The Quarterly Journal of Austrian Economics

VOL. 21 | No. 2
SUMMER 2018

ARTICLES

Author Submission and Business Information

The Quarterly Journal of Austrian Economics (ISSN 1098-3708) promotes the development and extension of Austrian economics, and encourages the analysis of contemporary issues in the mainstream of economics from an Austrian perspective. This refereed journal is published quarterly online, in the spring, summer, fall, and winter by the Ludwig von Mises Institute.

Authors submitting articles to *The Quarterly Journal of Austrian Economics* are encouraged to follow *The Chicago Manual of Style*, 14th ed. Articles should include: an abstract of not more than 250 words; have a title page with author's name, email, and affiliation; be double spaced; have numbered pages; and be in Word, Wordperfect, or PDF format. Authors are expected to document sources and include a bibliography of only those sources used in the article. Footnotes should be explanatory only and not for citation purposes. Comments, replies, or rejoinders on previously published articles are welcome and should *generally* be not longer than 5 double-spaced pages.

The *QJAE* will not consider more than two articles by a single author, whether as sole author or co-author, at any given time. The *QJAE* will not publish more than two articles by a single author, whether as sole author or co-author, per volume. Submissions should be sent to qjae@mises.org.

Submission of a paper implies that the paper is not under consideration with another journal and that it is an original work not previously published. It also implies that it will not be submitted for publication elsewhere unless rejected by the *QJAE* editor or withdrawn by the author.

Correspondence may be sent to *The Quarterly Journal of Austrian Economics*, Ludwig von Mises Institute, 518 West Magnolia Avenue, Auburn, Alabama 36832.

The Quarterly Journal of Austrian Economics

VOL. 21 | No. 2 | 95–109
SUMMER 2018

A Brief Defense of Mises's Conception of Time Preference and His Pure Time Preference Theory of Interest

G.P. Manish

ABSTRACT: In his recent book, *Money, Interest and the Structure of Production* (Machaj, 2017), Mateusz Machaj advances two significant criticisms of Mises's theory of time preference and his pure time preference theory of interest (PTPT). First, he claims that time preference only exists under certain unrealistic conditions, and second, that the PTPT, as presented by Mises, is unable to provide a coherent explanation for the spread between the prices of inputs and output that characterizes production processes in a monetary economy. In this paper I present a brief defense of Mises's conception of time preference and of his PTPT from both of these criticisms. I argue that, contrary to Machaj's claims, the existence of time preference does not require any unrealistic assumptions and also provide an analysis of how the PTPT can provide a satisfactory explanation of the monetary surplus that permeates the production structure.

KEYWORDS: time preference, interest, production, Austrian economics

JEL CLASSIFICATION: B53, E14, E23, E43

G.P. Manish (gmanish@troy.edu) is associate professor of economics at Troy University.

I. INTRODUCTION

Mateusz Machaj's *Money, Interest and the Structure of Production* (Machaj, 2017) is a welcome addition to the recent groundswell of works on Austrian macroeconomics. In this book Machaj covers a broad range of topics, some of them theoretical, such as the theory of interest, the inter-temporal structure of production, and the relationship between the rate of interest and the length of the production structure, along with others that are more policy-oriented, including an analysis of the cogency and practical relevance of popular macroeconomic concepts such as potential output and full employment, and the implications of the non-neutrality of money for monetary policy. The entire range of topics is covered in a manner that is intellectually courageous, provocative and thought provoking.

In part I of the book, which comprises two chapters on the theory of interest (Machaj, 2017, pp. 3–36) and on the inter-temporal structure of production (Machaj, 2017, pp. 37–86), Machaj advances a number of criticisms of traditional Austrian macroeconomics. In the first chapter, in addition to presenting an original theory of interest, Machaj focuses his critical ire on the theory of time preference as presented by Bohm Bawerk (Bohm Bawerk, 1930, pp. 237–281) and Mises (1998 [1949], pp. 476–487), and on the pure time preference theory of interest (PTPT) as advanced by the latter (Mises, 1998 [1949], pp. 521–534).[1] And in the second chapter, he presents a detailed and highly critical analysis of a proposition that has long been of great importance to the Austrian of economic growth and business cycles: the inverse relationship between the rate of interest and the length of the structure of production.[2]

In this paper I present a brief defense of Mises's theory of time preference and the PTPT from the criticisms advanced by Machaj. In doing so, I do not explicitly address his criticisms of

[1] It should be noted that Machaj is not alone in doing so. Prominent recent critics of the theory of time preference and of the PTPT also include Lewin (1997), Hülsmann (2002) and Gunning (2005).

[2] In doing so Machaj builds on the critical analysis of this proposition advanced by Fillieule (2007) and Hülsmann (2008; 2010).

the relationship between the rate of interest and the length of the structure of production.[3] Nevertheless, I do so implicitly, since the PTPT, especially as advanced in its most refined form by Mises, is critical to understanding the nature of this relationship. In fact, it is the PTPT that provides the microeconomic, price theoretic foundation to the traditional Austrian position that these two variables share a negative relationship.[4] Thus, it is no surprise that Machaj, having rejected the PTPT, is also highly critical of the traditional Austrian position on the relationship between the rate of interest and the length of the structure of production.

II. MISES AND THE PURE TIME PREFERENCE THEORY OF INTEREST: THE TWO IMPORTANT CRITICISMS OF MACHAJ

There are two main charges that Machaj levels against Mises's pure time preference theory of interest (PTPT). First, he claims that the theory of time preference, including the one advanced by Mises, can only be worked out under certain unrealistic and unrealizable conditions. "With typical time preference theory," Machaj notes, "one has to assume very sophisticated and quite unrealistic clauses about the other things being held equal […]" (Machaj, 2017, p. 27). Along with the assumption that "people compare two identical goods that are non-perishable and do not change," he argues that the theory also makes two patently unrealistic assumptions: first, that "the circumstances surrounding them [the people: GPM] also stay the same, except for the passage of time," and second, that there is "full certainty and predictability of future states of affairs" (Machaj, 2017, p. 27).[5]

[3] See Newman (2014) for a recent defense of the traditional Austrian position of this subject.

[4] This, for example, is the position advanced by Hayek (2008 [1931]), Mises (1998), Rothbard (2009) and Garrison (2001).

[5] To support these claims, Machaj, immediately after the passage cited here, provides a reference to a paper by Peter Lewin (Lewin, 1997). In order to avoid any potential misunderstandings, I would like to clarify that the criticisms offered in this paper only address the claims made by Machaj and not those made by Lewin in the paper that is referenced.

Two important implications follow from the unrealistic assumption of perfect certainty. First, time preference can only explain the rate of originary interest, or the rate of interest as it appears within the confines of the evenly rotating economy (ERE), where there is a uniform rate of return in every production process. And since the imaginary construct of the ERE is built on the assumption of perfect certainty and predictability of the future,[6] it follows that the theory of time preference can only explain the rate of return that appears within the production structure under these artificial conditions, and is unable to explain the price spread between input and output that permeates the production structure in the real world characterized by uncertainty.

Second, adherents of the PTPT cannot explain how the rate of originary interest comes to be what it is. As Machaj notes, if the theorist is confined to explaining interest only in the ERE and has no explanation of the interest rate that appears within the production structure in the dynamic and uncertain world of reality, there is no way for him (or her) to provide any coherent and meaningful explanation of why the rate of originary interest is what it is. In such a scenario, the theorist is forced to acknowledge that the rate of interest within the ERE "is equalized not by the mechanisms of the model but merely by the assumptions of the model: everything is the same because everything is the same" (Machaj, 2017, p. 25).[7]

Now, this first charge that Machaj levels against the PTPT, while restricting its scope to the imaginary world of the ERE, at least assumes, albeit implicitly, that the theory can actually explain the rate of originary interest that characterizes such an economy. The second and stronger charge that Machaj levels against the PTPT, however, denies even this possibility. The PTPT, he claims, cannot even explain the rate of originary interest. And why is it unable to do this? Because the concept of time preference simply cannot explain why there should be a monetary surplus that characterizes any production process, even in the ERE.

[6] For a detailed explanation of the assumptions underlying this imaginary construct see Mises (1998 [1949], pp. 247–251) and Rothbard (2009, pp. 320–329).

[7] Mises advances a similar criticism of economists who focus purely on an analysis of the ERE, thereby assuming uncertainty away from their analysis. See Mises (1998 [1949], pp. 352–354).

While Machaj accepts that time preference is indeed "an element of a pure theory of action," he argues that there is "a gap" between accepting this proposition and "making it a prerequisite for physical monetary surplus" (Machaj, 2017, p. 25). In fact, as he goes on to note, "there is no clear bridge between a preference for sooner rather than later and a physical surplus of money in interest payments" (Machaj, 2017, p. 26). Thus, consider a production process where a capitalist-entrepreneur pays out 100 units of money today to hire various factors of production. An acceptance that his actions are guided by the concept of time preference does not in any way imply that he will sell his output tomorrow for a sum that is greater than 100 units, thereby earning some positive rate of return. Instead, "the transaction could well be 100 units of money today in exchange for 100 units tomorrow, such that monetary interest is zero." Or, in fact, "interest could even be negative: 100 units today for 95 units tomorrow" (Machaj, 2017, p. 26).

Thus, Machaj throws a one-two punch at Mises's PTPT. The first attacks the conditions under which the concept of time preference holds true, and the second focuses on the implications that can be derived from the concept itself. In the following two sections I will try to defend Mises's exposition of time preference and the PTPT from both of Machaj's criticisms. In doing so, I will begin with a defense against the initial blow, regarding the realism or lack thereof of the conditions under which the concept of time preference itself holds true, and will then deal with the second criticism, which focuses on whether the existence of time preference can explain a monetary surplus within a process of production.

III. HUMAN ACTION, VALUE JUDGMENTS AND VALUE IMPUTATION

Before dealing with the specific criticisms that Machaj advances against the Misesian PTPT, I think it is important to mention and explain some important implications that follow from the existence of human action. These propositions, although they belong, first and foremost, to the realm of praxeology, and thus take us beyond the realm of catallactics, are still worth laying down in some detail since they are essential to my defense of Mises's exposition of the theory of time preference and the PTPT.

Human action, as Mises defines it (Mises, 1998 [1949], p. 10), is purposeful behavior. It is the purposeful reaction of an individual to his (or her) environment and involves an attempt, on the part of this individual, to alter this given environment and to replace it with a different state or situation.

Such purposeful behavior, as Mises goes on to note (Mises, 1998 [1949], pp. 13–14), implies the existence of certain conditions. Action, to begin with, requires an individual to be less than fully satisfied. He must, in a given situation, be aware of certain unfulfilled wants, and must experience "some uneasiness" (Mises, 1998 [1949], p. 13). Given this lack or insufficiency in the conditions that define his existence, the individual must be aware of alternate states of the world that will enable him to satisfy one or more of these unfulfilled wants. Moreover, these alternate states must, in his eyes, be realizable and worth striving towards.

The ultimate goal or the ultimate purpose of all action, it follows, is the satisfaction of some unfulfilled wants, or the removal of the uneasiness that the actor experiences. Action, however, also requires the actor to choose between alternate states of satisfaction. It forces him to prefer and strive after one possible state of the world and the satisfaction that it opens up, and to renounce another realizable state of the world and the satisfactions that it has to offer.

These preferences, first and foremost, rank the ultimate goals of action: the alternate states of satisfaction that the actor has to choose between in any given situation. One or more unfulfilled wants that offer greater satisfaction are deemed to be of more importance to the actor's well-being, and of greater value to him, and are ranked above other unfulfilled wants that offer less satisfaction and are valued less. These valuations then guide the conduct of the actor. Of two possible paths of conduct open to him at any given moment, he chooses the one that allows him to satisfy the wants that he values more, while renouncing the path that promises less value.

Now, although the actor attributes value to the possible states of satisfaction that he can bring about, he also necessarily imputes and attributes this value to the means that he uses to attain these states of the world. For, although the attainment of a state of satisfaction is the ultimate goal for an actor, he finds himself in a situation where these states of satisfaction are unattained or unfulfilled. And, it is in this current, given scenario that he plans to employ certain scarce elements in his environment, or means, to try and attain these ultimate ends. As a result, the value that he attributes to these states of satisfaction is also imputed to the means that enter into his action.

This holds true both for actions involving consumer goods, or first order goods, and for actions that involve producer goods, or higher order goods.[8] Thus, consider the case of Crusoe, all alone on his island, using a fish in his possession to satisfy a want. Since the fish, by assumption, is a first order good, the value that Crusoe attributes to it will be a reflection of the value that he attributes to the marginal utility that he expects to attain with it. The want that he will use it to satisfy has some importance to his well-being, and this importance is directly imputed to the fish at hand.

Now, consider a situation where Crusoe employs an hour of his labor-time to start producing a raft. When completed, he will use this raft to catch some fish. On what will the value of this first hour of labor devoted to raft production depend? The value of the services of the raft that it helps produce will be imputed to it. Thus, the value of the third order good, the hour of labor-time, reflects the importance that the second order good, the services of the raft, has for Crusoe's well-being. And on what does the value of this second order good depend? It, in turn, reflects the value of the fish, or the first order good that can be produced with it, and therefore the value of the states of satisfaction that the fish will help Crusoe attain.

IV. CHANGE, UNCERTAINTY AND TIME PREFERENCE

Just as action requires the actor to make value judgments, it also implies the existence of time preference. Since the actor strives towards the gratification of an unfulfilled want, it follows that he prefers to satisfy this want in the nearer as compared to the more distant future. And since the attempt to gratify an unfulfilled want is essentially an attempt to attain a state of satisfaction, it follows

[8] For a detailed analysis of the valuation of first and higher order goods in a scenario of economic self-sufficiency, see especially Menger (2007 [1871], pp. 114–174), Böhm-Bawerk (1930, Bk. III) and Rothbard (2009, pp. 17–46).

that, in the eyes of the actor, "other things being equal, satisfaction in a nearer period of the future is preferred to satisfaction in a more distant period" (Mises, 1998 [1949], p. 480). An individual's actions necessarily reflect time preference: at any given moment, he attributes greater importance and more value to satisfaction that lies relatively close at hand, and less value to satisfaction that lies further away in time.[9]

Given that time preference is implied in every act, the conditions under which it exists or manifests itself will necessarily be identical to the conditions that necessitate action. Keeping this firmly in mind, let us now analyze Machaj's first criticism of Mises's PTPT, i.e., that time preference only exists under the unrealistic conditions that "circumstances…stay the same except for the passage of time" and that there is "full certainty and predictability of future states of affairs" (Machaj, 2017, p. 27).

Let us begin by clarifying the meaning of the first assumption. When Machaj states that "the circumstances surrounding them [the people: GPM] stay the same except for the passage of time" (Machaj, 2017, p. 27), I am going to assume that he means the following: the theory of time preference assumes that, when an individual acts, no changes in circumstances or conditions that are exogenous to the action itself can take place. To be sure, every action itself is an agent of change and implies an alteration in the conditions surrounding the actor. In fact, to effect such changes is the overarching goal of action. But no changes in an actor's environment that are unrelated to the specific act that he undertakes are allowed.

Now, given that time preference is implied in human action, the veracity of Machaj's claim can be assessed by answering the following question: does action require such an assumption? Does the existence of action require one to assume that only changes endogenous to action can take place and no changes that are exogenous to it can impact the environment of the actor? For, if

[9] As Mises argues, individuals "value fractions of time of the same length in a different way according as they are nearer or remoter from the instant of the actor's decision…. If any role at all is played by the time element in human life, there cannot be any question of equal valuation of nearer and remoter periods of the same length" (Mises, 1998 [1949], p. 480).

this condition is not necessary for the existence of action, it is also not implied in Mises's theory of time preference.

Turning now to the conditions necessary for the existence of action that I have mentioned earlier (Section III), one finds that action only assumes that there are unfulfilled wants. It does not, however, require any assumption regarding the lack of changes exogenous to action. Indeed, such changes can and indeed necessarily do buffet the world of the actor. But all that action assumes is that, despite such changes, the actor perceives and believes that there will still be certain unfulfilled wants. And it is only the existence of these ungratified wants that are necessary for him to act.

Now, what about the second unrealistic assumption? Does the theory of time preference assume away the endemic uncertainty that characterizes the real world? Once again, given that time preference is implied in the fact that human beings act, we can determine the validity of Machaj's claim by answering the following question: does action imply perfect certainty? For, if this is not a necessary assumption for the existence of action, then it is also not a necessary assumption for the existence of time preference.

The answer to this question has been given, and given quite emphatically, by Mises in *Human Action* (Mises, 1998 [1949], pp. 105–106). Far from action requiring full certainty and predictability of the future, it is, in fact, impossible for any action to take place in a world characterized by perfect certainty and predictability of the future. Indeed, as Mises notes, "if man knew the future, he would not have to choose and would not act" (Mises, 1998 [1949], p. 105). Far from being a striving, purposeful creature, man, under these conditions, "would be like an automaton, reacting to stimuli without any will of his own" (Mises, 1998 [1949], p. 105).

Thus, far from perfect certainty being a necessary condition for action, it is the uncertainty of the future that is "implied in the very notion of action" (Mises, 1998 [1949], p. 105). And since the conditions necessary for the existence of action are also those that are necessary for the existence of time preference, it follows that Machaj's claim that the latter exists only under the unrealistic conditions of "full certainty and predictability of the future state of affairs" is not true. Time preference exists and influences the actions and choices of individuals in the dynamic, real world of change and uncertainty.

Two important implications follow from this. First, since time preference does not appear only in the artificial and unrealistic thought construct of the ERE and does manifest itself in the real world that confronts acting man, it does, assuming that it can explain the price spreads that permeate the production structure, help explain the phenomenon of interest as it appears in the real world. And second, since it does influence the actions undertaken in the real world, and thus does influence the allocation of resources within the production structure, it does play a role in analyzing the step-by-step process by which the ERE would emerge and interest rates in the various processes of production would be equalized, if tastes, techniques and the stock of the original factors of production (land and labor) were assumed to be given.

Thus, the theorist who espouses the Misesian version of the PTPT does not, contrary to what Machaj claims, conclude that price spreads within the production structure are equalized in the ERE "merely by the assumptions of the model," and "not by the mechanisms of the model." And he is certainly not forced to conclude "that everything is the same because everything is the same" (Machaj, 2017, p. 25).

V. TIME PREFERENCE AND MONETARY SURPLUS WITHIN THE PRODUCTION STRUCTURE

1. Time Preference and the Value Spread Between Input and Output: The Case of a Crusoe Economy

The existence of time preference has important implications for the process of value imputation. Let us reconsider the case of Crusoe devoting an hour of labor to the production of a raft. As discussed above, both the value of the labor-time as well as the value of the services of the raft produced with it depend, proximately, on the value of the fish, and ultimately, on the value of the unfulfilled wants that these fish will help satisfy.

Nevertheless, although the services of the raft and the hour of labor-time both ultimately derive their value from the same states of satisfaction, their values will not be equal. The hour of labor that Crusoe plans to devote, right now, to the production of the raft is of less importance to his well-being, and therefore of less value to him, than the services of the raft that it helps produce. The cause of this spread or difference between the value of the input, the hour of labor, and the value of the output, the services of the raft, lies in how far away each of them is, in time, to the ultimate goal of Crusoe's action: the attainment of satisfaction.[10]

Assume that it takes two days of labor-time for Crusoe to produce the raft. It follows, therefore, that when he is about to devote an hour to start its production his ultimate goal lies more than two days away. But when he has finished producing the raft, the services of it that this first hour helped produce are a few hours, or maybe just a few minutes away from the attainment of some satisfaction.

Now, as mentioned above, time preference implies that Crusoe, when embarking on a course of action, attributes greater importance and value to states of satisfaction that lie in the nearer future and less importance to those that lie further away in time. In this instance, the hour of labor-time contributes, ultimately, to the gratification of some unfulfilled wants that lie in the more distant future, whereas, the services of the raft, once it has been completed, help him to attain satisfaction in the nearer future. It follows, therefore, that at the moment when he is about to start producing the raft, he values the services of the raft more than the services of the hour of labor-time that help produce them; to the former he attributes the greater value of satisfaction that lies in the nearer future, and to the latter he imputes the lower value of satisfaction that lies in the more distant future.

2. Time Preference and the Price Spread between Input and Output: The Case of a Monetary Economy

Turning our attention now to a monetary economy, consider the case of a capitalist-entrepreneur and his actions in the market for a producer good. Just as in the case of Crusoe, the value that the capitalist attributes to a unit of the good in question is ultimately determined by the contribution that it can make to the ultimate goal of his (or her) actions: the gratification of unfulfilled wants

[10] For a more detailed discussion of this point see Böhm-Bawerk (1930, pp. 179–185).

and the attainment of states of satisfaction. However, given the existence of the division of labor and specialization, the path that the capitalist takes to achieve this ultimate goal is very different from the one taken by Crusoe.

