GOOD MONEY, PART I

F. A. HAYEK

THE COLLECTED WORKS OF

F. A. Hayek

GOOD MONEY, PART I

The New World

F. A. HAYEK

Edited by Stephen Kresge

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General Editor: Stephen Kresge
Associate Editor: Peter G. Klein
Assistant Editor: Gene Opton
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EDITORIAL FOREWORD

The essays collected in *Good Money, Part I: The New World* include the earliest pieces written by F. A. Hayek on any economic subject, but notably on the still-unresolved controversies to which he made a significant contribution: on monetary theory and policy, trade cycles, and the theory of intertemporal equilibrium. The essays have lost none of their original interest; if anything, the resistance to fixed answers to the questions Hayek addresses—for example, what should determine the level of interest rates set by central bankers—leaves extensive portions of these essays as timely as tomorrow's headlines in the financial press.

Published here for the first time is Hayek's first essay on the subject, "Exchange Rate Stabilization or Price Stabilization?" Two other essays are published here for the first time in English translation, as is the complete text of his meticulous investigation into the formation of US monetary policy, "Monetary Policy in the United States after the Recovery from the Crisis of 1920". A revised English translation of his most original contribution to the theory of economic equilibrium, "Intertemporal Price Equilibrium and Movements in the Value of Money", leaves no doubt as to the importance of this work and the visit to the United States in 1923 which provoked it.

Looking back on this visit to the New World (as he referred to it), Hayek recalled that what was new and troubling about the debate over monetary policy was the displacement of gold from its central role in the control of bank reserves. "Until some sixty years ago", Hayek recalled in 1981, "monetary policy simply meant securing a gold equivalent or silver equivalent of a particular money in circulation. My interest in monetary policy began when I found in the 1923 Annual Report of the US Federal Reserve Bank a statement which said that the control of the quantity of money could be used to assure the stabilization of economic activity. At that time, that was a new idea". Hayek challenged this idea in his subsequent work. But the predicament in which the US Federal Reserve found itself at the end of the First World War was unprecedented; so much gold had found its way to the United States that postwar move-

ments in gold between the United States and the rest of the world were not large enough to affect gold reserve requirements for money and credit. (Keynes accused the Federal Reserve of "burying" its gold.) Thus the question, If the gold reserve ratio could not be used as a guide to interest rate policy, what should take its place?

To the present generation of economists, this may seem like a purely historical question. It is not. The displacement of gold during the First World War was a Humpty-Dumpty predicament which led to destructive nationalistic economic and trade policies in the 1930s. When the gold standard was abandoned, the world gave up not only the physical use of gold for measuring the relative value of separate currencies; the world lost the use of a *standard* for comparing the monetary value of everything. Without a common standard, central bankers of the world are left to pore over data without end, searching for some consistent link between the issuance of credit and what the recipients of that credit do with it to make things better or worse for everyone else, most urgently for their political servants or masters.

The New World and the Federal Reserve System were still in the process of inventing themselves when Hayek arrived for his first visit—changing "the rules of our own making", as W. C. Mitchell characterized the process. The process was both promising and alarming: "constructivism" was the term which Hayek later used to describe this approach to institutional change. Is it possible, we may well ask along with Hayek, to have rules without standards? In the present disarray of the world's currencies, with banks failing on almost every shore, this is not merely an academic question.

The essays collected in this volume are important for understanding the development of Hayek's ideas. They are just as important for understanding the development of contemporary monetary policy.

The editor of this volume would like to express his great appreciation to Dr. Grete Heinz for her translations from the original German of most of the essays in this collection. To Alan Jarvis of Routledge, and Penelope Kaiserlian and Geoffrey J. Huck of the University of Chicago Press, my gratitude for their continuing enthusiasm for this project. I would like to thank Denis O'Brien for his careful reading and criticism of the text. Bruce Caldwell receives both my appreciation and my sympathy for his patient review and tactful help with both early and final versions of this volume. Without the resourceful effort of our research assistant Elisa Cooper and manuscript preparation by the assistant editor Gene Opton, this volume would not have materialized.

