

## ARTICLES

Value Investing's Compatibility with Austrian Economics—Truth or Myth? . . . . .	3
<i>David J. Rapp, Michael Olbrich, and Christoph Venitz</i>	
A Modern Concept of Asset Price Inflation in Boom and Depression . . . . .	29
<i>Brendan Brown</i>	
Fitting Attitude Theory in Economics: Menger and Keynes . . . . .	61
<i>Paolo Gomarasca</i>	
Book Review: <i>Democracy in Chains: The Deep History of the Radical Right's Stealth Plan for America</i> By Nancy MacLean . . . . .	84
<i>Thomas J. DiLorenzo</i>	
Book Review: <i>GDP: A Brief but Affectionate History</i> By Diane Coyle . . . . .	97
<i>Alexander C. Cartwright</i>	
Book Review: <i>Water Capitalism: The Case for Privatizing Oceans, Rivers, Lakes, and Aquifers</i> By Walter E. Block and Peter Lothian Nelson, Eds. . . . .	103
<i>Michael R. Montgomery</i>	

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## VALUE INVESTING'S COMPATIBILITY WITH AUSTRIAN ECONOMICS—TRUTH OR MYTH?

DAVID J. RAPP, MICHAEL OLBRICH, AND CHRISTOPH VENITZ

*ABSTRACT:* Within the Austrian economists' community, value investing is characterized as a useful investment strategy, and one that is in line with Austrian economics, in particular Austrian value theory. In fact, value investing shares some basic findings with Austrian value theory, especially the crucial distinction between values and prices. However, value investing also contradicts some fundamentals of Austrian economics. Therefore, the authors argue that value investing's seeming compatibility with Austrian economics must be characterized as a myth. The aim of this article is to illustrate what makes value investing incompatible with Austrian economics and, hence, to terminate this myth.

*KEYWORDS:* Value investing, Austrian economics, value theory, intrinsic value, subjectivism

*JEL CLASSIFICATION:* B31, B53, D46, D52, G11, G32

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## 1. VALUE INVESTING AND AUSTRIAN ECONOMICS—BLOOD BROTHERS IN FACT?

The recent financial crisis and its serious impacts on global (stock) markets raised a multitude of questions concerning market participants' appraisals and corresponding investment decisions. Moreover, the failure of mainstream investment strategies, allied with the successful financial undertakings of well-known value investors like Warren Buffett and his holding company Berkshire Hathaway, has meant that value investing has attracted an extraordinary volume of attention. Several Austrian economists have focused on value investing and unanimously judged it to be a useful strategy and, moreover, characterized it as being aligned with the Austrian school of thought. However, this conclusion is a fallacy because, unfortunately, the scope of prior research has been limited to the main common ground shared by value investing and Austrian economics—especially the crucial distinction between an asset's value and its price—while possible discrepancies have not been revealed yet. Since these discrepancies might affect the compatibility of the two concepts, an assessment of whether value investing is indeed friend or foe to Austrian economics requires an analysis of both common ground *and* existing discrepancies. The current article addresses this gap. To provide a sound basis, the article proceeds with a brief presentation of value investing's conceptual framework and offers an outline of the current Austrian view of this investment strategy in Section 2. In order to provide a comprehensive judgment of the relationship between value investing and Austrian economics, Section 3 enhances current research by analyzing both the common ground and the discrepancies. Section 4 of the article provides a conclusion summarizing its insights.

## 2. VALUE INVESTING AND HOW IT IS PERCEIVED IN AUSTRIAN LITERATURE

### 2.1 Conceptual Framework of Value Investing

Value investing's intellectual roots can be traced back to Benjamin Graham—a former Columbia University professor—who is credited with being the "father" (Lowe, 1996, p. 1; Leithner, 2009a, p. 28; Montier, 2010, p. 1; Athanassakos, 2011, p. 96; Spitznagel, 2013,

p. 270) of value investing.<sup>1</sup> Moreover, his coauthored book “Security Analysis”—first published in 1934—has been characterized as value investing’s “bible”<sup>2</sup> (Vick, 1999, p. 1; Brandes Investment Partners, 2009, p. 1; Damodaran, 2012a, p. 5; Dreman, 2012, p. 46).<sup>3</sup> In essence, value investors compare an asset’s intrinsic value to its market price and recommend investing in the asset as long as the value exceeds the price; accordingly if the value falls below the price, the asset would not be considered a wise investment (e.g., Hagstrom, 1999, pp. 20–21; Kwag and Lee, 2006, p. 64; Calandro, 2009, pp. 1–2; Truong, 2009, p. 1; Grimm, 2012, pp. 228–229; Panyagometh, 2012, pp. 20–21; Hagstrom, 2014, pp. 64–65; Otte and Castner, 2014, p. 21). It is value investing’s main idea that *in the short term*, intrinsic value and market price might differ but *in the long term* they will eventually coincide.<sup>4</sup> Therefore, the concept of an intrinsic value is key to the value investing strategy. Originally, Graham and Dodd (2009, p. 64) defined the intrinsic value as the “value which is justified by the facts, e.g., the assets, earnings, dividends, definite prospects, as distinct, let us say, from market quotations established by artificial manipulation or distorted by psychological excesses.”<sup>5</sup> In order to protect their investments against unexpected (adverse) future developments and potential misjudgments respectively, value investors demand a margin of safety—usually between 20 percent and 50 percent of the intrinsic value—when comparing an

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<sup>1</sup> Buffett and Clark (1999, p. 27) even recognize Graham as “Wall Street’s high priest of investment philosophy.”

<sup>2</sup> Similarly, Carlisle (2014, p. x) characterizes this textbook as “the foundational document for the school of investing now known as *value investing*.” In fact, value investing is sometimes portrayed as more than just an investment strategy; for example, Buffett and Clark (1999) title their book “Buffettology” and, therefore, imply a certain form of cult.

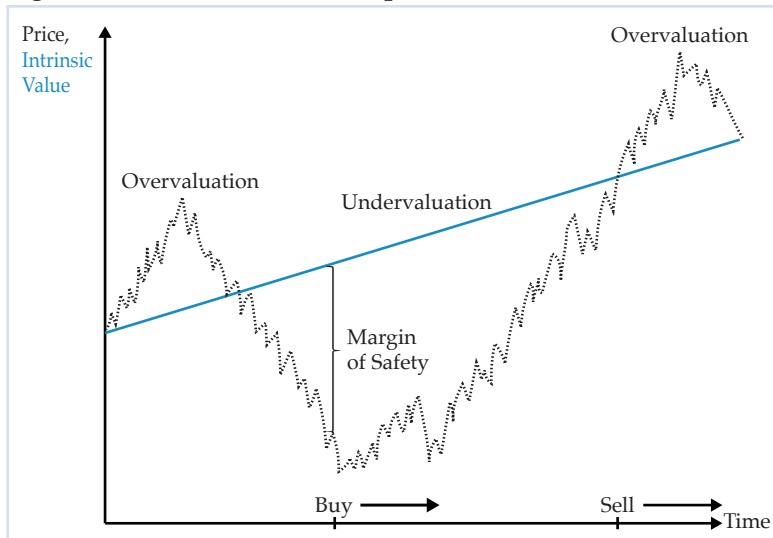
<sup>3</sup> Since there is a close connection between value investing and fundamental analysis (e.g., Grimm (2012, p. 223) states that value investing “is often affiliated with fundamental analysis” while Kaza (2000, p. 60) and Chang (2011, p. 99) even credit Graham with being the father of fundamental analysis), this paper’s insights also refer to fundamental analysis in general.

<sup>4</sup> For the possibility of disparities between intrinsic value and market price and the “inherent tendency for these disparities to correct themselves” see in particular Graham and Dodd (2009, pp. 69–70) and further Greenwald et al. (2001, p. 3), Leithner (2009a, p. 2), Schredelseker (2013, p. 222), and Hagstrom (2014, p. 64).

<sup>5</sup> In general, value investing literature either does not define the intrinsic value or makes use of the above mentioned definition (e.g., Lowe, 1996, p. 20; Schredelseker, 2013, pp. 221–222).

asset's value to its price (Lowe, 1996, p. 13; Greenwald et al., 2001, p. 4; Graham, 2003, p. 518; Calandro, 2009, p. 2; Athanassakos, 2012, p. 1).<sup>6</sup> Finally, if the asset's price equals or even exceeds its intrinsic value, that is, the asset is overvalued, value investors suggest it be sold (e.g., Ye, 2013, p. 1; Hagstrom, 2014, p. 137; Otte and Castner, 2014, p. 41). Consequently, the value investing process can be broken down as follows:<sup>7</sup> First, as a preselection, the investor has to identify possibly undervalued companies and classify them as potential acquisition targets. Subsequently, those companies' intrinsic values have to be computed in order to finalize the investment decisions. The following figure—similarly used by Vick (1999, p. 49), Brandes Investment Partners (2009, p. 3), Schredelseker (2013, p. 223), Otte and Castner (2014, p. 40)—illustrates this procedure:<sup>8</sup>

**Figure 1: The relation between price and intrinsic value**



<sup>6</sup> In this respect, Graham (2003, p. 518) states that the margin of safety “is available for absorbing the effect of miscalculations or worse than average luck.” According to Gad (2009, p. 95), “Warren Buffett likes to invest with a 50 percent margin of safety.”

<sup>7</sup> Both Athanassakos (2012, p. 1) and Howard (2015, p. 91) agree, distinguishing between a preselection (e.g., based on a ratio analysis) and the subsequent question “if the stock is indeed undervalued” (Howard, 2015, p. 91).

<sup>8</sup> If an investor aims to sell the asset only when the price exceeds the intrinsic value by a certain percentage, the selling-point in Figure 1 slips to the right on the x-axis.

## 2.2 The Current Austrian View on Value Investing

In the Austrian literature, several authors deal with value investing, for example Leithner (2005, p. 3) states “that value investors and Austrian School economists hold compatible views about a range of fundamental economic and financial phenomena” and, similarly, Taghizadegan, Stöferle, and Valek (2014, p. 225) conclude that “very broadly, value investing’s approach is in line with the Austrian approach.”<sup>9</sup> Spitznagel (2013, p. 269) sympathizes with this view, characterizing Austrian investing “as value investing’s intellectual forerunner” while Grimm (2012, p. 223) ultimately summarizes that value investing—as “an important application of fundamental analysis”—typically receives “favorable treatment” in the Austrian literature.<sup>10</sup> Moreover, the principles and findings of both value investing and Austrian economics are combined and applied in practice: For example, some investment companies—including Polleit and Riechert Investment Management LLP (2015)<sup>11</sup>—consider outcomes derived from both concepts when making investment decisions. Additionally, various institutions—such as the Institute for Austrian Asset Management (2015)—take into account the interrelations between value investing and Austrian economics. Evidently, both academics and practitioners representing the Austrian community unanimously conclude that value investing’s insights are (very broadly) compatible with those of Austrian economics. However, this conclusion is fallacious since it is based solely on the one-sided analysis of the existing common ground shared by value investing

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<sup>9</sup> Unless otherwise noted, all translations are by the authors. Taghizadegan, Stöferle, and Valek (2014, p. 8) further present a personal linkage; they argue that Warren Buffett’s father was influenced by Austrian economists and passed some important Austrian ideas on to his son. For this personal linkage see further Calandro (2009, p. 228) whose book “Applied Value Investing” also refers to both value investing and Austrian economics. Moreover, in a Mises Daily Article, Mayer (2000) characterizes “the great Benjamin Graham” as “inestimably wise.”

<sup>10</sup> Krug and Mohelsky (2010, p. 34) share this conclusion, stating that “in principle, value investing accurately reflects Austrian economics’ philosophy.”

<sup>11</sup> Similarly, Leithner and Company Pty. Ltd. (2016), a private investment company, “adheres strictly to the traditional ‘value’ approach to investment pioneered by Benjamin Graham” and is—at least—associated with Austrian economics since Leithner (2009a, p. 19) states that “Leithner & Co. has no crystal ball, but it does have the insights of the Austrian School.”

and Austrian economics while omitting potential discrepancies. The analysis has led prior research to focus on three main aspects, namely the distinction between value and price, the attitude to neoclassical finance theory, and the application of mathematical models. Indeed, since existing discrepancies possibly influence the compatibility, “a diligent attempt to determine whether value investing is compatible with Austrian economics would have to look beyond previous research, which owing to its focusing exclusively on common ground seems neither sufficient nor meaningful” (Olbrich, Rapp, and Venitz, 2016, p. 38).

### **3. VALUE INVESTING FROM AN AUSTRIAN PERSPECTIVE—FRIEND OR FOE?**

#### **3.1 What Do Value Investing and Austrian Economics Have in Common?**

##### **3.1.1 The Distinction between Value and Price**

Undoubtedly, their distinguishing between values and prices represents the most crucial common ground of value investing and Austrian economics and, therefore, is highlighted by both practitioners and academics (e.g., Leithner, 2005, p. 5; Taghizadegan, Stöferle, and Valek, 2014, p. 255; Haaker, 2015, p. 221). This differentiation is certainly indispensable not only for (value) investing purposes but for economic action in general because the assumption of a permanent value-price-congruence creates a market environment that deprives market participants of the option to increase their wealth through conducting transactions. Under these conditions, every action would be pointless and, therefore, individuals would have no economic incentive to act (Hering, 2000, p. 441; Olbrich, 2000, p. 460; Olbrich and Rapp, 2012, p. 233; Hering, 2014, p. 9).<sup>12</sup> Furthermore, if value investors did not distinguish between values and prices, there would never be an opportunity for a value investment and, consequently, the concept of value investing would be superfluous (e.g., Schredelseker,

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<sup>12</sup> Austrian economists (e.g., Menger, 2007, p. 191; Hochreiter, 2008, p. 3; Taghizadegan, Stöferle, and Valek, 2014, p. 17) agree, emphasizing that the pursuit to upgrade the level of wealth is the root cause of any transaction.



2013, p. 222). However, while both value investing and Austrian economics highlight the possibility of value-price-disparities, their assumptions and findings differ significantly, especially since value investors unlike Austrian economists hold the view that the market price has an inherent tendency to converge toward the intrinsic value.<sup>13</sup> Moreover, the value investing process is limited to listed companies and prohibits investment in unlisted companies as well as the accompanying (price) negotiations. Consequently, value investing's applicability is limited to a (very) small section of the investment universe. Furthermore, while taking over the majority of shares, the investor has to take into account the increase in share prices resulting from the growth in demand (e.g., Hering, 2014, pp. 208–209). Indeed, value investors hold the view that the intrinsic value of a single share corresponds pro rata to the value of the business as a whole (e.g., Leithner, 2005, p. 6). However, it is not feasible to obtain the value of a single share by dividing the value of the entire business by the total number of shares issued (e.g., Olbrich, 2000, p. 460; Olbrich and Rapp, 2012, p. 235).

### 3.1.2 Rejection of Neoclassical Finance Theory

The highly restrictive and escapist assumptions that underpin neoclassical finance theory—especially that holding that there is a perfect, frictionless market environment—and the implications flowing from them, such as those concerning the relation between value and price, run contrary to the principles of value investing and Austrian economics; therefore, both concepts reject neoclassical finance theory and the application of models springing from it in practice. On this topic Buffett (1997) argues that to “invest successfully, you need not understand beta, efficient markets, modern portfolio theory, option pricing or emerging markets. You may, in fact, be better off knowing nothing of these.” Equally, Austrian economists “have frequently criticized neoclassical economics for the unrealistic character of its assumptions” (Long, 2006, p. 3) and have analyzed existing characteristics distinguishing neoclassical finance theory from Austrian economics (e.g., Huerta de Soto, 1998). In fact, given neoclassical finance theory's assumptions and the idealized market

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<sup>13</sup> For this view see the references already cited in footnote 4.

environment flowing from them, value and price actually coincide by definition (Hering, 2014, p. 214; Olbrich, Quill, and Rapp, 2015, p. 12).<sup>14</sup> Indeed, the idea of a permanent value-price-equilibrium is neither consistent with the Austrian view nor with that of value investing since both concepts take a real world perspective rather than the—entirely hypothetical—neoclassical one. However, value investing analysis is characterized by inaccuracy, especially since value investors usually only highlight their refusal of the efficient market hypothesis while omitting some further—and even more restrictive—neoclassical assumptions.<sup>15</sup> For example, focusing on the capital asset pricing model (CAPM), value investors primarily criticize the inherent definition of risk<sup>16</sup> rather than other underlying assumptions which make the CAPM entirely detached from reality (such as homogenous expectations, information symmetry, and also no restrictions on lending).<sup>17</sup> But given that value investors presume that market efficiency alone results in a market environment characterized by a permanent value-price-congruence,<sup>18</sup> their line of reasoning is at least comprehensible since such an environment implies the absence of profitable (value) investment opportunities and runs contrary to value investing's theoretical foundation. While

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<sup>14</sup> For a critical perspective on the restrictive and escapist assumptions of neoclassical finance theory see Hering (2000, pp. 441–447), Hering and Toll (2015, pp. 14–15), and Olbrich, Quill, and Rapp (2015, pp. 9–15).

<sup>15</sup> For Buffett's rejection of the efficient market hypothesis see Rajablu (2011, p. 3). Within the efficient market hypothesis, Fama (1970, p. 383) distinguishes between weak, semi-strong and strong information efficiency. For efficient market considerations see further Copeland, Weston, and Shastri (2005, pp. 353–355), and Perridon, Steiner, and Rathgeber (2017, pp. 231–232).

<sup>16</sup> As cited in Hagstrom (2014, p. 66), "Buffett thinks the whole idea that price volatility is a measure of risk is nonsense" and Buffett (1994) himself states that "the academics' definition of risk is far off the mark." Most interestingly, even though value investors exclusively criticize CAPM's definition of risk, they themselves do not provide any precise alternative. For example, Vick (1999, p. 233) claims that "investors create risk by chasing stocks indiscriminately, by failing to do their homework."

<sup>17</sup> For those restrictive and escapist assumptions see for example Campbell, Lo, and McKinlay (1997, pp. 181–183), Copeland, Weston, and Shastri (2005, pp. 147–148), Hering (2015, p. 297), and Perridon, Steiner, and Rathgeber (2017, p. 290). In value investing literature, only few authors criticize these assumptions (e.g., Whitman, 1999, pp. 34–37; Montier, 2009, pp. 19–28).

<sup>18</sup> Value investing literature suggests this interpretation since for example Greenwald et al. (2001, p. 148) argue that the idea of market efficiency is "that the market always incorporates the best estimate of the true value of a security."

a perfect capital market in fact includes information efficiency it has further implications. Consequently, an efficient capital market need not necessarily be a perfect one, but information efficiency is a criterion for the existence of a perfect capital market (e.g., Schredelseker, 2013, p. 372).<sup>19</sup> Nevertheless, the rejection of neoclassical finance theory conforms to the Austrian view and, therefore, can be identified as further common ground. However, Austrian economists' insights into the characteristics of neoclassical finance theory are far more profound than those of the advocates of value investing, that is because Austrian economists do not only conduct research on market efficiency (e.g., Campos Dias de Sousa and Howden (2015, p. 389) conclude that "the efficient market hypothesis is not only incorrect, but unnecessary")<sup>20</sup> but also question the idea of market equilibrium (e.g., Yeager, 1997, p. 154; Huerta de Soto, 1998, p. 77),<sup>21</sup> perfect competition (e.g., Block, Barnett, and Wood, 2002), and criticize neoclassical economists for their "frequent assumption of no uncertainty" (Herbener, 1992, p. 81).

### 3.1.3 Rejection of the Overemphasized Application of Mathematical Models

Finally, complex mathematical models are badly received by value investors and Austrian economists alike because they both consider their application to be overemphasized (Leithner, 2005, pp. 5–9; Taghizadegan, Stöferle, and Valek, 2014, pp. 254–255). Value investing actually calls for a quite plain investment calculus, which—for simplification purposes—should be based on simplified assumptions, such as, steady future benefits. For example, Graham (1958, p. 20) states that in "44 years of Wall Street experience and study I have never seen dependable calculations made about common-stock values, or related investment policies,

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<sup>19</sup> For the relationship between perfect capital markets and efficient capital markets, see also Copeland, Weston, and Shastri (2005, p. 354), who state that "[c]apital market efficiency is much less restrictive than the notion of perfect capital markets."

<sup>20</sup> For shortcomings of the efficient market hypothesis see also Pasour (1989) and Shostak (1997).

<sup>21</sup> See also Austrian economist Jacobson's (1992, p. 788) argument that "[m]arket imperfections or inefficiencies allow a market to be in disequilibrium and are responsible for profit opportunities."

that went beyond simple arithmetic or the most elementary algebra” and concludes that if higher algebra is introduced, “you could take it as a warning signal that the operator was trying to substitute theory for experience.” Similarly, Leithner (2009a, p. 9) points out that “followers of Graham ground their analysis in simple maths, clear logic and hard evidence” and that the “investor-businessman distrusts the advanced mathematics, statistical models and computations which underlie contemporary finance.” Austrian economists hold a compatible view on the application of mathematical models since such models are exclusively adequate when dealing with equilibrium constellations as neoclassical economists do, but they do not include significant features of Austrian economics’ analytical reasoning like the essence of real economic phenomena and entrepreneurial creativity (Huerta de Soto, 1998, p. 84).<sup>22</sup> In fact, due to the “mainstream abuses of mathematics, including the frequent merely decorative and pretentious use of symbols, some Austrians have wanted to ban mathematics from economics” (Yeager, 1997, p. 155).<sup>23</sup> In this respect, Mises (1998, p. 347) concludes that the mathematical method “is an entirely vicious method, starting from false assumptions and leading to fallacious inferences.” However, value investors cannot entirely bypass mathematical formalism since the absolute rejection of mathematics contradicts the need of calculating intrinsic value being the “core task for [value] investors” (Hagstrom, 1999, p. 20).

## 3.2 Why Are Value Investing and Austrian Economics Nevertheless Incompatible?

### 3.2.1 Valuation versus Appraisalment

Prior research finds a strong compatibility between value investing and Austrian economics. However, that research has

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<sup>22</sup> Therefore, Huerta de Soto uses “mathematical formalism” as a distinguishing feature between Austrian economics and the neoclassical schools. Vaughn (1994, pp. 1–2) agrees, pointing out that “Austrians do avoid expressing their ideas in mathematical symbols” and that the “[a]version to mathematics and free market advocacy are distinctively Austrian traits.”

<sup>23</sup> For considerations concerning the benefits and costs of mathematization with regard to Austrian economics see Hudik (2014).

misled Austrian economists over the extent of compatibility because it exclusively directs attention to the major common ground while to date existing discrepancies have been omitted. Obviously, this procedure is not sufficient and, therefore, the scope of the analysis must be extended to the distinguishing features of the two approaches. In doing so, four problem areas arise; one mainly semantic issue that could be easily harmonized and three serious ones forming an insurmountable barrier between the two concepts. The four problem areas are:

1. Valuation versus appraisalment
2. Irrationality versus rationality
3. Intrinsic value versus subjective value
4. Reliable past versus uncertain future

First, it is important to focus on the terms *valuation* and *appraisalment* and their application because unlike value investors, Austrian economists explicitly differentiate between those terms and their specific meaning.<sup>24</sup> In Austrian economics, *valuation* describes a ranking of goods on an ordinal scale, whereas *appraisalment* aims at predicting the structure of future market prices; consequently, appraisalment is a necessary step toward an economizing valuation in a division of labor economy (e.g., Herbener and Rapp, 2016, p. 5). Furthermore, Herbener and Rapp (2016, pp. 5–6) recently introduced the term *investment appraisal* in the Austrian literature, describing a forward-looking decision tool for the use of the valuing person.<sup>25</sup> In contrast, value investors do not differentiate between appraisalment, investment appraisal, and valuation at all and typically refer to the term *valuation*. Indeed, some of them—especially Graham (2003) himself—use different terms synonymously. However, value investing's approach to assessing intrinsic value (which is by means of estimating future benefits) encompasses appraisalment and investment appraisal rather than valuation.

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<sup>24</sup> For the differentiation between valuation and appraisalment see in detail Mises (1998, pp. 328–330) as well as Smith (1969, pp. 3–6), Smith (1971, pp. 67–68), and Herbener and Rapp (2016, pp. 4–5).

<sup>25</sup> For the meaning of investment appraisal and its relation to valuation and appraisalment see Herbener and Rapp (2016, pp. 5–12).

