup> In 1694, the Bank of England made a loan to the government; it immediately monetized the loan and issued banknotes in equal amount, extending more loans to both the government and business. Through leverage, the bank earned interest income on capital, which it did not possess.

<sup>18</sup> Ron Paul (2009) considered "the creation of the Fed the most tragic blunder ever committed by Congress. The day it was passed, old America died and a new era

Maurice Allais wrote (1999): “In essence, the present creation of money, out of nothing, by the banking system is, I do not hesitate to say it in order to make people clearly realize what is at stake here, similar to the creation of money by counterfeiters, so rightly condemned by law. In concrete terms, it leads to the same results.” Bastiat (1877) deplored the redistributive injustice of paper inflation. It steals wealth from losers and showers it for free on the gainers. He wrote:

I must also inform you that this depreciation, which, with paper, might go on till it came to nothing, is effected by continually making dupes; and of these, poor people, simple persons, workmen and countrymen are the chief. [...] Sharp men, brokers, and men of business, will not suffer by it; for it is their trade to watch the fluctuations of prices, to observe the cause, and even to speculate upon it. But little tradesmen, countrymen, and workmen will bear the whole weight of it. (Bastiat, [1849] 2011, p. 131)

Carroll (1850s) severely condemned the redistributive injustice of fictive money and credit, favorably quoting Daniel Webster: “that of all the contrivances for cheating mankind, none has been more effectual than that which deludes them with paper money. This is the most effectual of inventions to fertilize the rich man’s field with the sweat of the poor man’s brow.” (Carroll, [1856] 1972, p. 35) Carroll noted that “the truth is, an expanded and consequently cheap currency is the most costly and wasteful machinery a nation can possess; the history of the world shows it to be uniformly unprofitable or disastrous.... There was never a greater mistake in any science, and never one so fatal to the stability of property and the well-being of society.” (Carroll, [1858] 1972, p. 76) Carroll deplored the devastating effects of paper money. He stated that “the value of money is regulated to disorder, to the impairing of contracts, and to the confusion of all just ideas regarding the rights

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began. A new institution was born that was to cause the unprecedented economic instability in the decades to come. The longer we delay a conversion to sound money and away from central banking, the worse our crises will grow and the more the government will expand at the expense of our liberties. Our wealth is drained, our productivity is sharply diminished. Our freedoms are eroded. We have been through nearly a hundred years of this same repeating pattern, so it is time to wise up and learn something. When the printing presses are available to the government and the banking cartel, they will use them rather than do the right thing.”

of property, as effectually by the powers exercised by the States in granting bank charters, with authority to issue bills of credit." (Carroll, [1855] 1972, p. 6) He described the notion of "price without value"; namely, currency generated by bank lending pours forth only to drive up prices without creating additional value.<sup>19</sup>

In 1833, William Gouge noted: "Our American Bankers have found that for which the ancient alchemists sought in vain; they have found that which turns everything into gold—in their own pockets; and it is difficult to persuade them that a system which is so very beneficial to themselves, can be very injurious to the rest of the community." (Gouge, 1933, p. 227) He regretted the evils caused by banks of issues. These institutions constantly altered the measures of value, caused uncertainty to trade, and conferred undeserved advantages on some men over others. He stated: "It has always been my opinion, that of all evils which can be inflicted on a free state, banking establishments are the most alarming. They are the vultures that prey upon the vitals of the Constitution, and rob the body politic of its life-blood." (Gouge, 1833, p. 111)

Gouge stressed the redistributive evils of bank money.

It made a lottery of all private property. These Banks, moreover, give rise to many kinds of stock-jobbing, by which the simple-minded are injured and the crafty benefitted. ... They see wealth passing continually out of the hands of those whose labor produced it, or whose economy saved it, into the hands of those who neither work nor save. The natural reward of industry then goes to the idle, and the natural punishment of idleness falls on the industrious. The reckless speculator, who has no capital of his own, but who operates extensively on the capital of other people, has much cause to be well pleased with this system. (Gouge, 1833, p. 31)

Gouge rejected the notion of over-production as pure nonsense as huge human needs in food, shelter, medication, etc., in every country remain unfulfilled; he attributed the business disruption to the disappearance of fictive money created by banks.<sup>20</sup> He rejected

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<sup>19</sup> Figure 1 showed that an item that cost £1 in 1945 would cost £38 in 2013.

<sup>20</sup> Irving Fisher (1936) explained the Great Depression (1929-1936) by the evaporation of bank money. His reform plan (*100 percent money*) urged the abolition of fractional reserve banking.

the notion of elastic money, which underlined the Federal Reserve Act in 1913. He noted that

the flexibility or elasticity of Bank medium is not an excellence, but a defect, and that “expansions” and “contractions” are not made to suit the wants of the community, but from a simple regard to the profits and safety of the Banks. The uncertainty of trade produced by these successive “expansions” and “contractions,” is but one of the evils of the present system. That the Banks cause credit dealings to be carried to an extent that is highly pernicious—that they cause credit to be given to men who are not entitled to it, and deprive others of credit to whom it would be useful. (Gouge, 1833, p. 136)

He rejected the notion that banks make money plentiful, saying,

Banks make money plenty. Nay, they make real money scarce. As Bank notes are circulated, gold and silver are driven away. It is contrary to the laws of nature that two bodies should fill the same space at the same time; and no fact is better established than that, where there are two kinds of currency authorized by law or sanctioned by custom, that which has the least value will displace the other. (Gouge, 1833, p. 45)

Gouge challenged the principle that paper was cheaper than specie. That paper money has some advantages must be admitted; but its abuses are also inveterate. Gouge rejected also government paper stating that: “Government issues of paper would be incentives to extravagance in public expenditures in even the best of times; would prevent the placing of the fiscal concerns of the country on a proper basis, and would cause various evils. Further than this, Government should have no more concern with Banking and brokerage than it has with baking and tailoring.” In terms of reforms, Gouge was ahead of both the 1933 Chicago Plan and Irving Fisher’s *100 Percent Money* (1936). For Gouge, debt-money is an evil that has no remedy, except be abolished or extinguish itself through bankruptcy or when paper become worthless. He stated:

[N]o legislative enactments can afford an adequate remedy for the evils which flow from incorporated paper money Banks. The system is, to use the language of the lawyers, *malum per se*—or a thing which is evil in its nature. The very principle of its foundation is wrong. No immunities should, in a Republican Government, be granted to any, save those which are common to all. (Gouge, 1833, p. 52)

And, "'You may say what you will, paper is paper, and money is money.'" (Gouge, 1833, p. 232)

Gouge proposed prohibition of all incorporated paper money banks; that is, to eliminate their privileges of limited liability and note issue. In their place he would have banks subject to unlimited liability, lending only their own capital plus savings deposits (time deposits) and maintaining a hundred percent specie reserve. "With private Banks, and public Offices of Transfer and Deposit, we should have all that is good in the present system, without the evil." (Gouge, 1833, p. 230) For Gouge, money is metallic:

The high estimation in which the precious metals have been held, in nearly all ages and all regions, is evidence that they must possess something more than merely ideal value. It is not from the mere vagaries of fancy, that they are equally prized by the Laplander and the Siamese. It was not from compliance with any preconceived theories of philosophers or statesmen, that they were, for many thousand years in all commercial countries, the exclusive circulating medium. Men chose gold and silver for the material for money, for reasons similar to those which induced them to choose wool, flax, silk, and cotton, for materials for clothing, and stone, brick, and timber, for materials for building. They found the precious metals had those specific qualities, which fitted them to be standards and measures of value, and to serve, when in the shape of coin, the purposes of a circulating medium.... (Gouge, 1833, p. 10).

No instance is on record of a nation's having arrived at great wealth without the use of gold and silver money. Nor is there, on the other hand, any instance of a nation's endeavoring to supplant this natural money, by the use of paper money, without involving itself in distress and embarrassment. (Gouge, 1833, p. 17)

Gouge was cognizant of the time dimension of reform:

[T]he sudden dissolution of the banking system, without suitable preparation, would put an end to the collection of debts, destroy private credit, break up many productive establishments, throw most of the property of the industrious into the hands of speculators, and deprive laboring people of employment. ...[T]he system can be got rid of, without difficulty, by prohibiting, after a certain day, the issue of small notes, and proceeding gradually to those of the highest denomination. (Gouge, 1833, p. 138)

All that it will be necessary for Congress to do, will, probably, be to declare that, after a certain day, nothing but gold and silver shall be received in payment of dues to Government, and that no corporation

shall be an agent in the management of its fiscal concerns. The people will then begin to distinguish between cash and credit; and public opinion will operate with so much force on state governments, that they will, one by one, take the necessary measures for supplanting paper by metallic money. (Gouge, 1833, p. 234)

The obstacles to reform noted by Gouge would not be very different from those of today. Besides political and deep-vested financial groups, Gouge recognized a degree of ignorance of people about the nature of the paper system.

Their only misfortune was, being ignorant of the principles of currency, and having rulers as ignorant as themselves. Certain individuals who have never caught a glimpse of a more improved state of society, boldly affirm that it cannot exist: they acquiesce in established evils, and console themselves for their existence by remarking that they could not possibly be otherwise. (Gouge, 1833, p. 227)

Henry Ford once said, "It is well that the people of the nation do not understand our banking and monetary system, for if they did, I believe there would be a revolution before tomorrow morning." Holding similar views as Gouge and Carroll, the 1921 Nobel Prize winner in chemistry, Frederick Soddy (1934), condemned debt money as a form of legal swindling and counterfeiting and a violation of democracy. He accused it of sending millions of workers into unemployment and poverty and presenting a stumbling block to progress of technology, full employment, and the smooth distribution of the produce of industry. He urged abolition of debt-money and reconstitution of mints that would issue a state paper currency as a relief from taxation. Aware of hyperinflations in Germany, Austria, and many other countries, he recommended that state paper be regulated by a stable price index.

The money system condemned by Gouge, Carroll, and Walker was superior to the money system that has become deeply rooted since early 20<sup>th</sup> century. During their times labor, capital, and commodities markets were competitive with no customs barriers, no government-set prices and wages, no central bank, no labor unions, no formidable taxation, and oversized government.<sup>21</sup>

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<sup>21</sup> During the 19<sup>th</sup> century, labor markets recovered very quickly from depression caused by banking failure through a free market mechanism. In the depth of the

Simons (1947) lamented the erosion of competition, and the institutions that control capital and labor market. He was appalled by the use of government force in money area and money as policy tool, often referring to central bankers as “dictators” who inflicted great uncertainty and upheavals on the economy; he deplored the wide contraction and expansion of the money supply and the consequent alteration in the value of contracts which he called a perverse elasticity. He deemed that too much uncertainty was created needlessly by money policy. He strongly supported 100 percent money and abolition of both central banking and fractional reserve banking. Opposition to fractional reserve banking and its pillar central banking was not limited to the monetary system but also to the economic system it helped to shape in the form of too much government, too-powerful interest groups, and a totally rigid price and wage structure.<sup>22</sup> Mises (1953) explained that rigidities and government support of monopolies of all kinds hindered recovery from depression. Massive quantitative easing in the US and the Eurozone illustrates clearly the belief of Mises, Simons, and many others on how deeply rigid the system has become. Mises argued that the best approach to unemployment was to remove legal restrictions on wage flexibility and let the labor markets clear on their own. Instead, governments force money expansion as the road to full-employment.

The principle of 100 percent reserve banking, (100 percent money) and the gold standard can be stated as follows. Banks are essential intermediaries in payments and investment; however, they should have no prerogative for money creation. Gold and silver are purely economic commodities and not an interest-based debt. Gold producers sell gold in the same manner as a farmer sells wheat. Gold is exchanged against wheat. As money, gold does not contract in the same fashion as a debt money, which contracts when borrowers pay it back or when issuers refuse to issue or

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Great Depression, with unemployment close to 25 percent, the US hiked up wage rates tremendously in the effort to stimulate spending. Not surprisingly, unemployment remained above 19 percent until the breakout of the war (1939–1944). With the war, unemployment fell to less than 1 percent.

<sup>22</sup> Greece is an example of an economy saddled by oversized bureaucracy and deeply rooted rigidities that kept the economy in a depressed state during 2009–2015, with little scope for removing structural rigidities and downsizing government.

when it goes into a general default. Gold does not expand at the stroke of a pen as debt-money does. Gold does not confer to any country a privilege status of a reserve currency. Under the gold standard, countries may not use their own currencies as a means of settlement and may have to settle balance of payments in gold if no other commodities are available for exports. Gold exerted the development of exports; nations exchanged commodities, and rarely settled in gold. With paper money, many countries neglected exports since they import with paper. Other countries, mainly developing countries, relied on borrowing, and in turn neglected their export sectors.

### **SUGGESTED REFORMS FOR REINTRODUCING 100 PERCENT RESERVE BANKING AND A DOMESTIC GOLD STANDARD**

Restoring a gold standard following a suspension of gold convertibility is technically simple; it is purely a political decision. It requires relating changes in money (paper and demand deposits) to the flows of gold and foreign exchanges until the national currency reaches a stable rate vis-à-vis gold, at which point convertibility may be implemented on a permanent basis.<sup>23</sup> For instance, the German rentenmark was instantly pegged to gold in 1923, with no convertibility provision and almost no gold reserves, simply based on a full commitment to control the German money supply. Restoring a gold standard is exactly the same experience as restoring convertibility of a currency. After World War II, many European currencies, such as the French franc, were not convertible into foreign currencies at par as stipulated by the Bretton Woods system of fixed exchange rates. To reestablish convertibility, countries had to regain control of both money and fiscal policies and achieve macroeconomic stability. As long as the fiscal deficit was out of control and was being constantly monetized, countries could not attain convertibility.

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<sup>23</sup> The International Monetary Fund (IMF) adjustment programs imposed a strict ceiling or even reduction on the money supply in order to allow a country to reconstitute net foreign assets to a desired target. The IMF used the monetary approach to the balance of payments, which considered that the balance of payments reflected changes in domestic monetary aggregates.

Historical experiences of restoring the gold convertibility and gold standard are numerous. The basic principle was the same: strictly controlling banknotes and deposits emission. This principle was observed by the Bank of England in 1819 to pave the way for convertibility of its banknotes in 1821 following the suspension in 1797. In like manner, the US Treasury established gold convertibility of the greenbacks in 1879 through running fiscal surpluses that reduced paper money. As major industrial powers such as the United States, Germany, and France adopted gold standards during 1870–1900, the value of silver in relation to gold depreciated considerably. Numerous partner countries that were on a silver standard saw their currencies depreciate significantly, causing serious fiscal and external difficulties. Many silver standard countries had to introduce currency reforms consisting of achieving a fixed exchange rate of their currencies in relation to gold. These reforms were needed to establish stability of exchange rates and settle trade and capital operations in gold with gold standard countries (Kemmerer, 1916),

With the outbreak of war in 1914, many countries suspended the gold standard, meaning that their currencies were no longer convertible into gold; the currencies were floating in the exchange markets against each other. As soon as the war ended, countries were eager to restore the gold standard. An important feature of the return to a gold standard was the contrast between the doomed British experience and the successful French experience. The British experience restored gold at prewar parity in 1925 in the context of very high inflation. This rate did not reflect the very high degree of inflation since 1914 and was totally unrealistic. It necessitated a grave deflation that severely impaired the economy as well as external competitiveness. Mass unemployment developed, as wages could not be reduced. However, France was not as fast as the United Kingdom in restoring gold; it stabilized its economy until it reached a stable market rate of its currency in relation to gold that reflected past inflation as well as trade equilibrium. France restored a stable gold standard in 1928 at a highly devalued market rate, about one-fifth of the prewar parity, which enhanced external competitiveness without any reduction in nominal wages and was maintained with no difficulty thereafter.

Mises emphasized that a return to sound money, i.e., a gold standard, is technically simple; however, politically very difficult.

His gold plan required an end to inflation by setting an insurmountable barrier to any further increase in paper and demand deposits; it required a safeguard against deflation. He proposed the establishment of a conversion agency, different from the central bank, which would be entrusted with exchange operations. The agency would have the monopoly to issue paper money against 100 percent gold and foreign exchange coverage. The banking system would be 100 percent reserve banking, with no discounting by the central bank. No privileges would be accorded to the agency, other than paper money issuance. It would not get a monopoly for dealing in gold or foreign exchange. The foreign exchange market would be perfectly free from any restrictions. Everybody would be free to buy or sell gold or foreign exchange. There would be no centralization of such transactions; any bank or dealer could settle foreign payments with foreign correspondents. Nobody would be forced to sell gold or foreign exchange to the agency or to buy gold or foreign exchange from it. Mises emphasized that the United States should restore the classical gold standard, which existed in the United States until 1933 with gold coins circulating freely, and not the gold-exchange standard. Gold should be in everybody's cash holdings. Everybody should see gold coins changing hands, and everyone should be used to having gold coins in their pockets, receiving gold coins when they cash their paychecks, and spending gold coins when buying something from a store.