In Crusoe's self-sufficient world, a unit of a producer good is utilized by him to produce a first order good either directly or indirectly, and then attain some satisfaction. As a result, the value of the producer good depends, proximately, on the consumer good that he produces with it, and ultimately, on the satisfaction that he can attain with the latter. The capitalist, acting in a different institutional scenario, uses a unit of the producer good to produce a product that he sells for a sum of money. He then proceeds to use this money to purchase consumer goods produced by other capitalists. These consumer goods, in turn, are used by him to gratify unfulfilled wants and to attain states of satisfaction.

The value of a unit of the producer good to the capitalist, it follows, depends proximately on the value of the sum of money that it helps him attain, and ultimately on the value of the states of satisfaction that it enables him to bring about. The value of the satisfaction that he can ultimately attain is imputed, via the consumer goods, to the sum of money, and finally to the unit of the producer good in question.

Now, the existence of time preference has significant implications for this process of value imputation. Assume that the capitalist, in his estimation, can earn 100 units of money by hiring and employing a unit of the producer good in a process of production. Thus, both the unit of the producer good and the 100 units of money derive their value from the satisfaction that they enable the capitalist to ultimately attain. Nevertheless, due to the existence of time preference, there is a difference in the value that he attributes to these two things. The 100 units of money that he expects to earn at the end of the production process, which is the marginal value product that he expects the unit of the producer good to contribute to his possessions, is of greater importance to his well-being than the unit of the producer good that helps him acquire this sum of money.

As in the case of the labor-time and the services of the raft considered above, there is a difference in how far away in time the 100 units of money and the unit of the producer good is to the capitalist's ultimate goal of attaining satisfaction. Thus, assume that the production process takes a year to complete. The unit of the producer good, it follows, will take a year to yield the expected marginal value product of 100 units of money. At the moment when the capitalist hires this unit, the attainment of satisfaction lies more than a year away. However, once the product has been produced and the 100 units of money is in the hands of the capitalist, satisfaction lies merely a few days, or only a few hours away.

Thus, at the moment when the unit of the producer good is hired by the capitalist, it contributes to satisfaction in the more distant future, whereas the sum of money that it is expected to yield, once it is in hand, helps the capitalist attain satisfaction in the relatively near future. Given that he attributes greater importance and value to satisfaction that lies in the near future and less value to satisfaction that lies in the more distant future, it follows that he values its services less than he values the 100 units of money that he expects it to yield: at the moment when he hires the unit of the producer good, he attributes to the former the lower value of satisfaction that lies in the more distant future, whereas he imputes to the latter the greater value of satisfaction that lies closer at hand. As a result, the capitalist would only be willing to part with less than 100 units of money to hire the unit of the producer good.

Other capitalists competing to hire the unit of the producer good will be in a similar position. Due to the existence of time preference, they too would only be willing to offer the discounted marginal value product of the unit in question. Each of them would only be prepared to offer a sum that is less than the revenue that the unit of the producer good is expected to yield in the various production processes that they wish to embark upon.

Thus, contrary to the claim made by Machaj, time preference does provide an explanation for the existence for the spread between revenues and costs, or for a monetary surplus, within a production process. Specifically, it explains the *ex ante* existence of such a surplus or spread when the capitalist-entrepreneurs enter the markets for producer goods and bid for their services. *Ex post*, or after the product has been produced and sold, however, such a surplus may or may not characterize a production process due to the uncertainty that characterizes the real world. The actual, *ex post* rate of return consists of a mix of the rate of interest, owing to the influence of time preference, and profit (or loss), owing to the influence of the uncertainty that plagues the estimates of the marginal value products of the various producer goods.[11]

It is only in the imaginary world of the ERE, where there is no uncertainty, that the *ex ante* and the *ex post* align, and where the surplus due to time preference appears in its pure form, distinct from profit and loss.[12] Nevertheless, time preference does influence the actions of the capitalists in the markets for producer goods even in the real world and does influence the bids that they are willing to make for their services, even in the presence of uncertainty regarding their estimations of the marginal value products involved.

VI. CONCLUSION

In his recent book, *Money, Interest and the Structure of Production* (Machaj, 2017), Mateusz Machaj advances two significant criticisms of Mises's theory of time preference and his pure time preference theory of interest (PTPT). First, he claims that time preference only exists under certain unrealistic conditions, and second, that the PTPT, as presented by Mises, is unable to provide a coherent explanation for the spread between the prices of inputs and output that characterizes production processes in a monetary economy.

In this paper I present a brief defense of Mises's conception of time preference and of his PTPT from both of these criticisms. I argue that, contrary to Machaj's claims, the existence of time preference does not require any unrealistic assumptions and also provide an analysis of how the PTPT can provide a satisfactory explanation of the monetary surplus that permeates the production structure.

REFERENCES

Böhm-Bawerk, Eugen von. 1930. *The Positive Theory of Capital*. New York: G.E. Stechert and Co.

---

[11] See Rothbard (2009, pp. 509–516) for an insightful discussion of this point.

[12] See Rothbard (2009, pp. 367–410) for a detailed analysis of how the interaction of the valuations of the various participants in the time market that permeates the production structure gives rise to the rate of originary interest within each production process in the ERE.

Fillieule, Renaud. 2007. "A Formal Model in Hayekian Macroeconomics: The Proportional Goods-in-Process Structure of Production," *Quarterly Journal of Austrian Economics* 10, no. 3: 193–208.

Garrison, Roger. 2001. *Time and Money. The Macroeconomics of Capital Structure*. London: Routledge.

Gunning, J. Patrick. 2005. "Praxeological vs. Positive Time Preference: Ludwig von Mises's Contribution to Interest Theory," *History of Economic Ideas* 13, no. 1: 105–120.

Hayek, Friedrich A. von. 1931. "Prices and Production." In Joseph Salerno, ed., *Prices and Production and Other Works*. Auburn, Ala.: Mises Institute, 2008.

Hülsmann, Jörg. Guido. 2002. "Theory of Interest," *Quarterly Journal of Austrian Economics*, 5, no. 4: 77–110.

——. 2008. "Time Preference and Investment Expenditure," *Procesos de Mercado: Revista Europea de Economía Politica* 5, no. 2: 13–33.

——. 2010. "The Structure of Production Reconsidered." Working Paper. Angers: Lunam Universite, University of Angers.

Lewin, Peter. 1997. "Rothbard and Mises on Interest: An Exercise in Theoretical Purity," *Journal of the History of Economic Thought* 19, no. 1: 141–159.

Machaj, Mateusz. 2017. *Money, Interest and the Structure of Production*. New York: Lexington Books.

Menger, Carl. 1871. *Principles of Economics*. Auburn, Ala.: Mises Institute, 2007.

Mises, Ludwig von. 1949. *Human Action: The Scholar's Edition*. Auburn, Ala.: Mises Institute, 1998.

Newman, Patrick. 2014. "Rothbard's Time Market and the Demand for Present Goods," *Quarterly Journal of Austrian Economics* 17, no. 1: 46–66.

Rothbard, Murray N. (2009). *Man, Economy and State: A Treatise on Economic Principles*. Auburn: The Mises Institute.

The Quarterly Journal of Austrian Economics

VOL. 21 | N^O. 2 | 110–136
SUMMER 2018

Facing Inflation Alone: Juan de Mariana and His Struggle against Monetary Chaos

Gabriel Calzada
Translated by Eric Clifford Graf

ABSTRACT: This is a brief biographical sketch of the heroic late-scholastic thinker Juan de Mariana, with particular attention to his epic confrontation with Philip III and the Duke of Lerma, including a review of the list of charges against him. Around 1600, Mariana produced a series of powerful criticisms of statist monetary policy. From a broad perspective, the Jesuit's attitude anticipates classical liberal and libertarian opposition to the shenanigans of central bankers (cf. Jefferson, Rothbard, Huerta de Soto, etc.). Furthermore, we continue to learn that Mariana's analysis of monetary manipulation was disseminated more widely than we once thought, both within Spain and across Europe. This, in turn, supports the general thesis that the School of Salamanca had greater impact than previously believed. Deprived of their silver content, stamped with artificially inflated face values, and mass-produced by way of a hydraulic invention installed at Segovia in the 1580s, the copper billon coins allowed the Habsburgs to implement a form of taxation without consent, and Mariana dissented loudly. Many millions of citizens, from his generation to our own, have benefited from the courageous efforts of this exemplary man who defended private property and freedom against the tyrants of his day.

KEYWORDS: Juan Mariana, coinage, inflation, monetary policy, scholasticism, School of Salamanca, Spain

JEL CLASSIFICATION: B11, B31, E42, N1, N43

Dr. Gabriel Calzada (gc@ufm.edu) is President of the Juan de Mariana Institute and Rector at Francisco Marroquin University in Guatemala.

Until September 8, 1609, Juan de Mariana did not appear to have been fully aware of just how risky it can be to participate publicly in an ideological debate, especially when one places the pillar of private property at the center of one's political and economic theory. On that day a group of armed men headed by one Miguel de Múgica broke into the Jesuit monastery at Toledo and carried out an arrest warrant against him by order of the Bishop of the Canary Islands, Francisco de Sosa (a Franciscan), whom the King had nominated to adjudicate the controversy over the inconvenient philosopher. Three days prior, a group of officials from the Inquisition had appeared at his chamber and taken him off to make a deposition before that body's examiners (Ballesteros, 1944, p. 222). It was then that Mariana had acknowledged being the author of his latest book, a volume of seven essays, and indicated surprise that his words had caused so much commotion.

The life of this man from Talavera had always been beset by momentous challenges. Some, such as the composition and publication of the first *History of Spain*, he had brought about quite consciously in order to highlight certain lacunas which he felt the society in which he lived needed to address. Others, however, were imposed upon him as a consequence of complex events which he had never intended to unleash. Seventy-three years before his arrest, towards the end of summer, a few days after his birth in Talavera de la Reina, he had to be transferred by protectors into a new home in another town, a place where the good name of his father, Juan Martínez de Mariana, the local dean of Talavera, could remain free from any dishonor.

The brilliance of Mariana's intellect, complemented by his natural facility for languages and his portentous memory, meant that Ignacio de Loyola, always on the lookout for talent, would focus his attention on him during his first year of studying theology at Cardinal Cisneros's Complutense University at Alcalá de Henares. The year was 1553, and he would officially enter the Jesuit Order the following January, along with other future literati like Luis de Molina and Pedro Rivadeneyra (Ballesteros, 1944, p. 18).

After his novitiate, which he fulfilled at the Castle of Simancas, and having completed his studies at Alcalá, his superiors were anxious to take full advantage of his intelligence, especially his capacity for communicating and his command of Greek and Latin, at which he continued to excel with each passing year. And so it was that Mariana was given the mission of teaching theology in the foreign capitals where the Company of Jesus sought to extend its reach. First, he was tapped to go to Rome, where in 1561 he began teaching theology at Loyola's new Colegio Romano, attended by exceptional students, such as the future Cardinal Robert Bellarmine. Between our Talaveran and the nephew of Pope Marcellus II there arose a friendship that would last their entire lives (Ballesteros, 1944, p. 247). After four years in the Eternal City, Mariana left, first for Loreto, and two years later he packed his bags again for Sicily.

In 1569, with eight years of teaching under his belt, Mariana left Italy to begin a new phase in his life as a teacher and scholar at the Sorbonne in Paris. There he received his doctorate and became a chaired professor of theology. His courses on Thomism soon made him one of the students' favorite professors and won him international acclaim. His great gifts as an orator and his profound knowledge of the material meant that attending his courses became a matter of punctuality, for to arrive late typically meant not being able to find a seat for the Spaniard's lectures.[1]

On August 24, 1572, after more than five hundred nights of relative tranquility in Paris, Mariana likely awoke with alarm at the noise of the bells of the Church of Saint-Germain-l'Auxerrois. It was the beginning of the Saint Bartholomew's Day massacre, which marked the bloody end to the Peace of Saint-Germain-en-Laye. Mariana was made eyewitness to the deaths of thousands of Huguenots at the hands of their Catholic rivals. The use of religion for political ends and a murderous rampage resulting in the deaths of some 2,000 citizens of the capital, and between 5,000 and 10,000 in the rest of France, must have had a profound effect on the Thomist teacher, and years later they surely influenced his political philosophy, especially his thoughts on the limits of political power and his defense of tyrannicide.

After five years teaching in Paris, Mariana presented his resignation and asked to return to Spain. The Company of Jesus accepted his petition and that same year of 1574, after thirteen years abroad, the Talaveran arrived back in his native land. His

[1] Today Mariana's name can be seen on a wall of the Parisian university, carved there in commemoration of his work.

voyage took him by way of Flanders, with a stop in Amsterdam. It is possible that his return to Spain was motivated by poor health. It might also be that he had decided to seek a certain tranquility that he could not find amidst the pupils of Paris, in the hopes of recording the thoughts that had occurred to him during so many years of meticulous academic study. Perhaps these two reasons mutually reinforced each other in the decision to come home.

That same year of 1574 he would also arrive for the first time in Toledo, where he would reside for the remainder of his life. Leaving behind the bustle of two great European capitals, Mariana now had within his grasp a long desired period of rest and calm. In his request to return to Spain he had asked to be allowed to dedicate himself to his ecclesiastic vocation and to preach, and once again his wishes had been approved by Jesuit authorities. In this way, Mariana chose of his own free will to abandon the life of a university teacher.

Nevertheless, this tranquility lasted but a short while. Still in 1574, the Inquisition commissioned him, against his wishes, to be the censor of the *Polyglot Bible* assembled by Benito Arias Montano, who had been charged with heresy for consulting Judaic and Protestant texts for his edition. The choice of Mariana as censor was logical from the point of view of the knowledge necessary to elaborate a well-founded decision. It certainly would have been difficult to find another person with sufficient command of the theology and languages essential to the task at hand. But it also followed a certain strategic and political logic. For the fact that Mariana was a Jesuit must have made the Inquisition believe that he would harshly censor and sanction Montano in his report. In August of 1579 he finished his work, surprising all involved and society in general with an extensive and detailed study that analyzed several errors but ultimately absolved Montano. The final decision regarding the *Polyglot Bible*, which took Mariana more than five years to reach, not only laid out the doctrine according to which Catholic exegesis can make rightful use of rabbinical texts, but was also the first indication of an independent attitude, which, although it meant a range of inconveniences at the time for those in search of political privilege, it would also be a source of great moral support for subsequent generations and, as we shall see, for many of his contemporaries.

That intellectual independence and that demonstration of multidisciplinary knowledge which Mariana revealed in his role as censor had an unforeseen effect, one which surely did not please him. For from that moment on, and for many years to come, Mariana would be besieged with Inquisitional assignments.

During the years that the astute theologian was finishing his evaluation of the *Polyglot Bible*, he began to dedicate himself to researching and assembling diverse episodes for his *History of Spain*. He worked for seven years on this titanic project. The *History of Spain* was by no means the first work he had undertaken, but it was the first that he had chosen of his own volition. Mariana had decided to fill an enormous vacuum in the culture of his country, and in his chamber in Toledo he worked nonstop to make it happen. Finally, in June of 1586, he finished the initial version of the *History of Spain*, which for more than two and half centuries would be no less than the definitive *History of Spain*, with multiple editions in both Latin and Spanish.[2]

Owing to a plodding bureaucracy that was already substantial in those days, *Historiae de rebus Hispaniae*, which is the title Mariana gave to the Latin edition, would not circulate for another seven years, its publication thus coinciding with the centennial of the discovery of America and the Reconquest of Granada, the very episode with which Mariana opted to end his opus.

In 1585, a year prior to finishing the *History of Spain*, one of his best friends, García de Loaysa, was named the personal tutor of Prince Philip, the son of Philip II. Loaysa relied upon the intellect and the independent judgment of his friend when deciding on the knowledge that he was to impart to the future King of Spain. From then on Mariana served as advisor to Loaysa, and together they maintained a running correspondence regarding the education of the Prince, allowing Mariana to perceive the outlines of a new

[2] *Historiae de rebus Hispaniae* (1592) and its subsequent Spanish version, translated by Mariana himself and entitled *A General History of Spain* (*Historia general de España*, 1601), remained without rival in the historiography of Spain until Modesto Lafuente published his own *History of Spain* in 1850. Over the course of those two and a half centuries numerous editions of the Spanish version were published. Manuel Ayau, the great founder of Guatemala's Universidad Francisco Marroquín, exhibited with great pride a Spanish edition of 1848 in his personal library.

project, the elaboration of which he undertook of his own initiative. Five years later he had copious notes that would serve him in his work on monarchy. In the summer of 1590 he spent a period in a country house in El Piélago with two friends, sharing with them, chapter by chapter, the entire book with the aim of debating it and polishing it into its final form. The following year the text was essentially finished, but Mariana did not consider it appropriate for publication until after the death of Philip II and the rise to power of the actual Prince to whom he had directed the lessons in which his own political philosophy found formal expression. Standing out among the numerous themes that he analyzed are the genesis of human society, the origin and the essence of political power, the rights of human beings, and the importance of public finance. Among the conclusions that have caused the most sensation, over the course of the more than four centuries that have passed since its writing, are topics such as the anteriority of individual rights to the birth of political power, the subordinated condition of the king, the necessity and advisability of establishing clear limits to the exercise of a constrained power located in the king's person, the right of individuals to kill a king who has resorted to tyranny, the illegitimacy of establishing a monopoly over military power, the usurping character of laws established without the consent of the people, the importance of maintaining a balanced budget, and the unjustifiable recourse to unlawful practices even for the attainment of the most noble ends.

Coincidental to the analysis he performed in the writing of the chapter on taxation, Mariana began to be intrigued by monetary issues, in particular the relation between money and the important matter of weights and measures. This interest in arduous numismatic and pecuniary topics led him to begin to conduct research toward yet another publication. Around 1590 he commenced a search for texts with which to increase his knowledge on these subjects.

With the change in monarchs upon the death of Philip II in 1598, the Talaveran decided to brush off his book on the education of the prince and attempt its publication. At the same time, he tried to publish *De ponderibus et mensuris*, the work that had resulted from his investigations of weights and measures, and money in particular. The censor praised *De rege et regis institutione*, and that same year both *De rege* and *De ponderibus* went to press, even though neither would be distributed until 1599. The same year his friend Loaysa died, having been named Archbishop of Toledo just a year earlier and having again taken Mariana as his advisor for his new position. The publication of *De ponderibus et mensuris* in 1599 represented the first work by Mariana which focused on monetary issues. In all there appeared three monetary texts which would eventually conduct Mariana into the shadows of captivity. Nevertheless, the general and eminently formal approach of the first of these did not yet suggest the problems that the Jesuit scholar would suffer as a result of his later economic theory. In fact, it appears that Mariana himself never even intended to pen anything more on the money issue.

On December 31, 1596, Philip II approved a royal decree by which he attempted to raise funds and escape the consequences of the umpteenth bankruptcy of the public coffers, which had taken place earlier that same year.[3] That edict stipulated that the billon coins produced by the new hydraulic machine at Segovia were to contain no silver. The benefit this maneuver had on the Treasury was substantial. On the one hand, the King now issued coins made with the metal that had the least intrinsic value, and, on the other hand, he took advantage of the opportunity to order a recall of all billon coins previously put into circulation in order to extract their silver content and re-stamp them at Segovia with the same face value as before. The measure was not the slightest bit appreciated by the public and resulted in protests. In response to the social unrest, in 1597, the King, perhaps trying to live up to his nickname "Philip the Prudent," decided to concede and added a grain of silver to each mark of copper in all subsequent issuances.

With the rise to power of Philip III and his advisor, the Duke of Lerma, monetary policy went down a path which we would today term "inflationary." The five first years of his reign were characterized by a return to the minting of low-grade billon coins or coins with no silver content at all as per the late schemes of his father. In 1602, however, there was a qualitative change in this policy. On

[3] Prior to the bankruptcy of 1596, Spain had already experienced, during the reign of Philip II, bankruptcies in 1557, 1560, and 1575. For more details on these suspensions of payments by the Royal Treasury, see the essay by Drelichman and Voth (2009).

July 13, 1602, the Crown decreed the final elimination of silver and simultaneously reduced the coins to half their former size and weight. Given that the new silver-less and lower weighted billon coins maintained their previous face value, in spite of having their weight and size reduced by half, the coins minted previous to the new law suddenly and without warning saw their monetary value double. As one would expect, nobody wanted to turn over their old money in exchange for the new. Thus, on September 18, 1603, it was decreed that all coins minted previous to the new law had to be re-stamped. Accordingly, the coins with a value of two maravedís were now punched with four bars, signifying the duplication of their nominal value, and the same happened with the four maravedís coins, which had "VIII" imprinted over their previous value. In concert with these re-stampings, the treasurers subtly issued new coins officially valued at one, two, four, and eight maravedís, all of them without silver and in accordance with the new weighting system.