### 3.2.2 Irrationality versus Rationality

Second, value investing primarily explains value-price-differences by way of market participants' irrational behavior (Hagstrom, 1999, pp. 141–160; Vick, 1999, pp. 41–55; Brandes Investment Partners, 2009, pp. 1–2; Athanassakos, 2012, p. 1; Otte and Castner, 2014, pp. 27–28).<sup>26</sup> As an illustration, Graham (2003, pp. 204–205) created the allegorical figure of the manic depressive—or at least “emotionally unstable” (Hagstrom, 2014, p. 182)—Mr. Market whose investment decisions are solely based on his heavily swaying mood while he neglects to consider real (economic) changes.<sup>27</sup> Sometimes, the intrinsic value of an asset coincides with the market price determined by Mr. Market but usually “Mr. Market lets his enthusiasm or his fears run away with him, and the value he proposes seems to you a little short of silly” (Graham, 2003, p. 205). Therefore, the value investors' challenge is to take advantage of this erratic behavior; that is to invest when the offered price falls (far) below intrinsic value.<sup>28</sup> In contrast to that and according to Mises (1998, p. 18) “[h]uman action is necessarily always rational.” Consequently, in the Austrian view, *irrational* behavior is impossible by definition; hence, *rational* behavior must be seen as a pleonasm.<sup>29</sup> In turn, since every action aims to satisfy individual desires and “nobody is in the position to substitute his own value judgments for those of the acting individual” (Mises, 1998, p. 18), irrational behavior must be characterized as an

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<sup>26</sup> Basically, Vick (1999, p. 45) argues that most of the time, the stock market “is neither ordinary, rational nor fair” while Graham and Dodd (2009, p. 68) characterize “the irrational behavior of the market” as one of the main handicaps for security analysis.

<sup>27</sup> Greenwald et al. (2001, p. 159) describe Mr. Market as “alias for the collectivity of investors.” For more on the allegorical Mr. Market see also Buffett (1988), Lowe (1994, pp. 83–84), Greenwald et al. (2001, p. 3), Leithner (2009b, pp. 5–6), Lowe (2010, pp. 38–39), Hagstrom (2014, pp. 181–182), and Otte and Castner (2014, p. 61).

<sup>28</sup> This view on other market participants and their investment decisions reveals the self-assessment of the proponents of value investing since—in their opinion—value investors can overrule other market participants due to their irrational behavior and value investing's superior character.

<sup>29</sup> Schreiber (1965, pp. 21–23) referring to Mises's findings concludes that it is impossible to objectively define rational behavior.

oxymoron.<sup>30</sup> Whereas—at first sight—this difference might seem to be primarily conceptual, the diverse insights on (ir)rational behavior reveal entirely different mindsets concerning the market process in general, and in particular the price formation aspect. Unlike Austrian economics, value investing holds the view that intrinsic values and market prices should *theoretically* be coincident (e.g., Gottwald, 2011, p. 38); and in order to explain the fact that in *reality* they are not, value investors accuse market participants of acting irrationally. Due to neoclassical finance theory's assumption of a value-price-conformity (e.g., Brösel, Toll, and Zimmermann, 2011, p. 282; Kruschwitz and Löffler, 2015, p. 176), value investing resembles finance theory rather than Austrian economics in this respect.<sup>31</sup> In contrast, and according to both Austrian practitioners and academics, values and prices necessarily have to be different in general. In the Austrian view, a specific market price results from a transaction between market participants differing in their valuations and pursuing a higher level of wealth. In order to meet this objective by means of a transaction, the purchaser has to pay less for and the seller to earn more for the asset than it is subjectively worth to each respective party.

### 3.2.3 Intrinsic Value versus Subjective Value

Third, Austrian economists' insights are based on methodological individualism and subjectivism,<sup>32</sup> as Yeager (1987, p. 5)

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<sup>30</sup> In this context, Callahan (2004, pp. 37–38) presents the example of a guy called Rich who is stranded on a desert island; to survive, Rich has to eat some of the rats populating the island. However, Rich follows a religion that rejects harming living creatures and, therefore, he only eats coconuts even though without eating the rats, he is doomed to die. Unlike other economic schools, Austrian economics does not at all characterize this behavior as irrational; Rich simply pursues his highest goal, which is to live by his religious commitment.

<sup>31</sup> This insight also applies to the terms under- and overvaluation as well as under- and overpricing and their application by value investors because in this respect, value investing resembles neoclassical finance theory rather than Austrian economics since both use these terms synonymously. However, in fact, markets do not value but price the traded assets.

<sup>32</sup> For subjective value theory see Menger (2007, pp. 145–149) emphasizing “that value is nothing inherent in goods” (p. 145) and that the “*measure* of value is entirely subjective in nature” (p. 146). See further Horwitz (1994, pp. 17–22),

puts it, “[e]conomists of the Austrian school put special emphasis on subjectivism.” Therefore, “economics is primarily about people and their purposes, not about things and quantities” (Yeager, 1997, p. 155). Huerta de Soto (1998, p. 77) agrees, stating that “the real human being of flesh and blood” forms the bedrock of Austrian thinking. This subjectivity builds “the fundamental tenet that distinguishes Austrians from neoclassicism” (Horwitz, 1994, p. 17).<sup>33</sup> Obviously, that Austrian view holds that real human beings’ individual preferences, ends, and means determine their *subjective* valuations and, ultimately, their corresponding actions. Consequently, Austrian economics acknowledges the fact that each good will usually hold a different value for different individuals and that an individual’s perception of value is liable to change as time passes. Compared to the insights of Austrian economics, value investing’s considerations regarding the terms *value* and *price*, as well as their meaning, are very wide of the mark. Granted, value investing’s rejection of the neoclassical idea of a *permanent* value-price-conformity has to be acknowledged. Unfortunately, value investing exclusively focuses on finance theory’s assumptions and the implications flowing from them without dismissing the fundamental neoclassical value concept of an objective depersonalized value. Indeed, some value investors may disagree, arguing that intrinsic value takes into account subjective features:<sup>34</sup> For example, Buffett (1995) concludes that anyone “calculating intrinsic value necessarily comes up with a highly subjective figure that will change both as estimates of future cash flows are revised and as interest rates move.”<sup>35</sup> Obviously, Buffett

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Langlois (1994, p. 118), Yeager (1997, pp. 154–155), Huerta de Soto (1998, p. 77), Callahan (2004, pp. 25–26, 43–44), and Mises (2008, p. 18).

<sup>33</sup> Similarly, Huerta de Soto (1998, pp. 76–77) presents subjectivism as one of various “essential differences between the Austrian and neoclassical schools.”

<sup>34</sup> Apparently, Graham and Dodd themselves are not sure about their own value concept since in their opinion, “intrinsic value is an elusive concept” (Graham and Dodd, 2009, p. 64). Similarly, Buffett (1995) refers to intrinsic value’s “fuzziness.”

<sup>35</sup> Damodaran (2012a, p. 41)—while describing an investment strategy he calls “activist value investing”—also strongly suggests a dependency between the asset’s value and the controlling owner. In detail, Damodaran (2012a, p. 41) states that a company “could be worth more to someone else because of synergy.” Rather strange is that Damodaran (2012b, p. 1) simultaneously takes a contrary position, claiming that it is “disingenuous [...] to argue that value is in the eye of



does not aim to calculate a subjective value but instead characterizes subjectivity as a *troublemaker* that hinders the calculation of intrinsic value. Apparently, the idea of an objective value prevails. Value investing's insights into the relationship between value and price and its reasoning related to existing discrepancies support this conclusion: Value investors blame irrational behavior for discrepancies between values and prices whereas their assimilation owes more to (more) rational behavior. In turn, given that market participants act rationally, their investment appraisals must result in the same (intrinsic) value; obviously, the influence of individual preferences, ends, and means is omitted. Moreover, if the intrinsic value was a subjective figure, whose value judgment would be the one to cause the market price to oscillate? Semantically, the term *intrinsic* as well as other terms used by value investors—especially *fair*, *fundamental*, or *objective* value—are already indicative of the rejection of subjectivism (Olbrich, Rapp, and Venitz, 2016, p. 40). Since intrinsic value is supposed to be inherent in the appraised asset and entirely independent of any actual individual and his ends and means, the value investing and Austrian economics views on the nature of value are entirely incompatible.<sup>36</sup>

### 3.2.4 Reliable Past versus Uncertain Future

Lastly, value investing and Austrian economics take diametrically opposed positions over the significance of a future-orientation in decision making. In order to bypass the issue of dealing with uncertainty in a future-oriented process, value investors usually base their investment calculus and, consequently, the investment decision on past or (at best) present data.<sup>37</sup> For example, value investor Montier (2009, p. 49) claims “that forecasting is a waste of time” if not “a task beyond Hercules himself” (Montier, 2009,

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the beholder” and that the idea “that any price can be justified if there are other investors willing to pay that price” is “patently absurd.”

<sup>36</sup> Inconsistently, Schmidt (1976, p. 68) argues that one cannot presume that a Graham-and-Dodd-investment totally abstracts from the valuing subject but that individual features of a specific valuing subject are not taken into account.

<sup>37</sup> Graham and Dodd (2009, pp. 68–69) classify “the uncertainties of the future” as an essential handicap for security analysis.

p. 55).<sup>38</sup> Graham himself is also skeptical of investment decisions based upon future prospects; in his opinion, the combination of the formulae needed to calculate the present value of an asset “with highly imprecise assumptions can be used to establish, or rather to justify, practically any value one wishes” (Graham, 1958, p. 17). Greenwald et al. (2001, pp. 35) support this insight, referring to the “skepticism with which Graham and Dodd investors regard present value calculations of future cash flows” while Bos (2013, p. 19) emphasizes that “deep value investing is much more concerned with the actual facts of a company than forward-looking announcements.” Furthermore, Graham and Dodd (2009, p. 109) argue that for “investment, the future is essentially something to be guarded against rather than to be profited from.” They use a future-orientation to differentiate between investment and speculation; unlike investment, speculation is based on “prospective developments that differ from past performance.” Indeed, some value investors when working on a present-value-based appraisal, not only estimate payment flows by focusing on past data but also adjust the discount rate by adding a premium for “risk.”<sup>39</sup> As a result, uncertainty is considered threefold: First, by applying seemingly certain past benefits; second, by adding a risk premium to the discount rate and third, by insisting on a margin of safety. Therefore, profitable investments may be dismissed.<sup>40</sup> Again, Austrian economists take a contrary position regarding the need for future-orientation in decision-making by stressing

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<sup>38</sup> Indeed, Montier (2009, pp. 47–55) admits that theoretically, an investment calculus based on future cash flows is the correct way to determine an asset’s value but dismisses this procedure because “the implementation becomes a minefield of problems” (p. 47). Therefore, Montier emphasizes the need for investment appraisals based on past data.

<sup>39</sup> E.g., Greenwald et al. (2001, p. 98) hold the view that the “riskier the investment, the higher the cost of capital should be.” In contrast, as cited in Damodaran (2012a, p. 11), Buffett does not add a risk premium because he uses “conservative estimates of earnings.” One might refer to such a procedure as the “certainty equivalent approach” whereas the “risk premium approach” demands adding a risk premium to the denominator. For a presentation of both certainty equivalent approach and risk premium approach as well as their failings see Matschke and Brösel (2013, pp. 175–178).

<sup>40</sup> For the infeasibility of using both the certainty equivalent approach and the risk premium approach simultaneously see Olbrich and Rapp (2012, p. 235).

its significance, despite the issue of uncertainty.<sup>41</sup> In this regard, Mises (1998, pp. 105–106) emphasizes that “the future is hidden” and, therefore, every action is “a risky speculation.” Pasour (1989, p. 96) agrees, stating that in “reality, information about the future is always imperfect.”<sup>42</sup> Indeed, Austrian economists confront the uncertainty rather than surrender in the face of it. For example, Taghizadegan, Stöferle, and Valek (2014, p. 17) debunk the extrapolation of past performance—as recommended by value investor Montier—labeling it investors’ number one mistake,<sup>43</sup> while Herbener (1992, p. 80) points out that uncertainty “calls forth the skill of entrepreneurship in each action a person takes.”<sup>44</sup> Value investing misjudges the significance of a future-orientation in decision-making while Austrian economics emphasizes and confronts the issue of uncertainty rather than trying to bypass it as the advocates of value investing do.

#### 4. CONCLUSIONS

Due to the failure of neoclassical models in the recent financial crisis and value investors’ (seemingly)<sup>45</sup> successful investments, the

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<sup>41</sup> Münstermann (1966, p. 21) states that “for what has been, the businessman does not pay.” For the significance of a future orientation for investment decisions see for example Berliner (1913, p. 25), Schmalenbach (1917/1918, pp. 1–2 and p. 11), Liebermann (1923, p. 79), Mellerowicz (1926, p. 123), Koch (1939, p. 1364), Mellerowicz (1952, pp. 47–49), Jaensch (1966, p. 23), Schmalenbach (1966, pp. 36–37), Münstermann (1970, pp. 20–21), and Moxter (1983, p. 97).

<sup>42</sup> Similarly, Hoppe (1997, p. 49) states that our “knowledge of future events and outcomes is less than perfect” and carves out the drastic consequences flowing from a world characterized by “complete certainty” while Holcombe (2017, p.160) concludes that “all entrepreneurial innovation is risky, and there is no way to be certain ahead of time whether an investment will be profitable.” For the problem of uncertainty with explicit regard to future earnings see also Mises (2008, p. 27).

<sup>43</sup> Skousen (1994, p. 236) also criticizes the extrapolation of past trends; while referring to the CAPM, he argues that to assume “that Beta coefficients are relatively constant throughout market cycles” would be “a violation of the principle that history never quite repeats itself.”

<sup>44</sup> With respect to common stock selection, Grimm (2012, p. 224) states that “success depends on the investor’s ability to excel at identifying opportunities for profit in dynamic and uncertain environments.”

<sup>45</sup> A large number of empirical studies suggests that value investing is a superior investment strategy, especially compared to the growth investing strategy

value investing strategy has attracted a great deal of interest, even among the Austrian community who has concluded that a strong compatibility between value investing and Austrian economics exists. In value investing, the comparison of an asset's intrinsic value and its market price is key to identifying profitable investment opportunities. Given that the asset's intrinsic value exceeds (falls below) its price taking into account a margin of safety, buying (selling) the asset is considered to be a wise decision. Previous research revealed that value investing and Austrian economics do indeed have some basic insights in common. Particularly since both concepts emphasize the crucial distinction between values and prices, the attributed compatibility seems at first sight to be consistent. However, *inter alia* since value investing's definition of value is fundamentally at odds with the Austrian value concept, the seeming compatibility between value investing and Austrian economics must be characterized as a myth. If an appraisal concept is to be useful and compatible with Austrian economics, it must take the crucial features of that approach into account, particularly the subjective nature of value, a future-oriented perspective, and an individual consideration of uncertainty. These conditions are only met by appraisals based upon investment theory.<sup>46</sup>

## REFERENCES

- Athanassakos, George. 2009. "Value versus Growth Stock Returns and the Value Premium: The Canadian Experience 1985–2005," *Canadian Journal of Administrative Sciences* 26, no. 2: 109–121.

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(representative see Capaul, Rowley, and Sharpe, 1993; Lakonishok, Shleifer, and Vishny, 1994; Fama and French, 1998; Athanassakos, 2009). In this respect, Fama and French (1998, p. 1975) state that "[v]alue stocks have higher returns than growth stocks in markets around the world" while Athanassakos (2011, p. 86) refers to a "large body of academic research [which] has shown that value stocks [...] tend to have higher average returns than growth stocks." However, those studies cannot mask the theoretical flaws and fallacies of the value investing strategy because they are subject to the problems typical of empirical research. In fact, especially due to the arbitrary definition of the *past* observation period and the arbitrary stock selection, they are—at best—suitable to point out *past* tendencies. While making future investment decisions, the investor should be well aware of the flaws and fallacies of extant empirical research.

<sup>46</sup> For investment-theory based appraisals see especially Olbrich, Quill, and Rapp (2015), Rapp (2015), and Herbener and Rapp (2016).

- . 2011. "Do Value Investors Add Value?" *Journal of Investing* 20, no. 2: 86–100.
- . 2012. "Value Investing Vs. Modern Portfolio Theory," *Journal of Business and Financial Affairs* 1, no. 2: 1–2. Available at [http://www.bengraham-investing.ca/Research/Papers/Athanassakos/Value\\_Investing\\_vs.\\_Modern\\_Portfolio\\_Theory.pdf](http://www.bengraham-investing.ca/Research/Papers/Athanassakos/Value_Investing_vs._Modern_Portfolio_Theory.pdf). Accessed 31 May 2016.
- Berliner, Manfred. 1913. *Vergütung für den Wert des Geschäfts bei dessen Uebergang in andere Hände*. Hannover/Leipzig: Hahn.
- Block, Walter, William Barnett II, and Stuart Wood. 2002. "Austrian Economics, Neoclassical Economics, Marketing, and Finance," *Quarterly Journal of Austrian Economics* 5, no. 2: 51–66.
- Bos, Jeroen. 2013. *Deep Value Investing*. Petersfield: Harriman House.
- Brandes Investment Partners. 2009. *Value Investing*, 5<sup>th</sup> ed. Available at <http://www.northwoodfamilyoffice.com/wp-content/uploads/2015/03/FOCUS-Value-Investing.pdf>. Accessed 03 May 2016.
- Brösel, Gerrit, Martin Toll, and Mario Zimmermann. 2011. "The Perennial Question posed by the Financial Crisis: Objective, Subjective or Functional Business Valuation?," in Jodlbauer, Herbert, Jan Olhager, and Richard J. Schonberger, eds., *Modelling Value*, Volume 2, pp. 281–292. Aachen: Shaker.
- Buffett, Warren E. 1988. "Shareholder Letter 1987." Available at <http://www.berkshirehathaway.com/letters/1987.html>. Accessed 04 May 2016.
- . 1994. "Shareholder Letter 1993." Available at <http://www.berkshirehathaway.com/letters/1993.html>. Accessed 22 October 2015.
- . 1995. "Shareholder Letter 1994." Available at <http://www.berkshirehathaway.com/letters/1994.html>. Accessed 04 May 2016.
- . 1997. "Shareholder Letter 1996." Available at <http://www.berkshirehathaway.com/letters/1996.html>. Accessed 22 October 2015.
- Buffett, Mary, and David Clark. 1999. *Buffettology*. London et al.: Pocket Books.
- Calandro, Jr., Joseph. 2009. *Applied Value Investing*. New York et al.: McGraw-Hill.
- Callahan, Gene. 2004. *Economics for Real People*, 2<sup>nd</sup> ed. Auburn, Ala.: Ludwig von Mises Institute.

- Campbell, John Y., Andrew W. Lo, and Archie C. MacKinlay. 1997. *The Econometrics of Financial Markets*. Princeton, N.J.: Princeton University Press.
- Campos Dias de Sousa, Ricardo E., and David Howden. 2015. "The Efficient Market Conjecture," *Quarterly Journal of Austrian Economics* 18, no. 4: 387–408.
- Capaul, Carlo, Ian Rowley, and William F. Sharpe. 1993. "International Value and Growth Stock Returns," *Financial Analysts Journal* 49, no. 1: 27–36.
- Carlisle, Tobias E. 2014. *Deep Value*. Hoboken, N.J.: Wiley.
- Chang, Desmond. 2011. "Testing some of Benjamin Graham's Stock Selection Criteria: A Case of the FTSE Bursa Malaysia EMAS Index from Year 2000 to 2009," *Jurnal Manajemen Dan Kewirausahaan* 13, no. 2: 99–106.
- Copeland, Thomas E., John F. Weston, and Kuldeep Shastri. 2005. *Financial Theory and Corporate Policy*, 4<sup>th</sup> ed. Boston, Massachusetts et al.: Pearson Addison Wesley.
- Damodaran, Aswath. 2012a. "Value Investing: Investing for Grown Ups?" Available at <http://ssrn.com/abstract=2042657>. Accessed 22 October 2015.
- . 2012b. *Investment Valuation*, 3<sup>rd</sup> ed. Hoboken, N.J.: Wiley.
- Dreman, David N. 2012. *Contrarian Investment Strategies*. New York et al.: Free Press.
- Fama, Eugene F. 1970. "Efficient Capital Markets: A Review of Theory and Empirical Work," *Journal of Finance* 25, no. 2: 383–417.
- Fama, Eugene F., and Kenneth R. French. 1998. "Value versus Growth: The International Evidence," *Journal of Finance* 53, no. 6: 1975–1999.
- Gad, Sham M. 2009. *The Business of Value Investing*. Hoboken, N.J.: Wiley.
- Gottwald, Radim. 2011. "The Dependence Between Stock Price and Intrinsic Value of a Stock," *AD ALTA Journal of Interdisciplinary Research* 1, no. 1: 38–40.
- Graham, Benjamin. 1958. "The New Speculation in Common Stocks," *Analysts Journal* 14, no. 3: 17–21.

- . 2003. *The Intelligent Investor*, 4<sup>th</sup> rev. ed. New York: HarperCollins Publishers.
- Graham, Benjamin, and David L. Dodd. 2009. *Security Analysis*, 6<sup>th</sup> ed. New York et al.: McGraw-Hill.
- Greenwald, Bruce C. N., Judd Kahn, Paul D. Sonkin, and Michael van Biema. 2001. *Value investing*. New York et al.: Wiley.
- Grimm, Richard C. 2012. "Fundamental Analysis as a Traditional Austrian Approach to Common Stock Selection," *Quarterly Journal of Austrian Economics* 15, no. 2: 221–236.
- Haaker, Andreas. 2015. "Goodwill-Abschreibung für Value-Investoren?," *Praxis der internationalen Rechnungslegung* 11, no. 7/8: 221.
- Hagstrom, Robert G. 1999. *The Warren Buffett Portfolio*. New York et al.: Wiley.
- . 2014. *The Warren Buffett Way*, 3<sup>rd</sup> ed. Hoboken, N.J.: Wiley.
- Herbener, Jeffrey M. 1992. "The Role of Entrepreneurship in Desocialization," *Review of Austrian Economics* 6, no. 1: 79–93.
- Herbener, Jeffrey M., and David J. Rapp. 2016. "Toward a Subjective Approach to Investment Appraisal in Light of Austrian Value Theory," *Quarterly Journal of Austrian Economics* 19, no. 1: 3–28.
- Hering, Thomas. 2000. "Konzeptionen der Unternehmensbewertung und ihre Eignung für mittelständische Unternehmen," *Betriebswirtschaftliche Forschung und Praxis* 52, no. 5: 433–453.
- . 2014. *Unternehmensbewertung*, 3<sup>rd</sup> ed. Munich: Oldenbourg.
- . 2015. *Investitionstheorie*, 4<sup>th</sup> ed. Berlin/Boston: De Gruyter.
- Hering, Thomas, and Christian Toll. 2015. "Application of Alternative Valuation Formulas for a Company Sale," *Global Economy and Finance Journal* 8, no. 2: 14–30.
- Hochreiter, Gregor. 2008. "Die Hintergründe der aktuellen Bankenkrise." Available at <http://wertewirtschaft.com/analysen/bankenkrise.pdf>. Accessed 04 May 2016.
- Holcombe, Randall G. 2017. "Malinvestment," *Review of Austrian Economics* 30, no. 2: 153–167.

- Hoppe, Hans-Hermann. 1997. "On Certainty and Uncertainty, Or: How Rational Can Our Expectations Be?," *Review of Austrian Economics* 10, no. 1: 49–78.
- Horwitz, Steven. 1994. "Subjectivism," in Peter J. Boettke, ed., *The Elgar Companion to Austrian Economics*, pp. 17–22. Aldershot: Edward Elgar Publishing.
- Howard, Thomas C. 2015. *The New Value Investing*. Petersfield: Harriman House.
- Hudík, Marek. 2014. "Mises and Hayek Mathematized': Towards Mathematical Austrian Economics." Available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2433416](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2433416) &download=yes. Accessed 04 May 2016.
- Institute for Austrian Asset Management. 2015. "Austrian Asset Management." Available at <http://www.ifaam-institut.de/ifaam-methode>. Accessed 22 October 2015.
- Jacobson, Robert. 1992. "The 'Austrian' School of Strategy," *Academy of Management Review* 17, no. 4: 782–807.
- Jaensch, Günter. 1966. *Wert und Preis der ganzen Unternehmung*. Cologne/Opladen: Westdeutscher Verlag.
- Kaza, Greg. 2000. "In Defense of Fundamental Analysis: Securities Arbitrage and the Efficient Market Theory," *Quarterly Journal of Austrian Economics* 3, no. 1: 59–61.
- Koch, Waldemar. 1939. "Die Bewertung von Unternehmungen," *Der deutsche Volkswirt* 13, no. 28: 1363–1365.
- Krug, Steffen, and Philipp Mohelsky. 2010. "Graham Meets Mises," *Smart Investor* 8, no. 4: 34–35.
- Kruschwitz, Lutz, and Andreas Löffler. 2015. "Preise, Werte und Arbitragefreiheit: Erwiderung auf Gleißner," *Corporate Finance* 6, no. 5: 176–181.
- Kwag, Seung-Woog, and Sang Whi Lee. 2006. "Value Investing and the Business Cycle," *Journal of Financial Planning* 19, no. 1: 64–71.
- Lakonishok, Josef, Andrei Shleifer, and Robert W. Vishny. 1994. "Contrarian Investment, Extrapolation, and Risk," *Journal of Finance* 49, no. 5: 1541–1578.