Finally, we would again like to express our gratitude for the financial support of the original sponsors, without which this project could not have been carried through.

Stephen Kresge
Big Sur, California

INTRODUCTION

One of F. A. Hayek's first discoveries in the New York Public Library in 1923 was that the war in which he had fought for Austria—the First World War—had been very different from the one reported in the censored Viennese press. Of the many delusions that led to that war, perhaps the most foolish was the assumption that it would be brief and that the vanquished would pay for it. The source of this delusion was the Franco-Prussian War of 1870, which had been quick and tidy, and the losing French had paid a sizable indemnity.

The delusion that the 'Great War' would not last long (had the European military leaders paid more attention to the Civil War in the United States they might not have been so eager to fight) meant that governments saw no reason to raise taxes, particularly if it meant upsetting labour parties that had vowed to resist any European war except, as it turned out, one against Czarist Russia.

Governments first drew upon their financial reserves, confiscating international assets of their citizens, shipping gold to neutral countries and borrowing abroad, particularly from the United States. When the United States market was closed to Germany and Austria, their governments raised money with domestic borrowing, providing reserves to banks to purchase bonds which were then sold to patriotic citizens.

Austria lost everything in the war; Vienna became a capital without an empire. The French were determined to make Germany pay reparations for the entire cost of the war; England as well wanted to pass the burden of its debt to the United States on to Germany; the United States refused to forgive any debt. The United States was the only country to remain on the gold standard; even neutral Sweden, fearing inflation from an influx of gold, abolished coinage privileges. At the end of the war there was no way to measure effectively the cost of all the conflicting financial claims; in effect, the world had moved from the gold standard to a dollar standard but with no recognition of what that meant.

The result was rampant inflation—hyperinflation in Germany and Austria which ruined the holders of bonds, particularly the class to which

Hayek belonged—followed by a steep deflation, especially in the United States, which left commodity prices and costs of production in disarray throughout the world. 'Stabilization' became the elusive goal of both central bankers and economists.

Hayek later observed that "one of the first conclusions at which I remember I had arrived towards the end of 1923 was that stabilization of national price levels and stabilization of foreign exchange were conflicting aims. But before I could anywhere submit for publication the short article[1] I had written on the subject, I found that [J. M.] Keynes had just stated the same contention in his *Tract on Monetary Reform*."[2]

Hayek had recognized a conflict in the need to stabilize both domestic price levels and foreign exchange rates. Most authorities believed that to stabilize one would more or less automatically stabilize the other. The degree of dependence on foreign trade would determine which variable should be dominant. But the emphasis on trade left out of account the weight of debts and the claims for reparations. The dislocations of war finance had created a high level of short-term borrowing financed by capital movements that were sensitive to currency and interest rate changes. While the real world economy recovered rapidly, albeit unevenly—indices of production of most commodities were higher in 1928 than they were in 1914—the international financial structure remained shaky. Gold coins no longer circulated, and while the full return of the gold standard was a consummation most devoutly to be wished, actual redemption of currencies for gold remained severely circumscribed except for the dollar.

The divergence of theory and practice in the 1920s and 1930s is a matter of more than passing interest. The conflict between domestic price levels and foreign exchange rates, which meant a disequilibrium between internal and external prices, having been observed by both Hayek and Keynes, was largely excluded from their controversy over monetary theory and trade cycles. And they were not the exceptions. Economists for the most part treated exchange rate problems only as cases of individual aberration caused by governmental intransigence or profligacy. But the difficulty of finding a determinant solution to the problem of achieving

[1]An article by Hayek, "Exchange Rate Stabilization or Price Stabilization?" is translated and published here for the first time as an Addendum to chapter 1, this volume.

