# **IOWA STATE UNIVERSITY Digital Repository**

Retrospective Theses and Dissertations

Iowa State University Capstones, Theses and Dissertations

1985

# Harry Gunnison Brown: economist

Christopher Keith Ryan Iowa State University

Follow this and additional works at: https://lib.dr.iastate.edu/rtd



**P**art of the <u>Economic History Commons</u>, and the <u>History Commons</u>

# Recommended Citation

Ryan, Christopher Keith, "Harry Gunnison Brown: economist" (1985). Retrospective Theses and Dissertations. 12099. https://lib.dr.iastate.edu/rtd/12099

This Dissertation is brought to you for free and open access by the Iowa State University Capstones, Theses and Dissertations at Iowa State University Digital Repository. It has been accepted for inclusion in Retrospective Theses and Dissertations by an authorized administrator of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.



#### INFORMATION TO USERS

This reproduction was made from a copy of a document sent to us for microfilming. While the most advanced technology has been used to photograph and reproduce this document, the quality of the reproduction is heavily dependent upon the quality of the material submitted.

The following explanation of techniques is provided to help clarify markings or notations which may appear on this reproduction.

- 1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting through an image and duplicating adjacent pages to assure complete continuity.
- 2. When an image on the film is obliterated with a round black mark, it is an indication of either blurred copy because of movement during exposure, duplicate copy, or copyrighted materials that should not have been filmed. For blurred pages, a good image of the page can be found in the adjacent frame. If copyrighted materials were deleted, a target note will appear listing the pages in the adjacent frame.
- 3. When a map, drawing or chart, etc., is part of the material being photographed, a definite method of "sectioning" the material has been followed. It is customary to begin filming at the upper left hand corner of a large sheet and to continue from left to right in equal sections with small overlaps. If necessary, sectioning is continued again—beginning below the first row and continuing on until complete.
- 4. For illustrations that cannot be satisfactorily reproduced by xerographic means, photographic prints can be purchased at additional cost and inserted into your xerographic copy. These prints are available upon request from the Dissertations Customer Services Department.
- 5. Some pages in any document may have indistinct print. In all cases the best available copy has been filmed.

University Microfilms International

300 N. Zeeb Road Ann Arbor, MI 48106



# Ryan, Christopher Keith

HARRY GUNNISON BROWN: ECONOMIST

Iowa State University

Ph.D. 1985

University
Microfilms
International 300 N. Zeeb Road, Ann Arbor, MI 48106

Harry Gunnison Brown: Economist

by

Christopher Keith Ryan

A Dissertation Submitted to the

Graduate Faculty in Partial Fulfillment of the

Requirements for the Degree of

DOCTOR OF PHILOSOPHY

Major: Economics

Approved:

Signature was redacted for privacy.

In Charge of Wajor Work

Signature was redacted for privacy.

For the Major Department

Signature was redacted for privacy.

For the Graduate College

Iowa State University Ames, Iowa

1985

# TABLE OF CONTENTS

	Page	
CHAPTER ONE. INTRODUCTION	1	
CHAPTER TWO. LAND AS A FACTOR OF PRODUCTION	9	
CHAPTER THREE. CAPITAL AND INTEREST THEORIES	29	
CHAPTER FOUR. MONETARY ECONOMICS AND A VIEW OF KEYNESIANISM	50	
CHAPTER FIVE. TAXATION	77	
CHAPTER SIX. LAND VALUE TAXATION	109	
CHAPTER SEVEN. REGULATION AND RATE-MAKING	148	
CHAPTER EIGHT. INTERNATIONAL TRADE AND FINANCE	179	
CHAPTER NINE. CONTRIBUTIONS AS AN EDUCATOR	190	
CHAPTER TEN. CONCLUSION	200	
SELECTED BIBLIOGRAPHY		
ACKNOWLEDGMENTS		

#### CHAPTER ONE. INTRODUCTION

Paul Samuelson once formulated a list of early prominent American economists born after 1860. <sup>1</sup> To the list consisting of W. C. Mitchell, Allyn Young, H. L. Moore, Frank Knight, Jacob Viner and Henry Schultz he added the name of Harry Gunnison Brown. It is improbable that Brown's name had a familiar ring for contemporary students. It is, however, possible that some student may recall that the library catalog card for Irving Fisher's classic work <u>The Purchasing Power of Money</u> lists Brown as assisting Fisher in this work.