Rothbard (1962) proposed a gold standard with the dollar tied to gold permanently at a fixed weight, and redeemable in gold coin at that weight. The dollar should once again be defined as a unit of weight of gold. Rothbard urged the replacement of the name "dollar" by gold ounce or gold gram. Rothbard insisted that gold coins should circulate and be used in transactions. He emphasized that there seemed little point in advocating fundamental reforms while neglecting the causes that undermined the gold standard in the past. Besides abolishing the Federal Reserve, Rothbard wanted to eliminate, or at least dramatically reduce, inflation and business cycles. Consequently, he proposed 100 percent reserve banking, along the Chicago Plan (1933), Irving Fisher's *100 Percent Money* (1936), and Simons (1947) that would take away the ability of banks to create money and thus reduce leverage and inflationary and deflationary pressures. David Hume, Thomas Jefferson,

Andrew Jackson, John Adams, W. Gouge, Charles H. Carroll, Amasa Walker, Isaiah W. Sylvester, Elgin Groseclose, and Ludwig von Mises all adhered to the 100 percent gold reserve tradition, i.e., paper and deposits are 100 percent covered by gold reserves. They considered the issuing of demand liabilities greater than reserves as a fraud.

Ron Paul (1985) asserted that Menger (1892) and Mises (1953) showed that money emerged by evolution from the market process. Namely, governments did not invent gold bullion as money. He proposed a new troy ounce gold coinage. Paul supported Mises's Conversion Agency that would be responsible for issuing gold coins and bullion to the public and for exchanging gold and paper. Only the conversion agency should be allowed by law to legally exchange genuine coin for paper dollars at the par value. In Paul's plan, a main step to restoring the gold monetary system is gold coinage; gold must be in the cash holdings of everyone. As with Mises, everybody must see gold coins changing hands; everybody must be used to having gold coins in their pockets, to receiving gold coins when they cash their paychecks, and spending gold coins when they go to buy goods in a store. In the critical importance of the gold coinage lies the key to establishing a new gold standard. In Paul's gold standard plan, the coinage should be based on exact units of bullion weight. The coins should be denominated in troy ounces, half-ounces, and smaller sizes if feasible. The denomination of the coinage is the secret to success in the later stages of the political agenda.

Mises, Rothbard and Paul considered that a single country could go it alone and adopt the gold standard without waiting for the rest of the world to be under the gold standard.<sup>24</sup> They rejected the idea of an international conference for restoring a gold standard, since in the past each country had gold money established by a sovereignty act and not by coordinating with partner countries. Mises (1944) wrote:

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<sup>24</sup> Soddy (1934) insisted that monetary reform is purely a national matter and should not require an international conference. The United Kingdom was the only gold standard country during 1816–1873. It introduced its gold legislation in 1816, without approval from another country; it rejected bimetallism proposed by the international monetary conferences of late 19<sup>th</sup> century in favor of its own gold standard.

No international agreements or international planning is needed if a government wants to return to the gold standard. Every nation, whether rich or poor, powerful or feeble, can at any hour once again adopt the gold standard. The only condition required is the abandonment of an easy money policy and of the endeavors to combat imports by devaluation (p. 252).

In the same vein, Walker (1873) wrote:

If the principles we have previously laid down, and the practical results which follow, are such as we have stated, then no one nation needs to hesitate in making this experiment for fear that other nations may not follow their example; for the community which has the soundest currency will, other things being equal, have the most profitable industry and the most advantageous commerce. There need be no legal restriction whatever upon the issue of such a currency, and it matters not how voluminous it may be since it will be composed in fact of value money, will obey the laws of value, and, of course, will regulate itself. There would then be no expansions or contractions, except from the legitimate operations of trade; and the currency of the nation would be perfectly sound (p. 245).

## **ONE HUNDRED PERCENT RESERVE BANKING AND A 100 PERCENT CONVERTIBLE GOLD STANDARD**

An essential reform, even before thinking about restoring the gold standard, is establishing 100 percent (or close to 100 percent) reserve banking or 100 percent money. The introduction of this reform has been thoroughly described by Soddy (1934), and Fisher (1936). Legislation has to change the banking into two components: (i) a 100 percent depository system, which issues no loans; and (ii) investment banking, which borrows or issues securities and bonds, and invests, lends or buys bonds and securities (Walker, 1873). This component cannot create money, i.e., issuing a loan, which has no money available, by simply crediting a borrower account and creating deposits. An investment bank operates like a development bank<sup>25</sup> or a mutual fund whose

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<sup>25</sup> For instance, the World Bank cannot lend without raising the funds prior to its lending by selling bonds. These funds are held at depository institutions. Certainly, it cannot create deposits in favor of its borrowers.

funds are held by a depository institution. Hence, starting from an implementation date, legislation has to require that a new loan issued by an investment bank would have to be fully covered by funds held in a separate depository institution. This decision will arrest the creation of new debt money; it will stabilize the money supply; and will enable the banking system to transit to a two-tier banking.<sup>26</sup> Money holders would have to decide how much non-interest earning deposits they wish to keep, and how much interest-earning assets they acquire through the investment banking system. Simons stated that the best investment banking is the one that has no fixed money contracts at all:

What arrangements as to the financial structure would be conducive to lesser or minimum amplitude of industrial fluctuations? An approximate ideal condition is fairly obvious—and an unattainable. The danger of pervasive, synchronous, cumulative maladjustments would be minimized if there no fixed money contracts at all—if all property were held in residual equity or common stock form. With such a financial structure, no one would be in a position either to create effective money substitutes (whether for circulation or for hoarding) or to force enterprises into wholesale efforts of liquidation. (Simons, 1947, p. 165)

This reform enables the implementation of the McKinnon-Shaw financial deepening scheme. McKinnon and Shaw emphasized the importance of money deepening and a well-developed banking and financial sector. Large saving is pooled from small savers, large scale and efficient projects may be implemented, and risk is highly reduced. Investment banks borrow, or issue bonds, and stocks, and buy securities or extend loans to investment projects. Simons preferred that investment banks issue more equities than interest-bearing loans in mobilizing savings. Accordingly, the investment bank reduces its risk by linking the cost of its resources to the performance of its assets and to be able to raise long-term capital. Moreover, equity financing reduces the conflict between debtors and creditors and changes in value of debt due to changes in the price level.

The introduction of gold standard becomes an appendix to 100 percent reserve banking and 100 percent money, since a main

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<sup>26</sup> To prevent a resurgence of fractional reserve banking, depository institutions issue no loans; they are payments institutions. Investment banks have no money creation role. The depository banks settle all their payments.

obstacle to its existence has been removed, which is debt money. A gold standard with debt money would fail, since gold and debt money were like water and fire (Carroll, 1850s). A non-reserve currency country has nothing to lose by adopting a gold standard. It is presently in a pseudo-gold standard, since its foreign exchange can be converted instantly into gold at prevailing gold market prices. The gold standard cannot operate in any country with restrictions on the trade of gold. Gold restrictions were most futile and were imposed as a measure to force devalued paper on people as shown in France in 1720 and 1789–1795, the US after 1933, and the United Kingdom after 1931. A country has to establish a fully free gold market with no taxes on imports or exports of gold. The state assumes a role of quality control to prevent fraud. A free gold market establishes an equilibrium price free of distortions and contributes to a return to gold at true prices.

Peel's Act in 1844 split the Bank of England into two departments: the Issue Department and the Banking Department. The issue department was in charge of issuing banknotes with 100 percent gold coverage. In like fashion, the central bank of a country envisaging 100 percent money with a gold standard will be re-organized into an issue department; the banking department becomes purely redundant in 100 percent money and may be eliminated. The issue department will issue national paper money only against foreign exchange and gold at floating market rates. The issue department has the strict monopoly of paper money. However, it has no monopoly in foreign exchange and gold markets. Banks, foreign exchange bureaus, and gold and silver dealers are entirely free in their trade of gold and foreign exchange within the regulatory framework. The issue department has no banking operations within or outside the country. It immediately turns its foreign exchange into gold at market rates and sells gold against national money at market rates.

A gold standard act would re-establish the mints and the gold and silver coins. The mints would be open to all the public, including domestic and foreign gold dealers, as well as to the issue department of the central bank. The mints would turn gold into coins and certify the quality of the coin at a simple fee for covering the cost of assaying and coining the gold metal. Nationals should be allowed to acquire gold coins minted locally or abroad.

If residents export commodities, say, wheat, oil, and others, they may elect to import gold and transform the gold into coins. These coins should be allowed to circulate in the economy especially in settling large transactions. The purchase of gold coins should be facilitated through licensed banks and foreign exchange dealers. Monetary gold would be acquired through external trade, local mining if available, and diversion from non-money uses. The import of gold would be paid for by foreign exchange earned from exports of merchandise and services. Gold trade would be carried out at international prices in the same way as for all tradable commodities such as corn, crude oil, sugar, coffee, and others. The economy would have to export commodities in order to import gold or any other commodity. Gold would be bought and sold against national paper at the issue department or any appointed dealer at the market rate. Gold coins and bars may be deposited for safekeeping at depository institutions and used in payment operations. Depository institutions have to keep deposited gold in coins or bars and reconstitute them in coins or bars and never in paper money. Customers would convert their gold into national paper in separate operations at authorized banks and foreign exchange bureaus or directly at the issue department. During the transition period, gold would circulate alongside paper at floating rates in the same way as foreign currencies circulate alongside the paper. Traders may directly use their foreign currencies or convert them into paper to settle payments. Silver coins, to be issued by the mints, would circulate at a free rate as a commodity.

The issue department should monitor the exchange rate of the paper money in relation to gold only and not to foreign currencies; there should be no effort to economize on gold circulation or limit it only to bullion. The length of the transition is of little relevance, provided the issue department operates strictly as a conversion agency and the 100 percent money is in force. When paper is about to appreciate considerably in relation to gold, following a period of floating in relation to gold, a country would have reached the end of the transition period and would be ready to operate under a classical gold standard. The government may then fix the value of the paper in terms of gold. From this point of time onward, the issue department will buy and sell gold against paper at par. The paper has a denomination in units of accounts, and the gold coins

and bars will continue to be denominated in weights. At par, paper will be as good as gold.

A country would have 100 percent coverage of any newly issued currency; that is, each new paper will have a full gold back up. Inversely, gold sold by the issue department entails a withdrawal from circulation of an equal amount of paper. The risk of a speculation against paper, once it is pegged to gold, is nil, since with 100 percent money, no money can be emitted as a debt. The paper has been strictly controlled and tightly linked to the transaction needs; there is no more redundancy of paper. However, there may be crop failure that necessitates considerable gold for imports, which may strain the gold holdings of the issue department or the foreign exchange dealers. In such contingency, the issue department may consider temporarily floating the currency until it reestablishes the previous parity again. We may observe that there should be a subsidiary metallic coin system in silver, copper, bronze, and nickel to supplement gold in the settlement of small transactions, as was the case with the UK system during 1816–1914. The subsidiary coinage is denominated not in weight but in decimals of units of account. To prevent inflation through subsidiary coinage, a number of paper money has to be drawn for each equivalent amount of decimal coins.

We should underscore that no initial condition is needed for the stock of the paper currency or the stock of gold. A country would not have to amass gold before it moves to a gold standard nor does it have to withdraw its paper currency from circulation through taxation and budget surpluses.<sup>27</sup> The prior conditions would be to lift any restriction on gold as money and establish a totally free gold and silver market; establish a monopoly issue agency; and apply 100 percent reserve banking. The stock of gold acquired would be determined by the demand for gold; the higher the demand for gold, the more the country has to increase its exports and reduce its non-gold imports. The market would also determine the composition of its money in stocks of paper currency and gold and the convenience offered by each form of asset.

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<sup>27</sup> A country can instantly peg its currency to gold at prevailing market rate, as the case of the German Rentenmark in 1923 with no convertibility provision. It reduces its currency when gold appreciates and expands when gold depreciates in relation to the fixed rate.

The Chicago Plan (1933) stressed 100 percent reserve money and equity-based banking without specific reference to gold. Why insist on re-introducing gold in a country when 100 percent reserve money would secure financial stability with paper money? We observe that all previous 100 percent money plans during the 18<sup>th</sup> and 19<sup>th</sup> centuries assumed a gold standard and aimed at securing gold convertibility. The authors of the Chicago Plan might have stressed a return to gold had they experienced a pure paper system such as prevailed after 1971. A removal of debt money is essential for stability under a paper or a gold system. Debt and money have to be split; money should not vary in relation to debt. Inconvertible paper is not natural money and did not emanate from market forces. As a result, the state has found paper money convenient to finance deficits. Paper representing gold may be coined as fully backed money; inconvertible paper is not, since it is often created through debt or fiscal deficit monetization. Moreover, gold is both a standard of value and an equivalent (i.e., exchanged commodity). Inconvertible paper has no intrinsic value and is not a standard of value. Hence, a country may not benefit by holding its foreign reserves in inconvertible paper. It will be safe to hold them in gold. A national paper pegged to gold has a known metal content and is stable money. It is no longer influenced by inconvertible and rapidly depreciating foreign currencies. A country will shelter its economy against the instability and uncertainties caused by reserve currencies countries. If not pegged to gold, the national paper will have an unstable exchange rate, and may suffer a degree of depreciation as reserve countries keep inflating their respective currencies. This will discourage investment and increases exchange rate risk and uncertainty.

## **STRUCTURAL REFORMS TO SUPPORT 100 PERCENT MONEY: FULLY LIBERALIZED LABOR, CAPITAL, AND COMMODITIES MARKETS**

In almost every country, governments intervene in a multitude of sectors and areas of the economy. The more the government expands and intervenes, the more it needs resources, which it does by increasingly resorting to an inflation tax. Adam Smith, who demonstrated the fallacies of tariffs and bounties and warned

against the expansion of the unproductive government sector, has detailed the dangers of government expansion and intervention. He confined the role of government to defense, justice, education, and public works. Among opponents to government intervention was Lysander Spooner (1886) who called for abolishing tariffs and monopolies and restoring free markets in capital, labor, and commodities. He stated:

[I]f a government is to “do equal and exact justice to all men,” *it must do simply that, and nothing more*. If it does more than that to any, that is, if it gives monopolies, privileges, exemptions, bounties, or favors to any, it can do so only by doing injustice to more or less to others. *It can give to one only what it takes from others; for it has nothing of its own to give to anyone*. (Spooner, 1886, p. 15)

Historically, therefore, the government had to force paper currency, make it a legal tender, to be able to levy inflation taxes and promote interest groups.

Paper money and fractional reserve banking have led to large government bureaucracies and powerful interest groups; the economy has reduced mechanisms for adjustment, except through inflation. Numerous writers have criticized the model of excessive intervention of the state in the economy. Mises (1949, 1953) stressed the necessity of unhampered markets and elimination of inflation as conditions for re-introducing a gold standard. He noted that government needed inflation to finance its expanding size. Simons (1947) deplored the devastating consequences of statism, and stressed that a monetary reform along the lines of 100 percent money has to be accompanied with abolishing monopolies and price rigidities. Hayek (1944) called it “the road to serfdom.” Anderson (1945), and a number of other writers showed the dangers of the present system of statism. The government keeps expanding in size.<sup>28</sup> Failure of the state is called failure of the market. In spite of financial crises, economic decline and social inequities, this system is fully supported by politicians. Reserve

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<sup>28</sup> In his book, *Our Enemy, the State*, Albert Jay Nock (1935) showed the adverse consequences of an ever-bigger government in terms of economic decline, despotism, and social decline. F.A. Hayek (1944) deplored statism in many Western countries, which reduced people to serfdom.

currencies were able to finance their excessive statism by printing money. After 2008, reserve currency countries set interest rates at near zero with a view to running fiscal deficits and transferring part of the bailout cost to other countries. A non-reserve country has a strict external constraint. Admittedly, no Western country has the adoption of a gold standard on its radar, especially given wage and price rigidities, the dominance of statism, high spending, monetization of deficits, huge public and private debt, as well as the dominance of powerful financial groups. In many countries, the statist economic model has damaged exports, turned a previously rich agricultural economy into a food deficit country, and caused high external debt. With statism and rigid labor and control laws, a country will not be able to adopt a gold standard, or even, a restrictive money policy to tame inflation. It has to rely on inflation taxation to run large budget deficits.