[2]*Hayek on Hayek*, Stephen Kresge and Leif Wenar, eds (Chicago: University of Chicago Press, and London: Routledge, 1994), p. 89. Hayek added that this disappointment did not lead to his later opposition to Keynes, as Keynes was then one of his heroes, as he was to many on the Continent because of his criticism of the peace settlement. See John Maynard Keynes, *A Tract on Monetary Reform* [1923], reprinted as vol. 4 of *The Collected Writings of John Maynard Keynes* (Cambridge: Macmillan for the Royal Economic Society, 1971).

both stable domestic prices and foreign exchange rates, without resorting to limits on trade, comes from the inconvenient fact that capital transfers between economies can only be made through the transfer of real goods and services.[3] This was the obstacle to the payment of reparations and debt after the war. Germany would be forced to export real goods; England and France were not prepared to accept imports at the expense of their own industries.

Currencies do not travel, they do not cross borders. Taxes paid in German marks could not be converted to British pounds without driving up the value of the pound, a conversion to which there were definite limits. Indeed, while other controversies of this period such as theories of the trade cycle have receded to the periphery of economic investigations, problems of reconciling internal price levels with external exchange rates have remained very much at the center of the choices facing central bankers. "[W]hen capital is free to move internationally, governments have to choose between an exchange-rate policy or an independent monetary policy; they cannot have both".[4]

In retrospect it is curious that the conflict did not occupy the center of attention of economists, since it was clear that what was at stake following the costly end of the war was the wealth of nations. A new virulent strain of nationalism threatened the old empires and their established links of trade and finance. Nationalism revived mercantilism which exposed the tenuous hold that economic principles had on bankers and politicians. In the event economic theory had little to offer beyond the first formulation of the mechanism of the gold (or silver) standard made by David Hume in 1752. This model, which came to be known as the "price-specie flow model", assumed that coins of a common metal circulated in different countries which traded goods. The model also assumed free coinage so that coins received in payment in one country could be melted down and the metal shipped to another to be coined into that currency. This mechanism made possible a self-correcting process to balance trade: the

[3]"Capital holds a unique position in one respect: It can move from one region to another only in the form of goods or services". Bertil Ohlin, *Interregional and International Trade* (Cambridge, Mass.: Harvard University Press, 1933), p. 180.

[4]So sayeth *The Economist,* October 7, 1995, "Survey, the World Economy", p. 10. Since the end of the First World War, US policy has consistently placed domestic concerns above exchange rate stability. As the World Economic Conference was informed in 1933, "We [the US delegation] are interested in American commodity prices. What is to be the value of the dollar in terms of foreign currencies is not and cannot be our immediate concern". Quoted in Barry Eichengreen, *Golden Fetters, The Gold Standard and the Great Depression, 1919–1939* (New York and Oxford: Oxford University Press, 1992), p. 333. As the dollar became the dominant reserve currency for the world, this policy was certain to lead to difficulties.

increase or decrease of money led to price changes which attracted either imports or exports.[5] In fact, the actual workings of international trade and finance were always more complex than the model suggests and governments always more devious in protecting national interests. Indeed, had the model worked with anything near its conceptual simplicity, England would have remained on a silver standard.[6]

Hayek began his investigations of monetary effects with two firm beliefs: that an international gold standard (even with all its imperfections) was necessary, and that it would function essentially as Hume had described it. It was the self-correcting characteristic of the price-specie flow model that Hayek prized. He extended the self-correcting or self-reversing characteristic to all purely monetary phenomena and although he later revised or even abandoned many of his hypotheses—including his belief in the gold standard—the idea that all purely monetary effects in an economy are self-reversing remained with him to the end.