Harry Gunnison Brown was roughly of the second generation of American economists who followed the pioneering generation which included John Bates Clark, E. R. A. Seligman, Frank Taussig, Francis Walker, Simon Patten, Richard Ely, Thomas Nixon Carver, Herbert Davenport and Irving Fisher, among others. Brown studied under and taught with Fisher at Yale until 1915. He and James Harvey Rogers were said to be Fisher's favorite and ablest students. Brown became a monetarist in the tradition of Fisher. Though on several occasions they differed, Brown demonstrated enduring respect for his mentor and colleague.

Another economist, Herbert J. Davenport, was held in particular regard by Brown. He joined Davenport at the University of Missouri for a year before Davenport left for Cornell. Davenport's work in refining and, at times, defending classical economic doctrine was admired by Brown. The discipline at that time struggled with the question of how much of the classical thought of the "British School" was to be retained

as sound. Brown's position in this regard was exemplified by his self-description as "an economist unemancipated from the classical tradition." He inferred by this statement that other economists had gone too far in their rejection of classical doctrine. Brown, who had read J. S. Mill before entering college, would in some regards retain strong elements of the classical approach in his writings. 3

An element in Brown's thought which would make him practically unique among academic economists was his staunch belief in and advocacy of the ideas of Henry George. In particular, he would argue throughout his life for tax reform along the lines of George when the profession tended to dismiss George's thought as utterly fallacious. Most prominent among Brown's areas of specialization was that of taxation and especially that of tax incidence. His text, The Economics of Taxation, stood for a time as a benchmark for texts on the subject of taxation.

In his chosen profession, Brown's record was exemplary over five decades of teaching at Yale, Missouri, The New School of Social Research, Mississippi and Franklin and Marshall. He wrote over one hundred articles and ten books. He was said to be for many years the dominant influence behind Missouri's School of Business and Public Administration. His dedication to teaching has been praised by his students, many of whom were to become prominent in economics and related fields.

Although Brown's concerns were diffuse, I would like to emphasize as characteristic of his work the three elements alluded to above. Through Fisher's infuence, he was aware of developments which can be considered "modern" in the sense of anticipating the direction of

economics as a field of study. He displayed, if not mathematical rigor, a dedication to a clear, logical approach to economic theory as well as an appreciation of the value of statistical application to the testing of economic theories. Harold Hotelling once commented that Brown's logic was mathematical in nature. 5 On the other hand, Brown, although by definition a neoclassical economist, tended to retain some elements of the classical approach as seen in his acceptance of Davenport's work, in his rejection of the claims of the "Psychological School" of Frank Fetter and in his later objections to Keynesian economics. Characteristic of Brown's work was a consistent attempt to relate economic questions to what he termed the "common welfare." That he found inspiration in the writings of Henry George was not unusual. His steadfastness in his espousal of George's proposed reform in the face of the hostility, scepticism and indifference of the profession was unusual. As is frequently commented upon, the advance and profusion of a discipline in many regards tends to foster the "bureaucratic" phenomenon of "constructive forgetting." Although certainly not without merit, this process stands subject to Santayana's famous dictum. 6 Harry Gunnison Brown's contributions were distinctly positive and worthy of recall. Arnold Harberger made this point in the following manner:

<sup>. . .</sup> Brown was one of a small group of economists of his era which included Frank Knight, Irving Fisher, A. C. Pigou who really carried the science forward by large steps. For decades, their work was neglected as the profession pursued one fad after another, but now, as economists have returned, more or less, to their mainstream, they are seeing once again the brilliance and insight of people like H. G. Brown. 7

Milton Friedman and Kenneth Boulding have commented that they felt that Brown's work has been overlooked.<sup>8</sup> Thus, my proposition is to examine his work with an even treatment of his efforts always trying to place them in the proper historical context and to render evaluatory comments where relevant.