This measure allowed the King to collect the old maravedís coins (those with silver as well as those with relatively more copper), re-stamp them, and then pay off his suppliers and creditors using the coins with less metal. The value of the public treasury jumped by 66 percent (Ballesteros, 1944, p. 199). Some studies estimate the King's windfall via this nifty trick at 875 million maravedís. Given the fact that the act of re-stamping does not generate any real wealth in and of itself, the proceeds that the King obtained had to result, naturally, in an equivalent diminution of the wealth of the citizenry, excepting those individuals and institutions that collaborated with the Crown in putting the new monetary policy into action and who thereby participated in the windfall.[4]

The vast majority of the population was impoverished and commerce itself was adversely affected by the fiscal chaos, all of which heavily impacted the lower classes and the nation at large. Discontent spread, but the Palace walls seemed deaf to the lamentations of the people. Mariana, who always had a keen sense

[4] This history of monetary maneuvers is well documented at the website www.marevedis.net, especially the section on re-stampings: www.maravedis.net/resellos.html. Not even this last measure could avoid yet another suspension of payments, which took place in 1607.

of morality and justice, immediately set himself to work on an explication of phenomena similar to those playing out in our own day, and he ended up denouncing the political authorities as those ultimately responsible for the situation.

What is certain is that very few people could understand as well as Mariana did the corrosive effects of suddenly changing by decree the weights and measures of money. The investigation that he had carried out while writing *De ponderibus et mensuris* had helped him to develop an understanding of the importance of always respecting said weights and measures. His historical knowledge offered him multiple examples from the past of the consequences provoked by similar monetary manipulations. What is more, his daily contact with commoners in the streets allowed him to directly assess the theoretical effects of such manipulations. Finally, his theological knowledge and his clear moral vision placed him in a unique position, allowing him to indicate those destructive consequences of the new monetary policy that lay in wait above and beyond its merely material effects.

And so it was that in 1603 Mariana undertook a new philological project on money. This time he focused on the causes and effects of monetary manipulations conducted by the politically powerful. This is the origin of *De monetae mutatione* as well as his own loss of liberty in 1609. In the words of Manuel Ballesteros Gaibrois, the events of 1602–1603 underscored "the tribune that lay dormant in the man, who converts his chamber into a jumble of written pamphlets and scientific experiments, and gradually conceives of a study—which will be entitled *De mutatione monetae*" (pp. 199–200).[5] It is not clear whether or not Mariana initially imagined this project as an independent treatise on money. If this was the case, he probably thought that the topic was of such importance that he could not wait to see it published along with the rest of the essays that he had already finished or else was in the process of finishing, all of which he had intended to release as a compilation of short meditations on diverse matters. The best indication of this urgency is the fact that the first fruits of this effort came to light well before

[5] Ballesteros confuses matters slightly when he says that Mariana set about expanding the content of the chapter on money in *De rege*, for the latter was not published until 1605.

the actual monetary essay. In effect, in 1605, only two years after the decree that mandated the re-stamping of the billon coins, and with the real consequences already plainly visible, Mariana published an early text, which already contained the heart of the argument that four years later, when published in the amplified form of a treatise, would unleash so much royal fury against his person. The opportunity that presented itself to him in 1605 was perfect. He was preparing the publication of the second edition of *De rege* and so he decided to insert a chapter on money just after the one dedicated to taxation. What better vehicle than a book dedicated to the education of a prince for an explanation of monetary theory? Here he could counsel against the evils caused by certain policies and try to establish the limits of political power with respect to the same issue.

Mariana began his chapter "*De moneta*" with an irony denoting his indignation at the policy put into action by Philip III:

> Some astute and ingenious men, in order to attend to the needs that continuously overwhelm an empire, above all when it is far-flung, came up with the idea, as a useful way to overcome difficulties, of subtracting from money a certain part of its weight, such that, even if the resultant money were adulterated, it would nevertheless maintain its previous value.

Next, he explained what is concealed by these policies:

> As an amount is taken from the money in terms of its weight or quality, a similar amount redounds to the benefit of the prince who mints it, which would be astonishing if it could be done without injury to his subjects.

Finally, he insinuated his own views and took the first steps toward more categorical denunciations, making it patently clear that he is referring to the King's current policy:

> In truth it would be a marvelous art, and not a secret magic but, rather, a public and laudable one, by which means great quantities of gold and silver would be accumulated in the treasury without having need to impose new tributes on the citizens. I always viewed as petulant men those who tried to transform metals, by means of certain occult skills, and make silver out of copper and gold out of silver through some chemical distillation. Now I see that these metals can change their value with no effort and no need of burners, and even multiply it, by means of a princely edict, as if by some sacred contact they were given a superior quality. The subjects will still partake of the common wealth just as much

> as they possessed before, and the remainder would fall to the benefit of the prince for him to apply toward the public good. Who among us has such a corrupt, or perhaps perspicacious, mindset that he would not approve of this blessing on the state? Above all if he reflects that it is nothing new. (Mariana, 1599c, pp. 339–340)

Mariana continued his exposition by presenting various historical examples of monetary manipulation, but he clarified that the fact that such policies have been carried out in the past does not justify them now. What is more, he concluded: "Under the appearance of great utility and convenience can hide a deception that produces many and worse damages both public and private, and so recourse should not be made to this extreme measure except at the experience of great duress" (p. 341).

After this thunderous introduction, our author established the foundations of his thesis and signaled private property as the principal pillar sustaining his theoretical structure. For Mariana, the point of departure is the fact that "the prince does not have any right over the private property and estates of his subjects that would allow him to take them for himself or transfer them to others," and he affirmed that those who argue otherwise "are charlatans and flatterers, who much abound in the palaces of princes" (p. 341). Mariana maintained that taxation robs the people of their property and impoverishes them. Just in case it has not been made clear, and taking advantage of the fact that this is the very same book in which he expounds his version of the generally accepted theory of tyrannicide, he explained that to establish new taxes without the formal consent of the people makes the king a tyrant. Then he generated a parallel between inflation and taxes, argued that through the adulteration of money the king keeps for himself a part of the property of his subjects, and concluded that the king cannot devalue money without the consent of the governed.

Next, Mariana addressed the difference between intrinsic value and extrinsic value, arguing that he who would allow this difference between them to exist is a fool. The reason for this, he explained, is as follows: "Men are guided by the common value that is born out of the quality of a thing in conjunction with its abundance or scarcity, and all efforts are in vain when aimed at altering these fundamentals of commerce" (p. 343). To put it another way, men act according to their subjective evaluation of things, which is based on the properties of goods and their relative availability.[6] He added that it is futile for the king to go against natural law and the monarch only has the right to a small commission for the minting of money.

Mariana went even further: he set out a range of natural economic laws and exposed the fraud involved in inflationary policy, which consists of altering the weights and measures of money and which he equates with robbery. Following Aristotle, he explained the origin of money and then turned against the principal argument in favor of inflation, namely, that since money has no other use than to provide necessary goods, what is wrong with the prince extracting his share and mandating that the remainder continue to circulate among his subjects with the same face value that it had previous to its devaluation? The answer is immediate: this policy is like robbery, because it destroys the wealth of the citizenry; and it is difficult to restrict because the king has greater control over the production of money than he has over the production of other goods. Moreover, according to the Jesuit, this policy has three obvious consequences. The first is that it will cause shortages and reduce the purchasing power of the people. He adds that the typical remedy on the part of the governing classes is to establish price controls, but that this solution only escalates the evil that it pretends to fix. Second, the debased money debilitates commerce. Price controls do not solve this problem either, because nobody will want to sell at the fixed prices and this will bring about runs on goods, stagnation, and the collapse of commerce. Third, upon the economic collapse, the taxes that the king continues to collect will provoke resentment.

Mariana concluded this new and valiant chapter by saying that he had performed his discussion of inflation in order "to admonish princes against altering those things which are the very foundations of commerce, that is, weights, measures, and currency, if they desire to have a tranquil and stable state, because under the appearance of momentary utility lies untold fraud and harm" (p. 351).

[6] In his *Principles of Economics*, Carl Menger, the modern founder of the Austrian School of Economics, lists four conditions that convert something into an economic good: 1) the existence of a necessity; 2) the existence of characteristics in a given thing that can causally relate to the satisfaction of that necessity; 3) awareness regarding these characteristics; and 4) awareness of that causal relation on the part of a person with control over that thing.

In sum, the daring Jesuit was telling the King that he should not let himself be carried away by those who were telling him that an inflationary policy was an easy solution to the problems of the public treasury, one which he had a right to employ. He explained that this is essentially a matter of property rights and that, if the King cannot make off with the goods of his vassals, neither can he alter the weights and measures of money. Inflationary policy impoverishes the people and hurts commerce, and the benefits of said policy are only superficial.

Mariana must have been conscious that many would consider his stance radical, and yet he was set on influencing the monetary policy of Philip III. For this reason it does not seem to be a coincidence that the second edition of *De rege et regis institutione*, in which he presented for the first time his anti-inflationary argument, was published together in a single volume with *De ponderibus et mensuris*, as if he had wished to add a long appendix expounding in detail on the technical foundations of the evil he was denouncing.

Meanwhile, the fiscal situation of the State continued to deteriorate and the monetary games of the King and the Duke of Lerma, the same games Mariana denounced in the chapter recently added to *De rege*, were ineffective in avoiding a new suspension of payments by the Treasury on November 7, 1607, only a few months after the conclusion of the re-stamping process begun in 1602. By then the Jesuit was already anticipating the publication of his treatise on the adulteration of money.[7] Towards the end of the previous year he had finished writing the seven essays that would make up his new book, in which *De monetae mutatione* was the fourth.[8] While the sage priest was awaiting the publication of the Latin version of the essay, he set about translating it into Spanish, once again confirming the priority that he always gave to the battle over money, which was now beginning to spill over into the intellectual world. What he surely did not anticipate was that his enemies would retreat from the public dialogue, instead

[7] According to Mariana's own testimony at his trial, he had finished the text by 1605, making only a few minor adjustments afterward (Ballesteros 225).

[8] The authorization by the Provincial Father for the publication of these seven treatises was issued on November 24, 1606.

leveraging political power and physical force against him with the goal of silencing his inconvenient ideas.

Around the middle of 1609 the treatise on the manipulation of money was finally published at Cologne as part of *Septem tractatus*, and on August 28 the King received a letter signed by one Fernando Acevedo, in which he denounced the work. The mixture of emotions that Mariana felt on September 8, when the group of armed men following the orders of Francisco de Sosa seized him and escorted him to Madrid, must have been particularly bitter. After seventy-three years dedicated to studying, teaching, certifying, and disseminating scientific ideas, the monarch responded to his independent quest for the truth in all of this work by taking away his liberty. After giving of himself to society for the better half of a century, the Government chose to persecute him, accusing him of *lèse-majesté* and confining him to the Basílica de San Francisco el Grande. The anger that his detailed defense of tyrannicide had failed to unleash suddenly came crashing down on him at his explication of the effects of monetary manipulation. His exposition on the causes and consequences of the inflationary phenomenon seemed more menacing to the King than the actual threat of death should he become a tyrant by not respecting the rights of his subjects.

The basic arguments of *De monetae mutatione* would turn out to be the same ones he had already used in his chapter on money, except that between 1605 and 1606 he had taken time to add to his historical examples, flesh out his juridical arguments, and develop his economic explications of the causes and effects of the evil that was so clearly afflicting the populace. In the prologue, in case it was not clear enough through a simple reading of the text, he underscored that the issue of monetary policy respecting billon coins was among the most important facing Spain at the time and it was what had motivated him to pen the present work. Furthermore, he implored the King to read carefully the arguments that he was going to present before condemning him for his indiscretion or deciding on whether or not he was correct. Our author made use of these initial pages to explain that the current “disorders and abuses” in the production of billon coins were making the entire populace cry out, and given that nobody dared to denounce the situation, he was taking it upon himself to do so. He even added that after so many books in which he had tried to serve His Majesty, he could think of no greater reciprocation on the part of the King and his ministers and advisors than that they should read with attention this treatise in which he had perhaps displayed an excess of missionary zeal in the denunciation of the abuses that had brought about the chaos affecting the entire country.

At the age of seventy-three, Mariana showed himself determined to rail against what he considered an injustice with grave consequences for the entire nation. He was conscious that he was inserting himself into a matter that might cause more than a few sparks to fly. Nevertheless, as he stated in another of the treatises published alongside *De monetae mutatione*: "the violence committed up to now will have terrorized many; but not me, for whom it only serves as a call to battle. I have proposed to establish peace between the combatants, and I am going to attempt to do so, no matter what dangers I face. It is in the most brutal and scabrous issues that one must exercise the pen."[9] Thus he began his treatise on money, exercising the pen in the most brutal business of them all, one that would come to be the work's central question: *Whether or not the king is the owner of the property of his subjects*. For the Thomist thinker who taught at the Sorbonne, the answer was already clearly in the negative. For the septuagenarian who had developed a profound skepticism for statist solutions and a strong sympathy for the principles of individual liberty and private property, the answer could not be put more roundly, "No!" In the second edition of *De rege* he had already stated the case in black and white terms. The policy of continually altering the weights, values, and stamps of money, which today we would call inflationary, is a form of robbery, and he was not about to watch the same abuse take place again without decrying it.

This is how Mariana assumed for himself the voice of the people, putting the right to private property at the axis of his anti-inflationary diatribe. Having defined the core problem, he explained that the king neither has the right to establish taxes without the consent of those who will pay them nor to create monopolies, for "either way the prince appropriates part of the wealth of his vassals" (Mariana,

[9] This valiant affirmation can be found in the essay entitled "Pro editione vulgata," the second of the treatises in Mariana's *Tractatus VII*.

1861, p. 38). More still: if this is indeed the case, then "the king cannot reduce the value of money by changing its weight or its face value without the consent of the people," and he concludes:

> If the prince is not the master but, rather, the administrator of the private possessions of his subjects, then he is not allowed to take away arbitrarily any part of their possessions for this or any other reason, as occurs whenever money is debased, for then what is declared to be worth more is worth less. And if the prince is not empowered to levy taxes on unwilling subjects and cannot set up monopolies over merchandise, then neither is he empowered to make fresh profit by debasing money, because this tactic aims at the same thing, namely, robbing the people of their wealth, no matter how much it is disguised as granting more legal value to a metal than it naturally has. All of this is smoke and mirrors, and it is all doomed to the same outcome, which will be seen with more clarity in what follows. (p. 40)[10]

Mariana then dedicated the fourth chapter of the essay to explaining the importance of being able to count on a stable currency free from manipulations. His message was clear: political alterations of money bring about price inflation. In the author's words, the reason for this is that "if money undershoots its legal value, all merchandise irremediably rises in price to the same degree that the value of the money drops, and all accounts are adjusted accordingly" (p. 46). Besides elevating prices, the adulteration of money alters and damages the proper functioning of commerce, because weights and measures are the foundation of all exchange. What is more, monetary interventionism is typically presented as the solution to this and other problems, and yet the sage Talaveran explained that these are "like giving drink to a sick man at the wrong time, which at first refreshes him, but in the end only makes his condition worse and increases his suffering"

[10] Regarding public consent and taxation, some might dispute whether or not Mariana was actually being contentious here. Nevertheless, it remains quite clear that the simple calling of a session of the Cortes in order to formally ratify new taxes does not satisfy him at all. In the *Tratado y discurso*, we can also read the following: "It is well understood that little attention is paid to what ought to happen in Spain, and here I refer to Castile, which is to drag the tax collectors before the Cortes, because the majority of them are not all that bright, since they are chosen by lot, being people who are of small minds when it comes to everything and who go about resolved to fill their pockets at any cost to the miserable public" (p. 36).

(p. 48). Here we have Mariana presenting an early version of the analogy between the inflationary solution and the drink used to revive an alcoholic, one which Friedrich Hayek would use roughly five centuries later.

Having analyzed the matter in depth, the philosopher detailed the disastrous effects of monetary manipulation, which, as he explained, goes against all rule, custom, reason, and natural law. In the same way that it would not be licit and nobody would approve if "the king were to break into the granaries of his subjects and take for himself half of all the wheat, and then compensate them by authorizing them to sell the remaining half at twice its previous value" (p. 68), neither is it right that the king take away half the value of the money and then attempt to satisfy its owners by declaring that what was once worth two is now worth four. And the robbery can be even greater still when the king permits or, worse still, orders that debts can be paid with the devalued money.

If injustice is the flipside of adulterated money, the face of it is inflation. Goods "will become costlier in proportion to the debasement of the money supply" (p. 69). This effect provokes popular outrage and what typically occurs is that the ruler, now caught up in the dynamic of his own interventionism, tries to fix prices. Clearly this remedy will be even worse than the disease and, as the first modern historian of Spain does well to point out, this will inevitably bring about shortages, "because nobody will want to sell" (p. 69). And if this reasoning were not remarkable enough, what followed was a compounded explication of the rise in prices in conjunction with the loss of the money's purchasing power, the one quantitative and the other qualitative. The first phenomenon responded to the fact that, as in the case of any good, the rise in the quantity of money will diminish its value. The second, though, responded to the fact that if the quality of the money deteriorates, then people will want to exchange their goods for money only if there is an increase in the amount of money being offered for those same goods.

As Mariana had explained previously, the ruler, far from reversing course, typically ventures further down his destructive path and now attends to the symptoms, instead of the causes that he himself unleashed. Thus, the fixing of prices, as an attempt to preserve the loss of a money's purchasing power, distorts the economy even further, bringing about general privation. In other words, shortages are not accidental but, rather, the logical consequence of fixing prices. And sooner or later, the king will be forced to acknowledge the source of the problem by lowering the official value of the money back to its intrinsic value (p. 71). The end result of all of this degradation cannot be anything other than a swelling of "collective rage," which the prince has only brought upon himself.

If we limit ourselves to material reality, there is no doubt that the king will benefit over the short term from this kind of policy, but over the long term the dynamic effects of the strategy will have forced him to worsen his own situation, via debasement of the money and its subsequent effect on commerce (and the productivity of the nation), always as delicate as milk, "which at the slightest disturbance separates and curdles" (p. 78).

But there is more. Bad money, in this case billon, exiles good money, in this case silver. Mariana described the Spanish experience as a textbook case of Gresham's Law. This law, popularized via the formula "bad money drives out good money," was proclaimed in 1558 by Sir Thomas Gresham. First articulated by Nicholas Oresme, it explains the effects caused by maintaining an artificial exchange rate between two currencies despite the one being devalued and the other not.[11] Our Jesuit describes the phenomenon just as it was taking place between the new billon coins and the old ones, and he simultaneously denounces that in such situations the king should benefit by ordering that he be paid with money containing silver, precisely while he continues to make his bond payments and dole out salaries with money containing only copper. Finally, as Mariana does well to indicate, foreign creditors and suppliers will not accept this arrangement, and thus silver will flow in their direction (Mariana, 1861, p. 64).

For a man who has dedicated his life to reflecting on moral, political and philosophical problems, at both empirical and abstract levels, for a man who has lived abroad, written the history of Spain, and tried to assist in the education of the Prince, and for a man who has looked hard at the rights that predate the royal

---

[11] Cf. Oresme's treatise and Selgin's essay on Gresham's Law. For more on Oresme, see Hülsmann, who has positioned him as the origin of the monetary theories of the Austrian School of Economics.

institution and even society itself, it is impossible not to see that the manipulation of money, with all of its attendant problems, is first and foremost a means of financing the public debt. Perhaps this is why the last chapter of his treatise is dedicated to the analysis of alternative measures that might resolve the Treasury's problem without having to make recourse to the destabilizing and destructive "fraud" of debasing the money supply.

According to Mariana, instead of focusing on raising revenues as the way to solve the fiscal imbalance, the first thing that the King and those who govern ought to do is reduce expenditures. His second recommendation is to end subsidies, rewards, pensions, and prizes. This is because—and let us not forget—the King is administering resources that are for the most part not his own. Mariana does not hesitate to put the case simply, so that it will be understood:

> Let us look at the matter clearly: If I were to send a representative to Rome and give him money for his expenses, would it be permissible for him to waste it and to give it to whomever he pleased, or for him to go about doling out another's money in a public display of generosity? The king cannot allocate public money given to him by the citizenry with the same freedom with which a private individual spends the income derived from his own lands and other possessions. (p. 91)

Furthermore, he proposed that "unnecessary ventures and wars be avoided, that incurable cancerous limbs be amputated" (p. 91). In other words, those wars which are not absolutely necessary should cease and there should be no hesitation in allowing Flanders to secede from the Empire. Moreover, he suggested that the King dedicate more energy to keeping outlays in line with revenues, with the purpose of avoiding influence peddling and corruption. Finally, if it becomes necessary to raise taxes, Mariana proposed that these be levied on luxury items, which are purchased principally by the upper classes.