A gold standard embedded in 100 percent reserve banking has been proposed by many writers since the 17<sup>th</sup> century because of the extensive damage caused by paper and fractional reserve banking. Although such a system has not existed in a recent past and there is no historical experience to prove its superiority, there are instead a great number of counterfactual cases regarding the disruptive consequences of inconvertible paper and debt money, by which leading industrial countries as well as developing countries are suffering economic stagnation, high unemployment, high inflation, high indebtedness, and continued financial instability. Very high income and wealth inequality prevails through redistribution caused by money printing, leverage and financial crises. The income distribution is no longer determined by the real contribution to the national output but by non-market advantages. In contrast, there is a substantive evidence that economic growth was rapid under the gold standard and benefited labor considerably in the form of substantial real wage increases with full-employment fully maintained in all gold standard countries (Farrer, 1898). Exchange rates were fixed for decades, and international trade was flourishing. However, the gold standard could not survive alongside fractional reserve banking. A system of 100 percent money, which abolishes debt money, does not allow money creation out of thin air.

Opponents of the gold standard have claimed that gold scarcity would prevent circulation of increasing volume of commodities,

ignoring the role of clearing that clears almost all transactions in asset, commodities, international trade, etc., with almost no cash. Unlike the US Fed, which printed \$4 trillion in money within 5 years to finance government expenditures, there is no mining company that could dig out as much gold within the same period. Banks, in emitting money, were guided by profit maximization and much less by commodity circulation. The redundancy of debt money evolved into a rampant inflation showing that too much paper was crippling the economy.<sup>29</sup> The US dollar has a purchasing power in 2016 that is less than 2 cents of what it had in 1914. Gold was used essentially as a standard; it rarely circulated as a means of payments as illustrated by the establishment of goldsmith houses, and the Bank of Venice, Bank of Amsterdam, Bank of Hamburg, and other similar banks that settled accounts without physical gold movements. By late 19<sup>th</sup> century, actual gold payments represented less than 2 percent of total payments in the United Kingdom. Be it for gold or paper, only the economy determines the actual real money in the economy via changes in prices. Moreover, there is a huge stock of gold buried deep in storage that could be released and used as money. Opponents also claim that gold impaired external competitiveness. In case of many countries, paper money inflation ruined the export sector as some countries relied on foreign debt to finance their external deficit, instead of exports. Moreover, domestic inflation impaired competitiveness. Improving external competitiveness via inflation and exchange rate depreciation amounts simply to a subsidy to exporters at the expense of importers and the fixed income groups; it is not a true improvement in competitiveness, which emanates from productivity gains and innovation. There is plenty of evidence that the gold standard improved competitiveness via substantial gains in productivity and a consequent drop in prices as witnessed during 1871–1914.

## CONCLUSIONS

We have recommended 100 percent (or realistically closer to 100 percent) reserve banking as the most important reform in restoring

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<sup>29</sup> Paradoxically, inconvertible paper creates money shortages. Cagan (1956) showed that real money was almost non-existent in hyperinflation countries.

sound money and financial stability. This would also provide the foundation and a stepping stone to re-introducing a domestic gold standard in one or more countries that wished to do so. Sound monetary reform would help a country restore economic growth and social equity. As Gouge (1833) stated, fractional reserve banking is a *malum per se*, and has no remedy, except to be abolished and replaced by 100 percent reserve banking, in other words 100 percent money, as strongly advocated by the Chicago Plan (1933), Soddy (1934), and Irving Fisher (1936).

In the context of a cheap money policy by reserve currencies countries and consequent uncertainty, a non-reserve country might consider a gold standard to immunize its economy against fluctuations in exchange rates and prices. China has expressed such an interest at different times over the last 10 or so years. Besides 100 percent money, a country ought to encourage risk-sharing equity investment banking as suggested by Simons, thus alleviating the conflict between debtors and creditors and securing financial stability.

The inconvertible paper system has become highly unstable, as shown by the 2008 crisis, its aftermath as well as the turbulences that caused it. Controlling interest rates at near-zero bound will reduce savings, foster debt-financed consumption and misallocate resources away from their best physical investment opportunities in the real sector; increasing the level of debt, redistributing wealth with growing inequalities, fueling volatile exchange rates and asset prices, and all damaging growth, social equity, and international trade. By re-establishing 100 percent money, a country will have a most propitious money that will extricate an economy from inflation, restore fast growth, full employment, and enhance social justice, with its money and interest rates being market determined and not administered by the state.

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## TRANSPARENCY OR DECEPTION: WHAT THE FED WAS SAYING IN 2007

MARK THORNTON

*ABSTRACT:* Central banks have embarked on a transition from relative secrecy to relative transparency over the last two decades. This has led researchers to investigate the ramifications of transparency on important economic outcomes. By and large, the results reported have been favorable, favorable with qualifications, or ambiguous. This paper examines the communications of officials from the Federal Reserve during 2007, the year between the end of the housing bubble and the beginning of the financial crisis. In contrast to previous findings, these communications are indicative of either deception, incompetence, or a combination of both.

*KEYWORDS:* Federal Reserve, transparency, monetary policy, policy objectives and coordination

*JEL CLASSIFICATION:* E52, E58, E61, E65, Z18

“There are several reasons to believe that this concern about burst bubbles may be overstated.”

– Fred Mishkin, Feb. 17, 2007

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## INTRODUCTION

Central banks have become more “transparent” over the last quarter-century. By communicating their actions, intentions, and philosophy they give the appearance of public-spiritedness and justify their independence from the political process. By examining this greater transparency with regards to monetary policy, economists have found that it has led capital markets and interest rates to react more efficiently and be more efficient.<sup>1</sup>

In contrast, the economic theory of regulation (Stigler, 1971) holds that regulators such as central banks will be “captured” and act in the private interests of the industries that they regulate. Evidence is presented here regarding the Federal Reserve’s role in regulation and financial oversight that supports this theory by showing that communications from the central bank have a tendency to support the Federal Reserve and the financial industry’s interests, rather than the public interest. The fact that the large banks were bailed out during the crisis confirms this conjecture about the nature of the relationship between the Federal Reserve and the financial industry.

This paper contends that central bank communications can indeed mislead market participants. Previous studies that rely on numerical market data have concluded that transparency has been generally beneficial. In contrast, public speeches by members of the FOMC on financial innovation and Federal Reserve oversight of financial institutions and financial products, such as mortgage-backed securities are examined here for their transparency. These communications are drawn from a critical period between the end of the housing bubble in 2006 and the financial crisis, which began in 2007. Rather than being transparent and helping markets

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<sup>1</sup> The drive for increased transparency began in the 1990s. In 1994 the Federal Open Market Committee (FOMC) started announcing its target for the federal funds rate. In 1999, the FOMC began announcing its “bias” for future changes in monetary policy as well as issuing more details statements when it was not changing rates. A few years later it began announcing FOMC votes after each meeting. In 2005, the FOMC began releasing the minutes of its meeting prior to the subsequent FOMC meeting. In 2007, the Fed has increased the frequency and content of its publicly-released forecasts. Similar trends towards central bank transparency have occurred at the Bank of England, European Central Bank, the Norges Bank, Sveriges Riksbank (the central bank of Sweden) and the Reserve Bank of New Zealand. (Blinder et al., 2008, p. 3)

equilibrate, these communications were effectively deceptive in an apparent attempt at maintain undo confidence in financial markets.

## CENTRAL BANK TRANSPARENCY

The issue of central bank transparency or lack thereof is important under a discretionary monetary regime. For example, Koppl (2002) shows that the central bank is a “big player” and market participants must expend resources and bear risk because the central banker has discretion and disproportionate impact on market outcomes. Likewise, Goodfriend (1999) in examining the role of the regional Federal Reserve banks, concludes that market expectations could be fractured if decision making over monetary policy were centralized in the hands of a “dictator” and that centralized decision making could be more easily captured by special interests. Crowe and Meade (2008) and McGregor (2007) have analyzed how much transparency has really changed and whether to expect more or less transparency in the future.

Prior to 1990, monetary policy was largely shrouded in mystery. Under the gold standard and in the Bretton Woods system, monetary policy was less arbitrary than today because it had a relatively fixed anchor. Because money had no anchor after Bretton Woods, policy makers felt a need for secrecy and a fear that lack of secrecy would undermine markets. Those fears gradually receded and were replaced with the notion that better communications by central bankers would help to manage expectations in financial markets and lead to improved economic results.

The Federal Open Market Committee (FOMC) began to announce its federal funds rate target in February of 1994. In May of 1999, the FOMC began publishing statements regarding its “bias” towards future rate changes. In 2002, it began to release the votes of the FOMC immediately after meetings. The Fed has continued its transition to greater transparency and more timely communication of its monetary policy. Forward-looking policy guidance was added in 2003. The release of FOMC minutes was shortened to three weeks after each meeting in 2005. Numerical forecasts with an extended three-year time horizon were added in 2007. Meeting transcripts for an entire year are now publicly released with a five-year lag. The financial crisis that began in 2008

has led the Fed to extend its transparency further into the future, e.g. rates will remain low for the foreseeable future.

Blinder (2008) reports that the central banks of England, New Zealand, Norway, Sweden, elsewhere in Europe, and other nations have adopted the philosophy of greater transparency and in many cases explicit inflation-targeting regimes. According to Blinder (2008, p. 3), "the view that monetary policy is, at least in part, about managing expectations is by now standard fare both in academia and in central banking circles. It is no exaggeration to call this a revolution in thinking."

There has been a great deal of research on this new paradigm of monetary policy and while better communication is generally lauded as a good thing, it is not yet considered a panacea. For example, there is the ultimate constraint that central banks will know more about their own views and actions than will the general public and financial markets. Therefore, there cannot be complete transparency. In addition, Bernanke (2004) admits that no system is known in which central banks can be completely self-constrained when changing conditions and surprises dictate deviations from previous central bank communications and inflation targets. Therefore central banks cannot provide 100 percent certainty about the information they share regarding the future.

The general appeal of transparency is that better communications by central banks help to manage or stabilize expectations and stable expectations help central bankers to implement more effective monetary policy, even though it may have less "influence" in the short run. Donald L. Kohn and Brian Sack (2004) contend that individuals place special authority on the communications of central banks based on the central banks' records of forecasting. While empirical studies support this view, it is not surprising, given the large amount of resources allocated by central banks to forecasting and by market participants to analyzing central bank communications.

Blinder (2008) shows that there is an extensive empirical literature that examines the impact of central bank communications on measurable movements in interest rates and events in stock markets. The general conclusion of these studies is that such central bank communications can and do positively impact these markets, but not necessarily as completely as central banks wish.

This paper does not argue with this conclusion. Rather, it relies on these types of results: central bank communications do impact behavior in a relatively effective manner. Additionally, this paper builds on the suggestion in the literature that central bank communications could also be welfare reducing, a minority view. For example, Amato, Morris, and Shin (2002) contend that central bank communications could move markets away from fundamentals if market participants give too much weight to central bank communications relative to market-generated data.

## ARE CENTRAL BANKS CAPTURED?

What are the implications of Amato, Morris, and Shin's (2002) contrarian stance? Most of the literature on transparency implicitly or explicitly assumes central bankers are motivated by concern for the public interest. This literature produces a great deal of evidence that this is indeed the case. However, if we were to re-examine this literature from a private-interest approach we might even find that Amato, Morris and Shin (2002) was not the exception, but the rule. Perhaps the evidence that transparency facilitates such things as stabilization of interest rates and inflation expectation could also be viewed as in the interest of central banks and money center banks as well as the public interest.

George Stigler (1971) presents an economic theory of regulation that suggests that special interests have an economic incentive to have agencies regulate their industries to create a cartel-like environment that will produce economic rents for members of the industry. Stigler's approach is closely aligned with the capture theory of regulation. This theory holds that interest groups with high stakes in both the form and the enforcement of a regulation or set of regulations will devote resources to capture the legislative process, commissions, and regulatory staffs. This allows the industry to control and benefit from the regulatory process. The outcomes are most often worse than if there were no regulation at all. Hamilton (2013) shows that when regulatory officials are not elected (as in the case of the central bank of the United States) and when democratically elected officials face insignificant competition, private-interest outcomes will dominate public-interest outcomes. More specifically Rothbard

(1984) has demonstrated that the Federal Reserve System was intended as and acts as a cartelizing device for large banks' interests. Broz (1997) argues that the Federal Reserve was a joint product consisting of a public good, i.e., a reduction in bank panics, and a private good, i.e., benefits to the large New York City banks, as suggested above.

An additional motivation for this research is an important paper by White (2005). He found that the Federal Reserve is highly influential in the business of publishing academic research in monetary economics. In his sample of the *Journal of Monetary Economics* and the *Journal of Money, Credit and Banking*, 80 percent and 75 percent of the articles had at least one coauthor with a Federal Reserve affiliation and 82 percent and 87 percent of the editorial board members had Federal Reserve affiliations. At the very least, this influence would tend to have a "crowding out" effect on research on alternative monetary regimes, such as the gold standard and free banking. White (2005, pp. 343–344) concludes that:

an academic economist who values the option to someday receive an offer from the Fed, either to become a staff economist, or a visiting scholar, faces a subtle disincentive to do regime-challenging research. To repeat Fetting's (1993) characterization of Milton Friedman's view: "if you want to advance in the field of monetary research... you would be disinclined to criticize the major employer in the field."

## CENTRAL BANK DECEPTION?

"Indeed, U.S. financial markets have proved to be notably robust during some significant recent shocks."

– Donald L. Kohn, Feb. 21, 2007

Thornton (2004) suggests that one should not listen to Federal Reserve chairman Alan Greenspan's testimony and speeches. Delete it from your mind like spam emails. Watch what he has done and what he is doing, but deeply discount anything you read about his testimony. Note that Greenspan's speeches and testimony as well other central bankers is often considered obfuscation rather than true deception.

Central banking is a confidence game. The Federal Reserve runs a monetary system where money has no traditional backing, such as gold or silver. It runs a banking system that has, until the housing bubble-financial crisis, had no reserves to back deposits, other than drawer money. The central bank certainly has its own tools to give us confidence in the system, such as the discount window, which serves as Federal Reserve role as a lender of last resort. Other institutions such as legal tender laws and deposit insurance also provide confidence by acting as security for the value of the dollar and insuring bank accounts against bank failure. Although central bankers would not accept the notion that central banking is a “confidence game,” they regularly speak of investors’ confidence, consumers’ confidence, policy expectations, and economic uncertainty.<sup>2</sup>

The Federal Reserve seeks to maintain our confidence in its system and to encourage people to not take proper precautions against the negative effects of its policies. Printing up money and lowering the value of dollar-denominated assets while simultaneously providing benefits to special interest groups is a deception that is a major part of the confidence game.

The basic focus here will be on the Federal Reserve’s mission to instill confidence in us about the economy while simultaneously instilling confidence in us about the abilities of the Fed itself. The first mission is easy to see because Federal Reserve officials are almost always publicly bullish and hardly ever publicly bearish about the economy. According to the central bank, the economy always looks good, if not great. If this message fails to have its intended effect, the central bank will proclaim that the economy is better than it appears and that there are signs of recovery and economic growth. If there are some problems, please do not worry, the Federal Reserve says: it will come to the rescue with truckloads of money, lower interest rates, and easy credit. If things were to get worse, *which they won’t*, the

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<sup>2</sup> A confidence game (also known as a *bunko*, *con*, *flimflam*, *hustle*, *scam*, *scheme*, or *swindle*) is defined as an attempt to defraud a person or group by gaining their confidence. The victim is known as the *mark*, the trickster is called a *confidence man*, *con man*, or *con artist*, and any accomplices are known as *shills*. Confidence men exploit human characteristics such as greed, vanity, honesty, compassion, credulity, and naïveté. The common factor is that the mark relies on the good faith of the con artist.

Federal Reserve would be able to respond with monetary weapons of mass stimulation. Of course this perspective is consistent with the viewpoint of mainstream economists. They see the business cycle as caused by psychological problems, random technological shocks, or market failures. In fact, the business cycle can be attributed to the divide between interest rates set by the Federal Reserve and those indicated by market forces.

The evidence presented here comes from public speeches by leading officials of the Federal Reserve during the year 2007. This is the period between the ending of the housing bubble in 2006 and the onset of the financial crisis, which began in earnest in 2008. Predictably, their testimony and speeches are highly nuanced and hedged. The quotes taken from these communications typically represent concluding or summary remarks. Note that this evidence is qualitative in nature rather than quantitative and therefore not of the species used by mainstream economists.

## **Ben Bernanke**

Let us begin at the beginning of 2007 with the chairman of the Fed, Ben Bernanke. The former economics professor from Princeton gave an address to the annual meeting of the American Economic Association. (Bernanke, 2007) Bernanke was the first chairman of the Fed from academia since Arthur Burns, and it was Burns who helped take us off the gold standard.