- Langlois, Richard. 1994. "Risk and Uncertainty," in Peter J. Boettke, ed., *The Elgar Companion to Austrian Economics*, pp. 118–122. Aldershot: Edward Elgar Publishing.
- Leithner, Chris. 2005. "Ludwig von Mises, Meet Benjamin Graham: Value Investing from an Austrian Point of View." Available at <http://mises.org/Literature/search/?q=leithner>. Accessed 06 November 2014.
- . 2009a. "Investment Philosophy." Available at [http://www.leithner.com.au/investment\\_philosophy.php](http://www.leithner.com.au/investment_philosophy.php). Accessed 22 October 2015.
- . 2009b. "Risk, Its Management and Disclosure." Available at <http://www.leithner.com.au/risks.php>. Accessed 04 May 2016.
- Leithner and Company Pty. Ltd. 2016. "Home." Available at <http://www.leithner.com.au/index.php>. Accessed 19 May 2016.
- Liebermann, Benedykt. 1923. *Der Ertragswert der Unternehmung*. Dissertation: University of Frankfurt a.M.
- Long, Roderick T. 2006. "Realism and Abstraction in Economics: Aristotle and Mises versus Friedman," *Quarterly Journal of Austrian Economics* 9, no. 3: 3–23.
- Lowe, Janet C. 1994. *Benjamin Graham on Value Investing*. Chicago, Il.: Dearborn Financial Publishing.
- . 1996. *Value Investing Made Easy*. New York et al.: McGraw-Hill.
- . 2010. *The Triumph of Value Investing*. New York et al.: Portfolio/Penguin.
- Matschke, Manfred J., and Gerrit Brösel. 2013. *Unternehmensbewertung*, 4<sup>th</sup> ed. Wiesbaden: Springer Gabler.
- Mayer, Christopher. 2000. "The Meaning of 'Over-Valued'." Available at <https://mises.org/library/meaning-over-valued>. Accessed 19 May 2016.
- Mellerowicz, Konrad. 1926. *Grundlagen betriebswirtschaftlicher Wertungslehre*. Berlin: Volkswirtschaftliche Verlagsgesellschaft.
- . 1952. *Der Wert der Unternehmung als Ganzes*. Essen: Girardet.
- Menger, Carl. 2007. *Principles of Economics*. Auburn, Ala.: Ludwig von Mises Institute.
- Mises, Ludwig von. 1998. *Human Action*. Auburn, Ala.: Ludwig von Mises Institute.

- . 2008. *Profit and Loss*. Auburn, Ala.: Ludwig von Mises Institute.
- Montier, James. 2009. *Value Investing*. Chichester: Wiley.
- . 2010. *The Little Book of Behavioral Investing*. Hoboken, N.J.: Wiley.
- Moxter, Adolf. 1983. *Grundsätze ordnungsmäßiger Unternehmensbewertung*, 2<sup>nd</sup> ed. Wiesbaden: Gabler.
- Münstermann, Hans. 1966. *Wert und Bewertung der Unternehmung*. Wiesbaden: Gabler.
- . 1970. *Wert und Bewertung der Unternehmung*, 3<sup>rd</sup> ed. Wiesbaden: Gabler.
- Olbrich, Michael. 2000. "Zur Bedeutung des Börsenkurses für die Bewertung von Unternehmungen und Unternehmungsanteilen," *Betriebswirtschaftliche Forschung und Praxis* 52, no. 5: 454–465.
- Olbrich, Michael, Tobias Quill, and David J. Rapp. 2015. "Business Valuation Inspired by the Austrian School," *Journal of Business Valuation and Economic Loss Analysis* 10, no. 1: 1–43.
- Olbrich, Michael, and David J. Rapp. 2012. "Wider die Anwendung der DVFA-Empfehlungen in der gerichtlichen Abfindungspraxis," *Corporate Finance biz* 3, no. 5: 233–236.
- Olbrich, Michael, David J. Rapp, and Christoph Venitz. 2016. "End the Myth! On Value Investing's Incompatibility with Austrian Economics," *Journal of Prices and Markets* 5, no. 1: 36–44.
- Otte, Max, and Jens Castner. 2014. *Erfolgreiches Value-Investieren*, 4<sup>th</sup> ed. Munich: FinanzBuch Verlag.
- Pasour, Jr., Ernest C. 1989. "The Efficient-Markets Hypothesis and Entrepreneurship," *Review of Austrian Economics* 3, no. 1: 95–107.
- Perridon, Louis, Manfred Steiner, and Andreas W. Rathgeber. 2017. *Finanzwirtschaft der Unternehmung*, 17<sup>th</sup> ed. Munich: Vahlen.
- Panyagometh, Kamphol. 2012. "Weight and Stock Selections for Equity Portfolio Management: Evidence from the Stock Exchange of Thailand," *Business and Management Review* 2, no. 7: 20–27.
- Polleit and Riechert Investment Management LLP. 2015. "Investment Philosophy." Available at <http://www.polleit-rieichert.com/funds/investment-philosophy/>. Accessed 22 October 2015.

- Rajablu, Mahmoud. 2011. "Value investing: review of Warren Buffett's investment philosophy and practice," *Research Journal of Finance and Accounting* 2, no. 4: 1–12.
- Rapp, David J. 2015. "Boom and Bust: The Role of Business Valuation in the Recent Financial Crisis," in Ludwig von Mises Institute of Canada, ed., *Papers & Proceedings of the Third Annual International Conference of Prices & Markets 2014*, pp. 86–93. Toronto: Ludwig von Mises Institute of Canada.
- Schmalenbach, Eugen. 1917/1918. "Die Werte von Anlagen und Unternehmungen in der Schätzungstechnik," *Zeitschrift für handelswissenschaftliche Forschung* 12, no. 1/2: 1–20.
- . 1966. *Die Beteiligungsfinanzierung*, 9<sup>th</sup> ed. Cologne/Opladen: Westdeutscher Verlag.
- Schmidt, Reinhard H. 1976. *Aktienkursprognose*. Wiesbaden: Gabler.
- Schredelseker, Klaus. 2013. *Grundlagen der Finanzwirtschaft*, 2<sup>nd</sup> ed. Munich: Oldenbourg.
- Schreiber, Klaus. 1965. *Kaufverhalten der Verbraucher*. Wiesbaden: Gabler.
- Shostak, Frank. 1997. "In Defense of Fundamental Analysis: A Critique of the Efficient Market Hypothesis," *Review of Austrian Economics* 10, no. 2: 27–45.
- Skousen, Mark. 1994. "Financial Economics," in Peter J. Boettke, ed., *The Elgar Companion to Austrian Economics*, pp. 231–243. Aldershot: Edward Elgar Publishing.
- Smith, Ronald G. E. 1969. *The Appraisal, Valuation and Selection of Security Investments and the Theory of Price Determination in Securities Markets*. Dissertation: Louisiana State University and Agricultural and Mechanical College.
- . 1971. "Uncertainty, Information and Investment Decisions," *Journal of Finance* 26, no. 1: 67–82.
- Huerta de Soto, Jesús. 1998. "The Ongoing Methodenstreit of the Austrian School," *Journal des Économistes et des Études Humaines* 8, no. 1: 75–113.
- Spitznagel, Mark. 2013. *The Dao of Capital*. Hoboken, N.J.: Wiley.

- Taghizadegan, Rahim, Ronald Stöferle, and Mark Valek. 2014. *Österreichische Schule für Anleger*, 2<sup>nd</sup> ed. Munich: FinanzBuch Verlag.
- Truong, Cameron. 2009. "Value investing using price earnings ratio in New Zealand," *University of Auckland Business Review* 11, no. 1: 1–7.
- Vaughn, Karen I. 1994. *Austrian Economics in America*. Cambridge: Cambridge University Press.
- Vick, Timothy P. 1999. *Wall Street on Sale*. New York et al.: McGraw-Hill.
- Whitman, Martin J. 1999. *Value Investing*. New York et al.: Wiley.
- Ye, Yangxiu. 2013. "Application of the Stock Selection Criteria of Three Value Investors, Benjamin Graham, Peter Lynch, and Joel Greenblatt: A Case of Shanghai Stock Exchange from 2006 to 2011," *International Journal of Scientific and Research Publications* 3, no. 8: 1–7.
- Yeager, Leland B. 1987. "Why Subjectivism?," *Review of Austrian Economics* 1, no. 1: 5–31.
- . 1997. "Austrian Economics, Neoclassicism, and the Market Test," *Journal of Economic Perspectives* 11, no. 4: 153–165.

## A MODERN CONCEPT OF ASSET PRICE INFLATION IN BOOM AND DEPRESSION

BRENDAN BROWN

*ABSTRACT:* The aim of this article is to demonstrate how monetary disorder spawns asset price inflation. This is re-interpreted here according to modern usage as meaning an empowerment of irrational forces in asset markets. The author blends insights from behavioral finance research and from Austrian business cycle theory to develop a hypothesis about how mental flaws of investors become inflamed by monetary influences and how these contribute to episodes of widespread mal-investment. Identifying two types of asset price inflation—boom type and depression type—this article draws on the last century of history to illustrate both through several stages, accompanied by a variable intensity of inflation symptoms in the goods markets.

*KEYWORDS:* asset price inflation, Austrian business cycle theory, carry trade, hunt for yield, irrational exuberance

*JEL CLASSIFICATION:* B53, E14, E31, E32, E42, E43, E44, E58, F45, G02, G12, N12, N14

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## INTRODUCTION

During the long monetary experiment (including quantitative easing, near zero or negative interest rates, long-term interest rate manipulation) following the latest Great Panic and Recession (2008–2009), the term “asset price inflation” has become popular in market and economic commentaries. It seems that the writers are identifying the presence of speculative fever and frothy prices across a wide range of asset markets. Unfortunately there is much imprecision and too often the symptoms are divorced from the underlying monetary malaise. That is a pity, especially given that the present themes surrounding asset price inflation overlap considerably monetary economics as taught by the Austrian School (albeit that this highlighted distortions to the relative price of capital and consumer goods rather than to a broad array of asset markets).

The aim here is to link firmly the modern popular concept of asset price inflation to the monetary disorder from which it stems. Inspiration is drawn from Austrian business cycle theory. A key ingredient of the analysis here comes from behavioral finance theory. The mental flaws identified there in investment decision-making become prominent during periods of asset price inflation. The widespread intensification of these flaws is not due to random build-up of animal spirits but to inflammation by monetary disorder. Yes, a big political, economic or technological discontinuity may well be part of the process by which asset price inflation forms, but these are not a sufficient condition without the intervention of the money monkey-wrench.

In pursuing the relationship between monetary disorder and asset price inflation including the mental flaws described it becomes apparent that there are in fact two types of asset price inflations—the boom type, which emerges under conditions of flourishing investment opportunity, and a depression type, which forms when the overall economic situation is quite weak (albeit not so weak as to preclude the birth and growth of speculative narratives about investment opportunity which in turn excite highly leveraged activity across a limited range of economic activity). A giant monetary experiment features sometimes in the boom type of asset price inflation and always in the depression type.

The boom type is characterized by irrational exuberance in which capital gains fuel positive feedback loops about the various speculative narratives, reinforcing confidence in these. The depression types feature a “hunt for yield” driven by a famine of income on safe assets. The two forms of asset price inflation vary in significant respects. One task here is to plot the possible paths of both asset price inflation types through their various phases from start to finish. It is not impossible but rare for a depression-type asset price inflation to undergo metamorphosis into boom-type asset price inflation—at least according to the small sample size of history.

This paper makes reference to that history wherever possible to illustrate the analysis. In broad terms this starts with a definition of the concept. Second, the roles of irrationality and speculative story telling are detailed. Third, a clear distinction is drawn between the two types of asset price inflation. The relationship is described between asset price inflation on the one hand and goods and services inflation on the other (in effect, both twins born of the same monetary disorder). Finally, there is a short conclusion and discussion about the direction that future research into these topics could take.

## **GENERAL CONCEPT OF ASSET PRICE INFLATION INCLUDING IRRATIONALITY AND SPECULATIVE NARRATIVES**

Let us start with a definition of the concept.

Asset price inflation describes the empowerment of irrational forces in asset markets by monetary disorder. This empowerment is characterized by an unusual prominence of flaws in mental processes as identified by psychologists (see especially Kahneman [2012]). Examples include irrational behaviour driven by “mental pain of realizing loss,”<sup>1</sup> feed-back loops from price action to

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<sup>1</sup> Mental pain of realizing losses. Daniel Kahneman (2012) describes various experiments which illustrate that people become risk-seeking when all their options are bad. More generally he finds that “losses loom larger than gains” and that people are “loss averse.”

assessment of related speculative hypotheses,<sup>2</sup> anchoring effects,<sup>3</sup> and several others including magical thinking<sup>4</sup> and mental compartmentalization.<sup>5</sup>

These flaws are identifiable in various types of market conditions found under asset price inflation, whether characterized by “the hunt for yield” or “irrational exuberance.” There is much speculative storytelling and many investors become abnormally ready to embrace these tales, discarding their normal skepticism. During the course of the asset price inflation the stories come and go, as speculative excess produces outcomes (excess supplies and falling profits) which discredit them. The amount of distortion across asset markets is not general or equal, but depends on the evolving speculative narratives and the catalysts which drive these. The most powerful narrative of all may be new magical instruments designed by the central bank.

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<sup>2</sup> Positive feedback loops are processes in which a change from the normal range of function elicits a response that amplifies or enhances that change. Shiller (2000) describes these as follows: “...news of price increases spurs investor enthusiasm, which spreads by psychological contagion from person to person in the process amplifying speculative stories that might justify the price increase. These bring in a larger and larger class of investors who despite doubts about the real value of the investment are drawn to it partly through envy and partly through a gambler’s excitement.”

<sup>3</sup> Anchoring effects result from a cognitive bias that describes the common human tendency to rely too heavily on the first piece of information offered. An example would be the irrational tendency for investors to formulate their views about the outlook for interest rates many years from now based on where they are today and on where the Federal Reserve says it will steer them over the next two years. In principle the rational investor should form their expectations taking account of a whole range of scenarios which could be very different from today.

<sup>4</sup> Magical thinking is the attribution of causal relationships between actions and events which cannot be justified by reason and observation. An example could be investors who follow almanacs in their decision making.

<sup>5</sup> Mental compartmentalization is an unconscious psychological defense mechanism used to avoid cognitive dissonance or the mental discomfort and anxiety caused by a person having conflict emotions, beliefs within themselves. For example, investors in a situation of interest income famine, may focus on dividend income and how they spend out of this, distinguishing this from capital gain or loss. In rational mode there would be no difference between the two income sources. Security houses have abetted this irrationality by marketing “dividend-paying stocks” and high-yield bonds on the basis that they provide a stream of income for current spending purposes.



The asset price inflation goes through different stages from start to finish. Early on, currency devaluation may play a lead role in generating speculative stories and in practice, the Federal Reserve as the dominant central bank, plays a key role here. Even though other central banks at this early stage may not have launched their own contribution to global monetary disorder, asset markets in their country or currency (even if floating freely) can become subject to the increased forces of irrationality as fueled in the US.

In a mid-phase, forces of irrationality have strengthened and these spread over a wider span of asset markets giving rise to what market analysts describe as “speculative froth.” Yet in some markets the froth is already receding amidst the din of apparently isolated crashes. The central bank may respond to these, amidst concern that a sudden drainage of speculative froth across all markets could occur, by undertaking further monetary reflation. If successful, this might even induce some bottom-fishing in the crashed markets whilst adding to heat elsewhere. In a final phase there is an almost general plunge in speculative temperatures, sometimes financial crisis, and recession. The full extent of malinvestment at last becomes apparent.

The waxing and waning of speculative stories are central to the process of asset price inflation through time. The revelation of malinvestment (most likely via plunging profits or rents) and growing expectations of a tightening in monetary conditions (coupled perhaps with actual tightening) are catalysts to the waning. In particular, as the appearance of speculative froth grows in intensity and alongside forecasts of rising goods and services inflation gain prominence, speculation grows on “normalization” or “tightening” of monetary policy. The central bankers go on the speaking circuit to wonder aloud when they will start the normalization process. The president and finance minister might voice similar thoughts. Long-term interest rates begin to reflect that.

In principle we could imagine an asset price inflation coming to an end through a process of speculative stories waning (amidst accumulating disappointment) including the identification of malinvestment without any normalization of monetary policy. In the small sample size of history, though, there is no practical example of this. The asset price inflation of 1934–1937 in some respects is the closest, though there is a popular historical folklore which blames

the Crash and recession of 1937–1938 squarely on the Fed’s error of trying to normalize monetary conditions too soon (see below).

The monetary disorder which spawns asset price inflation also gives rise to goods and services inflation. We would be surely unlikely to observe one twin without the other being present somewhere, though care might well be required in ferreting it out and the relative vitality of the two can vary considerably between different episodes. For example, goods and services inflation may exist even where official statistics say otherwise, when account is taken of the “natural rhythm of prices.” It has been an insight of Austrian School economics that prices of goods and services on average should fluctuate through time (with a long-run tendency only to revert to the mean) under a regime of sound money (see Salerno [2010]). For example, during spurts of productivity growth, business recessions, periods of rapid globalization, the pressure on many prices would be downwards. The attempt of the central bank to stabilize prices during such episodes or even to generate a target low inflation rate induces monetary inflation. Stable official price indices, when the natural rhythm of prices is downwards, would be symptomatic of inflation.

All monetary disturbances do not start necessarily with the actions of a central bank. Under a gold standard, disturbances could come from shifts in the supply of gold or from perverse official intervention in and legislation regarding the banking industry which lulls the public into irrationally economizing on cash (and overestimating the safety of deposits), exposing them periodically to shock therapy. An example was the 1903–1907 boom and bust (see Brunner and Carr [2007]). Rothbard (2001) attributes the particular monetary disturbance then to Treasury operations which effectively increased the supply of monetary base—and of course there was unusual scope for market interest rates to diverge from unknown natural under the trauma of the San Francisco earthquake and the background of rapid technological progress in gold mining. In general, though, modern monetary and financial history is dominated by the great disturbances generated by the Federal Reserve. The specific features of the Fed-created monetary disorders have varied through time. The Federal Reserve has had huge discretionary power to set the path for high-powered money in the pursuit of shifting objectives, whether price stability, inflation targets, full employment, or some combination of these.

As the monetary base has become increasingly dislodged from the pivot of the monetary system (meaning that there is no broadly based stable demand for this aggregate which in any case is no longer a highly distinct asset) the Fed has sought to focus largely on setting the short-term term interest rate path. The tool of explicit injections of high-powered money on a large scale has been used in financial crisis and its recessionary aftermath. Many episodes of monetary disturbance have stemmed from the wide divergences created (wittingly or unwittingly) by the central bank between market rates across the maturity spectrum and the so-called neutral or natural level of interest rates (unknown at any time even though modern central bankers insist they can model it—see Williams [2017]).<sup>6</sup>

## **BOOM-TYPE ASSET PRICE INFLATIONS: CHARACTERISTICS**

Boom-type asset price inflations occur in the context of persistently good economic news—likely including rapid productivity growth and living standards. The predominant mental flaw is the positive feedback loop—price gains across a wide spread of asset markets reinforcing the credibility of the particular speculative stories present there, including the macro-story of economic miracle or near-miracle. Good performance from essentially risky investments in the context of general prosperity and of interest rates below neutral level may cause investors to slant the probabilities of good scenarios in the future above those consistent with sober-rational evaluation and they may come to irrationally credit skill in their own investment choices.

Under the described glow of irrational exuberance there is likely to be malinvestment. Whilst this is taking place, growth of incomes and well-being is likely to be faster than what it would have been without the unsound money. Payback starts when the asset price

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<sup>6</sup> Empirical estimates of the neutral interest rate are based on observations of whether inflation is on a sustained basis below or above the target inflation rate. But this takes no account of the natural rhythm of prices. The central bank in aiming at an unchanged target during periods when the natural rhythm is downwards induces in fact monetary disequilibrium which may well show up most visibly in “financial instability” otherwise described as asset price inflation. Inflation below target does not mean that market rates were below the natural level.

inflation moves into its final stage. Even so there is some cushion from the earlier period against later adversity.

Boom-type asset price inflation is likely to go along with prices of goods and services rising faster than consistent with the natural rhythm which would accompany sound money (prices on average tending to revert to an unchanged mean over the very long run, but exhibiting substantial swings both down and up over the short and medium run). During a period of especially rapid productivity growth, prices would fall under a sound money regime.<sup>7</sup> And during a business recession prices would fall to well below their long-run average. (Expectations of higher prices in the future help stimulate spending during the weak phase of the business cycle—see Brown [2015]).<sup>8</sup> Evidence of unsound money policies could include prices moving sideways or slightly upwards when the natural rhythm would be downwards.

The monetary unsoundness (which accompanies boom-type asset price inflation) may well not be deliberate but due to a flaw in the monetary framework. Nonetheless, it has the result of steering rates below neutral, which contributes to the pattern of abnormally large and frequent capital gains. There is not widespread realization that money is unsound, and the central bankers may not realize it themselves (perhaps because they are focused on the aim of stable prices or low inflation, rather than realizing that in conditions of rapid productivity growth prices should be falling).

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<sup>7</sup> Sound money in this article means a regime where interest rates are determined freely in markets (both short-term and long-term), where the rules of the system mean that the outcome is very likely to be prices reverting to an unchanged mean over the very long run but exhibiting natural rhythm upwards and downwards as explained in the main text, and where these rules operate automatically with respect to the growth of high-powered money which is firmly at the pivot of the monetary system (as explained in the text).

<sup>8</sup> Prices falling during a recession could in principle impede recovery if expectations were to develop of further near-term falls, encouraging some delay in purchases (even though eventually higher prices are expected beyond the price drop when the next strong economic expansion emerges). In principle and practice this possibility of deflationary expectations should not be overstated. Yes, in hindsight we might see business cycle recessions where prices seemed to be on a falling trend. But in real time no one would know for sure that increased economic weakness lay ahead—*ex post* price declines prices as measured by statistics do not correspond to *ex ante* magnitudes. Moreover, recorded prices do not capture various types of unofficial discounts which may have been front-loaded in the economic downturn.

The carry trades which flourish under boom-type asset price inflation include three in common with the depression-type. A fourth (the term maturity carry trade—from short maturity safe government bonds into long maturity) is found only under the depression type. The three are first currency carry trades (low interest monies into high interest rate monies), second credit carry trades (from low risk credits into high risk credits), and third liquidity carry trades (from liquid assets into illiquid). In all three cases the carry trader pursues extra income in the knowledge that there is some risk attached—whether adverse exchange rate movement, default, or market seize-up (inability to transact). Even under sound money regimes, of course, such carry trades take place and are consistent with rational pursuit of extra yield. The irrationality creeps in where the traders distort the probability of loss assessments to well below “fair value.”

For example, in the pursuit of currency risk premiums the traders may become over-confident in expectations that the high-coupon currency will continue rising or not fall (such as to wipe out the interest rate advantage). That over-confidence may twin with a good news economic story, such that the high-interest rate money economy is undergoing a profound economic change (for the better)—becoming, for example, much more “dynamic” than previously. General good news and positive investment results elsewhere might contribute to false confidence about the future.

Alternatively, in the pursuit of the credit risk premium, a string of low actual defaults consistent with good economic times might encourage the belief that the defaults will remain low, when in fact the rational investor should be giving significant weight to the possibility of bad economic or political scenarios in the future where this might not be the case. And as regards the liquidity premium, the high turnover which typically accompanies bull markets in assets and the exaggerated optimism that good times will continue might falsely encourage unrealistic expectations that this state of affairs will long persist.

A final point, boom-type asset price inflations do not emerge early on in a cyclical expansion. They arrive typically after many years of good economic outcomes and of course depend essentially on monetary disequilibrium.

## BOOM TYPE ASSET PRICE INFLATIONS: A HISTORY

An early example of boom-type asset price inflation was 1924–1929. In the 1920s the new monetary experiment was the Federal Reserve seeking to steer the monetary base such as to alternatively promote faster economic recovery from the Great Recession of January 1920 to July 1921 and then stabilizing the price level in the face of rapid productivity change (electrification, the mass assembly line, radio) when the natural rhythm of prices would have been downwards.

We can see the signs of boom type asset price inflation accumulating in the years 1925–1928 amidst huge economic optimism both regarding the US and Germany (the second largest economy in the world at that time). Under the 1924 so-called Dawes Plan the Reichsmark in effect joined the dollar standard. A brief economic miracle ensued in the Weimar Republic. The Fed's monetary interventions bore down on interest rates relative to (unknown) neutral and caused the positive feed-back loops and other features discussed above to emerge across a range of asset market including US stocks, US commercial and residential real estate, and German credits, for example. A vast carry trade grew from the low interest rate monies and credits (especially dollars) into the high yielding German ones, and the apparent easy profits made along with the speculative narrative of German miracle revved up the momentum. Many of the German bonds were issued by municipalities, and more generally the flow of global carry trade funds was into German banks to get the higher interest rates available.