As a final point, he concluded once again that what needs to be avoided at all cost is inflationary monetary policy, because it runs contrary to both ethics and economic efficiency. For if such policy is pursued without the consent of the people, from whom part of their wealth is extracted through the encumbrance, then it is "illicit and wrong," and even if it be done with their consent, he considered it a mistake and destructive for a variety of reasons.

Mariana was conscious of putting himself at risk by speaking so frankly and loudly, and he indicated as much in the prologue to the reader of *De monetae mutatione*: "I see very well that some will consider me too bold, others rash, saying that I do not consider the risk that I run. Nevertheless, I dare to speak out, an odd and retired man, against that of which so many wiser and experienced men than me have approved" (Mariana, 1861, p. 27). Even so, it must have been difficult for him to have imagined that the King and the Duke of Lerma would have unleashed their fury in such a virulent and immediate manner. He must have been thinking in such terms when they seized him at the chapter house in Toledo on September 8, 1609, by order of the Bishop of the Canary Islands.[12] As he was being conducted from Toledo to San Francisco el Grande in Madrid, he would have had time to conjecture about what they were accusing him of and what would be his principal lines of defense.

Mariana was already seventy-three years old, but it was still not too late for him to learn one of the bitterest lessons of his life: if one is disposed to confront political authority in defense of individual liberty and private property, one should anticipate the likelihood that he will be abandoned by his friends and even by the institutions that he has served his entire life. This was the case, for example, with the Company of Jesus, to which Mariana had dedicated with talent and zeal his last fifty-five years. From the outset of the proceedings, the directors of the order were careful not to defend him if doing so meant compromising their interests.

The King and Lerma had been quick to detain the aged philosopher, but they would take their sweet time presenting their formal indictment. The original claim was presented by Don Fernando Acevedo on August 28. So the King waited seven days before having the Inquisition formally depose the inconvenient author and eleven more before ordering his arrest and transfer to Madrid. Nevertheless, the formal accusation would not arrive until October 27. It consisted of the following thirteen charges:

1. Denying the right of the King to reform the money supply, using formulations with which he tries to discredit and

[12] Curiously enough, ever since September 8, 1914, this day has been dedicated to celebrating the Virgen del Pino, the patron saint of the Canary Islands diocese.

reprove the monetary policy of His Majesty, such as offending ministers and defaming the nation and its customs.

2. Omitting the reasons that justify the reform and using an erroneous methodology, thus making his work more a matter of libel than scientific study.[13]
3. Trying to provoke and disturb the populace. In other words, trying to foment social unrest.
4. Defaming Court administrators, arguing that they are inept and given to bribery.
5. Maintaining that inflation is a hidden form of taxation, that the King cannot impose taxes without consent, and calling him a tyrant.
6. Not considering information pertaining to the troubles of the State but, rather, inciting them by labeling as "fraudulent infamy" practices similar to those carried out in other countries.
7. Classifying as inept and insolent the decisions made by ministers in the development of the national monetary policy.
8. Accusing ministers of obstruction.
9. Affirming that the nation is poorly governed, because public officials are corrupt.
10. Insisting on the "wicked and imprudent doctrine" which claims that in matters that concern all, all may express their opinions.
11. Comparing the Spanish Empire to the Roman Empire in its decadence and making fearful prognostications, in which are interwoven species of *lèse-majesté*.
12. Accusing the King of ingratitude toward García de Loaysa, Pedro Portacerrero, and Rodrigo Vázquez.
13. Finally, affirming that at that time and in that realm there coexisted the following grave evils: theft and deception among citizens; lack of honor among magistrates; robbery of public money; continuous imposition of new taxes, which end up paying for private expenditures or superficial expenditures of the Royal House, whereas the commoners

[13] Here the prosecutor accuses Mariana of using deductive logic.

> cry out, oppressed by the great burden, and "pass their lives in anguish and pain no less brutal than death itself"; the existence of a great "number of poor who, without any hope and without having anything of their own, go about lashed to a stake"; the adulteration of the money supply with the harm this supposes to commerce and the shortage of all kinds of goods. (Fernández de la Mora, 1993, pp. 68–77)

At last Mariana knew the charges against which he would have to defend himself. As soon as the accusations were put before him, he requested several days to prepare his defense, which he decided to undertake personally. The final words of the prosecutor invited him to disavow the written record he had left in his book. How should he confront the situation? The alternatives were clear: either he renounced his principles and declared that he had made an error in judgment, or else he threw himself into defending his ideas at the risk of never being able to convince the tribunal that it was not true that he had committed "capital offenses," as the prosecutor had claimed. On November 3 his choice was made clear via the thirty-five handwritten folios of exoneration that he introduced, which consisted of a series of formal arguments maintaining: that the publication of his work complied with the law from the moment it was granted the required license to be published; that in no way did it transgress the articles of his faith; and that it was "clear doctrine" that facts which are already public can be restated and that the majority of these had already been judged, referring to the abuses and corruptions that he denounced in the treatise. In addition, Mariana put forth four general arguments: 1) that he was being accused of supposed intentions that only God and he could know and which he had already disclosed in the prologue to the book; 2) that technically his book cannot be considered a defamatory libel because there is nothing surreptitious about it; 3) that it only mentions cases of corruption already punished as such; and 4) that it was printed in Cologne only because the domestic presses had been closed by royal decree and that he had obtained permission for its printing there.

Mounting his defense against the specific charges brought against him by the prosecutor, Father Mariana answered them one at a time with a combination of solid theological arguments and deft political maneuvering.[14] To the first accusation he responded that he maintains his opinion that the King has no right to debase the currency without the consent of the people, for the same reasons that he had expounded in his book. To the second, he responded that he never omitted any justification for the monetary reform but, rather, that he continued to believe there is insufficient justification. To the accusation of fomenting unrest, he answered that the existence of corruption does not mean that the King knows of it and consents to it, and that he only reiterated an already public outcry. He refused to disown his affirmation with respect to the fifth accusation, according to which inflation is a tax for which the King has not obtained consent, which is therefore not legitimate, and which casts the monarch in the role of tyrant. Regarding the sixth allegation, he defended himself saying that he did not intend to incite unrest but, rather, to alert the King as to what might happen to him and what, in point of fact, has happened in other countries. Next, Mariana contested the seventh, eighth and ninth charges with a sly prestidigitation by which he tried to maintain that he was not referring to the ministers of Spain but, rather, to certain personages already condemned and to ministers in general who would establish these policies independent of consultation. He also defended himself against the incrimination that he called ministers inept and labeled their decisions insolent by alleging that "inept" means purposeless and that an "insolent" decision is merely an "extraordinary" decision, availing himself of one of the meanings that the adjective still held at the time.[15]

[14] This summation of Mariana's defense is taken from Fernández de la Mora (1993, p. 83).

[15] The argument that Mariana utilized in his defense against this charge recalls the one used several years ago by Manuel Ayau (a.k.a. "Muso") in a famous debate at the highest institutional levels of Guatemala concerning the form that a possible stock market might take there. As told by Eduardo Mayora: "The Central Bank of Guatemala maintained its legalistic opposition to the incorporation of a fully private entity designed to underwrite a stock market. They could not imagine that such a thing could exist without passage of a special law, without the direction of the State, and, of course, without its own blessing. The proposal led to a high-level meeting with the Bank's most powerful dignitaries, presided over by its Vice President. On the side of those favoring a stock market, there was Muso leading the charge. The Vice President of the Bank of Guatemala welcomed Muso and those in his company, following the customary protocol at that type of formal gathering, with a more or less condescending

He responded to the tenth charge with an ardent declaration in defense of freedom of expression. Regarding the eleventh, he said that he had made the comparison between the two empires in order to warn about where we could all end up if the issue is not resolved. He accused the prosecutor of twisting his words in the twelfth accusation and, finally, he said that, regarding the final charge, he was merely referring to the public treasuries of all countries everywhere.

After reading the exculpatory text, the prosecutor levied a new charge against the Jesuit: alleging that the charges of the prosecutor are false. Nevertheless, the prosecutor must not have had much confidence in his accusations, because on December 2 he asked for a delay of the trial, to which Mariana objected. When the oral arguments finally took place, the accused philosopher encountered difficulties calling his seven witnesses, one of whom even refused to appear before the court. The other six defended the courage and honor of Mariana, after demonstrating their familiarity with his work. By contrast, of the ten witnesses called by the prosecutor only two were familiar with the book, but they all nevertheless denounced Mariana, displaying absolute complicity with the powers that be. Five of these went so far as to claim that the King could do as he wished with the money supply as well as the property of his subjects. Eight of the ten stated—without having read the book—that everything the book said is false.

On the day after the Day of the Magi in 1610, Mariana received a written statement of the cause against him and he responded that he will not enter into a discussion of positive laws but, rather, only natural laws. He further added that, if the prosecutor were correct, then private property would not exist, and he requested that all of the witnesses' testimony against him be disregarded, for they have testified without citing the book in question. So the case was set for sentencing on January 9, 1610.

---

tone, after which he yielded to Muso, who, without the slightest preamble, said: 'Well, thank you very much. Today, we are here to tell you all that you are dysfunctional....' Every one of us froze for a few moments, which seemed like an eternity, until Muso finally added: '...in the sense that it is not the function of the Central Bank to regulate any stock market.' After that we all breathed a huge sigh of relief" (personal communication, 2009).

The King put Mariana's feet to the fire, trying to condemn him for *lèse-majesté*, and meanwhile he called for his ambassadors to buy up or take possession of all the copies of the book they could find in order to burn them. Unfortunately, the ambassadors set themselves with such zeal to the task ordered by Philip III that today it is nearly impossible to find a first edition copy of *Septem tractatus*. Nevertheless, in spite of all the King's efforts at getting the Vatican to back him in his persecution of the Jesuit, he never achieved an ounce of papal cooperation by which to condemn him.

In light of the impotence of the King, Mariana was freed, without any formal conclusion to the trial. As Gonzalo Fernández de la Mora (1993) does well to point out, contrary to what is usually believed, the episode "makes manifest the fact that the Monarchy's power was not capricious but, rather, limited not only by the ethical consciences of its affiliates, but also by judicial review" (p. 99). The result of the trial ultimately supports the view advanced by, among others, Murray Rothbard in *Economic Thought before Adam Smith*, according to which institutional rivalry and jurisdictional overlap limited the power of the State in a relatively effective way, while the Catholic Church continued to enjoy a certain degree of power in Europe.

Juan de Mariana managed to overcome the nightmare in which he found himself all alone. At seventy-four, he returned to Toledo and never again occupied himself with monetary issues. In the years following the trial, he lived long enough to see how those who had persecuted him with their hatred fell from the pedestals to which they had risen. He also lived long enough to see how a new generation of intellectuals would defend his work, which was also attacked in France for its defense of tyrannicide. In spite of the physical disappearance of the book in which he had most clearly articulated his monetary theory, his ideas were defended by other authors, both within and beyond the borders of Spain. And so it was that so many millions of citizens, from his generation to our own, were made the welcome beneficiaries of the valiant efforts of this exemplary man who defended private property and freedom, even under the most adverse of circumstances.[16]

[16] Among the authors who knew, defended, and disseminated some of Mariana's ideas over the years that followed, we should note philosophical, political,

REFERENCES

Ballesteros Gaibrois, Manuel. 1944. *El Padre Juan de Mariana: La vida de un sabio*. Barcelona: Amaltea.

Drelichman, Mauricio and Hans-Joachim Voth. 2009. "Lending to the Borrower from Hell: Debt and Default in the Age of Philip II, 1556–1598." Working Paper.

Fernández de la Mora, Gonzalo. 1993. "El Proceso contra el Padre Mariana." *Revista de estudios constitucionales* 79: 47–99.

Hayek, Friedrich. 1931. *Prices and Production*. New York: Augustus M. Kelly.

Hülsmann, Jörg Guido. 2007. *The Ethics of Money Production*. Auburn, Ala.: Mises Institute.

Laures, John. 1928. *The Political Economy of Juan de Mariana*. New York: Fordham Univ. Press.

Mariana, Juan de. 1592. *Historiae de rebus Hispaniae*. Toledo: Petrus Roderici.

——. 1599a. *De ponderibus et mensuris*. Toledo: Tomás Guzmán.

——. 1599b. *De rege et regis institutione et De ponderibus et mensuris*. Mainz: Balthasar Lipp, 1605.

——. 1599c. *La dignidad real y la educación del rey*. Madrid: Centro de estudios constitucionales, 1981.

——. 1609. *Tractatus VII. De adventu B. Iacobi Apostoli in Hispaniam. Pro editione vulgata. De spectaculis. De monetae mutatione. De die mortis Christi. De annis arabum. De morte et immortalitate*. Cologne: Antonius Hieratus.

——. 1861. *Tratado y discurso sobre la moneda de vellón, que a la presente se labra en Castilla y de algunos desórdenes y abusos*. Madrid: Instituto de estudios fiscales, 1987.

Menger, Carl. 1871. *Grundsätze der Volkswirtschaftlehre*. Vienna: Braumüller, 1923.

Oresme, Nicolás de. 14th century. *Tratado de la primera invención de las monedas*. Barcelona: Orbis, 1985.

economic and even literary giants ranging from Quevedo and Lope to Turgot and Locke. And as can be seen in the following essay by Professor Graf, there is a good argument to be made that Miguel de Cervantes, the author of the first modern novel, was Mariana's greatest disciple of all.

Rothbard, Murray N. 1995. *Economic Thought before Adam Smith*. Cheltenham: Edward Elgar.

Selgin, George. 1996. "Salvaging Gresham's Law: The Good, the Bad, and the Illegal." *Journal of Money, Credit and Banking* 28, no. 4. 637–649.

The Quarterly Journal of Austrian Economics

VOL. 21 | N^O. 2 | 137–146
SUMMER 2018

Juan de Mariana and Miguel de Cervantes: The School of Salamanca and the Invention of the Modern Novel

Eric Clifford Graf

ABSTRACT: Given the importance of the School of Salamanca, economists of the Austrian School occupy a privileged position with regard to the study of literature. Specifically, they are well suited to understand a foundational text in the modern history of the novel form. *Don Quijote de la Mancha* (1605/1615) by Miguel de Cervantes (1547–1616) is steeped in the thinking of the School of Salamanca, especially that of the great late scholastic Juan de Mariana (1536–1624). Just as there are reasons to teach early modern economic thought in literature departments; there are reasons to teach *Don Quijote* in economics departments. This essay is an introduction to the philosophical, political, and economic commonalities between Cervantes and Mariana in the hopes that more classical liberals will attend to the first modern novel as a reflection of the general contours of our perspective.

KEYWORDS: Miguel de Cervantes, coinage, Don Quijote, inflation, Juan Mariana, monetary policy, scholasticism, School of Salamanca, Spain

JEL CLASSIFICATION: B11, B31, N1, N43

Eric Clifford Graf (ericgraf@ufm.edu) is a professor of literature at Universidad Francisco Marroquín in Guatemala.

INTRODUCTION

Economists from the Austrian School have long argued that the free-market mindset, which reached its peak during the classical liberal period of the eighteenth and nineteenth centuries, traces its origins back to the early modern period, especially the ideas of the late-scholastic thinkers of sixteenth and seventeenth-century Spain known as the School of Salamanca. Men like Domingo de Soto (1494–1560), Martín de Azpilcueta (1491–1586), Diego de Covarrubias (1512–1577), Luis Saravia de la Calle (1500s), Tomás de Mercado (1525–1575), Luis de Molina (1535–1600), Felipe de la Cruz Vasconcillos (1500s), and Juan de Mariana (1536–1624), were keen to define, analyze, debate, and explain topics that have always interested Austrian economists: interest rates, the prices of goods and services, the causes and effects of inflation, the advisability of different monetary policies, and the relation between supply and demand.

In the context of the importance of the School of Salamanca, economists of the Austrian School also occupy a privileged position with regard to the study of literature. Specifically, they are well suited to understand and explain a key text at the beginning of the modern history of the novel form. *Don Quijote de la Mancha* (1605/1615) by Miguel de Cervantes (1547–1616) is a text steeped in the thinking of the School of Salamanca. Given Thomas Piketty's recent abuse of novels by Jane Austin, Honoré Balzac, and F. Scott Fitzgerald, Austrians ought to consider using Cervantes's novel as a kind of riposte to the French neo-Marxist. Just as there are excellent reasons to teach early modern economic thought in literature departments; there are excellent reasons to teach *Don Quijote* in economics departments.

In the context of the relation between the School of Salamanca and *Don Quijote*, the great Jesuit thinker Juan de Mariana (1536–1624) was the most important influence. Three books by Mariana are fundamental for understanding Cervantes: 1) *Historia general de España* (Latin 1592, Spanish 1601), the first modern history of Spain, unsurpassed until the nineteenth century; 2) *De rege et regis institutione* (1598/1605), a princely advice manual written for Philip III (r. 1598–1621); and 3) *De monetae mutatione* (1609), the greatest and earliest response to statist inflationary monetary policy.

Now, among Cervantes specialists, consensus defines the novelist as a humanist reformer interested in the private, bourgeois form of Christianity advocated by Erasmus of Rotterdam. Cervantes himself signals this ideological orientation in *Don Quijote* 2.62 when his protagonist enters a printer's shop in Barcelona and alludes to *La luz del alma cristiana* (1554) by the Erasmian friar Felipe de Meneses. Religious reformers like Meneses became targets of the Counterreformation, so it comes as no surprise that in the same chapter, and for the umpteenth time, Cervantes criticizes the Inquisition. The narrator reports that religious authorities order the destruction of the "enchanted head," a device owned by Antonio Moreno, a character whose liberal values anticipate those of Voltaire, Jefferson, and Twain (all passionate readers of *Don Quijote* by the way). The classic works of literary criticism that established this interpretation of Cervantes are Américo Castro's *El pensamiento de Cervantes* (1925), Marcel Bataillon's *Érasme et l'Espagne, recherches sur l'histoire spirituelle du XVI* (1937), and Alban Forcione's *Cervantes and the Humanist Vison* (1983).

Given the dominance of the Erasmian interpretation of Cervantes, especially at universities outside of Spain, we still need to demonstrate the extent to which he was influenced by the late scholastics of his own country. And given his status as the leading Salamancan at the beginning of the seventeenth century, Mariana offers the most efficient means of articulating this response. I will go further: among all the intellectuals of the early modern period, Mariana, not Erasmus, is the most useful for unraveling the major metaphorical and sociopolitical aspects of *Don Quijote*.

Here, then, as much for specialists in economics as for specialists in literature, I offer nine ways to understand the intellectual parallels between Mariana and Cervantes.

1. AGAINST THE INQUISITION

The reform-minded humanists of the Low Countries were not the only ones to rail against the Tribunal of the Holy Office. Both the first modern Spanish historian and the inventor of the modern novel rejected the institution's politics of racial purity and its persecution of individuals like the theological poet Fray Luis de León or the reformist Archbishop Bartolomé de Carranza. In *De rege*, Mariana defended Jewish converts: "All those families that today shine forth with pure lineage had obscure and humble origins; if the door had been closed to plebes and converts, today we would have no nobility" (3.4). For his part, throughout his literary career, Cervantes mocked the Spanish obsession with blood purity. He does so in episodes in *Don Quijote* which highlight miscegenation in romantic couples like Aldonza Lorenzo and Don Quijote (1.25–26) and Zoraida and Ruy Pérez de Viedma (1.37). Similarly, he underscores the multiracial status of the Manchegan knight's supposed lovers, such as Dulcinea (2.10) and Altisidora (2.57). This criticism also appears in so-called exemplary novels like *La novela y coloquio de los perros* (both c.1605) and in comical interludes like *Retablo de las maravillas* (p. 1615), where Cervantes questions the racial purity of a pair of talking dogs and just about any Spaniard attending the theater. And Don Quijote's theory of lineage (2.6) echoes that of Mariana.

2. AGAINST CENSORSHIP

Complementing their criticisms of the Inquisition, Mariana and Cervantes were opposed to censorship. Mariana shocked many when he approved of Benito Arias Montano's edition of the polyglot *Biblia Regia* (1572). In numerous episodes of *Don Quijote*, Cervantes links the destruction of books to the persecution of individual human beings: the burning of the mad knight's books (1.6–7), the defense of similar books by the innkeeper Palomeque (1.32), the criticism of the Inquisition in the printer's shop of Barcelona (2.62), Altisidora's vision of devils torturing books in Hell (2.70), and Sancho Panza's return home with his ass dressed in buckram as a victim of the Inquisition (2.73). Given the other connections between Mariana and Cervantes, the presence of "the Queen Doña Maguntia" in *Don Quijote* 2.38 likely alludes to the German city where he published the second edition of *De rege*. The Maguntia edition of *De rege* of 1605 contained a single new radical chapter on money, which would later serve as the basis for the even more polemical *De monetae* of 1609, which, for its part, had to be published in Cologne and caused Habsburg authorities to arrest him and put him on trial for *lèse-majesté*.