In addressing his fellow mainstream academic economists, Bernanke was unusually bold in describing the Federal Reserve's access to and ability to use data concerning financial markets. This knowledge and expertise includes the market for derivatives and securitized assets. He describes the Federal Reserve as a type of superhero for financial markets. In discussing the Federal Reserve's role as chief regulator of financial markets he makes powerful claims concerning the Federal Reserve's ability to identify risks, anticipate financial crises, and effectively respond to any financial challenge.

Many large banking organizations are sophisticated participants in financial markets, including the markets for derivatives and securitized assets. In monitoring and analyzing the activities of these banks, the Fed obtains valuable information about trends and current developments

in these markets. Together with the knowledge it obtains through its monetary policy and payments activity, information the Fed gains through its supervisory activities gives the Fed an exceptionally broad and deep understanding of developments in financial markets and financial institutions.

In its capacity as a bank supervisor, the Fed can obtain detailed information from these institutions about their operations and risk-management practices and can take action as needed to address risks and deficiencies. The Fed is also either the direct or umbrella supervisor of several large commercial banks that are critical to the payments system through their clearing and settlement activities. (Bernanke, 2007)

In other words, according to the Federal Reserve, it knows everything about financial markets. In truth, the banks and the Federal Reserve apparently had no idea about the looming dangers concerning derivatives, securitized assets, and risk management practices. But it gets worse:

In my view, however, the *greatest external benefits* of the Fed's supervisory activities *are those related to the institution's role in preventing and managing financial crises*.<sup>3</sup>

In other words, the Federal Reserve can prevent most crises and manage the ones that do occur. Given that we are more than seven years into this serious economic downturn, that banks are even bigger and more susceptible to systemic risk, and that the national debt and the Fed's balance sheet have exploded upward in size, his statement is clearly in doubt.

Finally, the wide scope of the Fed's activities in financial markets—including not only bank supervision and its roles in the payments system but also the interaction with primary dealers and the monitoring of capital markets associated with the making of monetary policy—*has given the Fed a uniquely broad expertise in evaluating and responding to emerging financial strains*. (Bernanke, 2007)

In other words, the Federal Reserve is an experienced, forward-looking preventer of financial crises. This is a strong claim given

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<sup>3</sup> See Thornton (2010). [https://mises.org/daily/4177/The-Federal-Reserve-as-a-Confidence-Game-What-They-Were-Saying-in-2007#\\_ftn1](https://mises.org/daily/4177/The-Federal-Reserve-as-a-Confidence-Game-What-They-Were-Saying-in-2007#_ftn1).

Bernanke's own abysmal record of forecasting near-term events during and after the housing bubble. As financial strains did emerge, it would be hard to judge Bernanke's evaluation and response as even marginally satisfactory unless one takes the perspective of the large banks and financial institutions.

Bernanke is infamous on the Internet because of the YouTube video that chronicles his rosy view of the developing crisis from 2005 to 2007. He denied in 2005 that there was a housing bubble. Bernanke in 2006 denied that housing prices could decrease substantially. He said that if they were to fall it would *not* affect the real economy and employment. He first denied and then tried to calm fears about the subprime-mortgage market. He stated in 2007 that he expected reasonable growth and strength in the economy, and that the problem in the subprime market (which had then become apparent) would not impact the overall mortgage market or the economy in general. In mid-2007 he declared the global economy strong and predicted a quick return to normal growth in the United States. Remember, Austrians were writing about the housing bubble, its cause, and the probable outcomes as early as 2003.<sup>4</sup>

Possibly the worst of Bernanke's statements occurred in 2006, near the zenith of the housing bubble and at a time when all the exotic mortgage manipulations were in their "prime." This was the era of the subprime mortgage, the interest-only mortgage, the no-documentation loan, and the heyday of mortgage-backed securities. The new Federal Reserve chairman admitted the possibility of "slower growth in house prices," but confidently declared that if this did happen he would just lower interest rates.

Bernanke also stated in 2006 that he believed that the mortgage market was more stable than in the past. He noted in particular that "our examiners tell us that lending standards are generally sound and are not comparable to the standards that contributed to broad problems in the banking industry two decades ago. In particular, real estate appraisal practices have improved."

Bernanke is considered a top mainstream economist with the best credentials and extensive service in academia and government.

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<sup>4</sup> See the compilation by MarcellusCMarcellus, "Ben Bernanke Was Wrong," at <https://www.youtube.com/watch?v=9QpD64GUoXw>.

The chairman of the Federal Reserve has enormous resources at his disposal including a virtually unlimited budget, thousands of economists and consultants, and every piece of economic data, including detailed information concerning every major financial firm. With those resources at his disposal he consistently issued wrong answers over an extended period of time. The plausible explanations for this pattern of misinformation include; 1) Modern mainstream economics is inadequate with respect to using monetary policy to control macroeconomic outcomes, 2) Monetary policy is something beyond the capabilities of bureaucratic management, or that 3) Bernanke was issuing statements that were in the private interests of either the Federal Reserve, the banking and nonbanking financial industries, or both. These three possibilities are not mutually exclusive.

### **Fred Mishkin**

Less than two weeks after Bernanke's address to the American Economic Association, fellow academic Fred Mishkin, a governor of the Federal Reserve Board, took the stage at the Forecaster's Club of New York. (Mishkin, 2007) Mishkin is a leading mainstream economist and expert on money and banking, and the author of the best-selling college textbook on money and banking. Mishkin addressed the group on the topic of enterprise risk management and mortgage lending.

He begins,

Over the past ten years, we have seen extraordinary run-ups in house prices ... but ... it is extremely hard to say whether they are above their fundamental value.... Nevertheless, when asset prices increase explosively, concern always arises that a bubble may be developing and that its bursting might lead to a sharp fall in prices that could severely damage the economy....

The issue here is the same one that applies to how central banks should respond to potential bubbles in asset prices in general: Because subsequent collapses of these asset prices might be highly damaging to the economy ... should the monetary authority try to prick, or at least slow the growth of, developing bubbles?

I view the answer as no. (Mishkin, 2007)

In other words, if the Federal Reserve is not worried enough to change policy and address bubbles, you should not be worried either. He continues:

There is no question that asset price bubbles have *potential* negative effects on the economy. The departure of asset prices from fundamentals can lead to *inappropriate* investments that *decrease the efficiency* of the economy. (Mishkin, 2007)

In other words, there are some *potential* problems with bubbles. But Mishkin has a theory that says there can be no such thing as significant bubbles.

If the central bank has no informational advantage, and if it knows that a bubble has developed, the market will know this too, and the bubble will burst. Thus, any bubble that could be identified with certainty by the central bank would be unlikely ever to develop much further. (Mishkin, 2007)

He then tells his listeners that in the unlikely event of a housing bubble, it really would not be a problem for several reasons:

Asset price crashes can sometimes lead to severe episodes of financial instability.... Yet there are several reasons to believe that this concern about burst bubbles may be overstated.

To begin with, the bursting of asset price bubbles often does not lead to financial instability....

There are even stronger reasons to believe that a bursting of a bubble in house prices is unlikely to produce financial instability. House prices are far less volatile than stock prices, outright declines after a run-up are not the norm, and declines that do occur are typically relatively small.... Hence, declines in home prices are far less likely to cause losses to financial institutions, default rates on residential mortgages typically are low, and recovery rates on foreclosures are high. Not surprisingly, declines in home prices generally have not led to financial instability. The financial instability that many countries experienced in the 1990s, including Japan, was caused by bad loans that resulted from declines in commercial property prices and not declines in home prices. (Mishkin, 2007)

Everything he just said turned out to be completely untrue. As the leading expert on these subjects, he should have known that all

of the statements in this quote were either not true or were at least far from certain. He clearly appears to be using this communication to quell rising fear and to instill confidence and it all turned out to be not true. But he continues to dig his hole deeper and his deception wider:

My discussion so far indicates that central banks should not put a special emphasis on prices of houses or other assets in the conduct of monetary policy. This does not mean that central banks should stand by idly when such prices climb steeply....

Large run-ups in prices of assets such as houses present serious challenges to central bankers. I have argued that central banks should not give a special role to house prices in the conduct of monetary policy but should respond to them only to the extent that they have foreseeable effects on inflation and employment. Nevertheless, central banks can take measures to prepare for possible sharp reversals in the prices of homes or other assets to ensure that they will not do serious harm to the economy. (Mishkin, 2007)

In other words, the Federal Reserve understands bubbles, but it is not going to stop a possible housing bubble. In fact, if prices did start to decline noticeably and present any danger to employment or to raise the specter of deflation, Mishkin says the Federal Reserve is prepared to protect us from the bursting of the bubble and prevent housing prices from falling. Mishkin was in effect issuing a blanket insurance policy on housing prices.

## **Donald Kohn**

Federal Reserve vice chairman Donald L. Kohn significantly downplayed the possibility of a crisis, but said:

In such a world [of financial crisis], it would be imprudent to rule out sharp movements in asset prices and deterioration in market liquidity that would test the resiliency of market infrastructure and financial institutions.

While these factors have stimulated interest in both crisis deterrence and crisis management, the development of financial markets has also increased the resiliency of the financial system. Indeed, U.S. financial markets have proved to be notably robust during some significant recent shocks. (Kohn, 2007)

He is in effect telling his listeners—mostly high-level employees in banking, finance and regulatory agencies—that financial markets are stable in the face of shocks, but despite this stability the Federal Reserve is working further to deter economic crisis and learning and doing more to be ready to manage future crises.

The Federal Reserve, in its roles as a central bank, a bank supervisor, and a participant in the payments system, has been working in various ways and with other supervisors to deter financial crises. As the central bank, we strive to foster economic stability. As a bank supervisor, we are working with others to improve risk management and market discipline. And in the payments and settlement area, we have been active in managing our risk and encouraging others to manage theirs. (Kohn, 2007)

In other words, the Federal Reserve will deter any crisis and is working with other regulators to prevent financial crises, to provide economic stability, improved risk management, and market discipline.

The first line of defense against financial crises is to try to prevent them. A number of our current efforts to encourage sound risk-taking practices and to enhance market discipline are a continuation of the response to the banking and thrift institution crises of the 1980s and early 1990s....

Identifying risk and encouraging management responses are also at the heart of our efforts to encourage enterprise wide risk-management practices at financial firms. Essential to those practices is the stress testing of portfolios for extreme, or “tail,” events. Stress testing per se is not new, but it has become much more important. The evolution of financial markets and instruments and the increased importance of market liquidity for managing risks have made risk managers in both the public and private sectors acutely aware of the need to ensure that financial firms’ risk-measurement and management systems are taking sufficient account of stresses that might not have been threatening ten or twenty years ago. (Kohn, 2007)

In other words, the Federal Reserve’s number-one job is to prevent “extreme” events. Kohn is essentially telling his audience that the Federal Reserve is aware of black swans and that the Federal Reserve tests financial firms so that if such an event were to take place financial markets could withstand extreme changes in the economy.

A second core reform that emerged from past crises was the need to limit the moral hazard of the safety net extended to insured depository institutions—a safety net that is required to help maintain financial stability. Moral hazard refers to the heightened incentive to take risk that can be created by an insurance system. Private insurance companies attempt to control moral hazard by, for example, charging risk-based premiums and imposing deductibles. In the public sector, things are often more complicated. (Kohn, 2007)

Well, he did get that one right. Things are more complicated in the public sector. The Federal Reserve's bureaucratic approach does need the element of deposit insurance, provided by the FDIC, to instill confidence in the system of fractional-reserve banking. However, the Federal Reserve's own record of bailouts over the period of the so-called Great Moderation created a moral hazard for financial firms that ended up overwhelming the deposit insurance system. And now for the *pièce de résistance*: "The systemic-risk exception has never been invoked, and efforts are currently underway to lower the chances that it ever will be." (Kohn, 2007)

This record of resisting the systemic-risk exception has now been shattered. What does that tell about the status of moral hazard in financial markets and what might transpire in the next crisis?

## Randall Kroszner

Fed governor Randall S. Kroszner was the Federal Reserve's number-one official in terms of regulation of financial markets. He was the point man in preventing things like systemic risk, but he considered all the new financial "innovation" and "engineering" to be a good thing:

Credit markets have been evolving very rapidly in recent years. New instruments for transferring credit risk have been introduced and loan markets have become more liquid.... Taken together, these changes have transformed the process through which credit demands are met and credit risks are allocated and managed.... I believe these developments generally have enhanced the efficiency and the stability of the credit markets and the broader financial system by making credit markets more transparent and liquid, by creating new instruments for unbundling and managing credit risks, and by *dispersing credit risks more broadly*....

The new instruments, markets, and participants I just described have brought some important benefits to credit markets. I will touch on three of these benefits: enhanced liquidity and transparency, the availability of new tools for managing credit risk, and a greater dispersion of credit risk. (Kroszner, 2007a)

What he then goes on to discuss are “recent developments” such as credit default swaps (CDS), of which the “fastest growing and most liquid” are credit-derivative indexes involving such things as packages of subprime residential mortgages. He says that “among the more complex credit derivatives, the credit index tranches stand out as an important development.”

He believes that, historically, secondary markets were illiquid and nontransparent because banks held their own loans and that this was a problem. Now because of these new financial vehicles liquidity has improved and transparency has improved. This promotes better risk management, as risk is measured and priced better because market participants have better tools to manage risk. The result has been a “wider dispersion of risk.”

On its face, a wider dispersion of credit risk would seem to enhance the stability of the financial system by reducing the likelihood that credit defaults will weaken any one financial institution or class of financial institutions. (Kroszner, 2007a)

According to Kroszner, yes, there are some concerns here, but most of these concerns are “based on questionable assumptions.” Yes, there is risk, but it is the risk that has been out there all along; now we can trade this risk among ourselves. There is “nothing fundamentally new to investors ... credit derivative indexes simply replicate the sort of credit exposures that have always existed.” Plus, remember that this risk is greatly diminished because lenders require borrowers to put up collateral.

What Kroszner seems to have failed to realize is that by allowing institutions to disperse their risk, the regulators encouraged and allowed for a huge increase in the aggregate amount of risk. When banks kept their own loans on their own books, they were careful to make prudent loans, but with nearly free money available from the Federal Reserve, they wanted to make more loans, and the only way to do that is to make riskier loans. They did not want to hold the risky loans, so they “dispersed” them.

Kroszner told his audience that the market already experienced a surprise in May of 2005, but that since that time much energy has been expended by market participants and the Federal Reserve to improve risk management.

We do not have to worry, Kroszner tells us, because Gerald Corrigan is in charge of making sure nothing goes wrong. Corrigan—a former president of the New York Federal Reserve and a managing director in the Office of the Chairman of Goldman Sachs—has been in charge of a private-sector group that controls “counterparty risk management policy” for the financial industry.

Cooperative initiatives, such as [this one led by Corrigan] can contribute greatly to ensuring that those challenges are met successfully by identifying effective risk-management practices and by stimulating collective action when it is necessary.... The recent success of such initiatives strengthens my confidence that future innovations in the market will serve to enhance market efficiency and stability, notwithstanding the challenges that inevitably accompany change. (Kroszner, 2007a)

Checking ahead, we find Kroszner still bullish later that same year.

Looking further ahead, the current stance of monetary policy should help the economy get through the rough patch during the next year, with growth then likely to return to its longer-run sustainable rate. As conditions in mortgage markets gradually normalize, home sales should pick up, and homebuilders are likely to make progress in reducing their inventory overhang. With the drag from the housing sector waning, the growth of employment and income should pick up and support somewhat larger increases in consumer spending. And as long as demand from domestic consumers and our export partners expand, increases in business investment would be expected to broadly keep pace with the rise in consumption. (Kroszner, 2007b)

Over the next year, the Dow would lose 6,000 points; by 2010 the amount of unemployment increased by seven million. Consumer confidence had hit a 27-year low, and sales of new homes hit the lowest level in a half a century—the lowest level in recorded history!

## CONCLUSION

We can see that the Federal Reserve plays a confidence game. Its officials’ public pronouncements, while heavily nuanced and

hedged, uniformly present the American people and the leading figures in banking and finance with a rosy scenario of the economy, the future, and the ability of the Federal Reserve to manage the market. Ben Bernanke and his successor, Janet Yellen have continued to spin a positive story of economic recovery dating back to the spring of 2008.

These are the people who said that there was no housing bubble, that there was no danger of financial crisis, and that a financial crisis would not impact the real economy. These are the same people who said they needed a multitrillion-dollar bailout of the financial industry, or else we would get severe trouble in the economy. They got their bailout, and we got the severe trouble anyway. Is it not time to bring this game, this confidence game, to an end for the sake of economic stability?

However, all this evidence does not rule out the other explanations for their behavior. They could be just incompetent; they could genuinely think they are acting in the public interest, or it might not be humanly possible to run such a monetary system and they were just hoping that unwarranted confidence could save all of us from a genuine disaster.