We can date a mid-phase of asset price inflation where speculative temperatures plunged already in some asset classes—the Florida land bubble burst in 1926, the Berlin stock market crash in May 1927 (see Voht [2003]). The rise of US equities had stalled in 1926 and early 1927 and the National Bureau of Economic Research records a mild recession around that time (October 26 to November 27).

It was amidst such faltering that Benjamin Strong (the New York Fed chief then the most powerful official in the Federal Reserve System) administered his famous “coup de whiskey” to the stock market (see Pollock [2013]). In fact, new injections of monetary base already occurred early in 1927, to be followed by a discount rate cut

in late summer, the latter ostensibly to help out Bank of England Chief Montague Norman in defending Sterling without (the latter) having to tighten monetary policy. Whatever the immediate motive, this late-cycle inflationary injection to sustain asset price inflation is the antecedent of what later became described as the Greenspan Put. And it was spectacularly successful in reinvigorating speculation on Wall Street. The carry trade into Germany resumed its boom, though that began to falter as Germany entered recession in the second half of 1928 and rising US interest rates by that point began to take their toll. The end phase of the great asset price inflation of the 1920s started in late 1928 and early 1929 amidst evidence that the nationwide real estate boom was faltering (beyond Florida) and then the Wall Street Crash. The German and wider European banking crisis in spring 1931 was the start of the final phase of bust.

The next boom-type asset price inflation was under the Kennedy/Johnson administrations. The years of the mid-1960s were an economic boom period, with rapid productivity growth (see Meltzer [2005]) in the US and more particularly in continental Europe and Japan where economic miracles were occurring. Yet the Fed was acting to resist market pressures to higher rates. New appointments to the Fed were Keynesians who were keen to pursue their hypothesized trade-off between higher inflation and unemployment. The Fed chair Martin was not a Keynesian but was nonetheless an advocate of “fine-tuning,” believing in his innate ability to “take away the punch bowl when the party got rowdy.” The rapid productivity growth and investment boom went along at the start with a subsiding of inflation and so there was no occasion to act on his thinking (which did not include any notion of a natural rhythm of prices downwards when productivity spurts). And as increasing public spending related to the Vietnam War and vast new social programs put upward pressure on long-term rates, the Chair saw his responsibility to help “manage public debt prices” and be “independent inside government” (see Meltzer [2005]).

A boom in the stock market and real estate prices doubtless helped by the lag of interest rates below neutral became characterized by the “Nifty Fifty,” the IOS, and the rise of the New York real estate moguls. Positive feedback loops between rising stock prices on the one hand and the hypotheses of global economic

miracle (double digit growth in Japan and high growth in France, Italy, and Germany) and the wonders of the new Keynesian economics on the other hand were not hard to find. As in the previously described episode of asset price inflation (boom-type) there was a mid-phase speculative set-back, this time in 1966, as the Fed instituted a “credit crunch,” partly in response to inflation concerns (CPI inflation up to 2 percent in late 1965) (see Pollock [2016]). Into 1967 the Fed delivered its “Greenspan Put” (in the form of suspending the crunch against the background of the stock market having fallen by 15–20 percent in the first half of 1966 and the economy having entered an apparent growth cycle downturn) even though, in the context of the Vietnam War, inflation expectations were rising.

A visible jump in goods and services inflation through 1967–1968, coupled with bouts of downward pressure on the dollar (within the Bretton Woods System), brought the party on this occasion to an end by forcing the Fed into a belated sharp tightening of policies. The crash of 1968 (from a peak which in real terms was 6 percent above the level of end-1965) and the recession of 1969–1970 were the catalyst to President Nixon and his central bank chief Arthur Burns (from January 1970) engaging in a powerful monetary reflation coupled with the devaluation of the dollar through 1971–1973. Asset prices (stocks and real estate) rebounded though never surpassing their 1967–1968 peaks in real terms. Then in 1973–1974 came the greatest crash since 1929, as the Fed tightened aggressively in response to headline goods and services inflation reaching double digits (as amplified by the 1973–1974 “oil shock”).

The next episode of asset price inflation again fits the boom-type description—the post-Plaza global boom of 1985–1990. The Volcker Fed, having ended the monetarist experiment already by 1983, came under growing pressure from the Reagan Administration to foster devaluation and monetary reflation in the context of a difficult growth recession from late 1984 to early 1986 (and the approach of difficult mid-term elections in which the Republicans indeed lost control of the Senate). The Administration appointed “supply-siders” to the Fed Board. Volcker was prepared to go along with the dollar devaluation strategy, never having fully shed his original mantle of “devaluationist” as the senior international economic official under the Nixon Administration who had



negotiated the devaluations of the early 1970s. He was alarmed by the widening of the trade deficit which occurred in the wake of the super-strong dollar of 1983–1984.

The related easing of US monetary policy fostered asset price inflation at a time when productivity and investment were indeed picking up underlying strength as a result of the Reagan supply-side tax reforms and the defeat of high inflation. And so there was the positive feedback loop from rising asset markets to belief in the fundamentals of the economic boom. The Louvre agreement to stabilize the dollar in early 1987 (safely past the mid-term elections) set off expectations that the Volcker Fed would now indeed tighten monetary policy in response to widespread evidence of rising speculation. And the crash of the US equity market briefly in October 1987 could be attributed to that shift.

A powerful monetary easing by Fed chair Greenspan—the first actual Greenspan put—who had succeeded Volcker in August was successful in re-stoking asset price inflation both in the US and globally through and extended late-mid phase, helping the Republicans keep the White House in November 1988. In Japan, the efforts of the monetary authorities to hold back the soaring yen through late 1985 and 1986 to early 1987 helped make that country the hottest zone of the global asset price inflation—definitely of type A as productivity and investment spending grew rapidly there. Resumed Fed tightening through 1989 in response to rising goods and services inflation, Japanese monetary action to counter “excess speculation” and a jump in German interest rates reflecting the fall of the Berlin Wall and German unification, all drove the asset price inflation into its final stage characterized by recession and crash.

The great boom and asset price inflation of 1995–2000 followed.

The story this time was the Federal Reserve tending (in clandestine fashion) towards a policy of “targeting inflation” (in July 1996 then-governor Janet Yellen presented at the invitation of Chairman Greenspan a paper to the FOMC on why inflation should not be lowered below 2 percent—see Brown [2015]) at a time when the natural rhythm of prices was downwards related to the surge of productivity. And when the ECB opened its doors, it adopted a virtual 2 percent inflation standard (see Brown [2013]).

One of the early huge speculative stories of this period was the economic miracle of the Asian tigers and cubs with a huge carry trade developing of funds flowing from dollars and yen into the high-yielding tiger currencies (many of which were in an Asian dollar zone). The yen was often the funding currency not just against the Asian but also more generally. The big speculative story of the IT miracle developed simultaneously. Alongside the currency carry trade was a credit carry trade. The latter encompassed also the corporate bonds issued by telecommunication companies. And there was the liquidity carry trade with LTCM and its fellow travelers finding “new ways” to boost returns by taking on illiquidity (in the case of LTCM focusing on off-the-run Treasury bonds).

The asset price inflation proceeded through a late mid-phase to the end-phase. The former included the Asian debt crisis of 1997, the wider emerging market crisis of the following year, and then forward to the bursting of the Nasdaq “bubble” and the Tokyo “IT equity” market in 2000. The credit carry trades burst spectacularly in the following year or two amidst tales of “fallen angels,” including such names as WorldCom and Enron going from fame to infamy.

The monetary contribution to all of this came from the Fed over-responding to the 1998 emerging market shocks and fears of a 2000 IT glitch and thereby fueling an intensified rise of speculative temperatures (the second Greenspan put). Then as goods and services inflation started to rise and concerns about speculative heat grew, the Fed tightened policy abruptly.

## **DEPRESSION-TYPE ASSET PRICE INFLATIONS: CHARACTERISTICS**

Let us turn to depression-type asset price inflation.

This appears early on in a cyclical expansion and is triggered by radical monetary experimentation which has the effect of causing a famine of interest income famine. The radicalism fuels anxiety about a breakout of high inflation at some uncertain point in the more distant future. The consequence is a desperate hunt for yield characterized by a flaw in mental processes which Daniel

Kahneman (2012) describes under the heading of “loss aversion” or more generally “prospect theory.” He notes from experiments that if individuals are faced with certain loss they become risk-lovers, willing to take on gambles which offer a possibility of gain (compared to the starting level of wealth) but whose expected outcome is substantially negative. The combination of risk-loving behavior to avoid loss but risk aversion otherwise is contrary to normally assumed rational behavior in economics (as usually expressed in the context of declining marginal utility of wealth). In particular the individuals concerned are giving undue importance to the starting point (against which losses and gains are measured).

Under conditions of interest income famine as induced by radical monetary experimentation, many investors, especially those whose savings are normally concentrated in or wholly in safe bonds and money, find themselves facing certain loss. They exhibit the loss aversion as described in joining the Hunt for Yield. In this hunt they do not become economic optimists, though they may become susceptible to speculative story-tellers.

The narratives may span particular industrial sectors (for example energy or Silicon Valley) or more generally countries (Brazil or China) but there is no master narrative about prosperity. Positive feedback loops may form where price gains stoke belief in the story but this is not equivalent to the general optimism of type A asset price inflation. Yes “momentum trading” may be one technique of hunting for yield (buying assets which seem to be on a rising trend). But speculating on continuing momentum—often based on algorithms—is not the same as irrational exuberance about the economic boom continuing. In fact there is much buzz about “the most unloved bull market.” In stock market terms, we should expect price-earnings ratios to reach a much higher level at the peak in a boom-type asset price inflation than in a depression-type asset price inflation.

“Everyone and their dog” knows that depression-type asset price inflation is present, unlike for the boom-type. The Federal Reserve is constantly in the news. The media is abuzz with warnings of financial market froth. The Great Monetary Experiment is apparent to all. Everyone except perhaps the architects of the experiment put a high probability on it failing—meaning an eventual crash and great recession. And so there is a

general reluctance to invest in long gestation projects which pay off when these dangers loom large.

Instead, companies find that equity investors reward them for paying out cash, whether in the form of dividends or equity buy-backs. Financial engineering strategies—often including increased leverage—are attractive, which bring cash into the early years, especially where prices of credit products are inflated in an environment of hunt for yield. Many owners of small and medium-size businesses plan to sell these at some distant point, and under an environment of asset price inflation type B they are concerned that by then it may have reached its end stage. So they also become reluctant to enter into long-gestation investments. Similar considerations apply to executives in large companies whose compensation includes long-dated share options.

Hence depression-type asset price inflation goes along with low investment and low productivity growth in general. There are no 7 years of fat (as occurs under boom-type asset price inflation) to compensate for the 7 years of famine to follow. And yet there can be much malinvestment, meaning that overall prosperity suffers considerably, taking the fat and the lean years together. Much of this malinvestment is concentrated around particular speculative stories which get an abnormally strong following. And usually, but not always, this malinvestment is accompanied by high leverage (which means that the equity investors might indeed get big cash rewards before the end-phase arrives, having shifted much of the longer term risks to the buyers of inflated credit paper).

The boom of the carry trade into long-maturity fixed-rate bonds in search of a term premium (the fourth form of carry trade unique to depression-type asset price inflation as explained below) and into credits (amidst unrealistic low expectations of default) favor a buildup of speculative temperatures in residential real estate markets especially where leverage is typically high and the term of fixed-rate borrowing long. More generally, in the Hunt for Yield which typifies depression-type asset price inflation, residential real estate with its apparent steady income stream (whether actual or imputed rents) can become attractive to income-famine victims. Owner occupiers, however, especially where intended holding periods (of the present or future homes) are long, should not in principle feel better off to the extent that home price gains might

superficially suggest. They are both the payer and recipient of the imputed rent flow through many years to come, which are discounted in the calculation of present value.

Depression-type asset price inflation is likely to be accompanied by its monetary twin of inflation in the goods and services markets, but as for the boom-type this may not be easy to find in the official price indices. Again, we should measure such inflation in the goods and services markets by comparison with the natural rhythm of prices under sound money. For example, in a cyclical period of economic weakness, prices should fall to a lower level than during a period of strong economic activity. Low and below-target inflation measured over several years of cyclical weakness may be consistent in fact with symptoms of monetary inflation in goods and services markets, especially if there is rapid globalization tending to push down the prices of traded goods.

The lack of general economic optimism or accompanying irrational exuberance under depression-type asset price inflation could mean that stock markets, for example, appear less expensive using the traditional metric of price-earnings ratios. At the top of the market in a depression-type asset price inflation the P/E ratio is likely to be well below the peak reached in boom-type. Consistently, though, the stock market might be even more elevated under type B relative to “fundamentals.” Within the stock market under depression-type as under boom-type there may be a sector where P/E ratios are in the stratosphere, reflecting extreme optimism on a particular innovation. And under depression-type this optimism is likely to combine with a flawed mental process already discussed above—the willingness to take on poor gambles to avoid the certainty of loss elsewhere in the portfolio (especially on monetary assets).

The recession and crash which feature in the end stage of depression-type asset price inflation can be as bad as for the boom-type even though the preceding economic landscape was so much poorer (under depression-type). Yes, there is no huge investment boom to turn to bust at a macro level under the depression-type, but nonetheless investment could collapse by as much. All those speculative stories and associated leverage did produce within the weak aggregates (for investment) areas of sometimes spectacular malinvestment. As the stories fade or

become discredited, the slump of capital spending in those areas depress substantially the investment aggregates. Moreover, the weakness of consumer spending could be as much or more under the depression-type (than boom-type) as households realize that their future income expectations were wildly exaggerated in a context of vast financial froth (and this downsizing of expectations would occur in the context, most likely, of financial crisis, including failure of financial institutions, and including those responsible for pension provision).

The timing of the onset of final stage for depression-type or boom-type asset price inflations might well be influenced by central bank actions. Under the boom-type these may be prompted by concerns about rising prices of goods and services but also by much talk of excess speculation. Under the depression-type the central bank could herald a “policy normalization” prompted by much discussion of potential “financial instability.” Depression-type asset price inflations, though, are more likely than the boom-type to end without any effective monetary tightening or normalization at all. This is because the depression-type occurs in weak economic conditions, where the emergence of excess capacity and declining profits in key sectors previously leading the upturn could emit signals sufficiently strong to cause a shift of asset price inflation into its final stage without any contribution from central bank action.

In depression-type asset price inflations, there is much commentary about whether monetary tightening or normalization could make matters worse by causing a sudden plunge in asset prices. This theme can also emerge in boom-type asset price inflations, albeit that the general optimism and less widespread wariness of over-priced asset markets means that the sense of danger is likely to be less. This is the “point of no return” issue raised, for example, by Friedman and Schwartz (1963) in their analysis of the asset market booms in the mid and late 1920s (they conclude that the Fed’s belated actions to “cool the speculative temperature” made the inevitable downturn worse than if this had been left to occur “naturally”). After the asset price inflation has been in process long enough and there is so much froth around, the danger is that central bank signaling or action could bring a more sudden and violent downturn than allowing the asset price

inflation to burn out from “within.” Again, the prominence of this “debate” could be greater under depression-type than boom-type given the widespread realization that a monetary experiment is in progress and that froth has been deliberately created.

As regards the carry trades under depression-type asset price inflation, much of this is driven by momentum-type considerations—the trend is your friend. But there may be speculative stories which appear to justify the trades also and which get exaggerated in importance.

For example, a carry trade into an emerging market currency might be driven in part by highly optimistic story telling about the future of that emerging market economy. Carry trades into high-risk credits feature similarly a combined drive of income famine and story-telling (in this case about the ultimate corporate or sovereign borrower) though the latter may be less prominent in general. The illiquidity carry trade could include several elements of distortion. For example, the switch of liquid funds into private equity includes much story-telling about the efficiency which private equity managers unconstrained by quarterly earning calendars and public market filing requirements will bring to business operations. There are also the tales of how the private equity “barons” have fostered crony capitalist connections which open up paths through the regulatory maze which surrounds some of their businesses.

The carry trade which features largely under depression-type asset price inflation and not at all under boom-type is the term maturity trade—the switching of funds from short maturity top government debt into long maturity in expectations of earning a “term premium.” The idea that there is a normal expectation of extra income from lending for a long time at a fixed rate rather than at a floating rate is dubious at any time. Higher long-term rates than short-term are likely to reflect expectations of less capital abundance in the future (for example, if investment opportunities improve and/or savings become scarcer or if government spending increases) and concerns about higher inflation. The demonstration that there is in fact a margin over and above (the so-called term premium) and that indeed normal equilibrium conditions call for this is dubious at best.

But in the hunt for yield and weak economic conditions which are intrinsic to asset price inflations of the depression-type, investors are more than usually willing to chase the hypothesis that a positive term premium should be expected, and there are strong grounds for speculating that this could be unusually positive. A big story at hand is secular stagnation. The persistent economic weakness marked by low productivity and low investment spending is fertile ground for Keynesian economists to paint their picture of long-run depression marked by a natural rate of interest which is sub-zero or barely positive. And indeed, actual market rates get caught in a “warp” of self-fulfilling expectations. The low investment generated by the monetary experiment and related uncertainty in turn becomes empirical justification for the secular stagnation story.

In rational mode, investors would question whether anyone can foretell with such precision the long run and would insist on putting significant probabilities on a return of robust economic conditions several years from now. But even some of those investors who cling to such rationality may become subject (under conditions of interest income famine) to another mental flaw which sustains the term carry trade. This is the magical thinking (fn. 4) about the power of the central bank to determine long-term interest rates.

The story is that the central bank’s “new” monetary tools enable it to fix long-term rates also. Many investors might doubt this, realizing that the stock of long-term fixed-rate paper outside the central bank is still huge and shifts in expectations amongst the holders of this (and the potential short-sellers) could surely overpower the would-be rate fixers in the central banks. But for now they realize that many market participants are ready to believe in the new powers of the central bankers and they convince themselves that “it is never wise to fight the Fed.” Yes, at some point someone will call out that the emperor has new clothes, but that could be a long time from now, and meanwhile let’s get in on the ride.

Speculative story telling tends to generate exaggerated focus (by investors and analysts) on flows rather than stocks. It is much easier to compose narratives about who is buying and selling than about the great silent majority of investors who continue to hold existing positions in the given asset rather than selling into or out of such



buying or selling waves. Central bank purchases of government bonds are one such flow story which gets disproportionate market weight in depression-type asset price inflations.

Could depression-type asset price inflation ever undergo metamorphosis into boom-type?

In fact that possibility can itself form a speculative narrative whilst depression-type asset price inflation is under way. Yes, in principle an economic miracle could take place. A surge in productivity growth could lie ahead, perhaps related to technological innovation or to political change heralding a sound money regime and fundamental reforms promoting free markets. Then the asset market prices which looked frothy in the context of the depression-type asset price inflation could now appear sober-rational. And if the central bank were to hold back the related rise of market rates in line with a higher (unknown) neutral level (perhaps responding to calm goods and services inflation in this environment), a boom-type asset price inflation could develop. It is quite possible, though, that all the speculative narrative about miracles could turn out to be false, and the excitement about an economic miracle and potential boom-type asset price inflation could all turn out to be yet another false dawn, perhaps culminating in speculative revulsion and the progression of the depression-type asset price inflation to its end.

Is it possible for the central bank to exercise successfully a “Greenspan put” in a late mid-phase, say, of a depression-type asset price inflation (as has happened often in boom-type asset price inflations), reacting to speculative temperature drops across a significant market spectrum and economic slowdown by making a big monetary injection?

Certainly the central bank could try to do so. Making success more difficult than at a similar stage of boom-type asset price inflation could be the more limited possibility of monetary injection (given that rates might already be very low and the monetary base dislocated from the pivot of the monetary system; moreover there may be by now widespread skepticism concerning the magic tool box of the central bank, including its latest state of the art non-standard implements). The range of potential speculative narratives to chase is also likely to be narrower than under

boom-type asset price inflation. Even so, it cannot be precluded in principle that a Greenspan put could have some success, especially if a big new story emerges coincidentally.

## **DEPRESSION-TYPE ASSET PRICE INFLATION: A HISTORY**

The first example of depression-type asset price inflation comes from US experience during the period of neutrality (say 1915 to early 1917) in the Great War.

The huge influx of gold from the Entente countries (chiefly the British and French governments selling gold to finance their war purchases) added directly to the US monetary base (the US remained on the gold standard) (see Brown [2013]). Goods and services inflation is well-documented during this period, but how much asset price inflation was occurring alongside? One can imagine that with interest rates at seriously negative levels in real terms and potential huge erosion of the real value of monetary assets, there was much scope for irrational forces to build up. Yet wartime does not necessarily fit well with irrational exuberance. Anyone could see the danger that the US might ultimately join the war and the sacrifices which this would mean. Prosperity in the belligerent countries already declined sharply even though certain types of military type expenditure (and so-called war profits) boomed.

Real stock market prices in the US, which had been at around 70 in mid-1914 and were at around 60 at the end of 1914, peaked at around 80 in late 1915; they fell below 60 on the US entry into the war (spring 1917) and were around 40 at the end of the war. Consistent with the presence of depression-style asset price inflation through 1915–1916 were reports of booming demand for US dollar-denominated government bonds issued in New York by France and Great Britain, swollen by a hunt for yield. Also fitting this description was the flourishing carry trade into long-maturity US government bonds (this market did not exist on the eve of the Great War) as investors swimming in low interest liquidity with investment opportunity blunted by global confrontation seeking apparently safe income, plausibly overestimating the so-called term risk premium (and credit-risk premium in the case of French and British government bonds).

The next possible depression-type asset price inflation was a brief episode from 1921–1923. The Federal Reserve experimented with its new monetary powers to launch a powerful reflation designed to empower an economic rebound out of the Great Recession of January 1920 to July 1921. A firm diagnosis of asset price inflation, though, cannot be made; interest rates were positive both in nominal and real terms and there was no alarm about long-run inflation (indeed the US dollar was convertible into gold albeit that the international gold standard had collapsed at the start of the Great War). Arguably, the Fed’s policies did help spark the speculative rise of US equities through 1921–1922 by bearing down on market rates relative to the neutral level. The speculative narrative of the US as a prosperous safe haven certainly gained ground with European investors in the context of contemporary European turmoil). This tentative depression-type asset price inflation did not “progress” into an early bad end given the arrival of so much good news through the mid-1920s (see above) and eventually was followed by boom-type asset price inflation.

The Roosevelt Administration’s monetary and currency policies set the stage for the first definitive depression-type asset price inflation (see Brown [2015], ch. 7).

The halt to the dollar’s devaluation as marked by its stabilization in March 1934 at \$35 per ounce of gold (in Europe the French franc together with the Swiss franc, Dutch guilder and Belgian franc were still on gold—in a rump gold bloc), was the catalyst to huge gold inflows to the US. This was amidst growing speculation on demise of the gold bloc and on rising domestic and geo-political unease. The US Treasury and Fed in joint operations essentially monetized the inflows, meaning that base money soared (relative to GDP by a similar amount to in the years 2010–2013). Short-term interest rates remained pinned at zero, whilst long-term Treasury bond yields were remarkably constant at around 2.50 percent at 10 years. The dollar’s devaluation had created an inflationary psychology sufficient to scare households that the real rate of return on money and bonds could be persistently negative. The strong rebound in the economy which had started in 1934 and intensified in 1935/6 provided enough confidence for a Hunt for Yield to take off. But underlying doubts as to the robustness of the economy and the likelihood of a further crash meant that business investment

remained weak compared to previous cycles. The cyclical rise in prices from the low point in the midst of the Depression should not be confused with monetary inflation. But it is plausible that on top there were concerns about future possible inflation.

In 1936, the US stock market and commodity markets were booming amidst much anecdotal evidence of soaring speculative temperatures. Official statements both from within the administration and Fed encouraged the view that the authorities were concerned about this tide of speculation. There was talk that the US might cut the price of gold (See Meltzer [2003] and Kindleberger [2013 (1973)]). In early 1937 there was a fast stock market tumble, amidst also new concerns about anti-business policies of the re-elected Roosevelt administration and anxieties regarding geo-politics (see Brown [2015]). And the Fed was now enacting a series of reserve ratio hikes (pre-announced in the autumn of 1936).

The stock market jitters brought a Fed volte-face by early spring 1937 amidst administration pressure on the Fed to do so (including direct pressure from the White House on Fed chairman Eccles to intervene in the Treasury bond market to push yields lower—pressure to which the chairman acceded). This could be seen as the “Greenspan Put” moment—a late cycle monetary injection in response to evidence of speculative temperature falls. As such it failed—perhaps because it lacked power, perhaps because the background economic, political, and geo-political environment had become so sour, meaning that new speculative narratives could not find a following. Stock markets steadied through the spring and early summer. But then the crash came in the late summer amidst further geo-political bad news, actual weak economic evidence emerging (the NBER date the cyclical peak to May). The crash led a sharp economic downturn (the Roosevelt Recession).