3. RIGHT TO SELF-DEFENSE

Natural law was the essential grounds for late-scholastic thinking. Thus, in *De rege* Mariana not only defended the right of freemen to bear arms, he argued that they must be allowed "to strengthen their bodies through military exercises" (1.5). Cervantes has Sancho embrace natural law when he rejects the laws of chivalry advocated by his master: "when it comes to defending my person, I'll not care much about your laws, for others both divine and human allow each of us to defend himself against whomever would seek to do us harm" (1.8). In the second part of *Don Quijote*, a certain continuity among the characters Antonio Moreno, Claudia Jerónima, and Roque Guinart even hints at the Catalan nobility's resistance to Habsburg efforts to outlaw a specific type of early modern shotgun (2.60–65). And there is deep irony in the fact that the peasant Sancho wins his physical confrontation with *Don Quijote* (2.60), because it was his own master who taught him the self-respect required to rebel against the submission demanded of him by medieval norms. Cervantes's novel indicates that natural law, according to which no freeman deserves to be forced against his will, had subversive implications for the era's politics, sexual relations, and institutions like feudalism and slavery.

4. LIMITS ON THE POWER OF KINGS

Both Mariana and Cervantes wanted checks on monarchical power. This should come as no surprise: the scholastics emphasized the popular origins of sovereignty and many of their preferred medieval sources, such as Aquinas, approved of tyrannicide. As usual, Mariana was more radical than his peers regarding this issue, not only insisting on the right to kill tyrants but broadening his definition of a tyrant to include the prince who inflates the money supply. In *De rege* he went so far as to argue in favor of killing kings so that these would recognize the limits of their power and the punishment that awaited them if they turned to tyranny: "It is, however, salutary for princes to be persuaded that if they oppress the realm, if they make themselves intolerable due to their vices and their crimes, then they can have their lives taken from them, not only by right but also thus earning the applause and fame of future generations" (1.6).

For his part, Cervantes establishes a similar tone in *Don Quijote* by quoting the refrain "beneath my cloak, I kill the king" in the first prologue and referring to "some crime of *lèse-majesté*" in the second. He also alludes to Calvinism in the pirates of La Rochelle (1.41), suggesting some degree of sympathy for the Monarchomachs, who embraced a Protestant version of the radical Jesuit perspective of men like Mariana.

5. ARISTOTLE AND PLATO

Another way to understand the mentality shared by Mariana and Cervantes is via their preference for Aristotle over Plato. This early modern polemic is often overstated, but it remains true that, when thinking about governments, the humanists followed Plato in their emphasis on cosmic idealism, abstract speculation, and a curriculum of study designed to improve the character of princes; whereas the scholastics followed Aristotle in their emphasis on realism, historical perspective, economic issues, multiple political systems, and the need for formal limits on the power of kings. For this reason, historians like Joseph Schumpeter, Murray Rothbard, and Quentin Skinner have located the origins of modern political theory in thinkers like Francisco de Vitoria (c.1483-1546), De Soto, Molina, Francisco Suárez (1548-1617), and Mariana. In *Don Quijote*, Cervantes articulates this same contrast through a series of allusions to Plato's allegory of the cave, which he renders absurd by way of the Latin scholastic motto in the knight's letter to Governor Sancho Panza: "*Amicus Plato, sed magis amica veritas*" (2.51), which means "Plato is a friend, but truth is a better friend."

6. NOSTALGIA FOR MEDIEVAL FUEROS AND CORTES

In *Don Quijote* we also encounter anxiety about the lack of constitutionalism in early modern Spain. Before Governor Sancho Panza departs for the Isle of Barataria, Don Quijote gives him extensive political advice. In the end, the knight expresses horror at his squire's inability to read or write. There is also a play on words between two senses of the term "documents" (2.42–43), which means "instructions" but also "written texts." Sancho underscores the political importance of the second definition: "it will be necessary that they be given to me in written form." Later, we have the chaos contained in "The Constitutions of the Great Governor

Sancho Panza" (2.51), which present serious moral challenges to any reader with training in constitutional law.

It is Mariana who helps us to understand the specificity of these anticipations of modern constitutionalism in *Don Quijote* as well as just what all this has to do with Zaragoza, the city most mentioned in the novel. In *De rege* Mariana articulates tragic nostalgia for the controls on monarchical authority that were once sustained by the charters (*fueros*) and parliaments (*Cortes*) of the medieval period. He points to the investiture traditions and the local laws of the Kingdom of Aragón as model institutions and laments the brutal repression of the nobility there by Philip II in 1591. One of the great ironies of the narrative trajectory of *Don Quijote* is that the hidalgo would have had actual political representation in the Aragonese parliament, whereas he was excluded from the Castilian body, which never granted seats to the low nobility and which had already succumbed to the growing absolutist power of the Habsburgs.

7. HISTORY VERSUS LEGEND

In addition to his princely advice manual and his treatises on monetary policy, Mariana's influence on *Don Quijote* can be seen in the protagonist's tendency to conflate historical events and chivalric fantasies. The harsh realism of *Historia de España* appears to have caused national psychological trauma. In Mariana's vision of Spanish History, traditional heroes like Alfonso X 'the Wise' and Enrique II 'the Honorable' and villains like Pedro I 'the Cruel' changed places as per the metallic content of their respective coins. The Jesuit historian discovered that Alfonso X misrepresented the value of his coins and that the coins of Pedro I were superior to those of his rival Enrique II. Don Quijote's insanity has much to do with the ideological disorientation provoked by the long history of monetary manipulation, a theme which Mariana deployed as a desideratum of political loyalty to the kings of Spain.

8. CYNICISM

The baroque, disillusioned, and anti-imperialist politics shared by Mariana and Cervantes permit us to understand an overlapping metaphor found in their respective *magna opera*. Both writers took great interest in the classical example of Diogenes of Sinope, one of the founders of Cynic philosophy. Diogenes famously preferred the company of dogs to men and once mocked Alexander the Great by asking him to stand aside and quit blocking the philosopher's view of the sun. In the prologue to *De monetae mutatione*, Mariana portrays himself as Diogenes and thus unafraid to speak out against the monetary manipulations of King Philip III and the Duke of Lerma. Similarly, in *La novela y coloquio de los perros*, written around 1605, coetaneous to *Don Quijote*, Cervantes signals that the quixotic insanity of ensign Campuzano is intimately related to the philosophy of Diogenes and then proceeds to criticize Habsburg monetary policy. Mariana could have read a manuscript version of Cervantes's exemplary novel about talking dogs before writing the prologue to his monetary treatise addressing the same themes; or, vice versa, some parts of *La novela y coloquio de los perros* could have been written closer to 1609, i.e., under the influence of a version of Mariana's controversial tract.

9. ECONOMIC AND MONETARY POLICIES

Mariana and Cervantes grasped the fundamental importance of economic freedom, both as a general moral imperative and a means of enriching the citizens of Spain. Cervantes places free-market and free-labor negotiations at the heart of key episodes. The brutality of slavery in Don Quijote's encounter with Andrés and Haldudo and his attack on the merchants of Toledo in *Don Quijote* 1.4 comes full circle and is substituted by the hidalgo's miraculous agreement to compensate Sancho for his services in 2.71 and 2.74. Then there is the fact that without intense bartering by the narrator for the missing manuscript in the marketplace of Toledo in *Don Quijote* 1.9, the novel as we know it would not exist.

Mariana and Cervantes considered monetary manipulation to be tyranny. For Mariana this awareness grew to fruition over the course of nearly twenty years of investigation. In his *Historia de España* of 1592, he examined the coins of medieval kings. In the chapter he added to the 1605 edition of *De rege*, he announced that Habsburg monetary manipulation was the principal basis for his political disillusionment. Finally, in 1609 he disseminated the same criticism in overwhelming fashion in *De monetae*. In *Don Quijote*, Cervantes alludes to the policy of adulterating the coins of Castile on multiple occasions. In the 1605 edition: the description of Rocinante's hooves (1.1), the themes of robbery and adultery in the Sierra Morena episodes (1.23, 1.33, etc.), and Sancho's slaver fantasy (1.29). In the 1615 edition: Don Quijote's adventure with the lions (2.17), Queen Maguntia (2.38), and the first three cases adjudicated by Governor Sancho on the Isle of Barataria (2.45).

In this last context, i.e., that of the early modern relation between the novel and Habsburg monetary policy, Mariana's chapter "De moneta" in the *De rege* edition of 1605 deserves far more attention than it has received. It is my thesis that some version of this essay is the most likely source for Cervantes's attention to monetary manipulation and Habsburg tyranny in *La novela y coloquio de los perros* and *Don Quijote*, which were respectively written and published in the same year. In the appendix that follows, translated and published for the first time in English, is Mariana's first monetary treatise, which stands as one more piece of evidence that these two intellectual giants, the inventor of the modern novel and the climactic figure of the School of Salamanca, read each other very carefully.[1]

REFERENCES

Arias Montano, Benito, ed. 1568–1573. *Biblia regia*. Antwerp: Christopher Plantin.

Bataillon, Marcel. 1950. *Erasmo y España*. 2 vols. Trans. Antonio Altatorre. México DF: Fondo de Cultura Económica.

Castro, Américo. 1925. *El pensamiento de Cervantes y otros estudios cervantinos*. Ed. José Miranda. Madrid: Trotta, 2002.

Cervantes y Saavedra, Miguel de. 1605/1615. *Don Quijote de la Mancha*. Ed. Francisco Rico. Barcelona: Crítica, 1998.

[1] Additional explanations for the synchronicities between Cervantes and Mariana would include the general rediscovery of Plato and Aristotle during the sixteenth century, the likelihood that Cervantes also received a Jesuit education, and the fact that both men experienced intense degrees of disillusionment with the policies of Philip II and Philip III.

———. c. 1605. *El casamiento engañoso y El Coloquio de los perros*. Ed. Agustín González de Amezúa y Mayo. Madrid: Bailly-Bailliere, 1912.

———. 1615. *Entremés del Retablo de las maravillas. Ocho comedias y ocho entremeses nuevos, nunca representados*. Ed. Florencio Sevilla Arroyo. Fundación Biblioteca Virtual Miguel de Cervantes, 2001.

Forcione, Alban K. 1982. *Cervantes and the Humanist Vision*. Princeton: Princeton Univ. Press.

Mariana, Juan de. 1592/1601. *Historia general de España*. Trans. Juan de Mariana. In Francisco Pi y Margall, ed. *Biblioteca de autores españoles*, vol. 30. Madrid: Rivadeneyra, 1854.

———. 1598/1605. *La dignidad real y la educación de rey (De rege et regis institutione)*. Trans. Luis Sánchez Agesta. Madrid: Centro de Estudios Constitucionales, 1981.

———. 1609. *Tratado y discurso sobre la moneda de vellón (De monetae mutatione)*. Trans. Juan de Mariana. In Francisco Pi y Margall, ed., *Biblioteca de autores españoles*. Vol. 31. Madrid: Atlas, 1951, pp. 577–593.

Meneses, Felipe de. 1555. *Luz del alma cristiana*. Sevilla: Martín de Montesdoca.

Piketty, Thomas. 2013. *Capital in the Twenty-First Century*. Trans. Arthur Goldhammer. Cambridge, Mass.: Harvard Univ. Press.

Rothbard, Murray N. 1976. "New Light on the Prehistory of Austrian Economics." In Edwin G. Dolan, ed., *The Foundations of Modern Austrian Economics*. Kansas City, Missouri: Sheed and Ward, pp. 52–74.

———. 2006. *Economic Thought before Adam Smith*. Auburn, Ala.: Ludwig von Mises Institute.

Schumpeter, Joseph. 1954. *History of Economic Analysis*. New York: Oxford Univ. Press.

Skinner, Quentin. 2000. *The Foundations of Modern Political Thought*. London: Manchester Univ. Press.

The Quarterly Journal of Austrian Economics
VOL. 21 | N^{O.} 2 | 147–157
SUMMER 2018

Appendix

On the Coinage

Juan de Mariana
Translated by Hazzard Bagg

In order to fill a gap in the budget, which is never not a problem, especially in a sprawling empire, certain smart and clever men propose that it would be helpful in many difficult situations if something were to be pulled out of the weight of the coinage or from its quality, by debasing the metal while still retaining its original value. The prince gets to keep whatever is deducted from the quality or the weight of the currency. And what is more amazing, in the absence of harm or complaint on the part of the provincials. This wonderful technique is not a secret, but rather a useful method by which an incredible amount of gold and silver is redirected into the public treasury without the imposition of any new burden.

I have always typically thought of those men who promise to transform metals by some magical method—to make silver out of bronze and gold out of silver—as being the most untrustworthy sort,

Hazzard Bagg (hbagg@lincolnschool.org) is an instructor of Latin and Greek at Lincoln School in Providence, Rhode Island. This translation constitutes pp. 268–278 of the Mainz edition of 1605 of *De rege et regis institutione*.

like itinerant snake oil salesmen. Now I see that metals are rendered more valuable without any effort; that they are doubled in value without any smelting, controlled merely by the edict of the prince, as if multiplied by some sacred touch or higher power; that the subjects are getting back from the economy what they had before at full value; that there is public utility in the fact that what is left over is handed over to the prince for his use. Who is so unreasonable, or, if you prefer, so insightful, that he would begrudge this happy state of affairs—especially when no innovations are being introduced?

Rather, we tread upon a road trampled by the feet of many, standing upon which great princes from every era have gotten through difficult times. Who will be able to deny that the Romans, under the pressure of the Punic War, reduced their copper coins, which were previously generous, first to two ounces of bronze, then to one ounce, and again to half an ounce... and that the government was freed from debt by this technique? That Drusus, as Tribune of the People, mixed bronze into the *denarii* that appeared to be made of pure silver? Plautus's comparison of a new bawdy form of comedy to the new coinage is as wise as it is old.[1] Need I bring up the Jewish people, that superstitious race, who shun everyone else?[2] I note that among them the temple *shekel* is worth twice as much as the common *shekel* for no other reason than that after a while it became clear to the people that half the value had been subtracted from the correct and original weight of the coinage, either all at once in a single stroke or gradually by means of all too frequent acts of deceit (which I suspect is the more likely explanation). There is no need to go on about other countries since it is common knowledge to anyone explaining the past that money has often been made worse by great kings through frequent devaluation.

Or do you suppose that it is for some other reason that *solidi*, which were first made of gold and then of silver, ultimately

[1] The reference is to Plautus's *Casina*, lines 9–10: *Nam nunc novae quae prodeunt cōmoediae multō sunt nequiōrēs quam nummī novī*... "For the new comedies that are coming out now are much more worthless than the new coins...."

[2] Editor's note: Mariana is not a blind supporter of the Inquisition and he defends *conversos*. This comment likely contains some degree of sarcasm, precisely because Mariana is using the Jews as an example of a people who are no longer fooled by monetary manipulation, unlike so many of the Christian population of Castile, who continue to be fooled by the alchemists at Court.

ended up as bronze for the most part, unless this was due to an assumed right to contaminate metals by adding some extraneous alloy? What should I say about our own *maravedí*, once gold, not so long ago silver, and now completely copper? Indeed, who is so confident that he dare criticize a practice employed by all nations at every point in time? Do we seek a higher form of praise in finding fault with institutions? Are we grasping at the empty favor of the masses?[3] Indeed, I shall not deny (for how could I?) that the coinage has often been debased by our forebears and that the type of crisis can sometimes happen in which it is necessary to have recourse to this remedy. I will be the first to say that not everything that our forebears did was without fault.[4] I would also maintain that deceit lies hidden behind the appearance of exceptional and accessible usefulness, that pure fakery exists, that considerable difficulties have arisen from this practice, both for governments and for individuals, and that one must not stoop to this point if we want a healthy situation.

First off, I assert that neither the portable possessions nor the land of subjects is under the legal control of the prince to the degree that he can take these things for himself at his own discretion or hand them over to someone else on a whim. Those who argue otherwise are blowhards and yes-men of the sort that are numerous in the halls of the powerful. Because of this, it is the case that he cannot order new taxes upon his nation without the consent of the people. For he should get his subjects to pay by asking openly, not by cheating them,[5] nor should he capriciously take a cut on a daily basis whereby they are reduced from a state of abundance and prosperity to a state of need. For that would be to behave like a tyrant who measures everything by his own desires, who takes possession of everything for himself, not a king who restrains the power that he has received from willing people with law and reason, and who does not extend his power all over

[3] Note how Mariana says that a sound coinage is important to commoners. He is alluding to the argument that supporting such a policy is populist demagoguery.

[4] Mariana drops his irony and makes the revolutionary affirmation that we are allowed to criticize what people did in the past. It is a provocative call for progress, an early turning point in the essay.

[5] Mariana distinguishes between lawful and unlawful taxation, contrasting a formal request for funds with the act of swindling.

the place. But I do not want to pursue any further a matter that is clearly understood and that has been discussed at greater length elsewhere.[6] I shall only add that of the two it is the case that a king cannot debase the coinage arbitrarily and without the consent of the people. It, too, is a kind of tax by which an amount is extracted from the possessions of subjects. Who would agree to exchange gold for an equal weight of silver, or silver for an equal weight of iron? Generally speaking, why would anyone agree to accept a silver coin for a gold one or a copper coin for a silver one? This happens every time the money is debased. Indeed, it will only be permitted for the king to change the appearance of the coinage, since coinage is listed among the things that are held by royal right under imperial law, provided that the value remains inviolate in accordance with the quality of the money and pre-existing law.

The value of coinage is twofold. First, there is its natural value based upon the quality and quantity of the metal used, which can be called its "intrinsic" value. The second value is its legal and "extrinsic" one, which the prince sets by law, as he does the prices of other goods so that they are not sold for more than what the law without question has ordained. He is a fool who so separates these two values such that the subsequent legal value does not stick to its natural value. Unfair is he who commands that something that is commonly valued at five be generally sold for ten. No one should try to make this happen through effort or strictness.[7] For people are influenced by a common valuation, which is based upon the quality of things and supply and demand; a prince would struggle in vain to tear up these foundations of commerce (which stand better unmoved), to deviate from the common opinion, and to bring a kind of force against their minds. What happens in the case of other commodities should also be extended to money. When assessing value by law, a prince ought to consider the actual price and weight of the metal and should not try to go beyond the small amount that can be added to the value of the metal to cover the cost of minting. For we are also not of the opinion which has hold

[6] An explicit reference to the earlier, and quite controversial, commentary on tyrants and regicide found in Chapters V, VI, VII, and VIII of Book I of *De rege et regis institutione*.

[7] Elsewhere in this same chapter (most notably in the discussion of Henry VIII in the penultimate paragraph), Mariana rails against imposing a debased coinage by force.

of great scholars and famous legal experts that a prince must mint the coinage at his own expense, and that he consequently should not add anything to the true value of the metal.

As a general rule, however, if we do not want to fall into error and overturn the laws of nature, the legal value should not be discordant with the natural and intrinsic value. What a sleazy deal it would be if a prince were to keep the extra for himself—and all the more disgusting if anything is subtracted from the quality of the metal or the weight of the money! Or should he be allowed to break into the granaries of his citizens, take a portion for himself, and compensate citizens for their loss by granting the option to sell what is left for the value of the whole pile before his portion had been taken away? Who would not proclaim open robbery, the worst sort of embezzlement? The same scenario could be played out in the case of businesses, farming operations, and any moveable property, but you get the point.

In ancient times they used to exchange things without using money: a goat for a sheep, a cow for some grain. Then they figured out that it would be easier if merchandise and grain were exchanged for metals: gold, silver, and copper. Ultimately, so that it would not forever be necessary to weigh metals out for their dealings and transactions with one another (which is quite a pain), they decided that the various metals should be divided into units by public authority and that these units should be stamped according to the weight of each. This is the proper and natural way to use money that Aristotle tells us about in the first book of the *Politics*;[8] those other ways of turning a trick to cheat the people were developed and discovered by men who could not care less about transparency and fairness. But even if the prince is not taxing the other commodities and is not laying claim to them, he often takes a cut of the currency; this does not mean that there is any less blame in doing this, nor is it any less of a subversion of, and stain upon, the laws of nature. But these mysterious, dolled-up schemes deceive most people with the result that the disease is felt less acutely.

"What harm is there," they say, "if the prince takes a half or a quarter for himself, and if what is left over for individuals is spent

[8] Mariana draws on Aristotle's famous discussion of money in *Politics* (1.9.1257a).

at a value that is no less than the original one? Indeed, you buy clothing and food just like before. Where is the loss? For their money is used only to buy necessities." So easily are the people tricked that they put up with the debasing of the coinage! Thus, the prince has more power over the coinage than he does over other commodities. The mints, mint officials, their operations, and the bureaucrats are completely in his power and control. Because of this, he is able to blend metals without anyone stopping him, he can introduce a new coinage in place of the old one stamped with a new mark, with no more honesty than if he were directing the other possessions of his citizens to himself with blatant force.