Hayek's decision to visit the United States in 1923 was prompted in part by a promise of employment he received from Professor Jeremiah W. Jenks of New York University, whom he had met when Jenks was in Europe to serve on a commission to advise the German government on budgetary difficulties. (Another member of the commission was John Maynard Keynes.) The work as a research assistant to Jenks left Hayek

[5]On the genesis of the gold standard and David Hume's contribution to monetary theory see F. A. Hayek, "Genesis of the Gold Standard in Response to English Coinage Policy in the 17th and 18th Centuries", in *The Trend of Economic Thinking,* W. W. Bartley III and Stephen Kresge, eds, being vol. 3 (1991) of *The Collected Works of F. A. Hayek* (Chicago: University of Chicago Press, and London: Routledge). See also Barry Eichengreen, *Globalizing Capital, A History of the International Monetary System* (Princeton: Princeton University Press, 1996), pp. 25–26.

[6]Hume assumed that "money is not, properly speaking, one of the subjects of commerce; but only the instrument which men have agreed upon to facilitate the exchange of one commodity for another". But silver and gold are traded as commodities; the overriding fact of England's trade with the Far East was the drain of silver whence it was largely hoarded. Hume observed this vexing predicament: "The skill and ingenuity of Europe in general surpasses perhaps that of China, with regard to manual arts and manufactures; yet are we never able to trade thither without great disadvantage. And were it not for the continual recruits, which we receive from America, money would soon sink in Europe and rise in China, till it came nearly to a level in both places". England replaced silver with gold and developed a system of banking and credit that would economize on the use of gold. Later controversies in monetary theory largely stemmed from the uncertain connection of credit to specie and its effect on prices and trade balances. Hayek addressed a number of the implications of this evolving controversy in the essays collected in *Good Money, Part II: The Standard.* (The first quotation from Hume is the first sentence of his celebrated essay, "Of Money" [1752}; the second is from "Of the Balance of Trade" [1752]. See David Hume, *Essays,* Eugene F. Miller, ed. (Indianapolis, Ind.: Liberty*Classics,* 1985), p. 281 and p. 313. —Ed.]

enough time to pursue his own studies. He registered at New York University for work towards a PhD (it would have been his third) in monetary theory and policy. The title of the thesis—never completed—was, "Is the function of money consistent with an artificial stabilization of its purchasing power?"

The subject matter was a complete departure from his preparatory studies at the University of Vienna, where the subject of the thesis for his second doctorate degree was the theory of *Zurechnung,* the imputation of value. His approach to economics was firmly rooted in the Austrian tradition of the subjective theory of value and marginal utility, where the value of any good was derived from the necessarily subjective demand of individuals. But, as Hayek wrote in an essay published in 1926, "The doctrine of marginal utility makes it possible to equate the subjective value of economic goods with a certain level of utility yielded by them if the good yields this utility directly and in isolation. . . . However, this principle is not immediately applicable to those goods which cannot by themselves satisfy certain needs and wants but which are able to do so only in combination with other economic goods. . . . [T]he problem of the derivation of the value of the individual producer goods from the jointly produced level of utility has entered into the economic literature under the name of *Zurechnung* (in English, imputation). . . ." And, not to underestimate the difficulty, Hayek announces, "Consequently, the whole of economic theory rests on the explanation of the value of producer goods and thus on the theory of imputation".[7] It is not then surprising that Hayek consistently finds the consequences of monetary imbalances in adverse changes in the relative prices of producer and consumer goods.

In this tradition the function of money remained problematical, since money must only serve as a proxy for the values of real goods that were the object of individual economic exchanges; thus the value of money as money was ambiguous since it was unclear how a standard of value would be maintained. Fluctuations in the supply of money could only muddy the pure stream from which the marginally preferable was sieved from the marginally inferior. Money was fool's gold. An artificial stabilization of money's purchasing power might reward the fool and punish the prudent.