The next possible depression-type asset price inflation was in the early 1990s. The Greenspan Fed responded to the economic downturn of 1990–1992 (in the wake of the bust to the Volcker asset price inflation of boom-type as extended by the first Greenspan put of late 1987 and early 1988) by holding rates at abnormally low levels for an extended period (1992–1993). The crisis of the savings and loan institutions and then the first Gulf War encouraged the Fed to persevere with its aggressive stimulus. A huge carry trade grew with a key destination—Mexico—where a wildly-heralded

economic miracle was occurring. There were also large carry trades into high-yielding Canadian, Australian, and Italian government bonds. As goods and services inflation started to pick up in 1994 and economic expansion surprised on the upside, the Greenspan Fed suddenly put on the monetary brakes. By year-end the Mexico boom had turned to bust, and more broadly sharp falls occurred across previous hot markets, including the Canadian and Italian currencies (popular high-coupon destinations). The US economy slid into a short-lived growth cycle downturn triggering some reversal of US monetary tightening. The economic miracle of the IT revolution was now emerging. In itself this would have cut short the end-phase of the 1992–1994 asset price inflation. New Fed error was to turn this relief into a new asset price inflation, this time boom-type (see above).

The next depression type asset price inflation came in the aftermath of the boom-type asset price inflation which entered its bust phase in 2000–2002. The central bankers club alongside the IMF concluded that there was a real danger of deflation which had to be avoided. The Greenspan Fed took the lead—and in late 2002 President Bush had installed there the Princeton professor Ben Bernanke renowned for his radical monetary views—in reformulating the framework of monetary policy so as to “breathe in inflation.” In early 2003 the ECB was to institute a similar reformulation (Otmar Issing saying that it was as important to prevent inflation falling below 2 percent as rising above it; see Brown [2014]).

This radical monetary policy was to set off a virulent asset price inflation (type B) which featured a booming US house market and construction a private equity boom, a lot of speculative story telling about fantastic profits in new financial areas, whether related to derivatives or more specifically related to European financial integration, about the endless demand for residential real estate in Spain (the new Florida for German pensioners), and a giant carry trade. Non-financial business investment and productivity growth remained subdued.

The carry trades included fantastic demand for the newly engineered high-yield debt products (hybrid debts emanating from bank subsidiaries packaged and labeled to appear high quality). Many investors, desperate for income in the new world where

central bankers were raising short-term rates glacially, saw new possibilities in the brave new world of financial innovation. There was a huge term carry trade into long-maturity safe government debt as investors hunted for yield. The speculative narrative, in fact told by the central bankers themselves, was that long-term interest rates would remain historically low due to the emergence of a huge savings surplus in Asia (see Bernanke [2013]). The carry trades in long-maturity debt and in credits sustained the housing boom.

In Europe the giant carry trades were into the higher-yielding debts of the periphery EMU sovereign debts, where yields came down to within tiny margins above German government bonds. A first warning that the asset price inflation was in a late mid-phase came with a downturn in US residential real estate prices already in late 2006. Then there was the crash of the Shanghai equity market. By summer 2007, credit quakes could be heard. East European credits and Spanish real estate credits suddenly weakened. The Bernanke Fed took emergency action to bolster liquidity but did this on a sterilized basis, leaning against any substantial cut in money market rates or monetary base expansion in view of the fact that the goods and services inflation rate was above its targeted 2 percent (and indeed rose to around 3 percent the next year).

This was a pretty feeble Greenspan put, but was nonetheless sufficient to set off a late speculative boom in commodities, and most spectacularly oil, in the first half of 2008 (the stock market, though, had peaked in late 2007). Alongside, an incipient commodity boom was getting under way, with oil prices in mid-2008 reaching the sky. A Shanghai equity market bubble had persisted through the second half of 2007 but burst already from early 2008. Then came the panic of late summer and autumn of 2008 followed by the Great Recession. Could there have been a bigger and more powerful "Greenspan put" in 2007 that would have set the stage for a late cycle rebound, including asset price inflation through 2008 and even 2009, culminating in an even bigger bust and depression than what actually occurred? We leave that to the counterfactual historians to answer, subject to the general observation above that a lack of general good news stories makes this more difficult under depression-type than boom-type asset price inflations (unless an economic or political miracle turns up).

The depression-type asset price inflation, with its origin in the monetary experiment undertaken by the Federal Reserve in the aftermath of the Great Recession (2008–2009) is still in progress at the time of writing. By early 2016 the asset price inflation had entered into a late mid-phase. Already one key focus of the asset price inflation—the energy sector—had burst, though there was now a prospect of some recovery from very low levels. Carry trades related to some currencies (Australian dollars, Canadian dollars, Turkish liras) had already imploded at least in part. The Chinese stock market swooned. Yet other speculative temperatures were still rising (think of the “FANGS” in Silicon Valley).

True to historic form, the Federal Reserve under Janet Yellen administered a “Greenspan put”—this time in the form of backtracking from its pre-announced program of raising short-term rates four times through 2016. Central banks in Europe and Japan responded to resulting upward pressure on their currencies (against the dollar) by initiating a new intensity of monetary experimentation (negative interest rates and quantitative easing) whilst Beijing ordered a new bout of state credit expansion. The term risk premium carry trade reached new peaks through early and mid-2016 as income-famine investors (especially life insurance companies in Europe and Japan) hesitated to push the sell button even when the yields on long-maturity government debt fell to zero or slightly below.

It is too early at the time of writing to judge the overall success of Janet Yellen’s Greenspan put. The election as US president of Donald Trump seems to have spawned a very powerful speculative narrative featuring a boom in economic growth on the back of deregulation and corporate tax cuts. If the grounds for optimism prove to be true, then yes, the depression-type asset price inflation of recent years might not have a bad end after all, though there would remain the danger of a boom-type asset price inflation developing further ahead. Skeptics on Trump-economics or other sources of economic miracle, by contrast, remain concerned by the dark scenarios of an early sudden and sore end to the depression-type asset price inflation, with the latest stories proving to be just that, rather than having any predictive power. The global economic rebound triggered by the Yellen Put of 2016 would be accordingly short-lived.

## INSIGHTS FROM THE AUSTRIAN SCHOOL AND AN AGENDA FOR FUTURE RESEARCH

Asset price inflation as such is not a term in the Austrian “literature.” But many of the ideas and concepts which have been used in the exposition here are closely aligned with that tradition. And the recognition that money out of control cannot be “neutral” in effect (affecting all prices equally so having no real impact) is of course fundamental to both (see Salerno [2010]). Austrian tradition does not have investors acting rationally at all times. For example, Lachmann (1977) writes about how “expectations of different economic agents in a world of imperfect knowledge and uncertainty will diverge—and this divergence guarantees that some or even most of the expectations will be faulty and the plans based on them unsuccessful to some degree.”

Mises makes a more direct link between irrationality and monetary conditions, writing that “some of the investments made in the boom period appear, when appraised with the sober judgement of the readjustment period, no longer dimmed by the illusions of the upswing, as absolutely hopeless failures” (Mises, 2010 [1949]). There are antecedents here to the speculative storytelling and credulity highlighted here. Yes, Mises and Rothbard eschewed psychology, but over the longer haul this has had a role in the Austrian school’s tradition (Rothbard, 2012 [1976])

The Austrian business cycle theory is an intellectual neighbor to asset price inflation analysis, but distinct (see for example Sechrest [2006]). This theory does, in common with the analysis here, take as an illustrative starting point the central bank intervening in a way which would drive interest rates below neutral level (unknown). There is much in both about malinvestment and over-investment—long a key element of Austrian business cycle theory (ABCT) and more generally Austrian monetary theory. The ABCT focuses on relative production of capital and consumer goods and the relative price distortion of these. This does not feature in the analysis of asset price inflation as presented here—and indeed in type B there is low investment overall (amidst much malinvestment). The ABCT does contain the loose end of why do business people not see through the central banks manipulating rates below neutral and remain cautious in consequence; the present exposition tries to tie that end.



The concept of asset price inflation has much application to history. And indeed the view of Austrians about history is distinct. They do not see history as a laboratory for the empirical testing of hypotheses. King Solomon was undoubtedly right when he said there is nothing new under the sun, but the sample size of history is also very small. Austrian scholars have largely rejected empiricism as the model for economic thinking (Mises, 2012 [1949]). And Rothbard (2012 [1976]) comments “To the economic historian, economic law is neither confirmed nor tested by historical facts: instead the law where relevant is applied to help explain the facts. The facts thereby illustrate the workings of the law. The historian using the tools of natural and social science is in the last analysis an artist and hence there is no guarantee or even likelihood that any two historians will judge a situation in precisely the same way.”

That is the approach we take in the historical content of this article—looking at how the concepts of type A and type B asset price inflations can help us in the understanding of past episodes. But an alternative approach overlaps to a considerable degree. According to this asset price inflation is a “disease” generated by monetary disorder. The disease does not always take the same course, though by studying past episodes we can understand more about this, and hopefully improve our diagnosis power with respect to present or future episodes. The recognition from the evidence that the disease seems to take two types has much relevance for improving our diagnostic power. Even so, the disease metaphor has a big problem in application as there are not the measurements to fit. Yes we can conceptualize speculative temperature—meaning the prevalence of flawed mental processes, but how actually to measure it? This is not a science, though it may be helpful for the “artist” to use the metaphor of medicine.

What are the potential rewards and challenges that lie ahead for researchers into asset price inflation, especially if interpreted in the modern sense as described here and falling into two broad types (boom and depression?). Certainly the practical investor will derive no precise time-related probability distributions describing the unfolding phases of asset price inflation (together with its twin goods and services inflation) over coming years. The same negative comment applies to the older tradition of Austrian business cycle theory. Even though gaining little predictive power,

if any, though, students of these ideas can surely make greater sense of the economic and business world around them, becoming less impressed by superficial patterns and storytelling, and more searching for the nature of the monetary disorder behind the various symptoms. And demonstrating that monetary disorder is the culprit for the many economic and social ills associated ultimately with asset price inflation, there is a real chance of political outcomes that would favor human freedom.

What should be on the research agenda for future work?

The nature of monetary disorders and how to construct a monetary regime which minimizes these remains at the top of the list. Beyond that, there is a huge survey-type research of identifying the flawed mental processes of important groups of investment decision-makers and why these faced so little constraint even from within (self-discipline) or from outside. Then there is the huge topic of the two twins—why in some inflationary episodes is asset price inflation more virulent than goods inflation and in others the opposite? How and why does the relative virulence vary through the cycle? Some tentative answers have been outlined in this article but much research remains to be done—not in the hope of making firm predictions but of increasing our understanding about the nature of monetary disorder. Alongside that research is a huge educational job—teaching students who might one day influence practical investment or policy-making agendas about the damage to economic prosperity and freedom wrought by inflation, and in particular the asset price inflation of both types as identified in this article.

## REFERENCES

- Bernanke, Ben S. 2013. *The Courage to Act*. New York: W.W. Norton.
- Brown, Brendan. 2013. *The Global Curse of the Federal Reserve*. London, New York: Palgrave.
- . 2013. *The Curse of the Federal Reserve*, 2<sup>nd</sup> ed. London, New York: Palgrave.
- . 2014. *Euro Crash: How Asset Price Inflation Destroys the Wealth of Nations*, 3<sup>rd</sup> ed. London, New York: Palgrave.

- . 2015. *A Global Monetary Plague*. London, New York: Palgrave.
- Brunner, Robert F. and Sean D. Carr. 2007. *The Panic of 1907*. Hoboken, N.J.: Wiley.
- Friedman, Milton, and Anna J. Schwartz. 1963. *A Monetary History of the United States, 1867–1960*. Princeton: Princeton University Press.
- Friedman, Milton. 2006. *The Optimum Quantity of Money*. London: Aldine Transaction.
- Kahneman, Daniel. 2012. *Thinking, Fast and Slow*. London: Penguin.
- Kindleberger, Charles P. 1973. *The World in Depression 1929–1939*. Oakland, Calif.: University of California Press, 2013.
- Lachmann, Ludwig. 1977. “The Significance of the Austrian School of Economics in the History of Ideas.” In W.E. Grinder, ed., *Capital Explanations and the Market Process*. Kansas City: Sheed, Andrew and McMeel.
- Meltzer, Allan H. 2003. *A History of the Federal Reserve*, Vol. 1, 1913–51. Chicago: University of Chicago Press.
- . 2005. “Origins of the Great Inflation,” *Federal Reserve Bank of St. Louis Review*, March/April: 145–175.
- . 2009. *A History of the Federal Reserve*, Vol. 2, Book 1, 1951–69. Chicago: University of Chicago Press.
- Mises, Ludwig von. 1949. “Malinvestment, not Overinvestment, Causes Booms,” *Mises Daily*, May 24, 2010. Available at <https://mises.org/library/malinvestment-not-overinvestment-causes-booms>.
- Pollock, Alex J. 2013. “Riverside Gambling with Ben Bernanke,” *Library of Law and Liberty*, July 21.
- . 2016. “The Credit Crunch of 1966: an Instructive 50<sup>th</sup> Anniversary,” *Realclearmarkets*, September 22.
- Rothbard, Murray. 1976. “Praxeology: The Methodology of Austrian Economics,” *Mises Daily* July 4, 2012. Available at <https://mises.org/library/praxeology-methodology-austrian-economics>.
- . 2001. *A History of Money and Banking in the United States*. Auburn, Ala.: Ludwig von Mises Institute.

- Salerno, Joseph. 2010. *Money, Sound and Unsound*. Auburn, Ala.: Ludwig von Mises Institute.
- Sechrest, Larry J, 2006. "Explaining Malinvestment and Overinvestment," *Quarterly Journal of Austrian Economics* 9, no. 4: 27–38
- Shiller, Robert. 2000. *Irrational Exuberance*. New York: Broadway Books.
- Voth, Hans-Joachim. 2003. "With a Bang, not a Whimper: Pricking Germany's Stock Market Bubble in 1927 and the Slide into Depression," *Journal of Economic History* 63, no. 1: 65–99.
- Williams, John C. 2017. "Three Questions on R Star," *Federal Reserve Bank of San Francisco Economic Letter*, February 21.

## FITTING ATTITUDE THEORY IN ECONOMICS: MENGER AND KEYNES

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*ABSTRACT:* Despite the substantial difference in their monetary theories, Menger and Keynes agree in terms of stigmatizing the love of money. This paper attempts to demonstrate that the shared ethical judgment is defensible for both on the grounds of the same metaethical assumptions—the value theory of Franz Brentano. The paper will be structured in two main parts: I. Ethics. The first part justifies the common rejection of the love of money, at the ethical level. This classical position, as a matter of fact, is considered controversial: in the case of Menger, his criticism towards egoism seems not coherent with his alleged utilitarianism; in the case of Keynes, his disparaging remarks on the love of money as a disgusting morbidity seem in direct contradiction with his endorsement of capitalism. II. Metaethics. In the second part, the focus will be the Fitting Attitude Theory of value, namely with reference to Brentano. The objective will be to identify and discuss the Brentanian arguments by which Menger and Keynes defend their ethical rejection of the love of money.

*KEYWORDS:* Menger, Keynes, Brentano, fitting attitude theory, ethics, metaethics

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## INTRODUCTION

*A Treatise on Money* begins with the following statement: “Money of account, namely that in which debts and prices and general purchasing power are expressed, is the primary concept of a theory of money.”<sup>1</sup> Obviously, Keynes does not underestimate the function of medium of exchange, and he adds: “Something which is merely used as a convenient medium of exchange on the spot may approach to being money, inasmuch as it may represent a means of holding general purchasing power.” Nevertheless, he believes, in a way that seems to be an implicit objection to Menger, that the function of medium of exchange is not sufficient to explain the true origin of money: “But if this is all, we have scarcely emerged from the stage of barter. Money proper in the full sense of the term can only exist in relation to a money of account.” (CWK, V, p. 3)

It is worth noting that, despite this clear disagreement, Streissler writes in 1973 “that in questions of monetary theory Menger anticipated most of Keynes’s ideas.” (Streissler 1973, p. 165) I agree with Streissler, and I think it is possible to demonstrate this accord at two different levels:

- 1) At the ethical level, the love of money is judged by both of them to be incorrect because it is a conduct based on a false interpretation of the value of money; and
- 2) At the metaethical level, Menger and Keynes make reference to the same theory of value—the fitting attitude theory of Brentano—with some relevant adjustment. This common reference allows them to justify their ethical positions.

## 1. ETHICS

### 1.1. Mengerian Utilitarianism?

The Aristotelian background, as argued by Smith (1990), permeates Austrian thought. This is particularly true for Menger, whose theory of value is inspired also by *Nicomachean Ethics*

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<sup>1</sup> *Collected Writings of John Maynard Keynes*, vol. V, 3. Hereafter cited as CWK, with volume and page number.

(Campagnolo, 2010). It should be easy to conclude, as Aristotle did, that *pleonexia* (greed) is a negative conduct. Nevertheless, it is not uncommon to find the thesis that the marginalist revolution is nothing but a version of the utility theory of value (Hunt and Lautzenheiser, 2011, p. 249), or the thesis that Menger, with Jevons and Walras, gave credit to the idea that “human behavior is exclusively reducible to rational calculation aimed at the maximization of utility” (Screpanti and Zamagni, 2005, p. 166). Here is then the problem to be solved: the Mengerian rejection of the love of money is not compatible with his utilitarianist model, because hoarding money may in some situations be good and perfectly rational for the utility maximiser.

My point is the following: Menger’s model is not utilitarianist. It is true that his emphasis on self-interest can be misinterpreted. It is also true that he is not prodigal of ethical evaluations on economics and, in particular, on the use of money. The reason is simple. He endorses a typically Weberian thesis: Economics should be conceived as a value-free science. It is not surprising, therefore, that Menger wrote:

One of the strangest questions ever made the subject of scientific debate is whether rent and interest are justified from an ethical point of view or whether they are “immoral.” (Menger, 2007, p. 173)

Consequently, from this theoretical standpoint, economics examines money without any political orientation, regardless of normative standards:

It may well appear deplorable—Menger concludes—to a lover of mankind that possession of capital or a piece of land often provides the owner a higher income for a given period of time than the income received by a laborer for the most strenuous activity during the same period. Yet the cause of this is not immoral, but simply that the satisfaction of more important human needs depends upon the services of the given amount of capital or piece of land than upon the services of the laborer. (Menger, 2007, p. 174)

However, this methodological focus on self-interest does not necessarily involve the thesis that “human behavior is exclusively reducible to rational calculation.” On the contrary, Menger is well aware that, in reality, individuals never behave in a purely economic way—that is, following an ever-constant self-interest:

For along with self-interest, which at most can be recognized as the main spring of human economy, also public spirit, love of one's fellow men, custom, feeling for justice, and other similar factors determine man's economic actions. (Menger, 1985, p. 84)

It is therefore crucial, for Menger, to grasp the difference between the task of economics, considered as a science, and the task of the practical sciences of national economy. The scientific task is to investigate self-interest in its purest form, "uninfluenced by other impulses or other considerations." (Menger, 1985, p. 87) The political task is to investigate and suggest what kind of monetary policy should be more suitable, under specific (historical and geographical) conditions of a country, and to prevent or, if necessary, fix possible disorders.

This is precisely the point that Schmoller, during the famous *Methodenstreit*, failed to appreciate. So, when he keeps on criticizing, stating that his opponent would be utilitarianist and a champion of the capitalist ideology of laissez-faire, Menger stands up for himself and justifies his political stance. In his pamphlet *The Errors of the Historical School*, published in 1884, he argues for the compatibility of his methodological option with his political and ethical commitment towards a fair economic model, which should be particularly in favor of the poor. (Menger, 1935a, p. 83)

Let us now turn to the *Lectures to Crown Prince Rudolf of Austria*.<sup>2</sup> I would argue that here Menger finally shows his ethical (Aristotelian) framework. "If and when the egoism and greed of a few become an obstacle to the interests of the many—Menger explains—the time has come for the state to defend the equal rights of all." (Streissler and Streissler, 1994, p. 125) There is a special feature that qualifies the selfish action—that is, it runs counter to the common good: it is the search for a momentary advantage. The example of

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<sup>2</sup> In 1876, Menger was asked to teach the principles of political economy to Crown Prince Rudolf of Austria, whose notebooks have come to light. How can we be sure, therefore, that these lectures reflect Menger's views? Obviously, this can never be fully proved. Streissler has examined a number of alternative explanations. I agree that the most plausible is the following: as far as we know, the notebooks were handed in to Menger for correction. So, we can conclude that, "apart from occasional naive remarks and a certain effusiveness, [...] the notebooks reproduce faithfully what Menger said." (Streissler and Streissler, 1994, p. 12)



deforestation is highly telling exactly because the selfish action, in this case, aims precisely to make (and hoard) fast money:

Quite often a forest owner in the mountains who is temporarily short of money will want to clear his high-lying forests; this can easily cause irreparable damage, since the rainfall will then run off in torrents and wash out the humus layer; floods in springtime, droughts in summer, and other kinds of damage to agriculture in the plains result from such deforestation of the mountain sides and tend to worsen over time. (Streissler and Streissler, 1994, p. 127)

This aspiration to large gains of the moments worries also Keynes, who considers this short-termist style of business with opprobrium. (Keynes, 1963 [1923], p. 94) Menger's judgment is as much trenchant: the blind greed of individuals may often "jeopardize the happiness of present and future generations." (Streissler and Streissler, 1994, p. 127) So, government intervention is required to correct the selfish drift towards commodification, putting individual egoism "in its legally defined place" (Streissler and Streissler, 1994, p. 125), which is also its ethically defined place. This displacement, from blind greed to normal egoism, is partly utopic: Menger is well aware that the ethical requirement to "make any sacrifice for the common good" "is an ideal every country must strive for" (Streissler and Streissler, 1994, p. 133). But precisely that ideal of a "good life" for everyone proves, in typical Aristotelian fashion, that Menger has committed himself on a level which is not strictly economic but evaluative–normative. I agree, then, with Boettke, who says that Austrian economics can be rightly described "as humanitarian in its concerns." (Boettke, 2010, p. 164) My point is that Keynes, too, does not argue in a different way.

## 1.2. Perversion of Desire

The love of money is, for Keynes, the primary ethical question: "At any rate to me it seems clearer every day that the moral problem of our age is concerned with the love of money, with the habitual appeal to the money motive in nine-tenths of the activities of life." (CWK, IX, p. 269) What is at stake here is a perversion of desire, which is typical of capitalism. Obviously, money can be well loved "as a means to the enjoyments and realities of life."

But if it is loved “as a possession”—that is, when money becomes “the object of true religion” (CWK, II, p. 12)—the love that this specific object engenders must be recognized for what it is: “a somewhat disgusting morbidity, one of those semi-criminal, semi-pathological propensities which one hands over with a shudder to the specialists in mental disease.” (CWK, IX, p. 329)

Keynes clearly refers to Freud (Dostaler and Maris, 2000). But I believe that the argument which justifies his diagnosis of perversion is linked to an Aristotelian background. The craziness arises when one starts to use money as a store of wealth. If we accept that money is a mere intermediary, then hoarding money becomes automatically an insane use. Keynes affirms it clearly: “Why should anyone outside a lunatic asylum wish to use money as a store of wealth?” (Keynes, 1937, p. 216)

But this is the problem with Keynes: the world we live in is not the world of the classical economy. We live in a monetary world of production, in which money—also considered as a store of wealth—plays a significant role. From this point of view, the case of “liquidity preference” is paradigmatic: in a context of uncertainty, Keynes admits that holding money seems a perfectly rational choice, because it “lulls our disquietude.” (Keynes, 1937, p. 216)

Apparently, Keynes is in contradiction with himself: the love of money (however morally and psychologically repugnant it may be) is absolutely normal and indispensable, at any rate when the future is dark. As a consequence, Keynes’s ethics seem directly in conflict with his monetary theory.

I argue, on the contrary, that the critical remark on money-motive is logically related with the idea that money’s ability to act as a store of wealth amounts—for Keynes—to a malfunction of the economic system. The liquidity preference, therefore, is not rejected by Keynes on the basis of an imaginary anti-capitalist utopia, but because it can make the capitalist system a) inefficient and b) unjust, at the same time:

- a) Inefficient, because the propensity to hoard causes the “enormous anomaly of unemployment”: as Keynes stated,

...unemployment develops, that is to say, because people want the moon;—men cannot be employed when the object of desire (i.e., money)

is something which cannot be produced and the demand for which cannot be readily chocked off. (CWK, VII, p. 235)

- b) Unjust, because the money-motive causes an “arbitrary and inequitable distribution of wealth and incomes.” (CWK, VII, p. 372)

Surely, the liquidity preference can be comprehended, but it is not the best way to manage the capitalist system. In the long run, the fact of holding liquid reserves can determine a crisis of confidence in the system of economic intermediations: “Our desire to hold money as a store of wealth is a barometer of the degree of our distrust of our own calculations and conventions concerning the future.” (Keynes 1937, p. 116) The consequence of this crisis is, for Keynes, catastrophic: the normal strategic interaction between economizing agents turns into “egotistic atomism,” a concept which Keynes employs for defining modern capitalism as “a mere congeries of possessors and pursuers.” (CWK, IX, p. 267)

There is however a difference here between Menger and Keynes. Keynes seems nearly “dogmatic” in taking egotistic behavior to be necessarily related to capitalism. Menger—as we have seen—is subtler: self-interest, obviously, is “the mainspring of human economy,” but there is also the “public spirit.” It is not then “automatic”—as for Keynes—that self-interest degenerates into selfishness.