You might ask, what should be done when a confident enemy challenges in war? Add to that one who is aggressive because of a fresh victory and strong in troops and supplies, and when there is no money available with which a soldier might be recruited or a salary paid. Or will you suppose that he ought to surrender and that every type of misfortune should be endured so that the coinage can remain intact? I would think that every possible remedy should be tried before it should come to the extreme measure of debasing the currency. But if a major crisis is pressing and the safety of the people is in jeopardy and the affected citizens cannot be forced to enter into an agreement whereby the prince can commandeer the other possessions of his subjects to come to the aid of the country in its moment of need, only then will he be able to blend metals or snip off a portion of the weight, but with the proviso that the permission to debase should come to an end along with the war and that the blemish not be permanent, and then that the bad money that necessity forced upon them be straightaway turned in and retired, and that the proper old coinage be restored in place of that bad one for those who were holding it in good faith.

Frederick Augustus, the second of that name, was laying siege to Faenza in Flaminia during a very harsh winter. There was no money for soldiers' pay, everywhere soldiers were slipping away, and units were being abandoned continuously. Lifting the siege was a disgraceful and serious thing, but continuing it was a difficult one. He marked money made of rawhide with the value of a gold coin, and with this conceit he got out of the tight spot. Once he had taken the city as victor, he exchanged the rawhide coins for as many gold ones as he had promised. The source is

Collenutius in Book Four of his *History of Naples*. This example has been followed in similar crises certainly long ago but also in recent times, and coinage quite often made of hide but sometimes even out of paper has been marked without harm or rebuke. However, if a prince thinks that it is within his purview to debase the currency outside of one of these crises just to fill a deficit in his treasury, something that is more or less always a problem, I proclaim certain destruction—nor will the respite be long-lasting—as the following terrible afflictions demonstrate.

The first consequence will be the high cost of all commodities and food—doubtless not less than the amount that will have been subtracted from the quality of the currency. For people do not value a currency any more than the quality and amount of metal allows—not even if there are strict laws against doing this. Indeed, at that point the people will bemoan the fact that they have been tricked by an illusion, and they will sense that the new currency that has been substituted for the old one is not worth as much as the former currency when they need much greater resources than they used to in order to feed their families. Or are we serving up delusions rather than things that are plain to see from the accuracy of our chronicles? King Alfonso of Castile, known as "The Wise," as soon as he gained control of the crown and possessions of the realm, substituted a bad currency, called the *burgalesa*, for the *pepión*, which was the coinage in use at the time. In order to relieve the high cost of things that immediately followed, he set the value of merchandise with a new law. This solution made matters worse since no one was willing to sell at the set price. And so, this scheme to set prices fell apart right from the start. The problem of high prices went on for a while. I conclude that damage to the coinage was the primary reason for the disaffection of the people and for his replacement by Sancho and his son before the end of his life. For since Alfonso was stubborn, in the seventh year of his reign he recalled the *burgalesa* and introduced a coinage that was called "black" because of the poor quality of the metal.[9]

Alfonso XI, in no way chastened by the example of his great grandfather, also minted a coinage made from metal that was not

[9] The relative blackness of a coin indicates its poor quality by revealing its copper content. The more copper a coin contains, the blacker it will become via oxidation.

of high quality that they called *novenes* and *coronados*. So that the prices of food and other items not increase, he took the sensible enough precaution that a mark—that is to say two-thirds of a pound—of silver not be worth more *maravedís* than it was worth previously (that is, 125). This ineffectual measure, however, turned out to be a useless precaution: inflation followed, the value of silver skyrocketed. Enrique the second, the son of this Alfonso, upon gaining the throne after the murder of his brother, King Pedro, had recourse to this solution in order to pay the salaries of his foreign provincial soldiers (to whom he owed his life and his throne) because his accounts were in a lot of trouble, since both the public and his personal treasuries had been exhausted. He struck two types of coinage, *reales* and *cruzados*, doubtless valued above the amount of metal in them. We have examined the *reales* of King Pedro and those of his brother Enrique; indeed, Pedro's are of good silver of the kind that is struck in our own day in Castile; Enrique's are blackish, evidently with a lot of copper added in. In order to alleviate the rise in the prices of things that followed (together with the dismay of people in the provinces), after a fresh appraisal, he was compelled to subtract two thirds from the value of both types of coinage. Thus, things that have been dreamed up so ingeniously to save us do frequently fall the other way. Oh, the short-sighted and blind minds of men!

That much the same thing befell Enrique's son, King Juan, is evident from his laws. For, being out of money because of the wars that he waged, first against the Portuguese and then incessantly against the English, he struck a coinage that he called the *blanca* in order to send the money that he owed to the Duke of Lancaster, his rival for the throne, in accordance with the treaty that he had recently entered into with him. Presently the prices of food went up. To alleviate this problem, he soon reduced the value of the new currency by about a half. But the high prices did not let up, as he himself admitted at the Cortes at Burgos the following year in 1388. Why should I bring up the kings who followed? I find that the same collapse has developed from the same corrupt origin.

So much for high prices... Another problem flows from the first: Commercial activity that for the most part makes up both public and private wealth is slowed down by a debased coinage. The low quality of the currency clearly frightens shopkeepers and their customers; the high prices that follow on from this problem also frighten them. But if the prince were to set prices for things by fiat (as always seems to happen), instead of a cure, the problem will get much worse since there is no one who will agree to sell for that price, which is so clearly unfair and not squared with commonly recognized valuation. Once commercial activity has stopped, there is no category of problem which does not befall such a people.[10] Certainly, the provincials will be of necessity stretched thin in two ways: first, due to the slowdown in buying and selling, the income from which the majority of the population lives will grind to a halt. These people are craftsmen for the most part and people whose hopes for a meal lie in their hands and in working every day—which is most people.[11] Second, the prince will be forced either to completely withdraw the bad currency which is the cause of the problem or to issue a currency that is worse with its previous value reduced. So it happened that in the reign of King Enrique the second of Castile, in spite of this, he subtracted two thirds from the value of his new currency. Whoever found themselves holding that money suddenly discovered that, by the power of a word, what had been three hundred gold pieces had been reduced to no more than one hundred.

We seem to be kidding. Let us set aside the past. From the moment that he left the Church, Henry, the eighth king of England by that name, ran into many problems. Among these problems he debased the currency. For that which had an eleventh part of copper mixed in was gradually reduced to the point that it retained only a sixth part of silver. With a fresh decree he swept up the old money from the provincials and exchanged it for an equal number and weight of the new, debased currency. The people remained silent as long as they feared the savagery of that man, who thought of bleeding his citizens as a game. But after his death, his son Edward

---

[10] Mariana's genius is his ability to synthesize and extend the ideas of his precursors. Notice how neatly he signals the greater, more global, threat to commerce that is posed by monetary manipulation. See his assertion above: "No one should try to make this happen through effort or strictness."

[11] Mariana emphasizes that inflation affects the poor more than it does the rich! Earlier in this same essay Mariana speculated that he could be accused of pandering to the people for criticizing debasing the coinage. Here he proudly embraces the accusation.

brought it about that the value of this coinage was decreased by half. Edward's sister, Elizabeth, also subtracted another half from the remaining value once she gained the throne. So it was the case that those people who used to have four hundred gold pieces in that currency had it reduced to one hundred once three quarters of the value had been subtracted. And the damage did not stop there; that currency was thereupon taken out of circulation with no way to restore the loss, a scandalous mugging. Sanders, a scholar and at one time in the past a friend of mine, confirms this toward the end of Book One of his *On the English Schism*.

With commercial activity suspended and, as a consequence, with the provincials stretched thin, the pitiable disaster of royal taxes will come to the fore. The prince will be punished in proportion to how much he has enjoyed the profit from that currency. For it cannot be a good situation for a king to have a kingdom which is practically struggling physically; nor will the provincials be in a position to be stretched thin by paying taxes. Also, tax collectors will not bring in as much in royal taxes as they had before. I read that when King Alfonso XI of Castile was a child, royal officials were forced to submit to an audit; I have gleaned that all the royal taxes for the year came to 1,600,000 *maravedíes*. Those *maravedíes* were worth more than ours and each one was worth about as much as seventeen of ours, still an undeniably tiny and laughable amount. The writer of the history of that king describes how one of the two causes of this disastrous situation was the debasing of the coinage carried out by quite a few of the previous kings. Evidently, with commercial activity brought to a standstill, the subjects were reduced to a state of penury and were unable to bring into the treasury what they had typically brought in during normal times.

Who would not see that this is a tremendous handicap? Who would not admit this? Would you then prefer that there be a universal hatred on the part of the people that will inevitably overwhelm the prince? Is it not preferable to be loved than to be feared? In general, all public failures are blamed on the person in charge. Philip the Fair, King of France, confessed right before his death that he faced the hatred of the people for no reason other than that the coinage had been debased, and with his last words he commanded his son Louis "Hutin" to change it. The source is Robert Gaguin. I do not read anywhere about what Louis did, but it seems to be the case that the demonstrations and hatred on the part of the people did not settle down before Enguerrand de Marigny, the author of the foul scheme, was publicly executed, as the majority of the nobles urged during the proceedings and the entire population applauded. There is no need to mention the fact that the precedent set by this disaster did not discourage Hutin's brother, Charles the Fair, nor their mutual cousin and successor, Philip of Valois, from treading on this same path of debasing the currency in France; nor need I mention the magnitude of the public reaction.[12] Instead, let a limit be placed upon the discussion that has been begun here. I would like to give princes one last piece of advice: if you want your state to be a healthy one, do not touch the primary foundations of commerce—units of weight, measurement, and the coinage. A many-layered swindle lies hidden behind the appearance of a quick fix.

[12] Note how close these examples come to endorsing tyrannicide in response to currency debasement.

The
QUARTERLY
JOURNAL of
AUSTRIAN
ECONOMICS

VOL. 21 | Nº. 2 | 158–162
SUMMER 2018

The Great Leveling: A Note

Mark Thornton

ABSTRACT: Peter H. Lindert and Jeffrey G. Williamson, in their book *Unequal Gains: American Growth and Inequality since 1700* (Princeton University Press, 2016), explore the reasons for the decline in the share of income captured by top earners in industrialized nations. Embedded in their take on the "Greatest Leveling" is a push for progressive redistribution policies, based on old misconceptions from Malthus and the Classical economists.

KEYWORDS: inequality, economic growth, Piketty, Malthus

JEL CLASSIFICATION: B12, N11, N12, O15

In a core chapter in their book, *Unequal Gains: American Growth and Inequality since 1700* (Princeton University Press, 2016), Peter H. Lindert and Jeffrey G. Williamson present "The Greatest Leveling of All Time," circa 1910 to 1970. In this chapter, the two prominent economic historians explore the reasons why "virtually every industrialized country went through a pronounced decline in the share of income captured by the those at the top" (p. 194) combined with significant economic growth.

The modern norm is that economic growth causes measured income inequality to increase. The authors ask "Will the bottom 99 percent ever have such good fortunes again?" (p. 195) They note

Dr. Mark Thornton (mthornton@mises.org) is Senior Fellow at the Mises Institute and Book Review Editor of the *Quarterly Journal of Austrian Economics*.

that "The interpretive stakes are high. Understanding the causes of this combined leveling and strong growth would inform today's policy debate." What caused this combined great leveling, i.e., more economic equality and strong economic growth?

What I found lurking in this chapter was an elaborate attempt to put the best face on their normative views concerning economic equality. The "leveling" is typically explained by a combination of the world wars, Spanish Flu, and the Great Depression which destroyed capital, killed off labor, and reduced the growth of the population and work force. Our authors would very much like to downplay these factors and to showcase progressive redistributive policies as the main cause.

They consider three general possibilities. First, the cause(s) could be something "we could control," (p. 195) such as more progressive policies. Second, it could be something understandable, but beyond policy control or just a fluke. Third, it could be something we can neither forecast nor control. They note that the leveling occurred in most industrialized countries both before and after the adoption of progressive taxation and transfers, i.e. welfare for the low-income population. They show that it was not just that the top 1 percent saw its share fall by 50 percent, income grew more equal even within the bottom 99 percent.

Lindert and Williamson note that for "some countries, it was mostly a matter of sharp inequality reductions during World War II." (p. 198) They note that this was especially true in Japan whose military and occupation governments enacted land reform, confiscated assets, and imposed high taxes to subdue the wealthy during the period from 1937 to 1950. In the US and several other countries, gains occurred for low-skilled labor vs. high skill labor during World War II, but in the US, wages remained compressed after wage controls were removed. "Something more fundamental must have been at work." (p. 199)

They do note that "White-collar workers generally lost ground in both world wars, not regaining it after either war." (p. 202) But they conclude on the basis of the evidence:

> In many, if not most, cases, the occupational rates were not dictated by government policy but rather by *market forces*. Thus, our search for causes of the Great Leveling within the lower 99 percent must focus on the

> *market fundamentals* that could have pushed the entire occupational wage structure towards equality even in the absence of changes in government wage-setting policies. (p. 202)

I have emphasized "market forces" and "market fundamentals" here because it appears the authors want it emphasized.

The authors identify six likely causes of the great leveling. The first of which is uncontrollable shocks such as war, macroeconomic instability, i.e. the Great Depression, and political shocks, i.e., "(especially the leftward shifts that expanded fiscal redistribution). The first two are understandable but are hard to control. The third is clearly within the control of the political process." (p. 207)

The authors agree, "Piketty is surely on the mark here. His explanation combines periods of diverse historical shocks into a single, long chaotic era from the 1910s to 1970s." (p. 207) Here they are downplaying the really important factors: World War I, the Spanish Flu, the Great Depression, and World War II in favor of random chaos. They also strangely note that the shocks they wish to emphasize have a common denominator—a political shift to the left—and then they homogenize all these shocks and supposed shifts to the left into "progressive fiscal redistribution." (p. 208) That is an unbelievable transformation, from wars and depressions to progressive redistribution!

Thomas Piketty is correct that World War I, the Great Depression, and World War II are the three primary events which most of the industrial world had in common, along with the Spanish Flu. These events were also episodes that destroyed or suppressed vast amounts of capital around the world. They were also events that killed or disabled more than one million Americans and tens of millions of young adults around the world who would have been highly likely to get married and have children. In the case of the Great Depression, family formation and child bearing decreased precipitously. The population growth rate was about half the normal level. So, the fact that labor gained while the income from capital relatively fell is not big surprise. Labor income also increased as a result of the Black Plague. Harsh immigration restrictions stopped the flow immigrants and this largely explained the gains to low-skilled workers vs. high skilled workers. Notice that immigrants are not permanently low-skilled, low-wage workers, but often move up the income distribution ladder.

The fact that marginal income tax rates were exorbitant during and after World War I and World War II had virtually nothing to do with redistribution in the typical sense. Rates were raised to pay for the US's role in these tragedies. The top 1 percent was a very small number of taxpayers and they paid little taxes in the highest marginal rate category. The fact that Lindert and Williamson claim that the 2 percent – 10 percent experienced little relative change strongly suggests that the highest 1 percent of income earners turned their income earning assets into tax free income earning assets, such as municipal bonds or kept other income within their corporations as retained earnings, as has been shown by Gene Smiley and Richard H. Keehn.

There are five other causes that Lindert and Williamson discuss. Some of them, such as the reduction in labor supply growth rates, stems from the primary causes above, while others are probably not very relevant or temporary, but they are all framed to readers as if all causes might have a roughly balanced impact.

This chapter also reveals a little of what the authors know about the history of economic thought. In what might be the only reference to the history of economic thought in the book, the authors discuss the impact of labor supply on incomes. They correctly note that any ratio of income per capitalist relative to labor would be affected by changes in labor supply. "This inequality argument goes back at least to David Ricardo and Karl Marx." (p. 209)

In fact, the argument does go back further in time, to Malthus. His "Principle of Population," which is now considered invalid when applied to capitalism, says that population is limited by subsistence and that an increase in production of food will increase population and this will create a tendency to keep labor at a subsistence existence. The Classical model of some of the leading classical economists shows that capitalists accumulate greater and greater amounts of capital while labor is held at subsistence. This misconception and other errors of Classical economics is what led Marx to his theory of the exploitation of labor. In turn, this theory seems to be the force behind our authors' ideology and their zeal for progressive redistribution policies which they define as taxing the rich and subsidizing low income poor people.

It is possible to have greater income equality and greater economic growth. It simply requires more free market policies and less government interventionism. It is too bad that more economists do not know this simple fact.

REFERENCES

Lindert, Peter H., and Jeffrey G. Williamson. 2016. *Unequal Gains: American Growth and Inequality since 1700*. Princeton: Princeton University Press.

Piketty, Thomas. 2014. *Capital in the Twenty-First Century*. Cambridge: Harvard University Press.

Smiley, Gene, and Richard H. Keehn. 1995. "Federal Personal Income Tax Policy in the 1920s," *Journal of Economic History* 55, no. 2: 285–303.

The
QUARTERLY
JOURNAL of
AUSTRIAN
ECONOMICS

VOL. 21 | No. 2 | 163–170
SUMMER 2018

Book Review

The Best American Science and Nature Writing 2017

Hope Jahren, Ed.
Wilmington, Mass.: Mariner Books, 2017, 352 pp.

Jason Morgan

The Earth's climate is extraordinarily complex. Unlike dinosaur fossils or organic chemistry or primate behavior, climate is always in flux, with countless factors influencing one another in an endless unfolding of diachronic stochastics. Given this complexity, one might presume that scientists who study planetary climate would be endowed with exceptional patience, scholarly integrity, and intellectual humility. After all, it takes a long time to learn even a little bit about such an intricate system, so part of the job description of climate scientist would seem to be acknowledging that there is only so much that is known about the 1.09 x 10^{44} or so molecules swirling about in the atmosphere. Even more complex

Jason Morgan (jmorgan@reitaku-u.ac.jp) is an assistant professor at Reitaku University in Chiba, Japan.

than all that, though, is navigating the public's interest in the field. Climate is contentious, and a climate scientist will have to keep his cool, sticking to the facts amidst even the most heated rhetorical environments.

And yet, this is precisely not how a startling number of climate scientists choose to behave. Former head of the National Aeronautics and Space Administration (NASA) Goddard Institute for Space Studies James Hansen, for example, once made the rather alarming claim that "it will soon be impossible to avoid climate change with far-ranging undesirable consequences. We have reached a critical tipping point. […] We have at most ten years—not ten years to decide upon action, but ten years to alter fundamentally the trajectory of global greenhouse emissions."[1] And what might happen if the Earth warmed by the five degrees Hansen was warning about? Hansen tells us in detail.

> The last time that the Earth was five degrees warmer was three million years ago, when sea level was about eighty feet higher. Eighty feet! In that case, the United States would lose most East Coast cities: Boston, New York, Philadelphia, Washington, and Miami; indeed, practically the entire state of Florida would be under water. Fifty million people in the US live below that sea level. Other places would fare worse. China would have 250 million displaced persons. Bangladesh would produce 120 million refugees, practically the entire nation. India would lose the land of 150 million people.

Rather discomfiting for Dr. Hansen, who thought we had "at most […] ten years to alter fundamentally the trajectory of global greenhouse emissions," those blood-curdling visions of hundreds of millions of drowning urbanites have now gone fully a dozen years without coming to pass.

Not to be dissuaded from his task—and traipsing rather lightly past the Climategate scandal, in which University of East Anglia scientists were caught *in flagrante delicto* discussing the doctoring of data to match the received narrative on anthropogenic climate change—Hansen next tried to set a new tone for the climate Armageddonists. The Earth's failure to implode on cue led Hansen and others to blame the system instead. "The democratic process doesn't quite seem to be

---

[1] Hansen (2006).

working," he said in 2009, for example (The Guardian, 2009). Naomi Klein, author of *This Changes Everything: Capitalism vs. The Climate* (2014), connected the dots between Hansen's rantings and full-bore income redistribution, hyping the "People's Recovery," which attempted to shunt tax dollars into communities experimenting in "nonextractive living" and "new democratic processes":

> Any attempt to rise to the climate challenge will be fruitless unless it is understood as part of a much broader battle of world-views, a process of rebuilding and reinventing the very idea of the collective, the communal, the commons, the civil, and the civic after so many decades of attack and neglect.

It would be hard to beat this orchestral crescendo of embarrassments to real scientific inquiry, this twisting of science into balloon animals shaped like either Chicken Little or Karl Marx. But in *The Best American Science and Nature Writing 2017*, series editor Tim Folger gives it a try. In large measure, he succeeds, calling into question whether "climate science" has not perhaps become an oxymoron.