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## REVIEW ESSAY

### *PHISHING FOR PHOOLS: THE ECONOMICS OF MANIPULATION AND DECEPTION*

GEORGE A. AKERLOF AND ROBERT J. SHILLER  
PRINCETON, N.J.: PRINCETON UNIVERSITY PRESS, 2015, 272 pp.

MARK THORNTON

This book tells its readers a great deal about the inner workings of mainstream economics, particularly behavioral economics. This review details just how far the profession has drifted from reality. My general impression is that the authors are simply putting forth their opinions or perceptions of how the world should be, and then constructing a theory to justify those opinions. The theory is then supported by a selective construction of events.

The authors are both Nobel laureates and in 2009 wrote *Animal Spirits: How Human Psychology Drives the Economy, and Why It Matters for Global Capitalism*. Here they argued that because of emotions

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and psychology, the government's response to the financial crisis must be decisive and overwhelming. The government's response, particularly the Federal Reserve's, gives the impression that the book was influential among policymakers.

George Akerlof, a retired Berkley professor, was trained at Yale and MIT. He was awarded the Nobel Prize in 2001 for his paper, "The Market for Lemons: Quality Uncertainty and the Market Mechanism." Akerlof was also the President of the Federal Reserve Bank of San Francisco and Chair of the President's Council of Economic Advisors during the Clinton Administration. He is also the husband of Janet Yellen, the current Chair of the Federal Reserve.

Robert Shiller, a Yale professor who also earned his PhD at MIT, was awarded the Nobel Prize in 2013 for his empirical analysis of asset prices. He is noteworthy as a contributor to the development of behavioral finance and as an opponent of the efficient market hypothesis. Unlike most mainstream economists, Shiller has made several correct forecasts of economic bubbles, including the dotcom bubble and the housing bubble.

Their general theory of markets involves a three step process. First, they begin with the notion that the free market is great at producing goods and services and rising standards of living. The coauthors claim to be "admirers of the free market system" (p. vii). The problem with this foundational assumption is that they think it applies to the real world.

To the contrary, the US and other leading economies of the world are not true free market economies in any sense. The US economy is riddled with high and distortive taxes, large and often hidden subsidies, price controls, and multiple, often overlapping regulatory agencies, to name just a few interventions. Government-granted monopolies permeate much of the US economy, and the US government has created pervasive moral hazards that distort our decision making. Thus, the current US economy is highly distorted and somewhat unstable because all of these interventions are subject to change. For example, no one would argue that farming would be exactly the same as farming without any government interventions in farming and related industries.

Also, the U.S. interventionist state apparatus did not just recently materialize, but has been around for a very long time. That means

there is a long history of intervention; including irregular cycles of wars, inflations, tax reforms, public enterprises and monopolies, to name a few. Therefore, the current economy is not only a product of current conditions, but is also influenced by a history of interventions. An example of the effects of interventionism would be that children who grew up during the Great Depression are systematically more frugal and more likely to be “pack rats.” Another example is the lifelong negative psychological, physical, and economic consequences that soldiers often experience after working in traumatic wartime conditions. It would be hard to argue that these two features of reality can be easily ignored, but such features of policy and historical context are ignored throughout the book. This ignorance is the basis of many of the authors’ errors.

The second step in their general theory of markets is the notion that markets have systemic problems of trickery. In most instances people trade in such a way that both parties benefit, but the authors argue that there are many cases where competition creates problems. These problems typically consist of instances where someone is sold something they didn’t want, or need, or that the authors have concluded they should not want. This type of problem is spawned by the nature of the “free market” economic system:

Many of our problems come from the *nature of the economic system itself*. If *business people* behave in the purely selfish and self-serving way that economic theory assumes, our free-market system tends to spawn manipulation and deception. The problem is not that there are a lot of evil people. Most people play by the rules and are just trying to make a good living. But, inevitably, the competitive pressure for *businessmen* to practice deception and manipulation in free markets lead [sic] us to buy, and to pay too much for, products that we do not need; to work at jobs that give us little sense of purpose; and to wonder why our lives have gone amiss (p. vii, emphasis added).

The third step in their general theory of markets is that when some deception or manipulation is established, it becomes embedded in the market. Market competition cannot overcome such problems. In the authors’ words, free market competition results in a “phishing equilibrium.” For example, the authors believe that cat owners who buy cans of cat food named “roast beef pâté” are caught in a phishing equilibrium. In other words, when a phishing for phools situation is established, it continues to

exist, until perhaps government intervention is introduced to stop it. It would seem that the authors have been confined throughout their careers inside the ivory tower without access to the Internet.

In contrast to the authors, everyone knows that there is some manipulation, deception, and trickery in the economy, whether it is fraud or the ordinary kind. Cat owners need not taste for the authenticity of the cat food manufacturers claims. Fluffy can render her own verdict. The economic questions are 1. What causes this behavior and 2. What tends to control or diminish this type of behavior? The first question will be a focus of much of this review.

The second question is answered by most Austrians by pointing to a true free market economy, laws against fraud, *caveat emptor* (let the buyer beware) and the ability of entrepreneurs to undermine the tricks of other entrepreneurs. This includes such things as product branding, company reputation, and “good will”<sup>1</sup> which forces entrepreneurs to meet the demands of consumers in order to protect their wealth. It involves product advertising (price and quality) that prevents other entrepreneurs from exploiting consumers. There are other concrete examples of why phishing for phools is not an equilibrium phenomenon, such as Angie’s List, Home Advisor, *Consumer Reports*, and product reviews by customers on websites like Amazon.com. Many products are sold with money-back guarantees and warranties, and most consumers are leery of products or services without such features.<sup>2</sup>

In the authors’ view, competition creates all sorts of opportunities for business people to take advantage of their customers and employees. They borrow the phrase “phishing for phools” from

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<sup>1</sup> Good will is an accounting term to describe the value of a company that is not based on the physical and financial assets of the company. For example, if the market value of a company is \$100 billion and its real estate and cash is worth \$10 billion, then the company’s good will is \$90 billion. Good will is based on such things as the value of a company’s brand name, good customer and employee relations, as well things such as patents. Entrepreneurs must remain ever vigilant because one adverse event can cause “good will” and thus the value of the company to evaporate immediately.

<sup>2</sup> They do mention Underwriters Laboratories, Consumers Union (which publishes *Consumer Reports*), and the Better Business Bureau as “heroes,” but these are private sector institutions. Their existence would seem to undermine the theory of “phishing equilibrium.”

Internet fraud and extend it to many areas of life. Their poster child of phishing for phools is Molly, who is addicted to slot machine gambling. For Akerlof and Shiller, it is the invention of the slot machine that is at fault and they would no doubt prohibit them if they could. In their view, they provide nothing beneficial and are harmful and therefore they are not needed. In doing so, the authors are a reversion to the secular Protestantism (or Puritanism) of the Progressive Era.

Molly proves to be a very poor poster child. I know dozens of friends and acquaintances that like to play slot machines, but none of them has a compulsion or addiction. They play once a month or once a year. They play “compulsively” for a day or so, or until their allotted money is gone. Some play irregularly for a few years and then drop casino gambling altogether. These people represent the general clientele of casinos and Molly does not.

In addition, we are told that slot machines have long been regulated by government (and therefore authorized for consumer use). Moreover, the state of Nevada takes as much money from Molly as the casinos. The state of Nevada essentially exchanges its seal of approval and oversight in exchange for part of the loot. Slot machines even have the state’s seal of approval on them in the form of a license stamp.

To emphasize that Molly is a problem gambler, we are told that Molly is a loner and suffers from an anxiety disorder. Did slot machines make her a loner and cause her anxiety disorder? Or did her personal problems lead her to slot machines as a way to relieve or distract her from her problems? Akerlof and Shiller seem to have a one-dimensional view of addiction. For them, it seems that drugs, alcohol, tobacco, and gambling cause addiction and related social problems. However, professional addiction experts believe that psychological and social problems are likely contributing factors of addiction, even though they also involve chemical processes and sometimes genetic factors.<sup>3</sup>

Would Akerlof and Shiller prohibit slot machines? I think they would be inclined to do so. But why ruin the fun times of the

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<sup>3</sup> See factors D,E,F, and G listed by the American Society of Addiction Medicine <http://www.asam.org/for-the-public/definition-of-addiction> (accessed 1/28/2016).

vast majority of gamblers who freely and knowingly exchange their money for a good time? Are we just supposed to ignore and completely discount entertainment value? More than two decades ago I lost \$90 in the only time I really gambled in a casino, a memory that has been fondly recounted many times over the years. In addition, banning slot machines would unlikely help Mollie, who could simply switch to the state lottery, raffles, bingo, etc.

The first significant application for Akerlof and Shiller general theory of markets is to the very real problem of debt in America. Families do not have enough money to cover their bills, are deeply in debt, have little or no savings, and are at risk for foreclosure, bankruptcy, and eviction. So is their federal government. Even before real median family income started to decline, Americans were in troubling economic circumstances despite a several-fold increase in real income since WWII.

The reason we worry about not being able to pay our bills, according to Akerlof and Shiller, is the free market. "Free markets produce continual temptation" (p. 20). It produces both what we want and what we do not want/need:

But free markets have also invented many more "needs" for us, and, also, new ways to sell us on those "needs." All these enticements explain why it is so hard for consumers to make ends meet. Most of us have better sense than to go in and buy the doggie (in the window), at least on a whim. But not all of us can be so rational—all of the time—when the streets and the supermarket aisles, and the malls, and now the Internet, are full to the brim with temptations (p. 21).

They later elaborate on this free market problem by indicting the credit card as the free market "magic spending pill." Of course the credit card does make it possible to temporarily spend more than one's income. It also is at the heart of our consumer debt problem.

But is it really the "free market" that is causing these problems? There are numerous reasons why that is not the case. First on this list in terms of importance would be Social Security and the government safety net that includes public housing, welfare, food stamps, unemployment insurance, etc. (a \$2.5 trillion annual moral hazard). If these programs did not exist and people were forced to rely on themselves and charity, then there would surely be much more saving and wealth and less buying and debt.

Examining the save vs. spend decision, we find that the save side is taxed while borrow-and-spend gets a tax break.<sup>4</sup> With monetary and price inflation we find the save side is harmed, while the borrow-and-spend side gets a break. Monetary and fiscal policy, of the type dominating recent US experience for the last half century, has clearly been on the side of spending and against savings. It should not be surprising that, with the exception of recessions, the personal savings rate (as a percentage of disposable income) has systematically declined in recent decades. Why save a depreciating asset? Surely commodity money such as the gold standard should be thought of as free market money, and unbacked paper fiat money would not be considered free market money.

With respect to credit cards, they very much are a free market invention. However, in the original arrangement, card users paid an additional transaction fee on the purchase price, instead of the merchant paying a fee to the credit card companies as they do today. That all changed with the passage of the Truth in Lending Act of 1968 which mandated that credit card users be charged the same as cash purchases. This government intervention was surely the key factor for the “credit card revolution” that started in the early 1970s.

Why is the current generation of Americans so unlike previous generations with respect to spending, saving, and borrowing? Allusions to psychology, trickery, and consumerism caused by the free market seem very weak in comparison to the enormous and revolutionary changes we have experienced in terms of government intervention.

The world financial crisis that began in 2008 was the result, according to Akerlof and Shiller, of “Reputation Mining” by well established financial firms and rating agencies. Their story is that financial firms sold gullible customers overrated financial products, such as mortgage backed securities (MBS) and collateralized debt obligations (CDO). When this financial hanky panky was discovered, the “free market” began to collapse. It was only central bankers who were responsible for saving the day:

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<sup>4</sup> For corporations, interest expense is tax deductible while equity dividends are subject to double taxation (at the corporate and shareholder levels).

Emergency loans by the Federal Reserve and by the European Central Bank, accompanied by massive fiscal support for “troubled assets” in the United States and Europe, averted worldwide financial collapse and reenactment of the Great Depression (p. 25).

Akerlof and Shiller ask the right questions that need to be addressed: “The institutions that produce securities, in the United States and in the world economy, changed between 1970 and 2005” (p. 26). Their answer for that change is that scrupulous and relatively unprofitable poor investment banks (circa 1970) expanded their businesses, played with their clients’ money, and took on new and unknown risks (circa 2005). In doing so, they mined their own reputations.

According to Akerlof and Shiller, rating agencies began to see that the investment banks who paid for ratings wanted the *highest rating possible* and competitive market forces made these agencies, in effect, overrate financial securities issued by investment banks. As more and more complex financial instruments were created, it became even easier to overrate new issues. One common practice (in simplified form) was to take a group or “bloc” of low quality “junk” mortgages and to then slice that bloc into the likely number of similarly rated mortgages that would probably default and the likely number of mortgages that would not likely default. The slice or “tranche” that would not default could then be given the highest rating of AAA and the other slices would be given lower ratings or go unrated.

We find out only later what the authors mean by “worldwide financial collapse.” Because investment banks financed their highly leveraged assets with “repos,” it turns out that in the event of a shortfall, depositors could simply take the investment banks’ assets that were linked or pledged to their deposits as collateral. Thus the investment banks were defeated from trying to hide in bankruptcy court. In other words, “worldwide financial collapse” means the free market punishes the big investment banks, like Goldman Sachs. Instead the Federal Reserve and the US Treasury bailed out those financial elites after they spent most of 2007 telling market participants that all was well and that the new financial products, such as MBS and CDO, were great inventions (Thornton, 2016).

It is clear that opportunistic behavior and reputation mining were taking place, but why and when did this change occur? While Akerlof and Shiller think the problem was due to reputation mining, other economists, including Paul Krugman, attribute the rating agency problems to the complexity of the new financial products. The actual answer is, in contrast, simple, straightforward and based on economic analysis.

The first factor is government regulation. Under the Basel Accords, banks are required to maintain certain capital requirements, which mandate that a certain ratio of capital to the assets they have on their books. The percentage of capital-to-assets is high for low quality assets and low for high quality assets. In other words, a bank can hold many more assets on its books if it has the highest rated assets (AA–AAA) than if it holds lower rated assets (BBB). So if a bank sells its lower rated mortgages to an investment bank that puts them into MBS packages, the bank can then buy the highly rated MBS packages—worth more than twice the assets—with the same amount of capital. That is what happened. It was regulation-driven incentives at work that caused banks to be more leveraged and to “unknowingly” take on toxic assets.

Another part of this story is that the federal government created a monopoly or oligopoly among the credit rating agencies. It mandated that assets be rated and that the rating be done by government-approved credit rating agencies which gave the big agencies a monopoly and stymied new competitors from entering the market. Under those monopolistic conditions, it would not be surprising if the credit rating agencies would not want to upset the apple cart that brought all those golden apples to them. They did not have to worry much about upstart or fringe rating agencies issuing conflicting ratings.

So why did things change “between 1970 and 2005”? Before 1970, the credit rating agencies sold the bulk of their ratings to the buyers of financial assets, but by 2005 they were selling the bulk of their ratings to the people issuing and selling the financial assets. This flip-flop was made complete by government interventions, but it began before the interventions. It will be suggested here that it really began at the time Nixon took the US and the world off the gold standard in 1971. With the anchor to gold broken, it is plausible that stock and bond issuers resorted to another important

and trustworthy anchor for the financial system—the highly scrupulous credit rating agencies.

Following this section, topics such as marketing, advertising, cable news, car shopping, home buying and credit cards are discussed. They consider all these situations to be cases of phishing for phools, but without much merit. It reminds me of the young John Stossel, the crusading investigative reporter, before he realized that such “fraud” was insignificant relative to the benefits of free market competition. Indeed, because of the Internet there has been a dramatic increase in the amount of information that consumers can access to improve their choices. Why do people feel so comfortable making purchases on eBay or Amazon? The answer is certainly not government regulation.

The section that follows tells us that the political process is rigged in favor of the crony capitalists to the detriment of citizens. This is clearly correct, but how did this happen? What might solve the problem without making things worse or violating our rights described in the Constitution? No good answers are provided.

“Chapter 6: Phood, Pharma and Phishing” turns out to be a very revealing chapter, not for its contents or analysis, but for its insight into the thinking and ideology of its authors. The chapter opens with Upton Sinclair’s book *The Jungle* and some of the horrors of patent medicine, such as Swaim’s Panacea. While the authors do correctly label Sinclair’s book a novel, they fail to point out that many of the horrific claims made in the book were purely fictional or that the major meat packing companies were more than happy to turn over their cost of meat inspection to the taxpayer. Nor do they point out that Swaim’s Panacea contained active, although potentially toxic ingredients, or that the product was endorsed by Dr. Nathaniel Chapman, who founded the American Medical Association. Nor do they point out that most of the products from the patent medicine era were either effective or were ineffective and intended to be a placebo cure, or that several of the products from that era, such as Bayer Aspirin, Vick’s VapoRub, Goody’s Powder, and Absorbine Jr., remain competitive today.<sup>5</sup>

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<sup>5</sup> Yes, many patent medicines contained undisclosed narcotics that were addictive, but those medicines were the only available effective treatment for people who suffered from chronic pain.