Brown's contributions can best be examined by considering separately his work in the wide variety of topics which interested him. However, first, the conclusion of this chapter will present a brief biography abstracted largely from obituary and memorial statements. Chapter Two is an attempt to set the scene of Brown's earlier years in the profession by surveying different views of a key question for Brown in economic theory. Chapter Three treats his views on capital and interest theories. Chapter Four combines macroeconomic considerations of business cycles, monetary policy and Brown's view of Keynesianism. Chapter Five examines his work in taxation excluding the question of land value taxation treated in Chapter Six. His early interest in railroad rates and public utility pricing questions are dealt with in Chapter Seven. Chapter Eight examines another early interest in international trade and finance. Chapter Nine comments on his professional career as an educator and writer of textbooks. The final chapter is an attempt to evaluate and classify Brown's thought in economic and political spheres.

Harry Gunnison Brown: A Biography 9

Harry Gunnison Brown was born in Troy, New York, on 7 May 1880. His father, Milton Peers Brown, was an accountant. His middle name derived from his mother's maiden name of Elizabeth H. Gunnison. At age four, he was stricken with tuberculosis of the hip which would recur and alter his vocational possibilities. After completing high school, he worked one year in a factory when the tuberculosis became active, forcing him to take a year of bed rest. He took advantage of the situation and read extensively, including in his reading works of J. S. Mill, Herbert Spencer and Henry George. The illness, abetted undoubtedly by his intellectual curiosity, led him to enroll at Williams College at the turn of the century. He graduated from Williams in 1904 which he was able to accomplish with the financial aid of a grandfather, scholarships, part-time jobs and summer farm work. In 1936, Williams awarded him an honorary L.H.D.

Brown next attended Ohio State University in 1905-1906 where he coached debating teams, an activity he had pursued as an undergraduate. He entered Yale University the following year and completed his Ph.D. in economics in 1909. His dissertation under Irving Fisher's supervision was titled <a href="Some Phases of Railroad Combination">Some Phases of Railroad Combination</a>. His earliest published articles date from 1907. Faculty members present at Yale mentioned by Brown other than Fisher were Clive Day, H. C. Emery and Fred Fairchild. Although no longer teaching economics courses, William Graham Sumner had been an early influence on Yale's teaching of political economy. Also, the acting president of Yale, Arthur Twining Hadley, had an active interest in economic questions.

Upon completion of his degree, Brown joined the faculty at Yale where he taught as an instructor until 1915. In this period, he

assisted Fisher in <u>The Purchasing Power of Money</u> and began his own publishing career with Macmillan and Company. It has been reported that he solidified his interest in Henry George and became an advocate of land value taxation before leaving Yale. 10

Brown became an assistant professor at the University of Missouri in 1915. The Economics Department at Missouri was then headed by Herbert J. Davenport and counted Thorstein Veblen as a member. Missouri's economics faculty had then the reputation of being one of the strongest in the country. 11 Davenport resigned in 1916, but the department retained a fine reputation under Brown's chairmanship as well as a close relationship with Yale. He became a full professor in 1918 and chaired the department with only brief respites until 1947. He also served as acting dean of the School of Business and Public Administration during the years 1934-36 and 1942-46. He was made professor emeritus in 1950. Brown published nine books and many articles in his thirty-five years at Missouri. He served as a member of the executive committee of the American Economics Association for the years 1937-38. He was elected president of the Midwest Economics Association. He became a director and member of the editorial board of the American Journal of Economics and Sociology. He was a frequent contributor to this journal dedicated to interdisciplinary research in the social sciences.

In 1951 on the invitation of Alvin Johnson, Brown taught at the New School for Social Research and also at the Institute for Economic Inquiry in Chicago. As a visiting professor to the University of

Mississippi he taught six more years. He then completed his formal teaching career at Franklin and Marshall College. While residing in Pennsylvania, he and his second wife, Elizabeth Read Brown, were active in promoting local tax reform. After his retirement and return to Columbia, Missouri, he remained active by writing and lecturing on the subject of tax reform and other subjects. When he was ninety-three, the Department of Economics at Missouri sponsored a symposium on taxation and tax reform in his honor in 1973. His death occurred in March of 1975.