First, a word about the 2017 iteration of the series. The editor for that year, Hope Jahren (the author of *Lab Girl* (2016)), has assembled a rather puzzling collection of genuinely interesting and valuable pieces, interspersed with tendentious politically-correct huff-puffing and special pleading. To take the good entries first, Robert Draper's essay (reprinted from *National Geographic*), "The Battle for Virunga," is a tightly-written piece on the intersection of economics, politics, and wildlife in the Democratic Republic of the Congo. David Epstein's *ProPublica* essay, "The DIY Scientist, the Olympian, and the Mutated Gene," tells the richly human story of Jill Viles, a muscular dystrophy patient whose extraordinary etiological insights helped track down important genetic information about lipodystrophy. And Ann Finkbeiner's "Inside the Breakthrough Starshot Mission to Alpha Centauri," taken from *Scientific American*, is a character-driven look at how new space technologies travel down the R&D pipeline. There are other fine essays in this volume, too: Tom Philpott's on the political economy of chicken farm antibiotics, Kim Tingley's on Polynesian navigation techniques, and Christopher Solomon's well-researched look at Bureau of Land Management machinations in the American West.

Unfortunately, Jahren's editorial heuristic, saturated in identity politics, leads her in the very unscientific direction of putting the scientist ahead of the science. This is especially odd, given that the writers who take the Cartesian plunge and delve into innerspace are forced to admit to having no idea who they are. Listless atheism marks Omar Mouallem's "Dark Science," for example. Ostensibly writing about light pollution and the efforts to combat it, Mouallem lets slip, "I once found myself in the middle of a field staring at a glistening sky. Had I still believed in him, I'd say it looked like God sneezed glitter." Azeen Ghorayshi's "He Fell in Love with His Grad Student—Then Fired Her for It" is the Glenn Close-esque tale of Christian Ott, a Caltech astrophysics professor who unburdens himself to his protégé about his deep-seated insecurities while publishing dozens of poems about her online. Sally Davies' "The Physics Pioneer Who Walked Away from It All" tells us about physicist Fotini Markopoulou, who avers that "between the truth of the physical world and a physics theory, there's humans. Of course, nothing happens there, because removing the person is the whole point of training as a scientist." And then there is Michael Regnier's heartbreaking true story of George Price, the man who literally did just that: removed himself, by killing himself in the name of the scientific study of altruism ("The Man Who Gave Himself Away").

But the real editorial knifepoint of this book is its global warming agenda. Climate change crops up everywhere, from essays on Greenland ("A Song of Ice") to Alaska ("The New Harpoon"). However, the *pièce de résistance* is Nathaniel Rich's "The Invisible Catastrophe," reprinted from *The New York Times Magazine*. This is passive-aggressiveness cranked up to eleven. Here, Rich manages to take a story about a methane leak in Aliso Canyon, outside Los Angeles, and turn it into a *schadenfreude* smorgasbord, with Rich secretly reveling in the fact that the wealthy residents of Porter Ranch—many of whom are Republicans—are finally getting a taste of their own medicine by being sickened by greenhouse gases.

But even this essay pales in comparison with Folger's truly unhinged Foreword. Here, we find the favorite trope of the unscientific, namely, that everyone with whom one disagrees is a Nazi. Yes, a National Socialist. And not just any kind of National Socialist, but active, core members of the Party. To be more specific, bookburning Nazis. Here's Folger:

> Modern cosmology was born in Germany a century ago, and within two decades of its birth it almost died there. When Albert Einstein published his general theory of relativity in November 1915, it's doubtful he could have imagined how profoundly deranged his country would become. On May 10, 1933—the same year Einstein left Germany forever—mobs of young Nazis and their supporters across Germany were feeding bonfires with his papers, along with works by Sigmund Freud, Thomas Mann, Bertolt Brecht, Erich Maria Remarque, and others supposedly contaminated with *undeutschen Geist*—un-German spirit. More than 25,000 books burned on that day, including those of the 19th-century Jewish poet and playwright Heinrich Heine, who had once written, "Where they burn books, they will also ultimately burn people. […]"

Where is Folger going with all this? Who are the modern-day Nazis in our midst? Why, climate skeptics and Trump supporters, of course:

> One measure of the health of any modern society must be the degree to which it supports its scientists. A few days before I started to write this foreword, hundreds of thousands of people in dozens of cities across the country participated in the March for Science. It was an event at once inspiring and worrisome: inspiring because so many took a stand for rationalism—a public rebuke to the nation's leaders that couldn't be more different from the German book burnings of the 1930s; worrisome because who would have thought that in the 21st century scientists and citizens would feel the need to gather in support of something so self-evidently valuable as unfettered scientific research?
>
> Yet the march was necessary, urgently so. Scientists at more than a dozen federal agencies have launched rogue Twitter feeds to counter the policies of a frighteningly uninformed president who once tweeted that "global warming was created by and for the Chinese." We live at a pivotal moment in history[; …] climate change threatens not just "the environment" but civilization itself.

Now, to be fair to Folger, he is hardly the only "scientist" to have had a Hitler-themed meltdown over thermometer readings in Queen Maud Land. We are fallen creatures, and we all let our passions get the better of us from time to time. Scientists are people too, and when they get caught rigging the deck so that every card comes up the Ace of Hockey Sticks, they are apt to lash out at the whistleblowers just like anyone else. If anything, in his extremism Folger is simply following in the footsteps of his fellow "earth scientists." Like Jacques Cousteau, for instance, who once opined that "world population must be stabilized and to do that we must eliminate 350,000 people per day."

But there is much more to Folger's brand of meteorological trolling than there might first appear. For example, there is the revealing research of William N. Butos and Thomas J. McQuade, whose 2015 paper on boom-and-bust cycles in the global warming industry shows the deep intertwinings of "scientific" research and the political economy. From the mid 1990s, global warming became a fashionable topic. From that point, governments increasingly began funding global warming-themed research to the exclusion of other projects. The much-touted "consensus" on global warming turns out to be little more than an illusion created by preferential funding by Washington and foregrounding by the United Nations Intergovernmental Panel on Climate Change (IPCC). As Butos and McQuade point out, science is supposed to be about hypotheses and experiments, but scientists turn out to be as susceptible to chicanery as politicians are once money for research starts to change hands.

Would that that were all. For what lies beneath even this fen of politicking under the rent veil of scientific disinterest is a deep uneasiness, felt most acutely by scientists themselves, over the true nature of their "scientific" enterprise. Folger is driven to accuse his critics of Nazism because he is afraid to confront their arguments head on. Why? Could it not be because of the epistemological bankruptcy of what passes as science?

Now, before the QJAE offices are deluged with hate mail, let me state that I am not a flat earther. I fully accept that pterodactyls and diplodocuses and trilobites were real, that the universe is billions of years old, that the earth goes around the sun, and that electricity is electrons, not voodoo. I also agree that carbon dioxide, methane, water vapor, ozone, and other substances are greenhouse gases, and that reducing the concentration of these gases in the atmosphere will reduce the greenhouse effect that they cause. I watched Mr. Wizard, too, and I am not here to dispute whether force equals mass times acceleration, or whether energy equals matter times the speed of light squared.

No, the claim I make here is much more serious than the denial of these facts would be. I am saying, in short, that scientists today, with rare exceptions, do not do science at all. They do sociology. As

Thomas Kuhn pointed out in *The Structure of Scientific Revolutions* (1962), for instance, science lurches and stalls through a series of paradigm shifts, with the behavior of scientists themselves being the real dark matter moving research and consensus. And Karl Popper, were he alive today, might be interested in applying the falsifiability criterion to wild speculations such as Hansen's and Folger's. The line between science and pseudoscience might lie much closer to the latter than many in the general public suspect.

I began this review by arguing that climate is complex. What we need, then, is a science capable of investigating it, and real scientists, for a change, who can rise above herd behavior and try to figure out exactly what is going on with all of those 1.09×10^{44} molecules in our atmosphere. What we do not need are any more quacks or snake oil salesmen who see science as a bandwagon and scientists as responsible for keeping everyone on board. On that note, Friedrich Hayek's *The Counter-Revolution of Science: Studies in the Abuse of Reason* (1952) would be a good place to start for learning the key difference between science and scientism, or the ill-starred attempt to bend science towards less noble ends than truth. Perhaps the next edition of *The Best American Science and Nature Writing* will heed some of Hayek's sound advice and feature much more writing of a scientific nature. But at the very least, let us hope that it has much fewer comparisons of honest dissenters—those who truly want empirical facts and dispassionate interpretations—to bookburning Nazis.

REFERENCES

Butos, William N., and Thomas J. McQuade. 2015. "Causes and Consequences of the Climate Science Boom," *Independent Review* 20, no. 2.

The Guardian. 2009. "Leading Climate Scientist: 'Democratic Process Isn't Working," March 18. Available at https://www.theguardian.com/science/2009/mar/18/nasa-climate-change-james-hansen.

Hansen, Jim. 2006. "The Threat to the Planet," *New York Review of Books*, July 13. Available at http://www.nybooks.com/articles/2006/07/13/the-threat-to-the-planet/.

Hayek, Friedrich A. 1952. *The Counter-Revolution of Science: Studies in the Abuse of Reason*. Glencoe, Ill.: Free Press.

Jahren, Hope. 2016. *Lab Girl*. Toronto and New York: Alfred A. Knopf.

Klein, Naomi. 2014. *This Changes Everything: Capitalism vs. The Climate*. New York: Simon and Schuster.

Kuhn, Thomas. 1962. *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press.

The Quarterly Journal of Austrian Economics

VOL. 21 | Nº. 2 | 171–183
SUMMER 2018

Book Review

Research Handbook on Austrian Law and Economics

Edited by Todd J. Zywicki and Peter J. Boettke
Northampton, Mass.: Edward Elgar, 2017, 440 pp.

Alexandre Padilla

Few scholars disagree that Austrian economists and their fellow travelers have made significant contributions to law and economics. Anyone familiar with the works of Carl Menger, Friedrich Hayek, Ludwig von Mises, Murray Rothbard, and Israel Kirzner recognizes their undeniable additions to law and economics, particularly in analyzing institutions, monopoly and antitrust laws, and regulations and their (unintended) consequences. The contributions in the *Research Handbook on Austrian Law and Economics* build on and expand the work of these great Austrian economists by applying what editors Todd Zywicki and Peter Boettke (2017, p. 21) call the "propositions that are the

Alexandre Padilla (padilale@msudenver.edu) is an Associate Professor of Economics at Metropolitan State University of Denver.

defining substantive position of the contemporary Austrian school of economics" to a large variety of areas in law and economics. Such areas include property rights and conflict resolution in the absence of formal rules (Krause), criminal constitutions (Skarbek), the efficiency of the common law (Zywicki and Stringham), family law (Horwitz), and rule reform (Coyne).

Because many of these contributions build on the work of the great Austrian economists, they share common themes that are not necessarily emphasized in mainstream law and economics:

1) The institutions that define the rules of the game, particularly property rights, matter. They "have been devised by human beings to create order and reduce uncertainty in exchange" (North 1991, p. 97).
2) Competition is not a state of affairs but a market "process of entrepreneurial discovery" (Zywicki and Boettke, 2017, p. 21).
3) Utility and costs are subjective.
4) Individuals, including those working in government and the courts, face a knowledge problem and operate under uncertainty.
5) Formal institutions are not necessarily superior or better-performing than informal institutions if those formal institutions are not being recognized as beneficial by the members of the group or society operating under those (competing) institutions.

The third and fourth themes are important because they lead Austrian economists to conclude that government usually cannot do a better job than markets. The fifth theme lies at the core of chapter 2, "Property Rights, the Coase Theorem and Informality" (Krause, 2017), and chapter 8, "Self-Governance, Property Rights, and Illicit Commerce" (Skarbek, 2017). Krause (2017, p. 31) shows that people living in slums in poor and developing countries, despite lacking a formal definition of private property rights or a formal justice system, have recourse to voluntary solutions as well as informal mediation services to resolve disputes between neighbors. He provides several examples showing that people have incentives to negotiate an outcome that benefits both parties, as predicted by Coase (1960), even when property rights are not formally defined. Even when there is a formal justice system, Krause (2017, p. 35) shows that, in the case of Peru, the overburdened administrative authorities eventually accepted the decisions of the informal organizations in the slums.

Krause (2017, p. 31) also draws another lesson from these natural experiments: "informal solutions of disputes among neighbours follow a 'rights' approach and do not intentionally look for efficiency, although this may be an unintended or secondary result of allocating rights." According to Krause (2017, p. 39), "this speaks against a cost/benefit analysis on such decisions since making the allocation of property rights dependent on a judge's evaluation of a net result would bring instability back."[1] Krause's discussion of dispute resolutions in slums represents another piece of empirical evidence supporting the idea that people have incentives to voluntarily resolve their disputes outside the government authority. His work also complements Williamson and Kerekes (2011), who, among others, show that formal institutions are not necessarily superior to informal institutions when it comes to securing property.

Skarbek (2017, p. 178) "challenges the legal centrism hypothesis by examining the internal governance institutions of prison gangs, arguing that order and property rights can emerge without the state" or, more accurately, despite the state. His chapter discusses how one of the largest prison gangs in Northern California, *Nuestra Familia* (*NF*), which operates outside the law both in and out of prison, has developed "effective self-enforcement internal governance mechanisms to limit opportunistic and shirking behavior" (Skarbek, 2017, p. 178). As Skarbek discusses (2017, p. 181), *NF* recruits members primarily in prison, and one of its main revenue sources is drug trafficking behind bars. Skarbek's analysis of the internal organization of *NF* is consistent with the idea that prison gangs operate like a profit-maximizing enterprise that seeks to reduce shirking, opportunism, and turnover when it comes to retaining its best employees.

NF recruits its members and associates by offering them protection against predatory inmates and rival gang members. In exchange, recruits swear lifetime allegiance to the *Familia* and work for the *Familia* while in prison and after release (Skarbek, 2017, p. 183). In

[1] A similar discussion occurs in Zywicki and Stringham's chapter, "Austrian Law and Economics and Efficiency in the Common Law" (Zywicki and Stringham 2017), that I discuss below.

addition, *NF* has rules that its members and associates must follow and punishments for breaking those rules. *NF* has also established rules that govern interactions outside the gang. Those rules are just as important as the rules governing interactions within the gang, because intergang violence diverts resources away from *NF*'s main source of profit: drug trafficking. All these rules have been codified in a written constitution that, similarly to what corporate culture does, sets workable principles and routines that create shared expectations for group members (Kreps, 1996).

Much of Skarbek's work on the prison gangs' internal organization echoes Peter Leeson's work on the internal governance institutions of pirate ships (Leeson, 2009). Whether pirate ships or prison gangs, it is in the interest of these criminal organizations to develop self-governance mechanisms to mitigate moral hazard and adverse selection so as to maximize their profits. They cannot use the government to enforce contracts or to arbitrate conflicts.

These two chapters by Martin Krause and David Skarbek undoubtedly represent important contributions to the law and economics literature, particularly as it relates to the development of self-governance institutions to coordinate human interactions in the absence of government or, in the case of criminal organizations, in spite of government. However, it is unclear what makes these two contributions uniquely Austrian. Challenging the legal centrist assumption that without government, there are no property rights, does not make one's contribution uniquely Austrian.

When it comes to the economic analysis of the law and particularly property rights, Austrian economists have long disagreed with mainstream scholars on efficiency. Building on the Austrian literature, Zywicki and Stringham (2017, p. 193), in their chapter "Austrian Law and Economics and Efficiency in the Common Law," are highly critical of Posner and his followers who argue that "the common law is efficient (Kaldor-Hicks efficient) because judges view wealth maximization as a normative ideal." Zywicki and Stringham (2017, p. 195) acknowledge not all mainstream economists agree that the common law maximizes wealth. The problem is these economists who argue in favor of changes to make the common law more efficient ignore that judges suffer from the same problems that public choice scholars identify with legislatures: interest-group pressures, rent-seeking, and rent-dissipating (Zywicki and Stringham, 2017, p. 196).

Since costs and benefits are subjective, judges cannot predict how specific decisions will affect litigants' willingness to pay. Willingness to pay might make sense in markets where willingness to pay changes as market conditions change, but within the context of the courtroom, judges face the same challenge as those "of a Soviet-style economic central planner" (Zywicki and Stringham, 2017, p. 197). In light of this conclusion, Zywicki and Stringham (2017, p. 198) argue that "the primary purpose of the law is not to try to impose rules that bring about the wealth maximizing 'outcome,' but instead to provide a stable institutional framework that will enable individuals to plan and coordinate their affairs in a world of constant dynamism." If the rules that individuals operate within are constantly changing, it will indeed be much more difficult for individuals to coordinate their plans, and we should expect much more judicial intervention. Higgs's (1997, 2012) concept of "regime uncertainty" defined as "a pervasive lack of confidence among investors in their ability to foresee the extent to which future government actions will alter their private-property rights" illustrates the point made by Zywicki and Stringham when applied to explain why the Great Depression lasted so long.[2]

Zywicki and Stringham (2017, p. 198) also believe, like other Austrians such as Block, Kirzner, and Rothbard, that the law should be evaluated "using extra-economic means," that is, "society-wide shared ethical perspectives" (Kirzner, 2000, p. 85). They argue that "Austrian economics is a positive discipline that does not say what any given policy or any given law should or should not be" (Zywicki and Stringham, 2017, p. 198). This argument echoes Mises, Kirzner, and Rothbard's position about economics being "a value-free science" that cannot tell us anything about whether a policy or a law should be passed or repealed. At best, economics might be able to tell us whether some goals are incoherent (Rothbard, 2006, p. 251).

[2] However, for Higgs (2012), regime uncertainty means "more than uncertainty about the government's laws, regulations, and administrative decisions." He also includes, for example, uncertainty on how "differences between judiciaries create uncertainties about how the courts will rule on contested laws and government actions." Therefore, in this respect, we can see how Zywicki and Stringham's concerns about some mainstream law and economics scholars pushing for evaluating and tinkering with the law in order to maximize Kaldor-Hicks efficiency echo Higgs's point when it comes to regime uncertainty.

Zywicki and Stringham (2017, p. 202) take their argument further and argue that Hayek ought to be praised for his analysis of the common law. However, his belief that "ultimately judges must be subservient to the legislature which can step in to alter the law when common law reaches a 'dead end' through adherence to precedent or when the law develops in ways that are inconsistent with the market economy" runs into the same problems that judges would face if they were to maximize Kaldor-Hicks efficiency when deciding cases (Zywicki and Stringham, 2017, p. 202). Instead of relying on the government to "improve the law," Zywicki and Stringham (2017, pp. 203–204) argue that we should allow for competition in law in the same way that we allow for competition in the market process, which enables entrepreneurs to discover unexploited profit opportunities to better satisfy consumers.

We can find precedent in the Middles Ages, when litigants sought out private judges for their expertise, judges who competed *de facto* with each other since part of their pay came from litigants' filing fees. Competition made judges more efficient in adjucating cases and also resulted in better laws and procedures to meet parties' needs (Zywicki and Stringham, 2017, p. 204). As the authors remind us, to some extent today, "competition takes place alongside government law, as with modern arbitration, mediation, and other forms of alternative dispute resolution," which suggests that "consumers" do not necessarily value government law since they use those alternative mechanisms of dispute resolution (Zywicki and Stringham, 2017, p. 205).

There is little doubt that competition as a discovery procedure is a better mechanism than government to sort out the rules and enforcement procedures that people actually value. But before reaching that conclusion, the authors spend two-thirds of the chapter arguing against Kaldor-Hicks efficiency—which no law and economics scholars claim is the panacea—without providing an alternative way to evaluate the law. More importantly, when Zywicki and Stringham (2017, p. 202) say that "the real test of the usefulness of a legal rule is found in the *unseen* effects of the rule in terms of the number accidents avoided or conflicts averted, not the *seen* effects of the cases that come before the judge," they seem unaware that by writing this, they are saying that the law's role is to minimize the costs associated with accidents or conflicts—which is another way of saying that the law's role is to maximize wealth.

Similarly, as discussed previously, Zywicki and Stringham's argument that the law's role is "to provide a stable institutional framework that will enable individuals to plan and coordinate their affairs in a world of constant dynamism" (2017, p. 198) sounds a lot like the argument that the law's role is to ensure that people can pursue their activities in an environment that fosters peaceful cooperation as opposed to plundering or, to be more accurate, to foster an environment where people are discouraged from engaging in violent wealth-extraction-type behaviors—and it is the law's role to do this because it allows people to maximize wealth. This is why theft is illegal: if stealing were allowed, people would spend resources trying to perfect their craft in stealing other people's property while others would spend resources attempting to protect their property. Tremendous resources would be wasted on activities that do not create wealth.