And now we come to the authors' confession that they are predisposed to a belief in the efficacy of government intervention and regulation:

Back in 2010, when we began this chapter on food and drugs, we intended it to be a "just so" story. We would go back to the nineteenth-century rotten meat and snake oil; we would tell of the passage of the Meat Inspection Act and the Pure Food and Drug Act, as we have done; then we would fast-forward to the twenty-first century. Our message would be "this time it's different": with-regulation now—in contrast to without-regulation then—food and drugs are safe. But when we undertook to describe modern times, we found a surprise. It's another case of "this time is different," but again with its ironic—rather than with its literal—meaning. The literal meaning just ain't so. Neither food nor drugs are now as safe as we had thought. Phishing goes on, avoiding the net of the regulators, now in more sophisticated ways (p. 86).

The authors readily admit that government regulation of food and drugs has not worked. They argue that competition has just changed the nature of the phishing. However, a more correct formulation would be that government intervention has probably made the problems worse. For example, one study by the CDC found that food poisoning led to 76 million illnesses, 325,000 hospitalizations, and 5000 deaths each year (Mead et al., 1999). FDA-approved drugs kill and harm every day, with the Vioxx scandal alone leading to 26,000–80,000 deaths. The problem has gotten worse over time.<sup>6</sup> When we combine these interventions with the government's food pyramid nutritional guidelines and the FDA/AMA's "a pill will fix that" mentality, we find that government intervention has created a gargantuan moral hazard in healthcare. Combined with the government subsidy for employer-paid comprehensive health insurance, the result is that the US has the most expensive healthcare system and the least healthy population of the major countries (Davis et al., 2014). This situation can be expected to get worse over time as current obesity and diabetes rates are projected demographically into the future.

The next chapter examines the mainstream economist's view of economic growth. The focus here is on Robert Solow's basic thesis that economic growth is driven largely by changes in ideas

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<sup>6</sup> Another example is Levaquin's death toll of 1,277. See Steinreich (2015).

and technical changes, rather than increases in capital and labor. However, the authors raise the specter that there may be bad ideas mixed in with the good ideas, and that economic prosperity would then be overstated. Again, that seemed like a reasonable hypothesis to pursue.

The authors present very limited evidence of where new ideas have negative impact. The emphasis here is on the mere existence of impact, rather than the significance of the impact. The first new idea is Facebook, which I find rather odd, because it has done a great deal to improve my own standard of living at zero expense to me. They base their view on interviews they conducted with Yale University undergraduate students. The interviews revealed a love-hate relationship with Facebook, because despite all the good it does, Facebook also creates problems of envy when the students fail to get enough “likes” or invitations to events. The second debilitating idea is “Rankings Everywhere.” They discuss airline boarding procedures where frequent flyers and first class ticket holders board first. It seems that the opportunity of early boarding made some Yale University students “smug.” Their evidence seems amusingly insignificant. The very idea that Yale undergraduate students are envious and smug!

It is worth pointing out that economists are some of the biggest abusers of rankings. They rank economists, economic departments, economic journals, etc. and then base their real world evaluations, like pay increases and promotions, almost exclusively on such rankings. Rankings even determine the merit of economic theories.

Chapter 8 is on tobacco and alcohol. There is no doubt that tobacco is both addictive and dangerous to health. Of course, the negative health consequences typically only manifest themselves after decades of use, typically combined with other negative lifestyle factors. Anti-tobacco forces typically imply that smoking results in early death and that all smokers who die are “tobacco deaths.” The reality is that cigarettes typically reduce life spans by marginal years.

Curiously, the authors blame the inventor of the cigarette rolling machine for tobacco health problems. However, the two main culprits are the medical profession and the government. The first reason for the rapid rise of lung cancer between the 1930s to the

1960s is that AMA-certified doctors endorsed cigarette brands in cigarette advertisements and that cigarette advertising was a critical factor in financing the *Journal of the American Medical Association*. The second factor was WWII, where the government gave out nearly 100 billion cigarettes to young soldiers.<sup>7</sup> Civilians also turned to cigarettes for anxiety relief during the war. It has famously been stated that “war is the health of the state,” but it could also be said that war undermines the health of citizens.

This is an important issue for the case study used in the discussion of alcoholism. They start with a story of a very capable and accomplished individual who becomes an alcoholic and ruins his life and that of others and never achieves his potential. A crucial point in their case study is that the person “served in World War II, winning three battle stars for his role in the crossing of the Rhine and the Ruhr in the Allied advance into Germany.” The authors place this point into the positive column of his abilities and accomplishments. However, my first thought was the man had experienced some of the most horrific war environments that American soldiers had experienced during WWII, and it could very well have been this experience that led to his alcoholism.

The S&L banking crisis of the early 1990s had a direct cost to taxpayers of nearly \$147 billion dollars<sup>8</sup> plus the negative economic effects of the 1991 recession.<sup>9</sup> The authors imply that this crisis was the result of free market forces and accounting practices. “We will see a world where the usual economics, in which firms maximize their profits, is turned topsy-turvy; a world in which phishing, in the form of misleading (and sometimes fraudulent) accounting practices leads to bankruptcy; but still it is the road to riches” (p. 117). However, their narrative clearly undermines their point of view. Their story begins with Fed Chairman Paul Volcker raising interest rates in the early 1980s (the problems with the S&L industry date back several more decades). This made most of the Savings and Loan banks economically bankrupt, but “the (government) supervisors did not move in. Instead, not wanting to ‘bail out’ the

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<sup>7</sup> The large scale cigarette rolling machine was invented in 1880.

<sup>8</sup> The Sep. 1990 present-value cost was \$147 billion. See Steinreich (2014).

<sup>9</sup> See for example, Steinreich (2014).

S&Ls, they let them remain open" (p. 118). Instead, government regulators relaxed accounting rules and allowed S&Ls to invest in assets other than housing. This encouraged the S&Ls to go on a reckless lending spree that increased the taxpayer bailout by about 400 percent. Therefore, to describe the S&L crisis as the fault of the free market is a complete deception.

Akerlof and Shiller's heroes are the bureaucrats and regulators who prevent the phishing of phools. However, their prime examples are surprising. First they mention government grain graders. The government does indeed have a classification system (since 1916), but grain grading has been around for a very long time and most inspection and grading is done by the private sector. The Chicago Board of Trade established its own grain grading standards in 1857 which allowed grain to be stored and shipped in bulk mechanically. This made farmers, the Board, and grain buyers more profitable as the Board experienced a 2,500 percent increase in its grain business in just four years. Second, they favorably mention Underwriters Laboratories and *Consumer Reports*, both of which are very successful, but private.

However, they point out one very important organization that is indeed a creature created by government, the Federal Reserve. Other than the previous mention of Fed Chair Paul Volcker, the Federal Reserve is mentioned three times, and in all three cases the Fed is praised for saving the world from another Great Depression, or worse. They admit that the recovery has been weak, "but, thank God, we have not entered the mini Dark Age of that earlier era, i.e. the Great Depression" (p. 134).

The authors place little credence in the role of the Fed *creating* a moral hazard for financial firms to take on ever increasing levels of risk and leverage. "But on the contrary, our view of finance, and the detailed factors that support our view, show that when run-ups in prices occur, they usually do so because of irrational exuberance" (p. 134). They find the Fed's role in creating moral hazard to be quite limited: "Such considerations, insofar as they existed, were of only marginal consideration in the euphoria that preceded the Crash of 2008" (p. 134).

This is quite a fantastic view. Central banks were well-known as moral hazards long before the founding of the Federal Reserve

in 1913. If a central bank acts as a lender of last resort, then banks will take on more risk on their balance sheets in terms of leverage and the riskiness of their loans and assets. They do this because the central bank will provide them with liquidity when other sources (e.g. depositors and other banks) will not. Everyone agrees on this point. That is why the Federal Reserve was established with strong guidelines and policies to limit the problems of moral hazard. Additionally, when the Fed was founded, it and the banks it oversaw were constrained by the gold standard and high reserve and capital requirements. Also, the discount rate is now a penalty rate in that it is set higher than the federal funds rate to discourage banks from directly borrowing from the Federal Reserve. So the Fed is by its nature a moral hazard, but one which is supposedly constrained by government regulations. It should also be noted that Fannie Mae, Freddie Mac, and the Federal Deposit Insurance Corporation also come with moral hazards for financial market participants.

It should also be noted that the Federal Reserve and the banking industry have been substantially deregulated, especially since 1980. To be brief, I will mention the Monetary Control Act of 1980, which started the liberalization of banking. In 1982, the Garn-St. Germain Act went even further by, among other things, exempting from reserve requirements the first \$2 million of deposits in a bank. Also, the 3 percent reserve requirement on non-transaction accounts was eliminated at the end of 1990. The Financial Services Modernization Act of 1999, also known as the Gramm, Leach, Bliley Act, among other things, repealed the Glass Steagall Act of 1933 which acted as a firewall between banks and security firms. All of this legislation would make sense in the absence of the moral hazard of the central bank. The notorious 1998 Fed-organized bailout of Long Term Capital Management added significantly to the notion that politically connected institutions were "Too Big to Fail." As it stands, this liberalization has coincided with ever expanding bailouts by government and the Federal Reserve, culminating with the recent financial crisis. To be clear, deregulation did not cause the financial crisis, but it did increase its magnitude.

This book promotes a view of the free market that is incompatible with the facts. The authors' view of government intervention, at least until recently, was unabashedly naïve. It all seems to hearken back to Thorstein Veblen and John Kenneth Galbraith and

other institutionalist economists who substitute personal value judgments for economic theory.

A more proper view of the free market is provided by the fictional character Pollyanna. In contrast to the Pollyanna principle of an unwarranted overly optimistic personality, the actual character of Pollyanna learns at a very early age that bad things happen in this world. Bad things happen in a true free market too. Pollyanna worked hard to make the best of things and to overcome problems such as being an unwanted orphan and being crippled in an automobile accident. The free market also overcomes problems related to such things as information, ownership, transaction costs, credence, trickery and so much more, and does so in a cost effective manner. Attributing phishing for phools to the free market, rather than to government interventions, is the same bad behavior that the authors claim to combat: manipulation and deception.

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## BOOK REVIEW

### *THE MIDAS PARADOX: FINANCIAL MARKETS, GOVERNMENT POLICY SHOCKS, AND THE GREAT DEPRESSION*

SCOTT SUMNER

OAKLAND, CALIF.: INDEPENDENT INSTITUTE, 2015, 509 + XVIII PP.

ROBERT P. MURPHY

*The Midas Paradox* is an impressive piece of scholarship, representing the *magnum opus* of economist Scott Sumner. What makes the book so unique is Sumner's use of real-time financial data and press accounts in order to explain not just broad issues—such as, “What caused the Great Depression?”—but to offer commentary on the precise zigs-and-zags of the economy during the 1930s.

Sumner rejects the standard Friedmanite monetarist “long and variable lags” approach, and argues that financial markets respond

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virtually *instantly* to new information, including announcements and events that would change expectations about the future path of monetary policy. Both because of his methodological innovations and his painstaking research, Sumner's book is an invaluable resource to economists and historians interested in the Great Depression and the operation of the classical gold standard.

Although I admire much of the book, I must reject its central thesis. Indeed, the very title *The Midas Paradox* is an allusion to the disaster that comes from an obsession with gold. Sumner agrees with standard Austrian critiques of the New Deal and its crippling effects on labor markets, but he also thinks a large portion of the blame for the Great Depression lies with the unfortunate fact that policymakers' hands (and currencies) were tied to gold. Even though economists back in the 1930s thought that central banks were "pushing on a string" with their low interest rate policies, Sumner thinks it is now well established that it was unwittingly *tight* money that made this depression "Great."

Furthermore, Sumner draws lessons for today, believing that economists are wrong to focus on low nominal interest rates and even the huge expansions in monetary bases that the world's major central banks have delivered since the 2008 crash. Instead, with his "Market Monetarist" framework, Sumner believes that central banks have foisted enormously *tight* monetary policy on the world, and that this largely explains the horrible crash and then sluggish recoveries of Western nations in the last decade.

In Sumner's view, only by adopting a more useful criterion for assessing monetary policy can economists explain past crises and help policymakers avoid future ones. As Sumner concludes his introductory chapter: "The events of the past five years should make us all a bit more forgiving of those interwar policy experts who failed to correctly diagnose the problem in real time. When aggregate demand collapses, it looks to almost everyone as if the *symptoms* of the fall in aggregate demand are the *causes*. That was true in the 1930s and it is equally true today" (p. 32).

Although I could spend the rest of this review noting the areas on which I *agree* with Sumner, the best contribution I can make is to point out why I think his thesis ultimately fails. To that end, I will first show that the single most important relationship he

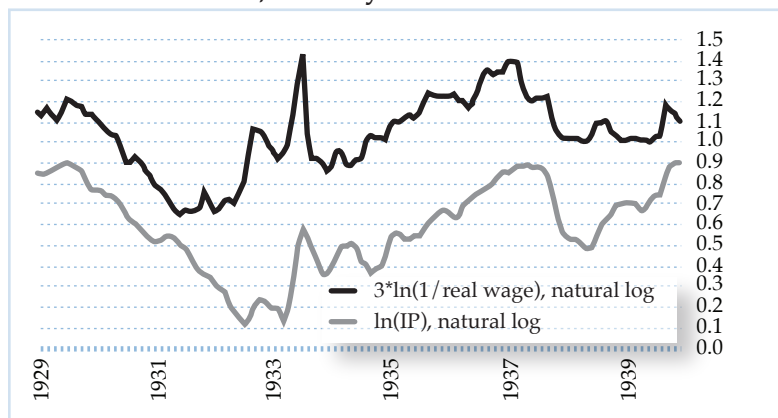
charts in the book—and it is Sumner himself who christens it as such—is just as consistent with the Rothbardian (1963) explanation of the Depression as it is with a Market Monetarist one. Then I will show that Sumner’s emphasis on gold—which is the reason for the book’s title, after all—is misplaced; it cannot fulfill the criterion that Sumner himself says it must.

I will conclude that Sumner’s book, excellent though it is in many respects, fails in its purpose. Austrians who subscribe to the Rothbardian explanation (which in turn was an elaboration of the Misesian theory of the business cycle) may collect some interesting nuances and a wealth of data from Sumner’s book, but they have no reason to abandon their basic framework.

### EVIDENCE THAT FITS BOTH FRAMEWORKS: THE CONNECTION BETWEEN REAL WAGES AND OUTPUT

In his introductory chapter Sumner declares, “If I were asked to give a talk on the Great Depression and allowed just one slide, it would undoubtedly be Figure 1.2” (p. 20). We have reproduced that crucial chart below.

**Figure 1.2: The Relationship between Detrended Industrial Production and Detrended (Inverted) Real Wages, 1929–1939, Monthly**



In Sumner's figure, the gray line shows the logarithm of industrial production, meaning that straight lines indicate steady percentage rates of growth (or shrinkage). The dark black line is the logarithm of the *inverse* of the real (i.e. price-level-adjusted) wage rate.

The figure shows quite clearly that during the 1930s, as real wages *increased*, industrial production fell. On the other hand, increases in industrial production went hand-in-hand with *declines* in real wages.

As it happens, I am perfectly happy with Sumner's graph. In fact, I will go further and enthusiastically endorse just about all of Sumner's *interpretation* of it as well:

[A] sharp fall in output could be caused by either a rise in nominal wages or a fall in the price level. It so happens that both factors played an important role in the Great Depression....

During the 1930s, the biggest supply shocks were New Deal programs aimed at artificially raising nominal wages. There were five big wage shocks, each of which tended to abort otherwise promising recoveries in industrial production. These wage shocks thus tended to make real wages more countercyclical—higher wages led to lower output.

...

But what about the demand shocks, which were the major cause of the Great Contraction? Recall that the real wage is the nominal wage divided by the price level.... Wholesale prices fell sharply during the 1929–1933 and 1937–38 contractions and rose sharply after the dollar was devalued in April 1933. *Because nominal wages tend to be sticky, or slow to adjust, sudden changes in the WPI tend to show up inversely as changes in the real wage rate....* If prices fall much faster than wages, then profits decline and companies lay off workers. Real wages actually rose sharply during the early 1930s for those lucky enough to maintain full-time jobs. (Sumner, pp. 20–22, emphasis added.)