Brown was married to his first wife, Fleda Harrison, in 1911. In many of his books, he cited her aid as a proof and critical reader.

She died in 1952. They had three children: Cleone Elsa, Phillips Hamlin, and Richmond Flint. He was married to Elizabeth Read Lumley in 1953, who collaborated with him in his endeavors from that time on.

## Endnotes

- Paul Samuelson, <u>Ten Economic Studies in the Tradition of Irving Fisher</u> (New York: John Wiley & Sons, 1967), p. 17.
- <sup>2</sup>Karl Bopp, <u>Essays in Monetary Policy in Honor of Elmer Wood</u>, ed. Pinkney Walker (Columbia, Mo.: University of Missouri Press, 1965), p. 8.
- <sup>3</sup>Paul Junk, Preface to <u>The Selected Articles</u> of <u>Harry Gunnison</u> Brown (New York: Robert Schalkenbach Foundation, 1980), p. xv.
- <sup>4</sup>Pinkney Walker, Preface to "Essays in Honor of Harry Gunnison Brown, Ph.D., L.H.D.; On the Occasion of His Retirement from the University of Missouri," <u>American Journal of Economics and Sociology</u> 11 (April 1952): 228.
- <sup>5</sup>Will Lissner, "In Memorium: H. G. Brown 1880-1975," American Journal of Economics and Sociology 34 (July 1975): 246.
- $^6$ George Santayana, "Those who cannot remember the past are condemned to fulfill it." In <u>Life of Reason</u> (New York: C. Scribner's Sons, 1905).
- <sup>7</sup>Arnold Harberger, quoted on back cover of <u>The Economics of Taxation</u> by Harry Gunnison Brown (Chicago: University of Chicago Press, 1979).
- <sup>8</sup>Milton Friedman, letter to author, 6 October 1984. Personal files of Christopher Ryan, Iowa City, Ia. Kenneth Boulding, letter to author, 10 December 1984. Personal files of Christopher Ryan, Iowa City, Ia.
- <sup>9</sup>The Biography is based primarily on the material cited in endnotes nos. 3, 4, 5 and <u>The National Cyclopedia of American Biography</u> 58 (Clifton, New Jersey: James T. White and Company, 1979), pp. 43-44.
  - 10Lissner, "In Memorium," p. 246.
- 11 Frank Fletcher Stevens, <u>A History of the University of Missouri</u> (Columbia, Mo.: University of Missouri Press, 1962), p. 419.

#### CHAPTER TWO. LAND AS A FACTOR OF PRODUCTION

A brief survey of contemporary introductory textbooks in economics appears to indicate that the classification of the factors of production utilized by the classical political economists has been retained. To land, labor and capital, these texts occasionally add entrepreneurship. The returns to these factors: rent, wages and interest (as well as profit), are explained in rough accordance to usage of over one hundred years. However, when more advanced texts in microeconomic theory are examined, the accordance disappears.

In the March 1928 issue of the <u>American Economic Review</u>, Clark Warburton examined prominent textbooks of the time, comparing and contrasting the economic terminology employed to describe the factors of production and the distributive shares. Taking the terminology used by John Stuart Mill as a model, Warburton found wide divergences in the usage of the terms. He noted a tendency to retain the tripartite grouping of the factors while recognizing that it was both vague and misleading. One of the inherent problems which accounted for the wide differences in approach was that there were differing views of capital and interest. Another was the question of the relationship of land to capital. Though the questions are clearly interrelated, I will discuss below the narrower question in the following manner. Is land an independent factor of production? Should the terminological distinction between land and capital be retained for analytical purposes? Is the distinction important for welfare considerations?

The position of land in theories of value and distribution had been debated for many years prior to Brown's entrance into economic studies. The questions above had generated an interesting distribution of opinion among the political economists that preceded Brown as well as among his contemporaries. For Brown, these questions and their various answers constituted an important element in his thought and work. For this reason, I will survey this distribution beginning, arbitrarily, with Alfred Marshall and concluding with Brown's American colleagues. In reviewing these views, I will attempt to point out relevant tendencies in the arguments without critiquing individual positions.