Certainly, and here Menger and Keynes share the same concern, capitalism needs to be “wisely managed.”

In the case of Keynes, what has to be noticed is that his “Aristotelian” evaluation is strongly associated with his monetary theory: if “our gods” become “avarice and usury,” then “fair is foul and foul is fair, for foul is useful and fair is not.” (CWK, IX, p. 331)

The reference to “usury” is crucial in order to understand the function of ethics in Keynes’s economic thought. In the *General Theory*, and elsewhere, Keynes argues the equivalence of his liquidity preference theory with the medieval and classical (Aristotelian) definition of usury. But what is important is this: the critical evaluation of this repugnant practice is not immediately justified on the basis of ethical reasons. As for Aristotle, usury is first of all a monetary anomaly. It is then because of this economic reason

that usury may be ethically questionable. This excerpt of *Politics* (1285b) shows the same line of argument endorsed by Keynes:

Usury—Aristotle explains—is very justifiably detested, since it gets wealth from money itself, rather than from the very thing money was devised to facilitate. For money was introduced to facilitate exchange, but interest makes money itself grow bigger. (That is how it gets its name; for offspring resemble their parents, and interest is money that comes from money). Hence of all the kinds of wealth acquisition this one is the most unnatural.

When this unnatural kind of wealth acquisition becomes a system of production, everything can be transformed in a possible means of maximizing utility:

We destroy the beauty of the countryside because the unappropriated splendors of nature have no economic value. We are capable of shutting off the sun and the stars because they do not pay a dividend. (CWK, XXI, p. 242)

It is the same as Menger's diagnosis of commodification. Under these pathological conditions, the therapy against the disgusting morbidity of the love of money is simply said: Keynes invites us "to return to some of the most sure and certain principles of religion and traditional virtue—that avarice is a vice, that the exaction of usury is a misdemeanour, and the love of money is detestable." (CWK, IX, p. 331)

There is an indicator which, for Keynes, attests that we are anew on "the paths of sane wisdom": We shall be able to "prefer the good to the useful" (CWK, IX, p. 331). That does not mean, in my view, that the pursuit of the useful is, for Keynes, necessarily detestable. As for Menger, the useful has the value of means; therefore, the criterion which regulates the useful cannot again be the useful. The means, in the world of the classical economy to which Keynes refers, is regulated by the end, and the end is the good which, for Keynes, too, always involves a nexus between the individual and the common interest. That is what Keynes, I think, intends to say when he affirms that "fair is not useful"; fair is the intersubjective measure which makes appropriate and legitimate the pursuit of the useful. If the useful becomes its own measure, then "foul is fair."

This is the same line of argument on which *Nicomachean Ethics* is grounded. But the thesis according to which money—and the useful in general—is a means is justifiable for both Menger and Keynes on the basis of the same theory of value. We have now to make explicit this metaethical level.

## 2. METAETHICS

### 2.1. Fitting Attitude Account of Value

Lachmann (1977) has argued that the importance of the Austrian school of economics is essentially the subjective revolution. This applies, in particular, to the case of Menger, where the theory of value is subject-dependent. “Essentially the same thing may be said,” according to Chisholm (2010, p. 145), of the theory of value as Brentano conceived it.<sup>3</sup> As regards Keynes, his philosophical engagement with Moore and Brentano is well known (Baldwin, 2006). Let us then begin to define this common metaethical model.

The key idea of the Brentanian model is the distinction between “intrinsic good” and “instrumental good”: “We must distinguish between primary and secondary goods—between what is good in itself and what is good for something else.” (Brentano, 2009b, p. 11) We can provide an account of this difference in the following way:

- a) What is an intrinsic good is good for its own sake *necessarily*—that is, in every possible world in which it happens. As a consequence, a good in itself, Brentano explains, “can stand side by side with the true. For whatever is true, is true in itself.” (Brentano, 2009b, p. 11)
- b) What is instrumentally good, or good as a means, is something that happens to lead to a good result in this world—that is, it varies according to time, place and circumstances; what is instrumentally good on one occasion may be instrumentally neutral, or instrumentally bad, on another occasion.

The intrinsic/instrumental distinction allows us to put the typical economic goods in the right place: “the useful—the same

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<sup>3</sup>I do not discuss here whether or not Menger has truly read Brentano. I am interested in proving the equivalence of their respective metaethical assumptions.

Brentano explains—is a clear example of the latter type of good.” (Brentano, 2009b, p. 11) Money is then an instrumental good; that is to say, that it cannot be correctly loved for its own sake.

The next step is the definition of the predicate “good,” which is strictly conceived as intrinsic good. Grounded in the analogy good—true, Brentano formulates his fitting attitude theory of value:

We call a thing true when the affirmation relating to it is correct. We call a thing good when the love relating to it is correct. In the broadest sense of the term, the good is that which is worthy of love, that which can be loved with a love that is correct. (Brentano, 2009b, p. 11)

We can outline the following definition:

A is intrinsically good =<sub>def</sub> A is necessarily such that, for any x who contemplates A, A is a “fitting object of a pro-attitude.” (Ewing, 1948, p. 152)

The emotivist hypothesis has to be rejected immediately. The good is inferred from *correct* emotions—that is, in a sense true. But here, there is ample room for justified skepticism. The more questionable point is the meaning of “worthy”. It would seem reasonable, based on the Brentanian definition of good, to exclude that “worthy” depends on a real predicative determination of a thing. From here, the problem emerges: What does it mean that an object is “worthy of love” if the object does not possess properties such as to cause the pro-attitude? What does “correctness” of an emotion mean?

The fitting attitude theory of value cannot aspire to be a correspondentist theory in the classical sense of “adequatio rei et intellectus.” Brentano states it clearly: “It would be manifestly absurd to say that the correctness of love and hate consists in a kind of identity that holds between these feelings [...] and something lying outside the feelings.” (Brentano, 2009b, p. 48) However, Brentano is decidedly much less clear when he attempts to explain how this kind of correspondence should be conceived: “One loves or hates correctly provided that one’s feelings are adequate to their object—adequate in the sense of being appropriate, suitable, or fitting.” (Brentano, 2009b, p. 48)

Maybe an example could provide a clue to understanding. Brentano endorses Aristotle: “When we contemplate knowledge,

there arises out of this contemplation a correct love of knowledge." (Brentano, 2009b, p. 99) Similarly, it is correct to become indignant about injustice, because we have an immediate awareness that injustice is worthy of disgust. This means that, following Brentano, some of our emotional reactions are similar to the *apodictic* judgment. An axiom, for example, is a proposition which requires, as the correct epistemic reply, to be accepted as immediately true. The same happens for certain emotional answers which are recognized as correct (*richtige anerkannte*). Furthermore, the ability to detect this correctness emotively is, Brentano believes, "common to all the members of our species." (Brentano, 2009b, p. 13) This binding assumption, as we will see, is shared by both Menger and Keynes.

I think it is possible to conclude this point by saying that the pro-attitude is not dependent on congruence with an outside object, but it is not even a simple matter of taste. Rather, the correspondence has to be intended between a given attitude and its "self-giveness" (*Selbstgegebenheit*). This means that, for Brentano, correct love or hate stems from an inner experience of *evidence*—an immediate perception (*Wahrnehmung*) of their truth. In a letter to Oskar Kraus, Brentano writes: "We know with immediate evidence that certain of our emotive attitudes are correct." (quoted in Chisholm, 1982, p. 72)

It is not my intention to discuss here the consistency of this meta-ethical model. My aim is to prove that Menger and Keynes opt, within limits, for it. I shall simply note, in accord with Reicher, that the immediate access to values through evidence is dubious: "If evidence is merely a feeling of certainty, clarity and distinctness, then it does not guarantee truth." (Reicher, 2009, p. 113) To sum up: A feeling of clarity is not a sufficient criterion which allows us to distinguish between real evidence and apparent evidence.

It has to be said that Brentano himself sees the problem: "There is no guarantee that every good thing will arouse in us an emotion that is experienced as being correct. When this does not occur, our criterion fails." But he is, nonetheless, convinced that "there are many things, and not just a single thing that we recognize in this manner to be good." (Brentano, 2009b, p. 15) So, having once acquired the conviction that we possess certain insightful feelings, immediately perceived as correct, Brentano can explain how some of our other feelings are, on the contrary, ethically wrong.

The argument is simple: If correct love is similar to the apodictic judgment, incorrect love is similar to prejudice. The example concerns exactly the love of money: “The feelings of inclination and disinclination often resemble blind judgment in being only instinctive or habitual. This is so in the case of the pleasure the miser takes in hoarding money.” (Brentano, 2009b, p. 12)

What, then, has to be considered ethically wrong in avarice?

First, hoarding money is “a foolish passion” (Brentano, 2009a, p. 18)—that is, it lacks the typical sort of clarity that is supposed to qualify correct emotions. Second, the lack of clarity involves a misinterpretation of the value of money: “Who loves money, completely forgets the aim and acquires a senseless desire for the means, just as if they were the end” (Brentano, 2009a, p. 18).

Therefore, we can conclude by saying that avarice is a type of love which is not in harmony (*im Einklange*) with the value of money; or the same thing—money is not worthy of love for its own sake; it is not a fitting object of a pro-attitude, being only instrumentally good.

## 2.2. Menger’s Theory of Value

It seems that Menger completely endorses the Brentanian thesis, according to which value is not a property of things, but it is subject-dependent: “The goods-character is nothing inherent in goods and not a property of goods, but merely a relationship between certain things and men, the things obviously ceasing to be goods with the disappearance of this relationship” (Menger, 2007 [1871], p. 52). Obviously, we have to bear in mind that the value in question here is related to economic goods—that is, the typical instrumental goods, following the metaethical classification proposed by Brentano. For Menger, this means that a thing acquires goods-character when it is placed in a causal connection with the satisfaction of our needs. Therefore, knowledge of goods-character is *a posteriori* and contingent, because the causal nexus varies according to time, place and circumstances. To be more precise, if a thing is to become an economic good, all four of the following prerequisites must be simultaneously present:

1. A human need (*Bedürfnis*).



2. Such properties as render the thing capable of being brought into a causal connection with the satisfaction of this need.
3. Human knowledge of this causal connection.
4. Command of the thing sufficient to direct it to the satisfaction of the need. (Menger, 2007 [1871], p. 52)

I would argue that the first prerequisite can be considered Brentanian. I ground my interpretation in the second edition of *Principles of Economics* (published posthumously in 1923), in which Menger writes no more simply “a human need” but “the perception of a human need” (see Becchio, 2014). It is true that Menger never speaks of “fitting attitude” or “correct emotion.” Besides, what is at stake here are instrumental goods. It is also true that Brentano never speaks of “human need.” Despite the differences, I believe that there is a point of agreement. Menger considers needs as always being in connection with desires: A need appears as involving a request of satisfaction and, therefore, as strictly related to desires and interests. This point can also be found in the Brentanian model, and I would argue that it is not a mere coincidence. As Smith (1994) and Shionoya (2012) showed, it seems reasonable to infer that Mengerian subjectivism has been directly influenced by Brentano’s psychology. Brentano, in fact, stresses three classes of mental phenomena:

- a) ideas or *presentation*;
- b) *judgments* (affirmations and negations);
- c) *emotions*.

Presentation, which we acquire through perception or imagination, does not mean “that which is presented” but rather the *act* of presentation. This act is the basic part of the mind: Every mental act (judgment or emotion) is superimposed on presentation.

Every judgment is either true or false: It is true when its affirmation is correct; as a consequence, when something is affirmed as correct, it is implied that it is false (incorrect) to deny that which was affirmed.

Finally, the third class includes love and hate but also interests, desires, acts of will and choices.

Now, then, the Mengerian “perception of a human need” can be classified, I believe, as being on the first level: It is a self-presenting

state through which we know a need and its correlative desire for satisfaction. Therefore, the goods-character of a thing, for Menger himself, is related to an emotion (need-desire) which is based on a self-presenting perception. To put it more precisely: human needs and desires are the basic standard of the evaluation of economic goods. This is why Menger stated that the *nature* of the economic value is subjective.

It is actually not very different from Aristotle. Or, at least, this is the “subjectivist interpretation” of Book V of *Nicomachean Ethics*, which Menger knows well (Menger, 2007 [1871], pp. 277, 295). Here, Aristotle argues that there can be no exchange if goods were not measured by some standard. “This standard is in fact demand (*chreia*), which holds everything together; for if people needed nothing, or needed things on different degrees, either there would be no exchange or it would not be the same as it now is” (Aristotle, 2004 [c. 350 BC], p. 90).

So far, then, Menger is Brentanian because of his Aristotelian background. The other prerequisites, namely the second and the third, are clearly beyond the Brentanian framework.

With the second prerequisite, we understand that the goods-character of a thing also depends on the intrinsic properties of that thing. The goods-character is not obviously reducible to something inherent in goods; but not everything is capable of being brought into a causal connection with the satisfaction of our human needs.

At the metaethical level, Menger seems not to be content with the Brentanian criterion of evidence: The self-presenting perception does not function as an inner experience of clarity, which would thus guarantee itself and the emotion which is presented. Rather, I think that Menger tends to combine Brentano’s subjectivism with a classical (correspondentist) theory of truth. In fact, with the third prerequisite, Menger states that value, which remains dependent on desire, requires “a judgment economizing men make about the importance of the goods at their disposal for the maintenance of their lives and well-being” (Menger 2007 [1871], p. 121). The Mengerian theory of value intends to be subjective and objective at the same time. I agree with Zúñiga (1998, p. 164), who defends this double character as follows: “The judgment that the agent makes regarding the economic object is subjective but its truth or falsity

can be settled objectively by the correspondence of the judgment with facts in the world.”

I would also add that the subjective judgment is not a product of arbitrariness because the relation of correspondence is between the real properties of the thing desired and *real* needs and desires. Menger believes that it is possible to identify the “true constitution of things” (Menger, 2007 [1871], p. 53) and the “true human needs”<sup>4</sup> by separating them from their false counterparts. This distinction, which is borrowed from Aristotle, is easy to set: When properties are “erroneously ascribed to things that do not really possess them” or when “non-existent human needs are mistakenly assumed to exist,” we enter in the irrational domain of “*imaginary* goods” and “*imaginary* needs” (Menger, 2007 [1871], p. 53).

Menger, then, is more Aristotelian than Brentano because of his reference to the true constitution (i.e. essence) of things and the reference to “the *naturality* of the needs.”

What is problematic, in my opinion, is how to justify the imaginary/true distinction within a metaethical framework which is not purely objectivist. It is unquestionable, as stated above, whether Menger advocates for a correspondentist model of truth; but its reference to “human nature” and the “essence of things” is only apparently Aristotelian because it is consciously detached from any metaphysical background (see Crespo, 2003).<sup>5</sup> Menger’s position on metaethics actually swings between objectivism and subjectivism.

On the one hand, Menger would claim to establish the “exact types” of the fundamental human needs. At that point, he would come to classify the imaginary needs as “incorrect” tokens; on the other hand, he is forced to admit that there is no objective measure of needs and “true” values (Menger, 2007 [1871], pp. 146, 299) since we always have to deal with the (subject-dependent) perception of needs and with the (subject-dependent) use value of goods.

Because of this oscillation, Menger is vulnerable to criticism from a purely subjectivist standpoint. Mises (2003 [1933], p. 185), for

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<sup>4</sup> The expression “wahre Bedürfnisse” is actually in the second edition of *Principles of Economics* (see Shionoya, 2012, p. 75).

<sup>5</sup> We will see that this is a problem which Keynes also had to face.

example, views the first case (imaginary goods) as obviously inconsistent: It is highly possible that things that are “objectively” useless become subjectively goods in the economic sense of the world. The second case (imaginary needs) is even more problematic: Who can decide whether a certain human need is mistakenly assumed to exist? But Mises’s criticism is even more radical. Menger may condemn “certain modes of behavior as absurd and opposed to ‘real’ needs.” The question, however, is that “such judgments—for Mises—are beside the point for a science dealing with the reality of human action. Not what a man should do, but what he does, counts for praxeology and economic. (Mises, 1998 [1949], p. 96)

But the issue, with regard to Menger, is that he is neither a pure objectivist nor a pure subjectivist. The attribution of value is not a matter of pure choice; it is also a matter of judgment. Menger states it clearly, with reference to Aristotle: If the attribution of value derives from a process involving rational deliberation, then we are in the field of true needs and goods; if the process is, for some reason, irrational—that is, if it involves the false ascription of properties to things that do not really possess them, we are in the field of imaginary needs and goods. Markets provide incentives to generate such goods. I then agree with Caldwell, who states that “sellers of snake oil are constantly with us, and some people are taken in” (Caldwell, 2006, p. 381). But this process is open to critical examination. As a consequence, we can learn and rectify this kind of mistake.

This is why I am inclined to think that the imaginary/true distinction is anything but arbitrary. In particular, I believe, contrary to the claims of Mises, that the distinction is a valid criterion that can be used to detect and correct the process of assigning an imaginary value to money. Let us see why.

According to Mengerian metaethical laws, we said that being good is not a property of a thing but a relationship between a thing and a need; it depends on a judgment regarding a thing’s actual ability to satisfy real needs. The case of money is no different: As we know, money has a goods-character because it is a thing which is supposed to have a certain degree of marketability—that is, a non-inherent property to facilitate the exchange of economic goods.

What happens, then, when one loves money for its own sake? The money lover assigns to money the supposed inherent property of being good in itself. This is the first metaethical mistake. The attribution of this imaginary value involves the false perception of an imaginary need—the urge of accumulation. This is the second metaethical mistake. The need to hoard money is not real, because it does not arise from rational deliberation on the real nature of money and from a correct assessment of human nature; it follows from a process of fetishization. This is why, for Menger too, money is not worthy of love; this is as a consequence of his metaethical assumptions.

### 2.3. Keynes's Theory of Value

As it has been demonstrated, Keynes knows and admires Brentano's work (Bateman, Davis, 1991; Baldwin, 2006). I am interested in highlighting a theoretical agreement, which I consider relevant to proving my thesis. In a famous, unpublished paper (*Miscellanea Ethica*, 1905), Keynes endorses a metaethical view, which is close to the fitting attitude theory of value endorsed by Brentano: "An object, towards which a valuable mental relation is possible, is liable to receive the same epithet as the mental relation it inspires. [...] Anything which is fit to inspire a good feeling is itself regarded as good." (Quoted in Davis, 1994, p. 78)

As we already observed, the attribution of goods-character is justifiable on the basis of an inner experience of a pro-attitude which is immediately perceived as correct. For Keynes too, this state of mind, which is related to a *fit* object, has an intrinsic value. This means that, always in harmony with the Brentanian metaethical framework, Keynes, as well as Menger, grounds his line of argument in the intrinsic/instrumental distinction. Only the things that possess an intrinsic value may be ethically justifiable as ends; on the contrary, the things that have only an instrumental value count as means in relation to the ends.

However, Keynes, again in a similar way to Menger, is not purely Brentanian. In my opinion, there are two points of difference with the Brentanian model:

- 1) The attempt to combine the subjective attribution of goods-character with a certain objective standard of evaluation.

2) The thesis that some states of affairs may have intrinsic value apart from experience.

1) The pursuit of an objective standard of evaluation leads Keynes towards the reference to the (problematic) normative function of human nature: “Assuming the approximate uniformity of human organs, we can often—if not near enough—say what, apart from peculiar circumstances, a man *ought* to think and feel” (quoted in Davis, 1994, pp. 80–81). Obviously, this reference is not intended to be perfectly Aristotelian. Keynes is well aware that his position “lacks the precision which a metaphysician would desire.” In my opinion, it is more understandable in Humean terms. It is known that Hume argues for the universality of human nature exactly on the grounds of a certain “similarity” between the minds of all men:

The minds of all men—writes Hume—are similar in their feelings and operations; nor can any one be actuated by any affection, of which all others are not, in some degree, susceptible. As in strings equally wound up, the motion of one communicates itself to the rest; so all the affections readily pass from one person to another, and beget correspondent movements in every human creature. (Hume, 2000 [1739-1740], nn. 575–576)

I consider the Keynesian claim for the “approximate uniformity of human organs” to be along the same line of argument. Surely, this reference to a certain regularity in human thinking and feeling does not lead to an objectivist position. But I consider it sufficient, as in the case of Hume, to reject a thoroughly relativist subjectivism.

2) This is why Keynes is convinced that not only states of mind but also some states of affairs may have intrinsic value. Beauty, harmony, justice and virtue are, according to Keynes, some examples of intrinsically valuable states of affairs. This is the second difference from the Brentanian model. Following Brentano, the intrinsic value of a state of affairs is always dependent on the emotions which are appropriate to, or required by, that state of affairs. For Keynes, some states of affairs can be judged based on their intrinsic value—that is, Carabelli suggests, totally apart from their influences on experience. In another early paper (*On the Principle of Organic Unity*, 1910), Keynes states clearly this anti-consequentialist position:

We ought to aim at bringing into existence a good state of affairs, and we should not judge rightly if our approval and disapproval has reference to isolated consciousness only [...]. Intrinsic value is ethical. Some states of affairs ought to exist rather than others apart from their influence or experience. (Quoted in Carabelli, 1998, p. 198)

Let us now ask: How can we classify the love of money in reference to these metaethical assumptions?

The first point to remember is that money—and the market in general—belongs to the domain of instrumental goods. Keynes admits that he borrowed the distinction from Marx. As rightly pointed out by Meikle (2001, p. 41), Keynes might also have got it from Aristotle, whom he read, and who first made the distinction in *Politics* Book One (Aristotle, 1998 [350 BC]). Besides, Marx himself took it from Aristotle and made it the cornerstone of his analysis of the market economy. As a consequence, the love of money for its own sake is not a good feeling, because money is not a fitting object of such love. An instrumental good is fit to inspire appreciation, but the correct appreciation of an instrumentally good object is not for its own sake but for the sake of the intrinsic good it helps to realize. The love of money is not, then, a valuable mental relation (it is foolish, strictly speaking), because it is grounded in a misinterpretation: A means, belonging to the category of useful, becomes an end—that is, it is mistakenly treated as an intrinsic good.

The second questionable point is that the love of money engenders an unfair social order which is directly in conflict with a state of affairs which Keynes considers intrinsically good and, for that reason, ethically required.

Therefore, Keynes justifies his ethical refusal of the love of money, starting from the same metaethical premises endorsed by Menger.

## CONCLUSION

To sum up, Menger and Keynes can be considered in light of two significant points of agreement:

- 1) At the ethical level, I have tried to demonstrate that, for both Menger and Keynes, the line of argument is the same: The useful, which is not *per se* morally problematic, becomes ethically stigmatizable when it tends to occupy the entire horizon of human

desires. Actually, the useful—as, for example, money—has value as means; therefore, the ethical criterion which regulates the useful cannot again be the useful. The means, in the world of the classical (Aristotelian) economy to which Menger and Keynes refer, is regulated by the end, and the end is the common good. This is why the love of money, which is a clear symptom of egoism, is ethically and politically detestable.

2) At the metathetical level, I have argued that, for both Menger and Keynes, the love of money is unjustifiable with reference to a common metaethical assumption, the fitting attitude theory of value conceived by Brentano, combined with an objective standard, which balances the subjectivist background of the Brentanian model.

## REFERENCES

- Aristotle. c. 350 B.C. *Politics*. Trans., with Introduction and Notes, by C.D.C. Reeve. Indianapolis, Cambridge: Hackett, 1998.
- . c. 350 B.C. *Nicomachean Ethics*. In R. Crisp, trans., ed. Cambridge: Cambridge University Press, 2004.
- Baldwin, Thomas. 2006. “Keynes and Ethics.” In Roger E. Backhouse and Bradley W. Bateman, eds., *Cambridge Companion to Keynes*, pp. 237–256. Cambridge: Cambridge University Press.
- Bateman, Bradley W. and John B. Davis, eds. 1991. *Keynes and Philosophy: Essays on the Origins of Keynes’s Thought*. Aldershot, Hants, England: Edward Elgar.
- Becchio, Giandomenica. 2014. “Social Needs, Social Goods, and Human Associations in the Second Edition of Carl Menger’s *Principles*,” *History of Political Economy* 46, no. 2: 247–264.
- Boettke, Peter J. 2010. “Back to the Future: Austrian Economics in the Twenty-First Century.” In Peter J. Boettke, ed., *Handbook on Contemporary Austrian Economics*, pp. 157–166. Cheltenham, UK; Northampton, Mass.: Edward Elgar.
- Brentano, Franz. 2009a. *Foundation and Construction of Ethics. Compiled from His Lectures of Practical Philosophy by F. Mayer-Hillerand*. E. Schneewind, trans. London, New York: Routledge.