Nobody denies that we can rely on noneconomic means such as ethical principles to explain why theft should be and is illegal, but certainly efficiency and wealth maximization seem to be useful tools to explain why theft should be and is illegal. It is curious that Austrian scholars who have written on the tragic consequences of alcohol and drug prohibitions would argue that we should either rely on society-wide ethical principles or, better yet, abstain from evaluating any law or policy. It is partly because of those society-wide ethical principles that most drugs remain illegal in the United States despite the obvious inefficiency of the war on drugs and its tragic consequences, intended and unintended. If Austrian scholars want mainstream economists to pay attention to their work, we should avoid telling them that economists should rely on noneconomic means to evaluate a law or a policy, and we definitely should avoid telling them that economists should abstain from evaluating a given law or policy because economics is a positive science.

Steven Horwitz's (2017) chapter, "Family Law, Uncertainty, and the Coordination of Human Capital," shows how Austrian economics can contribute to both the economic analysis of the law and to the economic theory of the family. His chapter updates Gary Becker's model of the family in several ways. First, Horwitz integrates the Austrian theory of capital into his analysis to help explain how "marriage and the family can be understood as structures of human capital formed in the face of uncertainty and intended to create an ongoing enterprise of cooperation to achieve a set of goals at lower costs than feasible alternatives" (Horwitz, 2017, p. 398). To complicate matters, members of the family produce not only for the market to earn income but also for the household when engaging in childcare and other household activities. Therefore, family members have to decide how much "market human capital" and "household human capital" they will respectively invest to make the whole venture successful (Horwitz, 2017, p. 398).

With an Austrian theory of marriage and the family, a law and economics analysis of family law will then investigate to what extent "the law facilitates or complicates the coordination process by which couples form marriages and decide on questions of market and household production" (Horwitz, 2017, p. 399). Horwitz (2017, pp. 407–408), for example, shows how laws that favor granting custody to the mother can alter significantly both parties' decisions regarding how much to invest in market human capital versus household human capital. This phenomenon also can help us understand part of the gender pay gap, since the mother will be less likely to invest in market human capital and more likely to invest in household human capital if she is more likely to end up with custody of the children.

When it comes to no-fault divorce law, its effects are more ambiguous. On the one hand, no-fault divorce law somewhat increases the uncertainty about how long the marriage will last compared with fault divorce law, thus decreasing incentives for both parties "to invest in the sorts of relationship-specific forms of human capital that are necessary to sustain the marriage and the large family that might result" (Horwitz, 2017, p. 411). On the other hand, "no-fault divorce can be seen as an effective institutional adaptation" to reduce the costs of exiting a bad marriage when one or both parties realize that they are not a good match and the probability of having a successful marriage and family is low (Horwitz, 2017, p. 413). Horwitz's analysis of family law as it applies to custody and no-fault divorce is further evidence that rules matter when it comes to coordinating human action, whether in a market or a nonmarket environment.

One thing Horwitz does not address (maybe because it is beyond the chapter's scope) is the impact of low-skilled immigration on women's incentives to invest in market human capital while still attempting to have a family. There is evidence not only that increased low-skilled immigration allows women to increase their labor supply, but also that increased low-skilled immigration that provides affordable household services leads to increased fertility among college-educated women (Furtado and Hock, 2010; Cortés and Tessada, 2011). Therefore, when it comes to analyzing marriage and the family, such empirical evidence shows that other laws, such as immigration law, can indirectly impact women's human capital investment decisions.

Christopher Coyne's (2017) "The Law and Economics of Rule Reform" represents the best chapter in this volume and should be recognized as an important Austrian contribution to which mainstream law and economics scholars should pay attention. In this chapter, Coyne (2017, p. 92) combines the tools of mainstream law and economics with those of Austrian economics to explain why some rule reforms succeed and others fail. His work builds on North's work on institutions as well as the works of Mises and Hayek and their intellectual heirs analyzing why central planning is bound to fail. As Coyne (2017, p. 92) explains, the goal of rule reform is to make "changes to existing rules in order to achieve a preferable state of affairs from the standpoint of the reformer." When analyzing rule reform, mainstream law and economics scholars tend to focus on how to generate the proper incentives such that the "relevant players" prefer those new rules to the old ones.

Certainly, incentives are a necessary but not sufficient condition for success in rule reforms. As Coyne (2017, p. 93) points out, a vast empirical literature shows that failures in economic, political, or social rule reforms attempting "to improve the human condition" abound. The major reason for these failures is what Austrian economists call the "knowledge problem," which "emphasizes that planners lack the context-specific knowledge to effectively achieve their ends through rational planning" (Coyne, 2017, p. 93). As Coyne (2017, p. 93) tells us, "determining the appropriate incentives is a difficult task given that the perceptions of citizens in other societies are grounded in a cultural context that often cannot be understood by outsiders in a manner that can be effectively incorporated into policies." For Coyne (2017, p. 93), the core of the problem with determining the appropriate incentives so that rule reform will succeed resides in "the distance between the local knowledge and the knowledge possessed by those designing the rules." The greater the "knowledge distance" between the rule reformers and "the locus of knowledge associated with the problem they seek to address," the more likely the rule reform is to fail (Coyne, 2017, p. 93).

Similar to how Buchanan argues that Hayek was warning us not only against "rational constructivism" but also against "'romantic constructivism' which attempts to design rules while ignoring 'culturally evolved rules for human behavior that constrain the set of institutional alternatives,'" Coyne warns us against "romantic rule reform" (Coyne, 2017, pp. 103–104). The more disconnected reforms are from "the underlying realities of the society in which they are imposed"—the less rule reform appreciates people's underlying beliefs and attitudes and the informal rules they operate under—the more likely such intervention will fail, regardless of how well intended the reformers are (Coyne, 2017, pp. 103–104). The overarching implication of Coyne's work is that rule reformers are significantly constrained in what they can do and, therefore, sometimes the *status quo* is the least bad option.

Other chapters in the *Handbook* deserve attention, also. But—though this is not necessarily a bad thing—too many of those chapters read like a literature review of what Austrians have said on a particular law and economics topic rather than novel contributions. As mentioned at the beginning of this review, there is little doubt that Austrian economists have made significant contributions to law and economics, and the *Research Handbook on Austrian Law and Economics* is additional evidence of that.

When it comes to catching the attention of mainstream scholars, a problem Austrians face is that mainstream law and economics journals, with a few exceptions, tend to publish papers on narrow topics relying on advanced statistical analysis. One problem for mainstream law and economics is that the research question has become subservient to the methodology. Austrians, by contrast, agree that the research question should dictate the methodology used to answer that question; therefore, they are more able to tackle a larger variety of questions using whatever methodology is necessary. Some of the chapters reviewed, particularly Krause, Skarbek, Horwitz, and Coyne, are evidence of how much more versatile Austrians are when it comes to tackling some interesting law and economics questions. Those chapters also answer partially some of the three questions Zywicki and Boettke (2017, p. 426) think "demand our attention in the field of law and economics," questions about the emergence and evolution of norms and the dichotomy between market and government in creating law.

Finally, it is also this reviewer's viewpoint that Austrian scholars should not shy away from engaging mainstream law and economics scholars, even using their preferred methodology when appropriate, but also scholars in other fields. Many topics covered in this volume certainly are of interest not only to law and economics scholars, but also to scholars in political science, criminal justice, management, finance, sociology, and other subjects. Austrian economics can shed new light on questions that scholars in those other fields are interested in answering, questions that mainstream law and) economics scholars might sometimes refrain from tackling because they cannot be addressed using their preferred methodology.

REFERENCES

Boettke, Peter J. 2012. *Living Economics: Yesterday, Today, and Tomorrow*. Oakland, Calif.: Independent Institute.

Coase, Ronald H. 1960. "The Problem of Social Costs," *Journal of Law and Economics* 3: 1–44.

Cortés, Patricia, and José Tessada. 2011. "Low-Skilled Immigration and the Labor Supply of Highly Skilled Women," *American Economic Journal: Applied Economics* 3, no. 3: 88–123.

Coyne, Christopher J. 2017. "The Law and Economics of Rule Reform." In Todd J. Zywicki and Peter J. Boettke, eds., *Research Handbook on Austrian Law and Economics*, pp. 92–108. Northampton, Mass.: Edward Elgar Publishing.

Furtado, Delia, and Heinrich Hock. 2010. "Low Skilled Immigration and Work-Fertility Tradeoff," *American Economic Review: Papers and Proceedings* 100: 224–228.

Higgs, Robert. 1997. "Regime Uncertainty—Why the Great Depression Lasted So Long and Why Prosperity Resumed after the War," *Independent Review* 1, no. 4: 561–590.

——. 2012. "Regime Uncertainty: Some Clarifications," *Mises Daily Article*. Nov. 19. Available at: https://mises.org/library/regime-uncertainty-some-clarifications.

Horwitz, Steven. 2017. "Family Law, Uncertainty, and the Coordination of Human Capital." In Todd J. Zywicki and Peter J. Boettke, eds., *Research Handbook on Austrian Law and Economics*, pp. 398–419. Northampton, Mass.: Edward Elgar Publishing.

Kirzner, Israel. 2000. *Driving Force of the Market: Essays in Austrian Economics*. London, UK: Routledge.

Krause, Martin. 2017. "Property Rights, the Coase Theorem and Informality." In Todd J. Zywicki and Peter J. Boettke, eds., *Research Handbook on Austrian Law and Economics*, pp. 29–45. Northampton, Mass.: Edward Elgar Publishing.

Kreps, David M. 1996. "Corporate Culture and Economic Theory." In Peter J. Buckley and Jonathan Michie, eds. *Firms, Organizations and Contracts*, 221–275. New York: Oxford University Press.

Leeson, Peter T. 2009. *The Invisible Hook: The Hidden Economics of Pirates*. Princeton: Princeton University Press.

North, Douglass C. 1991. "Institutions," *Journal of Economic Perspectives* 5, no. 1: 97–112.

Rothbard, Murray N. 2006. *Power and Market: Government and the Economy*. Auburn, Ala.: Ludwig von Mises Institute.

Skarbek, David. 2011. *The Social Order of the Underworld: How Prison Gangs Govern the American Penal System*. New York: Oxford University Press.

——. 2017. "Self-Governance, Property Rights, and Illicit Commerce." In Todd J. Zywicki and Peter J. Boettke, eds., *Research Handbook on Austrian Law and Economics*, pp. 178–191. Northampton, Mass.: Edward Elgar Publishing.

Williamson, Claudia R., and Carrie B. Kerekes. 2011. "Securing Private Property: Formal versus Informal Institutions," *Journal of Law and Economics* 54: 537–572.

Zywicki, Todd J., and Edward P. Stringham. 2017. "Austrian Law and Economics and Efficiency in the Common Law." In Todd J. Zywicki and Peter J. Boettke, eds., *Research Handbook on Austrian Law and Economics*, pp. 192–208. Northampton, Mass.: Edward Elgar Publishing.

Zywicki, Todd J., and Peter J. Boettke. 2017. *Research Handbook on Austrian Law and Economics*. Northampton, Mass.: Edward Elgar Publishing.

The Quarterly Journal of Austrian Economics

VOL. 21 | Nº. 2 | 184–190
SUMMER 2018

Book Review

How Global Currencies Work: Past, Present, and Future

Barry Eichengreen, Arnaud Mehl, and Livia Chitu
Princeton, N.J.: Princeton University Press, 2018, 250 pp.

Carmen Elena Dorobăț

The present volume is an engaging and intriguing account of how global currencies, such as British sterling and the U.S. dollar, have risen to global dominance in the international monetary arena, and how currencies such as the Chinese renminbi, for example, could follow in their footsteps. Divided into twelve chapters, the work focuses primarily on the international monetary history of the 20th century, complemented by a comparatively brief account of the 19th and 21st centuries. The narrower focus of the discussion in these chapters—and most of the data supplied in each chapter's appendices—concerns the composition of foreign reserves, i.e. the balance between holdings of pounds and dollars, and later of yen, euro, and renminbi.

Carmen Elena Dorobăț (c.dorobat@leedstrinity.ac.uk) is assistant professor of business and economics at Leeds Trinity University in the United Kingdom and a Fellow of the Mises Institute.

From this, the authors propose to tease out a few new factual discoveries and some implications for the future of the international monetary system. More precisely, they disavow the traditional theoretical view which argues that international currency status resembles a natural monopoly that arises organically from the benefits of using the currency of the most economically (commercially and financially) powerful country in international economic transactions, i.e. a monopoly due to network returns (p. 4), and winner-takes-all and lock-in effects.

Because, argue the authors, this 'old' model is not supported by much of the data from the 20th century, they propose a 'new' view arguing that multiple currencies can be used concomitantly on an international scale, such as the pound sterling and the dollar during the 1920s. These currencies played "consequential international roles" (p. 11) demonstrating that inertia and persistence due to network effects in international transactions are not as strong as previously thought. Their updated theoretical framework is borrowed from the process of technological development, where new technologies are adopted gradually by users and grow exponentially, thus using an analogy between the workings of international currencies and those of computer operating systems.

Eichengreen, Mehl and Chitu's discussion also seems to revolve around the interplay between the political sphere and national monetary policies on an international scale, but this insight remains latent throughout their analysis. The authors focus rather on the technical aspects of international currency status and deliberately treat political and monetary matters as separate—in parts dismissing political matters completely.

Chapters 2, 3, and 4 contain a factually rich historical narrative of the origin and development of the holding of foreign reserves, particularly before and after the First World War. Scattered throughout are little gems useful to any scholar of monetary theory, like the fact that "foreign exchange reserves had accounted for less than 10 percent of total reserves in 1880, [but] accounted for nearly 15 percent in 1913" (p. 17).

In Chapter 4 the authors provide evidence of the currency composition of foreign exchange reserves in the 1920s and 1930s that best underpin their 'new' view: they find that the dollar overtook sterling as the international reserve currency in the mid-1920s, and not in the 1930s to 1940s as previously thought by monetary scholars. This proves that the sterling and the dollar shared, at the same time, the status of international currency. Contrary to the traditional view, then, international currency status is not subject to a natural monopoly.

To further explain how this came about, the authors show in subsequent chapters the great intervention efforts of the U.S. Federal Reserve to 'support the market between 1917 and 1937' (p. 69). The Fed's heavy-handed approach to trade credit (chapter 5) and international bond markets (chapter 6) propelled the dollar to international currency status over a short period before its collapse during the Great Depression. However—and again disproving the theoretical model—the dollar recovered its status around the time of the Second World War and completely surpassed the British sterling, showing that the status of international currency is, once lost, *not* lost forever. Rather, it can be regained through the coordinated efforts of a powerful central bank, which can heavily benefit from engineering this rise to global currency status. Moreover, the authors argue, other countries benefit as well from not relying on one global lender of last resort, but rather on a network of lenders. Chapters 9, 10, and 11 discuss along the very same lines the rise and fall of the yen and the euro (with the euro crisis), and the future prospects of the Chinese renminbi, respectively.

Despite the great amount of historical information contained in this book, and the ample new data available to the authors, the volume falls short of the promise in its title. The narrative does not actually show how global currencies work in a comprehensive manner, but only how the global ascension of a currency can be traced back to the behind-the-scenes machinations of a central bank. As such, the subject could have been—and was—satisfactorily treated in a half dozen journal articles published by the authors between 2009 and 2016 (p. xv).

Nevertheless, it is still interesting to note that the geopolitical history of the world can be read through the history of monetary policy, or perhaps, that the history of monetary policy is mirrored in the history of geopolitics. As the authors themselves explain, the dominance of one country's currency in international exchanges can indicate the "singular leverage" (p. 3) of that country's central bank over international financial relations and international politics. More importantly, the reverse is also true: the dominance of one country in international politics is a good indicator of the international status of its currency throughout history.

However, because the authors choose to separate the political causes and implications of monetary policies from their economic aspects, the book ultimately provides a rather hesitant and unassuming analysis that makes it feel lackluster. Two questions arise that remain unanswered: Why do central banks benefit from their currency becoming global, if not by preventing domestic inflation from reflecting in their exchange rate and foreign reserves? And why do other countries benefit from having multiple lenders of last resort (multiple reserve currencies), if not by accomplishing the same disguise? Without an answer to these questions, or even an acknowledgment of their existence, the book appears to be a collection of great insights whose potential remains unrealized.

Let me briefly illustrate this by contrasting Eichengreen, Mehl, and Chitu's analysis of the momentous change in international monetary relations at the Genoa Conference in 1922 with the one put forward by Mises and Rothbard.

The authors discuss in chapter 3 (*From Jekyll Island to Genoa*) the leading countries' efforts to restore the gold standard in the 1920s whilst avoiding the deflationary repercussions following the period of great inflation during the First World War. According to the report of the financial commission,

> the Genoa resolutions called for negotiating a convention based on the gold-exchange standard with a view to "preventing undue fluctuations in the purchasing power of gold"… The idea was to create an environment in which 'credit will be regulated… with a view to maintaining the currencies at par with one another (pp. 38–39).

Eichengreen, Mehl and Chitu view this solely as an open effort of Great Britain to recover the lost dominance of the pound sterling, and the otherwise innocent desire to renounce the *golden fetters* of the pre-WWI gold standard. While discussing monetary competition between London and New York, they fail to pinpoint the nature of this competition, and avoid answering the question whether the new reserve system was "badly designed or badly managed" (p. 41).

In the system's design lurked a fateful goal: the continued inflation of money supplies. Coordination efforts among central monetary authorities in reaching this goal was a first step toward abandoning the commodity money system. While the authors only seem to skirt around the issue, Rothbard (2010, pp. 94–95) explicitly argued that Great Britain wanted to establish

> a new international monetary order which would induce or coerce other governments into inflating or into going back to gold at overvalued pars for their own currencies, thus crippling their own exports and subsidizing imports from Britain. This is precisely what Britain did, as it led the way, at the Genoa Conference of 1922, in creating a new international monetary order, the gold-exchange standard.

Mises had explained this need for policy coordination in a similar way:

> Various governments went off the gold standard because they were eager to make domestic prices and wages rise above the world market level, and because they wanted to stimulate exports and to hinder imports. Stability of foreign exchange rates was in their eyes a mischief, not a blessing (2010a, p. 252).

> If the various governments and central banks do not all act in the same way, if some banks or governments go a little farther than the others… those who expand [the money supply] more are forced to return to the market rate of interest in order to preserve their solvency through liquidity; they want to prevent funds from being withdrawn from their country; they do not want to see their reserves in… foreign money dwindling (Mises, 2010b, p. 77).

The crucial issue here, therefore, is not the prominence of one currency or another, but that this prominence was engineered to speed up the renunciation of the gold standard, and greatly enlarge the freedom of all central banks to inflate money supplies. The Genoa Conference had thus paved the way for the next steps: the Bretton-Woods conference of 1944 and the "closing of the gold window" in 1971. This process did not unfold without problems, but it created the auspicious environment for inter-governmental monetary agreements, and allowed the U.S. and other powerful nations to employ a "policy of *benign neglect* toward the international monetary consequences of [their] actions" (Rothbard, 2010,

p. 101). This further removed many obstacles to creating "the ideal condition for unlimited inflation" (Rothbard, 2009, p. 1018)—a system mimicking a global fiat currency as closely as possible.

In this light, the desire to engineer global currency status for one nation's currency is open to another, more somber interpretation, which highlights the pressing dangers of international fiat money. According to Mises (2010b, p. 254):

> Under a system of world inflation or world credit expansion every nation will be eager to belong to the class of gainers and not to that of the losers. It will ask for as much as possible of the additional quantity of paper money or credit for its own country.

It is not usual in a book review to criticize the authors for failing to achieve something they did not explicitly set out to accomplish. And yet, *How Global Currencies Work: Past, Present, and Future* is wanting in both its depth and breadth of analysis. Nonetheless, the abundance of data on the composition of foreign exchange reserves the authors make available is impressive, and their accomplishment in this regard must be commended. The book is easy to read, even though largely technical in nature and much too narrow in its focus.

I remain hopeful that this project will be followed by another, more extensive investigation into the workings of global currencies. An alternative analysis of this data, focused on the differences in kind between commodity and paper money, would provide a much deeper and richer illustration of how global fiat currencies are made to work to serve the political purposes of one powerful nation or another. This would indeed illuminate much of the dark history of monetary policy over the last three centuries.

REFERENCES

Mises, Ludwig von. 2010a *Omnipotent Government: The Rise of Total State and Total War*. Auburn, Ala.: Ludwig von Mises Institute and Indianapolis: Liberty Fund.

——. 2010b. *Ludwig von Mises on Money and Inflation: A Synthesis of Several Lectures*, compiled by B. Bien Greaves. Auburn, Ala.: Ludwig von Mises Institute.

Rothbard, Murray N. 2009. *Man, Economy, and State with Power and Market*. Auburn, Ala.: Ludwig von Mises Institute.

———. 2010. *What Has Government Done to Our Money?* Auburn, Alabama: Ludwig von Mises Institute.