Hayek brought to the stabilization debate the methodological impera-

[7] F. A. Hayek, "Some Remarks on the Problem of Imputation", in *Money, Capital, and Fluctuations, Early Essays,* ed. Roy McCloughry (London: Routledge & Kegan Paul, 1984), pp. 33–34. First published as "Bemerkungen zum Zurechnungsproblem" in *Jahrbücher für Nationalökonomie und Statistik* (Jena, Band 124, Folge III, Band 69, 1926), pp. 1–18. Translated as "Some Remarks on the Problem of Imputation", in McCloughry, ed., *Money, Capital, and Fluctuations,* op. cit., pp. 33–54.

tives of the theory of subjective value and marginal utility. He also brought with him to America introductions provided by Joseph Schumpeter to many of the leading economists. The ideas of Austrian economists were not unknown in America; Schumpeter had lectured at Harvard in 1913 and John Bates Clark had engaged in controversy with Eugen Böhm-Bawerk over capital theory. (Hayek was privileged to read the last paper in Clark's last seminar.)[8]

For their part, the Austrians knew the work of some of the American economists, most notably Irving Fisher, whose revival and extension of the quantity theory of money was at the core of the debate over stabilization. But the one man whom Hayek had not heard of until he was given a letter of introduction to him was Wesley Clair Mitchell. A somewhat perplexed Hayek observed that Mitchell, whose path-breaking work on business cycles had been published in 1913,[9] was the center of attention of most of the younger economists. They were drawn by the research possibilities opened up by Mitchell's statistical work which made empirical observations of economic activity comparable over varying time periods.

By 1926 Schumpeter observed that among these young economists a new *Methodenstreit* was brewing. "'Change the relative emphasis put upon statistical and historical materials in this picture', Schumpeter summed up, 'and we have, even to details, the position that Schmoller held throughout his life'". Mitchell did not agree.[10] His argument rested on the obser-

[8]For a full account of Schumpeter and of his elegant letters of introduction, as well as Hayek's obituary note on John Bates Clark, see *The Fortunes of Liberalism* (1992), ed. Peter G. Klein, being vol. 4 of *The Collected Works of F. A. Hayek,* op. cit.

[9]Wesley Clair Mitchell (1874–1948), whose *Business Cycles* (Berkeley: University of California Press, 1913) was considered by many to be the most influential work of its time on economic thinking, was one of the founders of the National Bureau of Economic Research, where in 1920, in addition to teaching at Columbia University, he assumed the position of Director of Research, which he held until 1945.

[10]Quoted by Mitchell in W. C. Mitchell, "The Present Status and Future Prospects of Quantitative Economics", Round Table discussion at American Economic Association meeting, December 1927. Reprinted in W. C. Mitchell, *The Backward Art of Spending Money* (New York and London: McGraw-Hill, 1937), pp. 37–38. Gustav von Schmoller (1838–1917), Professor at the Universities of Halle, Strasbourg, and Berlin, was the leader of the German 'younger historical school' with whom Carl Menger (1840–1921), the founder of the school of Austrian economics, engaged in heated controversy about the methodology of economic theories. Of the German school Hayek wrote, "Through the study of historical development it hoped to arrive at the laws of development of social wholes, from which, in turn, could be deduced the historical necessities governing each phase of this development. This was the sort of positivist-empiricist approach which was later adopted by American institutionalists (differing from similar more recent efforts only in that it made little use of statistical

vation that there was more uncertainty in economic behaviour than 'qualitative' theories—neo-classical theories relying on concepts of marginal utility and equilibrium—could account for. "Our qualitative theory has followed the logic of Newtonian mechanics; our quantitative work rests on statistical conceptions. . . . The mechanical view involved the notions of sameness, of certainty, of invariant laws; the statistical view involves the notions of variety, of probability, of approximations. . . . Hence, we must put our ultimate trust in observation. And as fast as we can raise our observations to a scientific level we must drop the cruder, yet not wholly valueless, approximations attained by the mechanical type of work".[11]

Hayek attended many of Mitchell's lectures, primarily on the history of economics, at Columbia University. When he returned to Vienna he used his newly acquired knowledge of time series to establish, with the help of Ludwig von Mises, the Österreichisches Institut für Konjunkturforschung (the Austrian Institute for Business Cycle Research), which earned him a mention in Mitchell's 1927 opus.[12] Still, Hayek was not convinced of the value of Mitchell's methods. In 1926 he wrote to Mitchell about the new direction of his work:

> The other thing that I take the liberty to ask from you [after politely requesting the return of a book by Wieser[13]] is whether you could help me in some way to get—at least for some time—a copy of your article on "The Role of Money in Economic Theory". The wartime issues of all

technique), and which is better described (as by Popper) as historicism". F. A. Hayek, *The Fortunes of Liberalism,* op. cit., p. 78. However, Mitchell, while adopting a positivist-empiricist approach to economics, was not noticeably historicist. His methodological views were influenced by Thorstein Veblen and retained a strong institutionalist bias, but the stronger influence on Mitchell was the pragmatism of John Dewey. The American pragmatists were fallibilists unlikely to accept any theory of historical inevitability.

[11] W. C. Mitchell, "Quantitative Analysis in Economic Theory", Presidential Address delivered at the Thirty-seventh Annual Meeting of the American Economic Association, December 29, 1924. Reprinted in Mitchell, *The Backward Art of Spending Money,* op. cit., pp. 33–36.

[12] *Ibid.,* p. 202.

[13] Friedrich von Wieser (1851–1926), who is credited with bringing the term "marginal utility" and the concept of opportunity cost to the Austrian theory of subjective value, was Hayek's teacher at the University of Vienna. For Hayek's appreciation of Wieser, see chapter 3 of *The Fortunes of Liberalism,* op. cit. Mitchell published a sympathetic review of Wieser's *Theorie der Gesellschaftliche Wirtschaft* in 1915 (reprinted in *The Backward Art of Spending Money,* op. cit.) and also wrote a preface, for which Hayek provided some assistance, to the English translation, *Social Economics,* trans. A. Ford Hinrichs (New York: Greenberg, 1927, and London: Allen & Unwin, 1928).

American periodicals are yet missing in our libraries and a request to the AEA has remained without answer.

I need this article of yours in connection with my present work which shall embody some of the slowly ripening fruits of my sojourn in the United States. It is only now that I feel how much I have really learnt during that year. While my theoretical predilections have remained unchanged, I realize now the weak points of abstract economic theory which seem to most of you to make the pure theory more or less useless for the explanation of the more complex phenomena of the money economy. It seems to me now as if pure theory had actually neglected in a shameful way the essential differences between a barter economy and a money economy and that especially the existing theory of distribution needs a thorough overhauling as soon as we drop the assumption of barter and pay sufficient regard to *time*. I hope however to be on the way to supply some of the missing links between orthodox economic theory and one applicable to the explanation of the processes of modern economic life. If my memory is correct, you have already pointed out some of the discrepancies in your article mentioned above which I read when in New York. Since then I have studied with the greatest interest Foster and Catchings's *Money*, who certainly deserve credit for insisting in their admirable book on this point.[14]

It is not too extreme to say that the encounter with Wesley Clair Mitchell shaped the direction of much of Hayek's later work. An inductive methodology allowed Mitchell to reintroduce historical processes and institutional constraints into economic relationships to show that individual behaviour was as much determined by institutional effects as vice versa. In attempting to counter the generalizations of statistical inference, Hayek realized that "complex phenomena" (which makes its appearance in the above quoted letter) was not just a descriptive term but the locus of the problems which characterized the social sciences.[15]

Discrediting Stabilization

Hayek surveyed some of the more important writing in the stabilization effort in an omnibus review for an Austrian audience which is now translated for the first time in chapter one of this volume. The debate had begun with Irving Fisher's proposal for a "compensated dollar", first pre-

[14]Letter from Hayek to Mitchell, June 3, 1926. The original is preserved in the Mitchell collection at the Columbia University Libraries. Hayek's review of Foster and Catchings's *Money* appears in this volume, chapter 1.

[15]See Hayek's later essay, "The Theory of Complex Phenomena", particularly section 4. In F. A. Hayek, *Studies in Philosophy, Politics, and Economics* (Chicago: University of Chicago Press, 1967), pp. 22–42.