- . 1889. *The Origin of the Knowledge of Right and Wrong*. R. Chisholm and E. Schneewind, trans. London, New York: Routledge, 2009b.
- Caldwell, Bruce. 2006. "Hayek, Social Science and Politics: Reply to Hill and Friedman," *Critical Review* 18, no. 4: 377–390.
- Campagnolo, Gilles. 2010. *Criticism of Classical Political Economy: Menger, Austrian Economics and the German Historical School*. London: Routledge.
- Carabelli, Anna. 1998. "Keynes on Probability, Uncertainty and Tragic Choices." In *Cahiers d'économie politique*, pp. 30–31, 187–226.
- Chisholm, Roderick M. 1982. *Brentano and Meinong Studies*. Amsterdam: Rodopi.
- . 2010. "Brentano on Preference, Desire and Intrinsic Value." In Wolfgang Grassl and Barry Smith, eds., *Austrian Economics. Historical and Philosophical Background*, pp. 138–147. London: Routledge.
- Crespo, Ricardo. 2003. "Three Arguments against Menger's Suggested Aristotelianism," *Journal des économistes et des études humaines* 13, no. 1: 63–84.
- Davis, John B. 1994. *Keynes's Philosophical Development*. Cambridge: Cambridge University Press.
- Dostaler, Gilles and Maris, Bernard. 2000. "Dr. Freud and Mr. Keynes on Money and Capitalism." In John Smithin, ed., *What is Money?* pp. 235–256. London, New York: Routledge.
- Ewing, Alfred C. 1948. *The Definition of Good*. New York: Macmillan.
- Hume, David. 1739–1740. *A Treatise of Human Nature: Being an Attempt to Introduce the Experimental Method of Reasoning into Moral Subjects*. D.F. Norton and M.J. Norton, eds. Oxford: Oxford University Press, 2000.
- Hunt, Emery K. and Mark Lautzenheiser. 2011. *History of Economic Thought: A Critical Perspective*. 3rd ed. New York, London: M.E. Sharpe.
- Keynes, John Maynard. 1919. "The Economic Consequences of the Peace." In *The Collected Writings of John Maynard Keynes, vol. II: The Economic Consequences of the Peace*. London: Macmillan, 1971.
- . 1923. "Social Consequences of Changes in the Value of Money." In *Essays in Persuasion*, 80–104. New York: Norton, 1963.

- . 1925. "Short View of Russia." In *The Collected Writings of John Maynard Keynes*, vol. IX: *Essays in Persuasion*, pp. 253–271. London: Macmillan, 1978.
- . 1930. "Economic Possibilities for Our Grandchildren." In *The Collected Writings of John Maynard Keynes*, vol. IX: *Essays in Persuasion*, pp. 321–332. London: Macmillan, 1978.
- . 1933. "National Self-Sufficiency." In *The Collected Writings of John Maynard Keynes*, vol. XXI: *Activities 1931–1939. World Crises and Policies in Britain*, pp. 233–246. London: Macmillan, 1982.
- . 1936. "The General Theory of Employment, Interest and Money." In *The Collected Writings of John Maynard Keynes*, vol. VII. London: Macmillan, 1973.
- . 1937. "The General Theory of Employment," *Quarterly Journal of Economics* 51, no. 2: 209–223.
- . 1973. "My Early Beliefs." In *The Collected Writings of John Maynard Keynes*, vol. X: *Essays in Biography*, pp. 433–450. London: Macmillan.
- Lachmann, Ludwig M. 1977. *Capital, Expectations and the Market Process. Essays on the Theory of the Market Economy*. Kansas City: Sheed, Andrews, and McNeel.
- Meikle, Scott. 2001. "Quality and Quantity in Economics: The Meta-physical Construction of the Economic Realm." In Uskali Mäki, ed., *The Economic World View. Studies in the Ontology of Economics*. pp. 32–56. Oxford: Oxford University Press.
- Menger, Carl. 1883. *Investigations into the Method of the Social Sciences: With Special Reference to Economics*. L. Schneider, trans. New York: New York University Press, 1985.
- Menger, Carl. 1871. *Principles of Economics*. J. Dingwall and B.F. Hoselitz, trans. Auburn, Alabama: Ludwig von Mises Institute, 2007.
- Mises, Ludwig von. 1933. *Epistemological Problems of Economics*. George Reisman, trans. Auburn, Alabama: Ludwig von Mises Institute, 2003.
- . 1949. *Human Action. A Treatise on Economics. The Scholar's Edition*. Auburn, Alabama: Ludwig von Mises Institute, 1998.
- Reicher, Maria E. 2009. "Value Facts and Value Experiences in Early Phenomenology." In Beatrice Centi and Wolfgang Huemer, eds.,

- Values and Ontology. Problems and Perspectives*, pp. 105–136. Frankfurt: Ontos Verlag.
- Screpanti, Ernesto, and Stefano Zamagni. 2005. *An Outline of the History of Economic Thought*. Second ed. David Field and Lynn Kirby, trans. Oxford: Oxford University Press.
- Shionoya, Yuichi. 2012. "Austrian Subjectivism and Hermeneutical Economics." In Yagi Kiichiro, Yukihiro Ikeda, eds., *Subjectivism and Objectivism in the History of Economic Thought*, pp. 73-90. London, New York: Routledge.
- Smith, Barry. 1990. "Aristotle, Menger, Mises. An Essay in the Metaphysics of Economics." *History of Political Economy*, Annual Supp. 22: 263–288.
- . 1994. *Austrian Philosophy. The Legacy of Franz Brentano*. Chicago and LaSalle, Illinois: Open Court Publishing Company.
- Streissler, Erich W. and Streissler Monika. eds. 1994. *Carl Menger's Lectures to Crown Prince Rudolf of Austria (1876)*. Aldershot, UK: Edward Elgar Publishing.
- Tieffenbach, Emma. 2010. "Searle and Menger on Money," *Philosophy of the Social Sciences* 40, no. 2: 191–212.
- Zúñiga, Gloria L. 1998. "Truth in Economic Subjectivism," *Journal of Markets and Morality* 1, no. 2: 158–168.

## BOOK REVIEW

### *DEMOCRACY IN CHAINS: THE DEEP HISTORY OF THE RADICAL RIGHT'S STEALTH PLAN FOR AMERICA*

NANCY MACLEAN  
NEW YORK: VIKING PRESS, 2017, 334 pp.

THOMAS J. DiLORENZO

The primary theme of *Democracy in Chains* by Nancy MacLean, a Duke University history professor, is that participation in American democracy by conservatives or libertarians threatens the destruction of American democracy by imposing restraints on the unlimited growth of government. She claims to have only realized this dire threat in “the early 2010s” when “something extraordinarily troubling had somehow entered American politics” (p. xv). Rather than the usual “bipartisan” support for the never-ending growth of government by both parties, a few “actions” of a few

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Republican governors and congressmen “seemed intended in one way or another to reduce the authority and reach of government....” To Nancy MacLean this was “a fire bell in the night,” to borrow a phrase from Thomas Jefferson.

The alarming things that were so disturbing to MacLean were the actions of Wisconsin Governor Scott Walker attempting to save his state from bankruptcy by restraining the political clout of teachers’ unions and other public employee unions; New Jersey Governor Chris Christie’s criticisms of the teachers’ unions in his state; opposition to proposals to allow voter registration without showing proper I.D.; and the existence of articulate arguments in opposition to more socialist central planning of health care (a.k.a. “Obamacare”).

Everything seemed to be going swimmingly, with the most far-left ideologue in history occupying the White House, and Democrat Party dominance of Congress, and then all of this happens. Leftists like Nancy MacLean claim to have been blindsided by political opposition that they thought had been completely neutered. So left-wing academics, armed with their generous government and (left-wing) foundation grants, immediately “tried to get a better handle on what exactly was driving this sortie from the right.” This sudden opposition to the practice of effectively granting unlimited powers to raise taxes to public employee unions, and critiques of socialized medicine, is un-American, un-democratic, and a mortal threat to the American way of life, she claims.

There’s no need to panic, however, for MacLean claims to have discovered the root of the problem. Other leftist academics have attempted to uncover some kind of secret and sinister “master plan” to transform America into the dreaded (by the Nancy MacLeans of the world) free society by investigating the writings of Adam Smith, Milton Friedman, Ayn Rand, and F.A. Hayek, she says. But with no avail. “[S]uch inquiries ran aground, because none of the usual suspects had sired this campaign” (p. xvii). “The missing piece of the puzzle,” she victoriously announces, “was James McGill Buchanan” and the Public Choice school of economics (p. xvii). This, she claims, is “the true origin story of today’s well-heeled radical right.” Without Buchanan and public choice economics, the “far right” would be “incapable of doing serious damage to American society” (p. xvii).

The mortal threat to MacLean's cherished goal of the relentless push toward unlimited government (i.e., totalitarian socialism) that the public choice school supposedly poses is that it has taught a great many people a great deal about how government actually works. Once they understand the process, it then becomes possible to propose changes to the process—or to the constitutional rules of the game—that could re-impose founding-father-style constitutional limits on the growth of government. All those years of Hamiltonian manipulation of “the living constitution” by leftist government lawyers in black robes could conceivably be reversed!

Indeed, Buchanan himself often said that public choice was essentially a rewriting of much of the writings of men like James Madison and Jefferson in the language of modern public choice economics (it was Jefferson who said that “the natural tendency of things is for government to gain ground and for liberty to yield”; and that government needed to be “bound by the chains of the Constitution”). He also was fond of saying that “no one could be a socialist” if they understood public choice theory. Perhaps Nancy MacLean is on to something here.

In Nancy MacLean's mind, there's nothing wrong with America's government establishment employing vast resources educating people how to use the levers and processes of government to *expand* its size, scope, powers, and budgets. This is accomplished today with the help of the vast university system which has become one giant taxpayer-financed think tank for statism with only a handful of exceptions; through a “mainstream media” that seems every bit as propagandistic as *Pravda* was during the Cold War; hundreds of thousands of government bureaucrats at all levels of government, every one of which is a propagandist/lobbyist for bigger government; a K-12 school system that is thoroughly embedded with leftist political correctness; huge armies of political consultants, lobbyists, and paid propagandists; a popular culture that endlessly repeats anti-capitalist, anti-libertarian, and pro-statist themes; and thousands of government-funded nonprofit organizations, from the AARP to the Wilderness Society, that promote more interventionism and less freedom. On top of that are private foundations like Ford, Carnegie, and Rockefeller that have showered leftist academics with foundation grants for decades, not to mention

the contributions of socialistic billionaires like George Soros, Ted Turner, and Bill Gates. For years, the Capital Research Center in Washington, D.C. published an annual study entitled *Patterns of Corporate Philanthropy* that documented that for every \$1 corporate foundations gave to a conservative or libertarian organization, between \$2 and \$3 was given to a left-of-center group.

All of this is apparently a proper if not essential part of American democracy, but *not* the writings of James Buchanan and other public choice scholars, and certainly not conservative or libertarian foundations that would financially support such research and writing, even if their multi-million dollar donations are a mere pittance compared to the funding of the Left. Hence the purpose of *Democracy in Chains* is to discredit and even defame Buchanan, the public choice school, and especially wealthy conservative or libertarian philanthropists like Charles Koch who have funded such research and education. The bulk of the book is a relentless critique, sometimes bordering on libel and slander, of James Buchanan and Charles Koch, the bogeyman of the American Left.

MacLean learned a great deal about Buchanan by spending what must have been weeks, or months, going through all of his personal files in "Buchanan House" on the George Mason University campus. (When James Buchanan and his Public Choice Center moved from Virginia Polytechnic Institute to George Mason University in the mid 1980s the old president's house was allocated to Buchanan as his office and was named "Buchanan House").

MacLean boasts of how Buchanan's intellectual heirs at George Mason left the door to Buchanan House unlocked so that someone like herself could rifle through all of the Nobel laureate's private papers and files and use them to write a book that attempts to defame him. (She does call him a genius, but an "evil" genius).

The book is also an attack on libertarianism in general, as MacLean cherry picks quotations here and there from various libertarian-oriented writers, usually out of context, in order to critique and ridicule them. Oddly, there is only one mention of the most famous (non-academic) libertarian in the world, Ron Paul. MacLean mentions in passing on page 144 that, in the late 1970s, Ron Paul once voiced approval of a Reason Foundation proposal for city governments to put city services up for competitive bidding.

MacLean's critique begins with a chapter about John C. Calhoun, of all people, who is not even cited a single time in Buchanan's magnum opus (with Gordon Tullock), *The Calculus of Consent*. I never heard Buchanan mention Calhoun when I took his Ph.D.-level Public Finance course at VPI in the fall of 1977, or when I was a colleague of his for a few years at George Mason University in the 1980s. If he mentioned Calhoun in any of his writings, I am not aware of it. Neither is Nancy MacLean, apparently, for she does not present a single footnote to make the point that Buchanan was somehow following in Calhoun's footsteps.

Nevertheless, Calhoun did write in the same philosophical spirit as Madison and other founders, and MacLean quotes Murray Rothbard (p. 2) to that effect. Buchanan did consider much of public choice theory to be derived from the kind of thinking possessed by the framers of the Constitution. Her discussion of Calhoun, however, is often distorted, just plain incorrect, and even cartoonish. For example, she claims that the only people in Calhoun's South Carolina who would have been harmed by the 1828 Tariff of Abominations, which imposed an extortionate, 45 percent average tariff rate on imports, were wealthy plantation owners. The man who was supposedly Buchanan's intellectual inspiration, she is saying, was a mere apologist for slave owners. Such talk is simply a joke, for high tariffs on woolen blankets (100 percent), shoes, farm tools, leather goods, and myriad other consumer products negatively affected *the entire population*. Moreover, the Tariff of Abominations was a deeply regressive tax that imposed a harsher burden on the lower-income people whom MacLean, as a card-carrying leftist, claims to be championing.

MacLean is also factually wrong when she calls South Carolina's opposition to the Tariff of Abominations "the first regionwide tax rebellion in U.S. history" (p. 6). The Pennsylvania Whiskey Rebellion (1791) and Shay's Rebellion in Massachusetts (1786) occurred decades earlier. The American Revolution itself was in part a tax rebellion ("Taxation Without Representation!"). Did the American colonists fight a revolution so that they could maintain the system of slavery that the king of England had imposed on them? This is what MacLean's logic, such as it is, would suggest.

These facts illustrate another falsehood in the book, namely, MacLean's assertion that such tax protests "did not arise where



slavery was absent" (p. 7). Yes, they did, and they were led mostly by yeoman farmers in Pennsylvania and Massachusetts who protested the imposition of national whiskey and property taxes.

MacLean's apparent strategy here is to falsify history by insisting that all early-American tax protests occurred only to "protect slavery" for the wealthy "propertied class." She quotes another leftist historian who wrote incorrectly that "the anti-government rhetoric that continues to saturate our political life is rooted in [support for] slavery rather than liberty" (p. 7). This would imply that all of the anti-government rhetoric of the founders, including Jefferson's "train of abuses" in the Declaration of Independence, the writings of Thomas Paine, and much else was all designed only to "support slavery." What nonsense.

She then makes numerous analogies to today's libertarian intellectual critics of Big Government, arguing that they of course are not slavery defenders, but their motives are not much better—they are merely paid intellectual prostitutes defending the super-rich. The academic recipients of multi-million-dollar government or (left-wing) foundation grants, on the other hand, are assumed to be as morally pure and objectively honest as the driven snow.

Like all radical socialists, MacLean is a harsh, sneering critic of private property, following in the footsteps of Marx and Engels who called for the "ABOLITION OF PRIVATE PROPERTY" in *The Communist Manifesto*. She repeats her mantra in several chapters that libertarian defenders of property rights are really only defending the rights of perhaps the top one-half of one percent of income earners—the wealthiest of the wealthiest. Not even the "one-percenters," she says, but the one-half-of-one-percenters. Who needs private property if only the wealthiest of the wealthy, who became wealthy in the first place by exploiting the rest of us, benefit from it?

That was supposedly true in Calhoun's day, as it is today, she insists. She cites Mises, Rothbard, Hayek, and Friedman as though she has read their writings on property rights, but she either hasn't or chose to ignore them. Mises was especially clear when he wrote in *The Free and Prosperous Commonwealth* (p. 67) that "Private property creates for the individual a sphere in which he is free of the state. It sets limits to the operation of the authoritarian will.... It thus

becomes the basis of all those activities that are free from violent interference on the part of the state. It is the soil in which the seeds of freedom are nurtured and in which the autonomy of the individual and... material progress are rooted." Secure property rights are a prerequisite for market exchange, market prices, the division of labor, and the human civilization created thereby.

Like other advocates of unlimited powers of the central state, MacLean also falsifies the history of nullification and interposition by asserting that the idea began with Calhoun, and was only meant to defend slavery. But as Tom Woods (2010) shows in his book, *Nullification*, the American colonists were the first nullifiers. Jefferson and Madison then adopted the concept in the Virginia and Kentucky Resolutions of 1798 that nullified the outlawing of free political speech through the Sedition Act that was being enforced by the Hamiltonian Federalist Party. Northern states nullified the Fugitive Slave Act, and Ohio nullified the chartering of branches of the Bank of the United States within its borders. New Englanders cited Jefferson's Kentucky Resolve to justify nullifying President Jefferson's trade embargo and to decline participation in the War of 1812.

McLean also falsely asserts that Calhoun was the first to talk of two conflicted classes in terms of net taxpayers (producers) and net tax consumers. This, too, was not original with Calhoun, but was introduced to American political philosophy by Jefferson and others who were familiar with the writings of the French "Industrialist School" of such writers as Augustin Thierry, Charles Comte, Charles Donoyer, Antoine Destutt de Tracy, Benjamin Constant, and Jean-Baptiste Say (Raico, 2006). Nor was Calhoun the lone American writing about what is known as libertarian class analysis; William Leggett, the owner and editor of the *New York Post* during Calhoun's time and a well-known abolitionist, was a prolific libertarian writer who also wrote of the injustice of empowering "net tax consumers" to plunder their fellow citizens.

MacLean really did her homework after spending all that time in Buchanan House, for a good portion of the book is a biographical sketch of James Buchanan, beginning with his birth in Gun, Tennessee in 1791. She briefly discusses his intellectual exodus from Middle Tennessee State Teachers College (triple major in English, Economics, and Mathematics), his time on the staff of Admiral

Nimitz during World War II, the University of Tennessee (Master's degree in Economics), the University of Chicago, University of Virginia, UCLA, Virginia Polytechnic Institute, and George Mason University. She discusses at length the Thomas Jefferson Center for Political Economy and Social Philosophy that Buchanan founded at the University of Virginia, which produced many fine scholars in the classical liberal tradition.

Throughout the book, MacLean strains mightily to distort Buchanan's views to make him sound as outlandish as possible. For example, on page 49 she quotes Senator Harry F. Byrd of Virginia as having been opposed to *any* government borrowing at all for "public investments" and then writes that Byrd "would have applauded the book on public debt that Buchanan was writing at the time." She is implying here that Buchanan shared this view of debt, which he did not. If she had read Buchanan's book on public debt she would have learned that he approved of government debt for infrastructure, for example, as long as the taxes to service the debt were earmarked for that purpose.

There is a long-winded discussion of the resistance to desegregation of education in Virginia in the 1960s, which seems totally irrelevant to the supposed theme of the book, or to anything Buchanan was writing about at the time. Again, her purpose here seems to be to argue that the origins of modern libertarianism are in the Virginia opponents of desegregation. "In these final hours of the massive resistance [to desegregation] era... can be found the seed of the ideas guiding today's attack on the public sector and robust democracy alike," she writes on page 72.

Another outlandish falsehood in *Democracy in Chains* is MacLean's statement on page 79 that "the major deficiency" of the Virginia School (i.e., the Public Choice School), is "the failure to search for empirical tests of the new theories." If MacLean had looked at any one issue of the journal *Public Choice* she would have learned that this is unequivocally untrue. Public Choice became very mainstream, and Buchanan was awarded the Nobel Prize for his part in it, precisely because there had been hundreds, or thousands, of published econometric tests of its propositions. Bob Tollison alone, Buchanan's most prolific student, authored and co-authored literally hundreds of academic journal articles that were econometric tests of various hypotheses drawn from public

choice theory. I personally attended every weekly Public Choice seminar, and every economics department seminar, at VPI from September 1976 to June 1979 as a graduate student and can attest that at least 90 percent of all the papers presented there contained some kind of empirical test. MacLean's assertion is preposterous. It's hard to believe that with all the effort that went into this book, sitting in Buchanan House for weeks on end, she never once looked at an issue of *Public Choice* on the shelf in Buchanan's office.

Among the mountain of falsehoods in this book is the further statement on page 98 that public choice scholars involved in the rent-seeking literature "depicted as rent-seeking *any* collective efforts by citizens or public servants to prompt government action that involved tax revenues" (emphasis added). This is another silly falsehood. Buchanan and Tullock were not anarchists; they were proponents of limited, constitutional government who generally approved of the use of taxation for the constitutional functions of government. This viewpoint is quite pervasive in the rent-seeking literature for anyone who looks for it. This literature is highly empirical, as most of public choice research is, yet MacLean falsely claims that it only involves "hypothetical scenarios with no true research—no facts—to support them . . ." (p. 98).

MacLean discusses Buchanan's departure from the University of Virginia after Gordon Tullock was denied a promotion to full professor for the third time, an act that Buchanan believed was an outrage, considering Tullock's achievements and reputation in the economics profession at the time. MacLean basically slanders the late Gordon Tullock by quoting an anonymous person who supposedly called him a "twit;" writing that "he was an awful teacher;" and "his publication record—apart from the book he coauthored with Buchanan—was undistinguished." He didn't deserve the promotion, in other words, so there must have been some other reason for Buchanan's departure from Virginia.

I took Gordon Tullock's Ph.D.-level seminar course in Public Choice in the fall of 1977 with some of the survivors of the first year of the graduate economics program at VPI (about half dropped out or flunked out after the first year). *The Calculus of Consent* was one of the textbooks and Tullock, being a University of Chicago-trained legal scholar, conducted the class like a law professor—or at least like the Harvard law professor portrayed in the movie *Paper Chase*.

He would come to each class with a couple of questions that were of the sort that they could have been final exam questions, research paper topics, or even dissertation topics in public choice. He would arbitrarily hand one of us a piece of chalk, and instruct us to stand in front of the rest of the class at the blackboard and explain how we would go about answering the question. It became a team effort, led by the professor, to think through the problem. He was always helpful and encouraging, sharing his great learning with us. He was not an “awful” teacher.

As for MacLean’s smear that Tullock’s publication record was “undistinguished,” she should have taken ten seconds or so to Google “Gordon Tullock vita.” She would have discovered that by the time Buchanan and Tullock left Virginia Tullock had published six books, not one (*The Calculus of Consent* with Buchanan; *The Politics of Bureaucracy*; *The Organization of Inquiry*; *Toward a Mathematics of Politics*; *Private Wants, Public Means*; and *The Logic of the Law*). In addition, he had published four articles in the prestigious *Journal of Political Economy*, four in the *American Economic Review*, and others in the *Quarterly Journal of Economics*, *Economic History Review*, *Oxford Economic Papers*, *Economic Journal*, *Western Economic Journal*, *Il Politico*, and *Social Science Quarterly*, among others. All while founding and editing *Public Choice* and refereeing at least half of all the articles himself.

The second half of *Democracy in Chains* is mostly about Charles Koch, the network of conservative and libertarian organizations that he has funded, and his relationship, such as it was, with James Buchanan. MacLean accurately states that after spending many millions of dollars over some three decades, Koch’s efforts “produced few results” (p. 127). She details how Koch worked with Murray Rothbard to co-found the Cato Institute, but says nothing at all about how Koch later confiscated Rothbard’s shares in the organization and disassociated himself with Rothbard. No mention is made of this, or of the reasons why the two men had a falling out. She does get much of the Koch story *backwards*, however, by saying that Charles Koch insisted that his well-funded minions remain “uncompromisingly radical” (p. 145). That, in fact, is why Rothbard was booted—he *was* in fact uncompromisingly radical whereas Koch, who moved the Cato Institute from California to Washington, D.C., was not. He wanted to pursue a patently

*un-radical* plan of trying to teach free-market and libertarian principles to the Washington, D.C. bureaucracy—at least *in a watered-down and compromised form* that would not be too offensive to them. That has always been the Cato Institute’s business plan.