Perhaps surprisingly, in the above quotation, Sumner has provided the same basic explanation of the high (and persistent) unemployment rate that I myself gave, in my decidedly Rothbardian treatment in Murphy (2009). Sumner and I agree that during the 1930s, unemployment shot up whenever real wages were increasing and (perversely) made labor more expensive relative to other commodities.

However, where Sumner and I disagree concerns the *blame* for this state of affairs. If the general price level falls, while nominal

wage rates do not fall nearly as much, then Sumner ultimately blames the monetary authorities for letting the purchasing power of money increase so rapidly. In contrast, I blame the *other* interventions of the federal government (in conjunction with labor unions) for making wages so much “stickier” than they had been in previous depressions.

In particular, we can compare the behavior of nominal wages and prices of the early 1930s with the experience from the 1920–1921 depression. Here we rely on the statistics and analysis from Gallaway and Vedder (1987). First we reproduce one of their tables:

**Table 4: Rate and Indexes of Consumer Prices, Money Wages, Productivity, and Productivity-Adjusted Real Wages**

Unemployment Rate		Indexes (1929 = 100)							
		Consumer Prices	Money Wages		Productivity		Productivity-Adjusted Real Wage		
			Annual	Hourly	Annual	Hourly	Annual	Hourly	
1929	3.2%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
1930	8.7%	97.3	97.4	98.4	94.8	96.3	106.7	105.0	
1931	15.9%	88.6	90.4	94.4	94.4	97.1	111.4	109.7	
1932	23.6%	79.6	80.1	82.4	81.8	93.4	118.5	110.1	
1933	24.9%	75.4	73.3	82.6	87.6	91.6	117.0	119.6	

Source: Table 4, p. 45, from Gallaway and Vedder (1987).

As the final column from the table shows, real wages for hourly workers—especially if we further factor in productivity—grew substantially over the years of the Great Contraction, reaching almost 20 percent higher by 1933 (when the unemployment rate was almost 25 percent). For another amazing fact, note that nominal (money) wage rates for hourly workers in 1931 were only 5.6 percent lower than they had been in 1929, even though consumer prices by that point had fallen 11.4 percent. During this year, unemployment was already at a devastating 15.9 percent.

Even the table above does not shed light on the *policies* that might have contributed to the problem. After all, Sumner could take these data from Gallaway and Vedder in stride, showing the disastrous consequences of the Fed’s (allegedly) tight monetary stance in the early 1930s amidst “sticky nominal wages.”

Yet here is where the comparison with the 1920–1921 episode is decisive. After producing the above table, Gallaway and Vedder explain:

The issue is whether the Hoover recipe delayed the onset of money wage adjustments sufficiently to exacerbate the disequilibrium and increase the severity of the Great Depression. The evidence is persuasive that this is the case.... [A] monthly wage index compiled by the Federal Reserve Bank of New York (reported by Lionel Robbins) shows almost no movement in money wage rates from the fourth quarter of 1929 through the second quarter of 1930.

Contrast this pattern with that of the 1920–21 downturn. In both cycles, industrial production peaked at midsummer before the onset of the decline. In both cycles, the decline was precipitous, 27.5 percent from July 1920 to July 1921 and 21.3 percent from June 1929 to July 1930. However, as noted earlier, *in the 1920-21 case, money wage rates fell by 13 percent, setting the stage for the sharp recovery that began in August 1921*. One of the factors cited by Benjamin Anderson in explaining this recovery is “a drastic reduction in the costs of production.” How these costs were reduced is clear—money wage rates were cut, something that did not occur in the early days of the Great Depression. For example, *according to data compiled by the National Industrial Conference Board, hourly wage rates for unskilled male labor fell more between 1920 and 1921 than they declined throughout the Great Depression*.

The clear implication seems to be that the *money wage rate adjustment process was distinctly different during the Great Depression compared to the 1920–21 decline in business activity*. Apparently, Herbert Hoover’s goal of *maintaining levels of money wage rates was achieved*, at least temporarily. (Gallaway and Vedder, 1987, p. 46, emphasis added, endnotes removed.)

Much more recently, Lee Ohanian (2009) develops a formal neoclassical model and concludes that Herbert Hoover’s policies—which asked large firms to maintain nominal wage rates in exchange for keeping out unions—are ultimately to blame for the Great Depression. He writes in his abstract: “The theory also can reconcile why deflation/low nominal spending apparently had such large real effects during the 1930s, but not during other periods of significant deflation.”

In summary, regarding the “one slide” that Sumner would use if he had to choose just one, he and I are in agreement: The key to understanding the massive unemployment of the 1930s is real wage rates. Sumner and I agree that during an economic downturn, the

last thing in the world we want is for labor to become artificially more expensive as prices fall faster than wage rates.

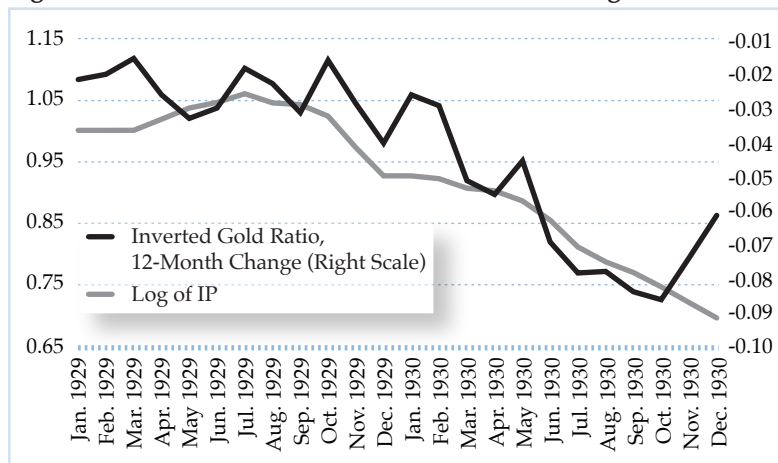
Yet rather than ask (ask Sumner does) why policymakers at the Federal Reserve *allowed* such a deadly fall in prices, instead I would ask why policymakers in the federal government *hindered* the fall in (nominal) wages that had been the norm in previous depressions (or “panics”).

### SUMNER’S MISPLACED EMPHASIS ON GOLD

In the previous section, I argued that the Rothbardian interpretation of the Great Depression could easily incorporate the single most important graphical relationship of Sumner’s book. Namely, a Rothbardian could agree that the immediate driver of unemployment was the real wage rate, but the Rothbardian would lay the blame on government measures that interfered with nominal wage adjustments, rather than with deflationary monetary policy.

In this section, I question Sumner’s emphasis on money—and in particular, the operation of the gold standard—as a key component of the Great Depression. Here again we will reproduce a key chart from Sumner’s book, namely Figure 2.1 (p. 44), which plots the inverse of the “gold ratio” against industrial production:

Figure 2.1: Industrial Production and 12-Month Change in C/G Ratio



To understand the significance of this figure, we first must explain the “inverted gold ratio.” Sumner had earlier (p. 28) defined the gold reserve ratio as “the ratio of the monetary gold stock and the currency stock.” Now under the rules of the classical gold standard, “countries were supposed to adjust their currency stock in proportion to their changes in their monetary gold stock,” and thus if a country did *not* do so, then such “[v]ariations in the gold reserve ratio can be seen as an indicator of discretionary monetary policy” (p. 29).

Returning to the figure above, we now see how it apparently endorses the Sumnerian framework. If the currency/gold ratio (the dark black line) falls, it means that the outstanding stock of currency has fallen relative to the amount of gold held for monetary purposes. It is discretionary monetary policy tightening, in the context of the classical gold standard. And since the dark black line goes hand-in-hand with industrial production (the gray line), Sumner believes that this chart is consistent with his central thesis.

However, even at this stage, there are problems. First, note that from January 1929 up until the fateful month of October 1929, the 12-month change in the currency/gold ratio is (slightly) negative. Even so, industrial output rises through the summer. Moreover, the particular zigs and zags do *not* coincide with each other; there is a relative tightening (i.e. falling dark black line) from April through June, while industrial production rises during this stretch. Furthermore, there is a spike in the black line going into October 1929, which (to repeat) represents a relative *loosening* of monetary policy in Sumner’s framework.

To be sure, eventually both lines collapse, but it is hardly clear that the movements in the black line are *causing* reactions in the gray line. Indeed, consider that as of January 1930, the height of the black line has returned to the same position it held back in April 1929. That means that the (modest) 12-month decline in the inverted gold ratio by January 1930 was no larger than that same change had been in April 1929. And yet, this monetary tightening coincided with growing industrial output back in April, while by January industrial production was in free-fall.

Now, when it comes to explaining the stock market crash of October 1929, what really matters is not the mechanical policy

of that moment but rather the *expectations* of investors. Perhaps the Federal Reserve signaled in some way the sharp tightening of monetary policy that would eventually come, and investors realized how much things had changed as fall 1929 unfolded.

As a staunch proponent of the Efficient Market Hypothesis (EMH), this is indeed the approach Sumner adopts. Space constraints do not allow me to summarize his case, but I think it is fair to say that he presents no smoking guns. In fact, Sumner *himself* implicitly admits that he has failed in the task he set for himself, when he (no doubt subconsciously) moves the goalposts.

Specifically, on page 40 Sumner tells us his strategy (consistent with the EMH):

Before we throw up our hands and accept the “bubble” explanation, we should first see whether there is an alternative explanation that allows for sensible investors to have been *highly optimistic in September 1929 and much more pessimistic in November 1929*. (Sumner, p. 40, emphasis added.)

To reiterate, for Sumner’s book to “work,” he must now show us what tangible actions (which could have been in the form of remarks made to the press) the Federal Reserve made in a two-month window from September to October 1929, which involved the handling of the gold standard and which made *both* the stock market valuations of early September and late October 1929 “rational.” Were there any such actions that would have altered expectations in such a drastic way?

I submit that Sumner gives us nothing that fits the bill. He himself seems to acknowledge this when, twenty-one (unconvincing) pages later, Sumner writes:

At the beginning of this chapter, I suggested that in order to understand the October [1929] crash, one needed to explain why it would have been sensible for investors to be highly optimistic in September 1929, and *somewhat pessimistic in November 1929*. Is there an explanation for such a dramatic change in sentiment? (Sumner, pp. 60–61, emphasis added.)

Note the subtle movement of the goalposts (again, I believe innocent enough); on page 40 he had sought something that would make investors “much more pessimistic” two months later, while on page 61 he has lowered the bar to “somewhat pessimistic.”

(Would a mere change to “somewhat pessimistic” explain back-to-back drops of almost 13 percent and then 12 percent, which is what happened in the market on October 28 and 29?) Sumner knows he doesn’t have it. Indeed, later on this page Sumner writes, “This makes it almost impossible to establish a clear link between monetary policy and the 1929 crash” (p. 61).

Now in fairness, Sumner might respond that his book does *not* need to explain how monetary tightening—due to the constraints of the gold standard—led to the 1929 stock market crash. This is because one of the ways Sumner departs from conventional analyses is that he thinks market crashes do *not* necessarily coincide with “real” downturns; his best counterexample is the 1987 market crash, which was bigger than the 1929 one and obviously didn’t spawn a decade-long depression.

Even so, it sure *seems* as if the 1929 stock market crash had an awful lot to do with the onset of the Great Depression. Just look again at the final chart above, taken from Sumner: the big drop in industrial production clearly began with the market crash. The fact that Sumner admits his framework can’t really explain this sharp turnaround is (in my opinion) key evidence that his focus on gold—and denial of the existence of asset bubbles—is fundamentally mistaken.

## CONCLUSION

In truth, *no* economic historian can explain the precise timing of every movement in the financial markets and broader economy, for the simple reason that humans have free will. Even so, using the very criteria Sumner himself embraces, we can conclude that his book—though superb in several dimensions—does not achieve its stated purpose.

Putting aside the detailed statistics, I will end this review with a simple question: How can it be that the classical gold standard is largely responsible for the Great Depression, when the classical gold standard was operating during several *previous* financial panics and depressions (small “d”)? To blame the Great Depression on the gold standard is akin to blaming a particular plane crash on gravity.

In contrast, the Rothbardian analysis at least has a *shot* at being satisfactory. After all, Herbert Hoover in his memoirs tried to defend his legacy by assuring his readers (truthfully) that his administration had taken *unprecedented measures* in battling the Depression, meddling in the economy in ways that no president during peacetime had done before. *That's* the place to start, when we ponder why Herbert Hoover suffered from a worse downturn than any president before.

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## BOOK REVIEW

### *CHOICE: COOPERATION, ENTERPRISE, AND HUMAN ACTION*

ROBERT P. MURPHY

OAKLAND, CALIF.: INDEPENDENT INSTITUTE, 2015, 299 PP.

LUCAS M. ENGELHARDT

Robert P. Murphy's "Choice: Cooperation, Enterprise, and Human Action" seeks to provide the reader with a "modern, condensed treatment" of Ludwig von Mises's *Human Action*. Robert P. Murphy is a long-time contributor to Austrian economics, and has been a serious student of Mises's work, having authored the *Study Guide to Human Action* in 2010, and the *Study Guide to The Theory of Money and Credit* in 2011. In *Choice*, Murphy uses *Human Action* as the primary source, but, as a good professor, focuses his efforts not on simply relaying what is already "in the book," but on emphasizing the important, explaining the difficult, and elucidating the context. The result is a book that can serve

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as a companion to—or, for many, even a substitute for—reading Mises’s rather imposing *Human Action*.

The philosophy underlying the writing of *Choice* comes from Mises himself. As Mises observes, the study of economics is not something that can remain “an esoteric branch of knowledge accessible only to small groups of scholars and specialists.” (Mises, 1949, p. 845) Since the primary benefit of economics comes from the understanding of policy that it provides, and policy is, in the end, determined by public opinion, economics can only really be effective in benefiting humanity if it influences public opinion. Austrian economists understand Mises’s *Human Action* to focus on the core of economics that the public would need to know to form informed opinions about economic policy. However, *Human Action* itself is largely inaccessible to the modern, intelligent layperson. As Murphy points out in his introduction, *Human Action* is quite long, uses technical vocabulary, and assumes substantial background knowledge. Today, even professional economists would often find reading *Human Action* to be a chore for those three reasons, as the profession is now dominated by journal articles rather than books (and treatises are almost guaranteed not to be read!), technical jargon has shifted substantially, and a modern economist’s knowledge of the history of economic thought is often insufficient to understand the underlying debates regarding, for example, economic calculation. These problems are only magnified for someone not trained in economics. *Choice* provides the necessary background, modern vocabulary, and reasonable length that *Human Action* lacks.

The main body of the text follows, in broad strokes, the plan of *Human Action*, moving from a foundational understanding of action and its immediate implications through action in society and markets, action under socialism and interventionism, and finally closing with the inspirational call to spread the knowledge of economics far and wide. While the broad plan of *Choice* is the same as *Human Action*, Murphy clearly has to condense material to fit it into a space that is less than one-third the size of the original. For example, where Mises devoted ten chapters to a discussion of the hampered market economy (or “interventionism”), this topic receives just one chapter in *Choice*. To make the connections between *Human Action* and *Choice* clear despite *Choice*’s need to condense material, the book includes an easy-to-use table showing the connection between the

original chapters in *Human Action* and the chapters that these map to in *Choice*. This table would be especially useful for those hoping to use *Choice* as a companion to *Human Action*.

In making decisions about what material to expand and what to condense, Murphy has done a masterful job determining what is and is not worthy of receiving detailed treatment in *Choice*. For example, the epistemological material has been drastically (and, in my mind, mercifully!) condensed. Part VI on the Hampered Market Economy was ten chapters—150 pages—in Mises. In Murphy, these are boiled down into a single, 20-page chapter. The decisions about what to keep and what not to keep appear to be driven by the underlying purpose. Murphy is asking the question: “Does someone need to know these details to really understand economics?” Often, the answer is no. This is part of what makes *Choice* a very strong book. Often, brevity breeds clarity. *Choice* focuses, then, on the true core of Mises’s thought, and explains it clearly.

However, when it comes to the true core of Austrian distinctives, Murphy is willing to devote the time needed to provide a foundation for understanding Mises’s argument. For example, a reader cannot understand Austrian business cycle theory—certainly a relevant topic!—without understanding money and banking and time preference theory first. Thus, Murphy devotes three chapters building up the theory of business cycles from its foundation in banking and capital and interest theory to the synthesis of these points in Austrian business cycle theory. The chapter on Capital, Time Preference, and the Theory of Interest provides a wonderful example of Murphy’s willingness to expand on the original when it is necessary to bring a modern reader up to speed. This chapter, rather than simply condensing and modernizing the three chapters of Mises that provide the inspiration, provides the history of thought that is needed to really understand how Mises’s approach to time preference differs from Bohm-Bawerk’s and Fetter’s, so that the reader has a greater sense of exactly what Mises had accomplished.