In the middle of her discussion of Koch, MacLean inserts a diversion chapter to take one more swipe at Buchanan by noting that he, like Milton Friedman, had accepted an invitation from faculty members to speak at a Chilean university after the overthrow of the socialist government there in the 1970s. (The faculty members were University of Chicago graduates). He offered advice to the Chilean students and faculty about a balanced budget, an independent central bank, and the importance of some kind of system of constitutional checks and balances. MacLean uses this narrative to repeat once again the ridiculous falsehood that “there was no empirical research” in the public choice literature (p. 158) in order to make the argument that Buchanan was spouting nonsense to his Chilean hosts. The main purpose of this diversion chapter is apparently to once again attempt to imply that “libertarianism” is really an evil, stealthy, centuries-long plot to benefit dictators and billionaires at the expense of the rest of society. And MacLean claims that it is public choice economists who lack facts and evidence!

One interesting and informative part of the book is MacLean’s discussion in the last two chapters of how Charles Koch and his lieutenant, Richie Fink, talked seventy-nine-year-old James Buchanan into lending his name to an organization on the George Mason campus that would become essentially a lobbying arm of Koch Industries. The James Buchanan Center, funded by a \$10 million grant to George Mason University in 1997, was staffed mostly by non-academics who conducted “outreach” programs for “Senators, Congressmen, and state legislators, legislative staff and regulators....” (p. 199). Some academics were involved, but they were in the minority, writes MacLean. Most were apparently Richie Fink’s political cronies from the D.C. corporate lobbying world.

Buchanan was not happy with this arrangement. MacLean uncovered a September 17, 1998 memo from Buchanan to Fink in the files at Buchanan House in which Buchanan wrote: “Quite frankly, I am pissed off.” What was being done under his name “verges on fraud and surely, at a minimum amounts to exploitation of me, of you, of JBC [the James Buchanan Center], of the

university" (p. 201). "Buchanan had been played like a fiddle" by Koch and Fink, writes MacLean, and she is right. Buchanan retired to his farm in Blacksburg soon thereafter.

Buchanan was not the only George Mason faculty member who was disgusted with the Koch/Fink gambit. The late Charles Rowley, a distinguished public choice and law and economics scholar whom Buchanan had brought from England to George Mason and the Public Choice Center in 1985, wrote on his blog in 2012 that Richie Fink, Charles Koch's top "strategist," was "a third-rate political hack" and "a man who is very appropriately named" (p. 209). "Far too many libertarians have been seduced by Koch money into providing intellectual ammunition for an autocratic businessman," he wrote. Many libertarians understood this, Rowley said, but remained silent because "too many of them benefit financially from the pocket money doled out by Charles and David Koch."

When Buchanan died in 2013 Nancy MacLean attended the memorial service for him in Fairfax. "[N]either Koch nor Fink... bothered to attend his memorial service," she noticed. "Why should they? His days of usefulness to them had passed" (p. 204).

MacLean's concluding chapter repeats for about the hundredth time her neo-Marxist, *ad hominem* theme that the whole history of classical liberalism, or libertarianism, is that of a small number of people working as paid apologists first for slave owners, and now for billionaires who want to use the powers of the state to line their own pockets at the expense of the rest of society. This is perhaps why, in a book about libertarianism in America, she completely ignores Ron Paul's extraordinary, worldwide popularity; the millions of voters who wanted him to become president; his voluminous writings and speeches; and the millions of dollars of spontaneous individual contributions to his campaigns based on nothing more than his recitation of libertarian economics, defense of civil liberties, and his advocacy of a foreign policy of national defense instead of offense.

MacLean also completely ignores the educational institution that Ron Paul is most closely associated with, the Mises Institute, and the more than two dozen Mises institutes around the world (Chafuen, 2014). Not to mention the thousands of independent

libertarian scholars, bloggers, columnists, authors, radio and podcast hosts, television personalities, and others. Acknowledging the existence of any of this would contradict her hoary Marxist-inspired, *ad hominem* theme that opponents of socialism and defenders of freedom and property rights are all “capitalist tools,” paid liars for corporate plutocrats. This reality also makes her conspiracy theory of “the radical right’s stealth plan for America” appear to be simply crazy.

## REFERENCES

- Chafuen, Alejandro. 2014. “Ludwig von Mises: Inspiring Think Tanks Across the Globe.” *Forbes*, August 20, 2014.
- Raico, Ralph. 2006. “Classical Liberal Roots of the Marxist Doctrine of Classes,” Available at <https://mises.org/library/classical-liberal-roots-marxist-doctrine-classes>.
- Woods, Tom. 2010. *Nullification: How to Resist Tyranny in the 21<sup>st</sup> Century*. Washington, D.C.: Regnery Publishing.



## BOOK REVIEW

### *GDP: A BRIEF BUT AFFECTIONATE HISTORY*

DIANE COYLE

PRINCETON: PRINCETON UNIVERSITY PRESS, 2014, 168 PP.

ALEXANDER C. CARTWRIGHT

**G**DP is undoubtedly the most known and widely used metric of macroeconomic performance. As a former economic advisor to the English Government, Diane Coyle is able to masterfully recount known problems and complications with measuring GDP while highlighting some new concerns pertinent to any student of economics. Unfortunately, the valuable insights in the book are scattered throughout sporadic, sometimes partisan, chapters that read more like a casual history of world events than a history of GDP.

Like many historical events, it is hard to attribute the rise of national income accounting to a single person, place or moment in time. Coyle argues that an interest in national income accounting gained a critical mass in the late nineteenth century. Specifically,

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the rapid economic growth during the industrial revolution gave rise to an interest in measuring the economy (p. 12).

While the industrial revolution may have sparked an interest in national income accounting, ultimately political forces and world economic events shaped modern GDP. During the Great Depression, British economist Colin Clark and American economist, Simon Kuznets, were charged with producing national income accounts. Kuznets' numbers showed an economy that had been cut in half between 1929 and 1932. President Roosevelt cited the figures in announcing the new recovery program and subsequently used supplemental figures for in budget proposals. According to Coyle, the GDP numbers validated FDR's desire to act (p. 13).

Though Kuznets is credited with generating the first national income accounts, they did not reflect a method he desired to use. Kuznets wanted to create a measure that could be used to understand welfare, not simply output. He thought advertising, financial industries, speculative activities, subways, and certain types of expensive urban housing, among other things, including government spending ought not be included (p. 14). However, these original definitions of national income would show the economy shrinking if private output available for private consumption was used for government action. "The Office of Price Administration and Civilian Supply, established in 1941, found that its recommendation to increase government expenditure in the subsequent year was rejected on this basis" (p. 14).

Hence national income, from its inception, was created and defined with political motives; that is to serve an interventionist, Keynesian ideology. Since the definition of 'national income' is defined by economists, what constituted 'income,' 'output,' etc., were determined based on the intellectual climate of the time along with the political and military needs of the moment (p. 11). Ultimately, "Kuznets lost and wartime realpolitik won," giving birth to a practical tool that upholds and economic and political legacy to this day (p. 16)

Coyle reminds us that Keynes himself advocated for national income accounts: Keynes wrote, "Every government since the last war has been unscientific and obscurantist, and has regarded the collection of essential facts as a waste of money" (Keynes, 1940).

Inspired by Keynes's writings on the matter, UK economist Austin Robinson commissioned his government to collect more statistics (p. 18). National Accounts, the rise of econometrics, and Keynesian ideas were all mutually enforcing, and they all served to solidify the importance of collecting information for GDP and to justify calculating GDP as a measure of output—which ought to include government activity since it acts as a stimulus on an economy prone to demand deficiencies. “The availability of national accounts statistics made demand management seem not only feasible but also scientific” (p. 20).

The new scientific status of both GDP and Keynesian economics encouraged widespread use and improvement of national income accounting. The UN, IMF, and World Bank came to depend on GDP numbers as key indicators of development and key indicators regarding the necessity of aid. Since GDP became the gold standard as a development metric, it is no surprise that many developing countries resisted attempts to improve GDP on political grounds if the improvements would make those countries appear richer, and thus ineligible for aid. Coyle describes one case in which China debated a revised GDP figure (revised to take account for the purchasing power of Chinese citizens using a PPP conversion) with the World Bank—ultimately convincing the World Bank to lower China's GDP per capita below the threshold level for concessional loans (p. 53).

Coyle's book documents several methodological changes to GDP calculations and their political implications. The following are some of the most striking: “Ghana between 5 and 6 November 2010, its GDP increased by 60 percent overnight, turning it officially into a “low-middle-income” country. The reality had not changed, but the GDP statistics had, because the country's statistical agency had updated the weights used in calculating the price index, and consequently real GDP, for the first time since 1993” (p. 31). After similar adjustments, Nigeria added a whopping 89 percent to GDP overnight in 2014, and Kenya added 25 percent (p. 32). Of course, there is no ‘objective’ platonic ideal of GDP nor how one ought to calculate it. Any definition can be justified depending on one's worldview; hence, the politically expedient options seem to be chosen.

These methodological changes and simple revisions to previous GDP calculations can be the source of major political and economic

events. As an example, Coyle cites the 1976 crisis in the UK. Chancellor of the Exchequer Denis Healey abruptly requested an emergency loan from the IMF. Upon a simple revision of the GDP numbers, Healey commented, "If we had had the right figures, we would never have needed to go for the loan." Based on these comments, Coyle speculates: "Who knows whether Mrs. Thatcher would have won the same kind of election victory if her predecessors in power had not had to bring in the IMF?" (p. 37).

Coyle argues that one of the most consequential defects of modern GDP is the metric's inability to account for innovation. Economists have known that there is a 'quality bias' in GDP figures: increases or decreases in prices are often divorced from the change in quality of a product. Some products have gone up in price, and GDP has subsequently gone up, but the quality of these products has increased faster than their prices. Conversely, some products have dropped in price while their quality has increased exponentially; some products carry a zero price. The inaccuracies in GDP as a result of innovation are likely significant. Consider: software, TV, and other parts of the information sector have made up only 4 percent of GDP for the past 25 years while zero price Google search gives consumers an estimated \$150 billion of value annually (p. 135).

Coyle tells a rich and compelling story about the history of GDP. Unfortunately, the book seeks to answer a history of thought question using the chronological history of macroeconomic events in the past century. Coyle obviously believes this is acceptable since, "the story of GDP since 1940 is also the story of macroeconomics" (p. 20). This author doubts the link is as clear as Coyle claims; her formatting does a disservice to her research and readers for two principal reasons.

Firstly, by telling the history of macroeconomic events, Coyle is forced to rush through a century of events and concepts which lead her to explain and opine on several topics unrelated to the core of the book. Her explanations are often brief, and the short opinions offered during historical explanations are controversial to say the least. For example, pertaining to the financial crisis, "the arrogance was the triumphalism about the prevailing model of economic growth. It was based on technological innovation, of course, but also on financial market deregulation and the broader ideology of 'free markets, and the globalization of finance and

trade" (p. 95). Coyle remarks that the crash can be blamed on those who forgot the "purpose of business" (p. 97). The format Coyle chose for telling valuable history on GDP is handicap, but we will not consider such orthogonal issues in a review on GDP.

Secondly, writing about GDP via a chronology of macroeconomic events requires Coyle to put the history of GDP into a boom-bust narrative: From inception to the 1970s are labeled the 'golden years' and again from 1995–2005 there is a period of expansion followed by an economic crisis. Certainly GDP influenced these events, but the reader cannot determine from the evidence presented in this book that these historical events were the principal drivers of economic thinking as they relate to GDP. This author has little doubt that since GDP was ultimately conceived in the political arena, world macroeconomic events will play a role in its historical development, but the link between all macroeconomic events and GDP, as this book suggests, seems exaggerated—at least in the 150 pages Coyle devotes to the topic.

While Austrian economists will certainly disagree with much of Coyle's commentary in the book, we can agree with many of her conclusions regarding government use of GDP over the past century. Coyle writes, "they overlooked the fact that by design GDP would increase when those policy levers were operated, at least in the short term. The definition of GDP was constructed around Keynes's model of how the economy works" (p. 65). The GDP measure is defined to support a certain school of thought. Coyle is also concerned about sustainability issues, which are absent from GDP; here, again, Austrians can sympathize since the measure makes no distinction of the trade-off between present and future consumption—boosting GDP requires increasing present production and consumption. GDP figures do not account for the long run sustainability of production—capital is homogenous and thus perfectly substitutable so far as GDP is concerned.

Austrians have long been critical of how increased government spending may very well stimulate the economy, and boost GDP numbers, but at the cost of malinvestment. Coyle explains a similar mechanism is at play in the financial sector:

UN System of National Accounts introduced the concept of "financial intermediation services indirectly measured," or FISIM. This current

measure compares banks' borrowing and lending rates on their loan and deposit portfolios to a risk-free "reference rate" such as the central bank's policy rate, and multiplies the difference by the stock of outstanding balances in each case (p. 102).

Hence, banks that take on more risk contribute more to GDP; Coyle points out that so far as GDP is concerned, more risk is counted like more growth. Therefore, current GDP methodology not only encourages malinvestment by only considering present spending, but also encourages malinvestment by favoring risky investments.

After reading Coyle's book, any reader will be more skeptical about our ability to understand macroeconomic health or fluctuations from GDP data. Upon further reflection it is unclear that GDP can simply be improved. After all, GDP is a measure of aggregates that are the outcome of a complex and spontaneous market process; those aggregates cannot be directly acted upon. Any attempt to boost those aggregates will only distort what they were originally proximate measurements of.

Coyle disagrees. Despite documenting 150 pages worth of the measure's shortcomings, she concludes that GDP is superior to all currently available alternatives; she even writes, "GDP, for all its flaws, is still a bright light shining through the mist" (p. 145). This is of course a *non sequitur*: regardless as to whether GDP is the 'best' measure we have, that is not a reason for continuing to use it.

## REFERENCES

Keynes, John M. 1940. *How to Pay for the War*. Reprinted in *Essays in Persuasion*. Basingstoke: Macmillan for the Royal Economic Society, 1989.

## BOOK REVIEW

### *WATER CAPITALISM: THE CASE FOR PRIVATIZING OCEANS, RIVERS, LAKES, AND AQUIFERS*

WALTER E. BLOCK AND PETER LOTHIAN NELSON, Eds.  
LANHAM, MD: LEXINGTON BOOKS, 2015, 302 pp.

MICHAEL R. MONTGOMERY

This collaboration between Block (free-market economist) and Nelson (free-market engineer) offers a little bit of anarcho-free-market-*everything* with which to engage the interested reader. Block, as always, brings his combative spirit and formidable reasoning abilities. He is ready to take on all comers including, at one point in the book, his own co-author! Nelson's interesting case-studies highlight particularly well what happens when property rights and market forces are suppressed—whether on land or on water.

The book is a fusion of two complementary tomes, a circumstance that can often make for choppy reading. At times, it is hard going.

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But the pilgrim who perseveres will in time be rewarded with many interesting insights, as well as a glimmer of what a consistent free-market water-rights regime would (or should) look like.

The first half of the book is a theoretical section of sorts, laying down the case for free-market economics in a property-rights context. This is followed by several interesting case studies that reinforce the theoretical discussion at the tract's beginning. A marvelous list of provocative topics is covered (albeit briefly for most of the topics). These mostly pertain to water-rights issues, but often the range broadens and discussion strays into more generalized property issues (e.g. the shameful treatment of Cliven Bundy [re. p. 40]). Here also is where the authors re-state their free-market roots, adding a second crucial concept: the problem of "*government failure*" which waxes in importance as the case studies are reached. These authors are not bamboozled by the sight of bureaucrats bringing gifts to the private sector, and they also understand about free lunches.

Chapter One sets the tone with a ringing call to "Privatize oceans and all other bodies of water!" A primary purpose of the chapter is to suggest that, in a free-market system, it is almost always possible to find successful policy solutions in/on water (and elsewhere) without resorting to the use of government force (e.g., ch. 9). One simply needs to be creative and have an honest desire to try to solve problems *sans* government. To get the discussion rolling, the authors spar with an imaginary skeptic about the book's message.

For additional emphasis, the authors throw in a generic argument for free markets, originating from Aristotelian thought and also based also on the idea that young children from a very early age recognize property rights. The authors see private ownership as natural and appropriate to humankind. Accordingly, they say, the socialists who claim "property is theft" are literally, exactly, and morally wrong. In such a way are the decks cleared for thinking about the morality of markets without entering an extended debate with the inevitable socialist critics.

The authors are *very* optimistic—likely too much so—with their claim that privatization of the Earth's waters will necessarily bring about, in effect, a new *Golden Age* on Earth (your reviewer's term, not the authors'). Sure, we will do better in developing our watery



resources if we apply hefty doses of capitalism to the problem (e.g., pp. 3–4; and pp. 22–25). But these thoughts seem to this reviewer to be largely beside the point. Having to work in water or on water—as opposed to dry land—is a significant “tax” on productive watery activities. We are land creatures, not “Aquamen.” In general, it is considerably more expensive for us to conduct production operations in watery environments (whether it is in a murky swamp, or on the sea-bottom, hundreds of feet down). The authors do not take too seriously this important factor. I would say that they understate the problem. Instead, they assume rather breezily that there is no such “tax” on watery productive activities. Down a few pages, the authors seem to recognize this issue. However, it still seems to this reviewer that the authors understate the difficulty of what they are proposing. This reviewer, therefore, is skeptical.

Chapter 2 asks the reverse of the question in Chapter 1: Why privatize anything? The authors first “school” us readers a bit more regarding free-market arguments to make sure we are prepared for the discussions to come. The morality of free markets, with its non-coercive principle, is seen as superior to coercion (on land or on water). Free-market institutions have dominated collectivist ones whenever and wherever the two systems have competed. Everywhere we look, better-managed resources are to be found where private-property models are allowed to take root. These are sentiments that many a free-market social scientist can endorse with gusto.

As for the land, so for the waters: Ethically, privatization is everywhere peaceful, ethical, and according to the authors, the best system to resolve disputes. Even better, productivity will be higher if there is private-water ownership.

Chapter 5 takes on these issues of privatization, homesteading, and abandonment. Rules are suggested for watery abandonment of derelict (abandoned) properties; plus other interesting suggestions. Surprisingly, the chapter is not “pragmatic,” but philosophical as it seeks ways to solve the various problems discussed in Chapter 5’s material.

Chapter 6 works through several mundane problems involving the existing law governing the seas: Admiralty Law, Law of Salvage, and also of interest: a brief discussion of free-market salvage rules

that might work well. It might have better, perhaps, to combine the discussion of the Law of the Sea into a single chapter.

This chapter lays out a part of the authors' theory of private property. Water rights, as well as their opposite—the harmful existing law governing much of the seas. The Lockean theory will be familiar to most free-market readers of this book; the Law of the Sea, perhaps less so. Chapter 6 also covers abandonment of homesteaded property.

Chapter 7 is where the authors begin to unfold the core of their case for the privatization of those waters currently “in government hands.” The fundamental argument is the *homesteading* one. Property rights are (or should be) established by a homesteader who substantially *mixes his labor with* available natural resources (thus claiming the right to control those resources). In a proper society, the authors suggest, water rights would not be established by a global centralized bureaucracy (or, alternatively, a local one). Instead, such rights would be earned mainly by the sweat of the brow. There is both a practical and moral aspect to this argument (as the authors argue above).

In Chapter 7, the authors bring interesting hints and suggestions that ought to help bring more free-market thought into the mainstream. For example (extrapolating from the authors [see p. 56]), specialists might envision designed GPS-enabled buoys that might be used to track especially-high value fish (such as Bluefin Tuna and Swordfish. Meanwhile, underwater electric fences might keep those fish safely penned up.

In this Brave New World of water-entrepreneurship, the authors seem to suggest that maintaining effective control over a three-dimensional “water plot” might be relatively easy—if the legal framework were there to support it, and if society saw the virtues of such an approach. The next steps would be effective education and advocacy in favor of such a legal framework. The authors' vision extends to fully operational underwater electric fish pens. Gated underwater plots of large size would be maintained to hold them. Such hopeful speculations make for interesting reading!

Next, the authors set down before us crucial questions that they seem to accept as representative of the large numbers of many similar questions that would need to be resolved if a fully-self

contained water rights regime were to come to pass. These are watery property-rights-related questions that need to be answered successfully, in the context of water rights, in order for a successful rules-based consistent market society is to grow and take root.

Many of these “watery rights” questions have been solved on land. They are to be thought of as difficult questions, not yet resolved, but which are crucial in solving any attempt to make a consistent property-rights-based system on the waters (or on land). Now the challenge would be to extend the reasoning on land so that “land law” can be can be appropriated to this more aggressive application.

Some reasonable answers to these kinds of questions are provided by the authors. Other questions are posed in a way that makes manifest the difficult challenge inherent in asking these questions. The results of these “thought-experiments” are sometimes quite provocative (e.g, discussion of the possibility of ownership/control of different depths of waters). It begins to look like some of these questions are quite interesting, likely answerable, and, even more, worth answering.

Turning to other matters: problems, such as the “water cycle,” (i.e., water evaporating into clouds and later dropping as precipitation at random spots, thus making assignment of property rights to water extremely difficult) are discussed at some length in Chapter 7. The problem, as the authors see it, is that this poses difficulty for those trying to tag every “piece” of water as being “mine” or “yours” causing problems for market forces. Also, there is considerable discussion of the concept of defining oceanic ownership and how it could be defined, and unfortunately not much in the way of solutions.

Chapter 8 is a rather long chapter focusing mainly on property issues of rivers. It addresses an interesting case (p. 76–77) where an owner’s access to his property is blocked from all sides by adjacent property owners (e.g., he has ownership in midstream but he lacks a legal access point to his “plot”). To make things a bit more challenging, let us assume that his not-so-friendly neighbors are unwilling to negotiate an access point. What, then, would then ensue? Our authors, armed with confidence in market forces, would expect creative solutions by the “players” in the “game” in finding an appropriate access point.

Other issues discussed are property rights in a situation where the course of a river is altered—how would a successful compromise ensue? Strategies for protection from floods in many cases could include something as simple as placing structures on stilts (as in the U.S. Gulf Coast). This long but informative chapter finishes up with discussion of free-market fishing rights and the consequences of erosion.

Chapter 9 covers free-market lakes and related topics. It is interesting chiefly because it concerns actual private ownership of lakes and happily, the discussion here seems less speculative and more concrete. We have, after all, numerous examples of successful management of small lakes.

As a lake community develops, it is particularly interesting in this chapter to see how the authors, starting with a small virgin lake with little commerce and with only-sketched-out property rights, takes the reader forward to a situation where well-defined, sophisticated property rights regimes. Other topics in this chapter include a discussion of fishing rights in rivers and the divvying up costs of erosion between interested injured parties; and the relatively rare case of changes of river course and how it might be managed.

Chapter 10 addresses the control and care of aquifers that often involve damage by one party to another where one party pulls out enough water to negatively and significantly affect a second party's aquifers. This is another "tragedy of the commons" scenario, sporting technical problems with a public good tilt. In a free market situation, first arriving parties should have priority.

Chapter 11 sketches out the mainstream perspective on ocean management, the so-called "CITES" approach based on the Convention on International Trade of Endangered Species of Wild Fauna and Flora. The authors strongly rebut, citing cases where on land where such models have far worsened conditions of flora and fauna living under these policies. They also present free-market alternatives. Overall, this is an engaging chapter.

Chapter 12 discusses the history of piracy. The authors are cautiously optimistic that the market and private property can solve the problem. Chapter 13 presents six quite interesting case studies. Case A: This discusses water rights in the lower portion of the Florida peninsula. The authors argue that one of the primary

complications stem from poorly-laid-out-private-property water rights. Case B covers efforts in flood protection going back to the 1880s. The authors emphasize the hidden subsidies in such a policy and a libertarian alternative. Case C analyzes a severely damaging 2014 chemical spill on the Elk River. The authors question whether or not regulatory relief would really be likely to prevent another such a disaster. Why should it? In contrast, in a fixed free-market property rights regime, the party responsible would be strictly accountable to all injured parties. Regulation would be unnecessary. Case D concerns California's Central Valley Aquifer. The authors argue that the problem is *too little capitalism*, not too much. The authors point out that property rights are a muddle in the aquifer area, creating severe "tragedy of the commons effects." Case E: Canada, with tremendous water reserves, refuses to treat their water supplies as an economic good. Water in Canada is not privately owned. The authors explore this strange feature of the "Canadian Mind," which has a very strong aversion to the sale of water to parched areas elsewhere. Case F concerns Somalia, Yemen, and the Gulf of Aden, and how the introduction of strong property rights in the Gulf of Aden would substantially reduce piracy and other problems in this fairly "wild" area.

Other interesting features of the book are: delightfully thorough references, a written debate between the authors (an unusual twist), a critique of a number of several other popular free-market books featuring a focus on water rights, which the authors see as straying too far from the free-market vision that the authors emphasize; and last but not least, a very pretty cover.