The one weakness that is evident upon reading the book is that the intended relationship between *Human Action* and *Choice* is not always clear. Is *Choice* meant to be more of a companion to *Human Action* or is it intended to be a substitute? The tone of *Choice* seems to flip back and forth on this question. Sometimes, the book reads as if it is really a standalone volume explaining Mises’s ideas. At

other times, the reader of *Choice* may feel somewhat like the college student who came to class not realizing that they were supposed to read the chapter before listening to the lecture. My own view is that *Choice* can serve either purpose, and I certainly hope that those who read it as a substitute for reading Mises can find the time and gumption to attempt reading *Human Action*.

I highly recommend *Choice* to anyone who is interested in a book-length introduction to Mises's thought but feels intimidated by Mises's own works. (Or perhaps has tried them, but found that Mises demanded far too much background knowledge.) Speaking as someone who has read *Human Action*, *Choice* was a useful refresher on the core of what matters most in Mises's thought, and, most importantly, why it matters. In the words of Murphy: "There is nothing to guarantee that good ideas will trump bad ideas. But what is certain is that the prevalence of faulty ideas in the realm of economics threatens civilization itself." (p. 299)

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## BOOK REVIEW

### *ZUR SANIERUNGS- UND REORGANISATIONS- ENTSCHEIDUNG VON KREDITINSTITUTEN (ON BANK RESTRUCTURING DECISIONS)*

DAVID J. RAPP

WIESBADEN, GERMANY: SPRINGERGABLER, 2014, 295 PP.

CHRISTIAN TOLL

The most recent financial crisis has engendered various actions by institutions aiming—or at least pretending to aim—to end the crisis and to stabilize the economy in general and the banking sector in particular. Not only have central banks flooded the markets with cheap money, but governments have also introduced new regulations intended to prevent the banking sector and, consequently, the entire economy from blundering into another crisis. These initiatives will in fact make everything worse, or are—at best—pointless. Apart from revised rules for banking

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supervision ("Basel III"), laws concerning the restructuring or formal liquidation of banks were passed in several countries. In Germany, the government created a Banking Restructuring Act ("Gesetz zur Reorganisation von Kreditinstituten") aiming at 1) the successful restructuring of (especially) so-called "systemic" banks without affecting the stability of the banking system as a whole and 2) the involvement of both equity and debt holders in solving a bank's crisis rather than the taxpayer.

While the German Banking Restructuring Act has been the subject of thorough jurisprudential research, David Rapp was the first to analyze the Banking Restructuring Act from a business economics perspective, based upon Austrian insights. His German-language dissertation *Zur Sanierungs- und Reorganisationsentscheidung von Kreditinstituten (On Bank Restructuring Decisions)* starts with a useful introduction which is not only able to inform the reader about the subject matter of Rapp's work as well as its importance and relevance, but it also clearly provides the main research questions and the corresponding structure of the book.

In section II, Rapp deals with three main topics. First, he discusses the causes and course of the recent financial crisis. While his analysis is based upon contemporary Austrian insights on this issue, Rapp's remarks go beyond the general Austrian scope, since he not only discusses economic reasons for the crisis (especially the monetary policy in the aftermath of the dot-com bubble), but also business economics oriented facets of the crisis which contributed to and exacerbated the crisis. He particularly analyzes the role of securitized assets and their international exchange, market participants' deficient risk awareness (which he consistently relates to the almost axiomatic application of neoclassical finance theory in investment decisions), dubious rating agencies, and the fair value accounting under IFRS and US-GAAP. Secondly, Rapp examines the rules of the Banking Restructuring Act. His detailed analysis and insightful critical comments complement his descriptive remarks. Thirdly, the author shows that the initiation of the restructuring process as determined by the law is problematic. His conclusion is drawn from the fact that the law requires an objective approach by focusing on certain ratios originally prepared for banking supervision purposes. Rapp rejects this approach, particularly because he characterizes the selection of

the time to initiate restructuring as a typical entrepreneurial act. Based on this insight, he is able to show that the ratios are useless for entrepreneurial decision-making, because they are nothing but arbitrary conventions, heavily influenced by the underlying accounting and banking supervision rules as well as balance sheet policy, and focusing on more or less irrelevant past data.

Then, in section III, Rapp presents an alternative entrepreneurial approach to answer the crucial question of when such restructuring should be initiated by a bank, based on applied Austrian economics. The author emphasizes that subjective valuation is at the core of entrepreneurial judgments rather than some pseudo-objective regulatory ratios. In this context, Rapp also rejects judgments based upon neoclassical finance theory (as recommended in the respective literature on the valuation of financially distressed or bankrupt firms) as inappropriate, particularly because—besides other inherent flaws and fallacies—by definition, these methods exclude the mere possibility of financial distress or a potential bankruptcy of a bank, given that every market participant has unlimited access to lending at market interest rate  $i$  in the perfect capital market. Rapp points out that models that exclude the mere possibility of financial distress—which is actually the cause for initiating a bank's restructuring process—are useless to a bank that faces such a situation in practice. His proposal, therefore, is based upon Austrian value theory, i.e., it considers real-world circumstances, especially the imperfection of markets, the subjective element of every entrepreneurial judgment, and the necessity of future-orientation. With his proposed heuristic based on both methodological individualism and subjectivism, Rapp provides a practical tool for decision-makers in banks that allows them to approximate a suitable point in time to initiate a restructuring process properly. Consequently, he argues for a rejection of the objectified judicial approach to the question of when the restructuring should be initiated, in favor of a voluntary entrepreneurial decision.

Within section IV, Rapp discusses the second main issue relevant to business economists: the debt-equity-swap. This is believed to be the most important means of restructuring. As he points out, while a debt-equity-swap creates certain advantages for the bank itself and may be beneficial to some equity holders, it might be detrimental to other equity holders. Even though the effects of such restructuring

may reduce some shareholders' wealth, these shareholders might be forced to accept it, since the debt-equity-swap only requires 50 percent approval (66.67 percent in some cases) of the shareholders according to German law. Therefore, the Banking Restructuring Act demands an adequate compensation for the shareholders in case of a debt-equity-swap, as they might have to accept an individually disadvantageous restructuring. Rapp analyzes this arrangement in depth. He not only recognizes that the assessment of such compensation necessarily requires a business valuation of the respective bank, but also step by step constructs a model which allows calculation of adequate compensation and respects both the legal requirements as well as fundamental Austrian principles. The author illustrates the effects which the debt-equity-swap causes from a shareholder's perspective and, thereby, applies both methodological individualism and subjectivism. As he points out, a debt-equity-swap does not only affect a shareholder's stake in the company, but also the magnitude of future payouts, e.g., because the respective bank's debt service decreases in response to the debt-equity-swap, allowing it to invest the saved money and to distribute the gained income to the shareholders. To conclusively assess the adequate compensation requires the juxtaposition of the advantageous and disadvantageous effects a debt-equity-swap has from a particular shareholder's perspective. Rapp shows that if and only if the shareholder suffers a reduction in welfare from the debt-equity-swap, he needs to be compensated to an extent equal to the reduction in wealth.

Section V serves as a suitable summary of Rapp's findings.

From an Austrian perspective, one might certainly argue that the entire Banking Restructuring Act should be rejected, since it cannot really solve any problems but only combats some symptoms—as long as the monetary system remains unchanged and central banks go on distorting markets. However, I appreciate Rapp's pragmatic approach, because he takes the law as it is—given in the real world—and provides important guidance especially to decision-makers in banks, shareholders, judges, and consultants on how to deal with it. However, his insights are not strictly limited to the German Banking Restructuring Act; Rapp's findings can be applied in widely varying circumstances. Furthermore, in criticizing various parts of the law and proposing consistent

alternatives, Rapp resolutely counsels politicians to revise the law in order to facilitate more voluntary entrepreneurial judgments rather than strict governmental regulations.

## A COMMENT ON DR. HOWDEN'S REVIEW OF *FINANCE BEHIND THE VEIL OF MONEY*

EDUARD BRAUN

Dr. Howden (2015) has done me the honor of reviewing my recent book *“Finance behind the Veil of Money”* (Braun, 2014) in this journal. Many of the points he raises are very helpful to the potential reader. He is probably correct in stating that the book is not an easy read. Its origin as a doctoral thesis explains why no theoretical obstacles were avoided, even those that might be cumbersome for the general reader. When Dr. Howden takes issue with my analyses of the opportunity cost concept and the time preference theory of interest, he also touches points that are of interest to potential readers. In both cases, I elaborate on minority positions within the Austrian School—I follow Dr. Reisman on opportunity cost and Dr. Hülsmann on interest theory. I expected that my discussion of these topics would arouse opposition, or better, I had the desire that it would because, in my opinion, they are yet to be satisfactorily resolved.

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My need to comment on Dr. Howden's review, however, has to do with the fact that he misrepresents my position on a point that is central both in my book and in his review. On p. 580, he gives an extended quotation from my book. In this quotation, I supposedly argue, in the context of the theory of interest, that all actions must be called consumption and that the separation between productive and consumptive activities is unnecessary. Dr. Howden then goes on to remark that this position (which he imputes to me) cannot be reconciled with other parts of my book. On p. 582, he once again refers to this supposed contradiction.

One of the central arguments in my book is that the purchasing power of money should be understood only in relation to consumer goods, not to producer goods or capital goods. It would indeed be a stark incoherence if I argued that there is no difference between consumption and production and then went on to maintain that the distinction between them is essential for understanding the purchasing power of money. This is why I feel the urge to rectify Dr. Howden's account of what I am saying.

The quotation he presents as depicting my own position reflects nothing but a counter-argument to my position, which I am in the process of discussing and refuting. The paragraph from where Dr. Howden's quotation stems starts with the sentence: "Yet, this argument [made by others] is irreconcilable with the time-preference theory itself: it gives up the distinction between present and future goods" (Braun, 2014, p. 21). *It is not my own position that present goods and future goods are the same and that, therefore, consumption and production cannot be separated*; rather, it is the consequence of a counter-argument I am addressing.

Far from contradicting my later argument concerning the purchasing power of money, my analysis of the interest phenomenon introduces the methodological foundations for this argument. My point is that originary interest is the consequence of a praxeological phenomenon. In human action, psychic costs are only incurred if the actor expects his psychic revenues to exceed these costs. From this necessarily follows a value-spread between psychic costs and psychic revenues. I further argue that *psychic costs cannot be defined but by the sacrifice of consumer goods (including leisure time)*.

In my discussion of the purchasing power of money, I transfer this praxeological argument to the production process as conducted by business enterprises. The ultimate purpose of these enterprises (why they are founded in the first place) is not psychic, as in human action, but of a monetary nature. Otherwise, there is a close parallel between the two phenomena. In particular, money spent on the means of production—monetary costs—is valued by all participating parties, not in accordance with its power to purchase these means of production, but with its power to purchase *consumer goods*. They orient their actions on the basis of the prospect of monetary income and monetary profit because money guarantees their consumption, not because it allows them to command producer goods. These goods are only means, not ends, and are therefore only of indirect use.

I am not able to exhaustively display the entirety of my argument in only a few lines. What I want to stress, however, is that my book does not contain the contradiction Dr. Howden has pointed out in his review. Rather, the two supposedly inconsistent arguments actually dovetail and are closely related to each other.

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## ***FINANCE BEHIND THE VEIL OF MONEY: RESPONSE TO DR. BRAUN'S COMMENT***

DAVID HOWDEN

What is the relationship between opportunity cost, choice and action? In my review of Eduard Braun's *Finance behind the Veil of Money* (2014), I took exception with his view that opportunity costs are not only unnecessary, but even detrimental to understanding decision making.

The most substantial difference between our views comes from Braun's treatment of the relationship between opportunity cost and choice. Consider his example of an unprepared hiker being given the choice of either of his friend's apples, and choosing one over the other (Braun, 2014, p. 32). (Braun assumes that the hiker is indifferent between the two options, or in his own words, "that the two apples are alike"). In choosing one apple over the other, the hiker realizes no net benefit since he also incurs the opportunity cost of the foregone alternative, the unchosen identical apple. Braun begs the question to the extent that it is trivial to

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state that one will receive no net benefit if the associated cost is an equally preferred alternative.<sup>1</sup>

As with other apparent paradoxes of choice similar to Buridan's ass, the solution requires identifying a hidden option. In Braun's case (as with the ass), the other option is not eating at all, and starving. The foregone alternative cannot be something perceived to be identical to what one is choosing since a preference of one option to another is a requisite of choice (Rothbard, [1956] 1997, pp. 225–226). Both the hiker and the ass make their choice based on the foregone alternative of starving, resulting in the more obvious (and conventional) gain from trade. In other words, the hiker's benefit came at the point when he avoided death by being offered one of two apples. The choice of what specific apple to consume is a subsidiary issue to the realization of this benefit.

Braun could have relaxed his assumptions, e.g., make the apples imperfect substitutes, yet still not achieve his desired end. In choosing the more highly valued red apple and foregoing the other yellow one, the hiker will indeed forego the lesser value of the yellow apple. As a result, his gain from this trade will be less than that of the previous example with identically satisfying apples. This outcome accords with reason and is an alternative way to illustrate the effect of scarcity on value.

These results can be summarized as in table 1. Braun's example is represented as example A, with indifference between the two apples. Choosing one of the apples will not result in the foregone alternative of the other apple, as the next best alternative is the third ranked preference of death. In example B, the hiker is not indifferent and prefers the red to the yellow apple. Choosing the red apple implies foregoing the yellow one, and the utility associated with it. Clearly one will benefit more when faced with indifference between the alternatives. While this indifference does not pose a theoretical problem, it cannot be demonstrated by choice (Rothbard, [1956] 1997, p. 226). As a consequence, example

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<sup>1</sup> This is analogous to a movement along an indifference curve in mainstream price theory, though I know of no framework used by Austrian School economists to illustrate this phenomenon (I provide a suggestion in Table 1). This example represents another point of departure of Braun's analysis from more conventional Austrian School approaches (e.g., Rothbard, [1956] 1997).

A is not a valid illustration of the point Braun wishes to make. Note that Braun is far from the only economist overlooking this point: 78 percent of economists polled at the 2005 annual meeting of the American Economic Association were unable to answer a similar question concerning value and opportunity cost (Ferraro and Taylor, 2005, p. 7).

**Table 1: Preference Ranks With and Without Indifference**

Preference Rank	Example A	Example B
1st	glass of water	glass of water
2nd	red apple ~ yellow apple	red apple
3rd	death	yellow apple
4th	can of Mountain Dew	death
•	•	•
•	•	•
•	•	•

Braun thinks that the opportunity-cost doctrine leads to seemingly perverse outcomes because it gives no heed to the role of ownership (p. 33). Since one can only forego what he owns, Braun reasons that a cost can only be created by foregoing something owned. From this he concludes that since the action undertaken (the embodiment of the choice) can only be made at the expense of something one owns, the cost can only be realized at the point the action is undertaken. In Braun’s words, opportunity-cost analysis “creates costs where they do not exist—in decisions—and neglects costs when they actually arise—in action” (p. 33). In my review, I addressed the latter part of his objection (Howden, 2016, p. 579), though some comment on the former part is also necessary.

Braun believes that there is a distinction to be made between choice and action. Maybe so, but the distinction is neither helpful nor important for the task at hand. Braun’s theory heavy book assumes implicitly an unhampered market.<sup>2</sup> As a consequence, there is no reason to believe that choice does not translate to action. There is no distinction in saying that “a choice gives rise

<sup>2</sup> The only exception is his unrelated discussion of BFH monetary systems (pp. 170–177).

to a cost" instead of "an action gives rise to a cost," since choice implies action.

Despite these differences, Braun and I both *partially* agree on one of his central conclusions though by different means. In Braun's analysis, a cost "*can only arise ... [if] one has to abstain from consumption in order to attain one's end*" (p. 34). I agree that all costs must ultimately be valued according to the theory of imputed value (Menger, [1976] 2007, ch. 3), but this is different than saying that a consumption good must be sacrificed in order for a cost to be realized. After all, an automotive company must choose (and produce based upon that choice) whether to use steel or aluminum to cast the engine's block. Neither the steel nor the aluminum are consumers' goods for the company. Does that mean that no cost will be incurred from the choice? No, and the magnitude of the cost will be determined by the discounted value the alternatives have according to their utility in producing a consumers' good. Thus consumers' goods are necessary to determine the magnitude of the cost, but it is incorrect to claim that costs may only arise when a consumption good is foregone. This insight is useful in demonstrating that only the prices of consumers' goods are relevant to the purchasing power of money, thus substantiating the popular notion that Marget ([1938] 1966, p. 487) lamented had no existing rigorous proof.

Braun also points out that I have incorrectly attributed to him the erroneous view of others, namely that all acts of production are also acts of consumption. I retract this claim.

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