Marshall's somewhat equivocal position is familiar. His statement that the rent of land is the "leading species of a large genus," breaks away from Ricardo's thought. Yet, he modified this statement with: "though, indeed, it has peculiarities of its own which are vital from the point of theory as well as practice." In the same article, he said: "And even there in a new country land must be regarded as a thing by itself from the ethical point of view." Marshall's views on land and rent were challenged by several economists, some of whom will be noted later. Edgeworth followed Marshall's lead and viewed land as a form of capital to the individual, but not to society. Edwin Cannan traced the usage of the three "requisites of production" in English political economy in his Theories of Production and Distribution. Cannan argued that by 1848 the triad "was not quite firmly established."

Smith, but noted that Smith's successors varied considerably in their approaches. James Mill, for example, identified only labor and capital as "requisites." Later, in his  $\underline{A}$  Review of Economic Theory, Cannan maintained that the attempt to distinguish land from other forms of property was futile. 7

Knut Wicksell discussed the question of whether land should be included with capital. He concluded that the tripartite division of the factors was justifiable. In his discussion of the concept of capital, he made an argument which Brown would later hark to in debates concerning capital. Wicksell approved of Henry Seager's definition of capital as the produced means of further production. This, for Wicksell, distinguished capital from land and labor a priori as they are not "produced" in the same sense as is capital. Furthermore, interest he viewed as an organic growth out of capital in contrast to wages and rent; although rent may be expressed as a percentage, like interest, this was "something derivative and secondary."

In a similar manner, Gustav Cassel defended the traditional classification. He noted the assertion that the classification was due to particular social conditions in the England wherein the classical theory evolved, but stated that "this classification is without doubt in complete accord with the requirements of a theory of pricing, and that its place in theoretical economics is fully justified." Cassel distinguished between natural and "produced" land, and argued that the price of the former is a secondary result of the pricing process, in that rent is capitalized with respect to the current rate of interest.

Stigler, in discussing the theorists of the Austrian school, noted that only Boehm-Bawerk trenchantly defended the traditional classification of land as an independent factor. <sup>11</sup> Although Boehm-Bawerk saw justification for including land with capital as "acquisitive instruments," he maintained that, on the balance, it was preferable to retain the distinction. He argued that land's distinguishing factors included: immobility, fixity of supply, a difference in origin as well as societal implications. <sup>12</sup> On terminological grounds, he noted that the distinction accords roughly with common usage and the proposal to lump it with capital would leave us without a convenient term for the produced means of "acquisition." <sup>13</sup>

Menger and Wiesner along with Wicksteed, in contrast, rejected the tripartite classification. All three noted peculiarities of land, but none viewed land per se as fixed in supply. Hore significantly, Menger's assumed static case made irrelevant the distinction, as all "factors" are fixed. Thus, for purposes of analysis land was treated as capital.

In the Walrasian system, all factors or resources are fixed or given such that the supposed unique attribute of land is assumed for all factors. Walras did find important the aspect of "extension" with respect to land, in that it could neither be produced nor destroyed, but land played at most a minor role in his analysis of production. Pareto's position was similar in that he argued "land capital" had no precedence over other capital. He did, however, concede that distinguishing land from capital was of possible political importance.

Early American writers on political economy had reacted negatively to Ricardo's theory of rent. Frank Fetter commented in the introduction to J. R. Turner's The Ricardian Rent Theory in Early American Economics: "They denied with almost as close approach to unanimity, the 'orthodox' contrast between land and capital in the sense of artificial agents." Henry Carey and Francis Bowen argued that land was capital and Ricardo's theory was formulated with respect to England's "peculiar social conditions." Arthur L. Perry who taught at Williams maintained that all land value was due to human effort with only minor exceptions (unusual fertility or location). In contrast, Francis Walker followed the classical treatment of land as a distinct agent in production. However, the influential Simon N. Patten argued that the social imperatives no longer applied so that incomes should no longer be separated out as in the classical construct. 21

Around the turn of the century, American political economists were heterodox in their approaches to economic theory. Several had studied in Europe, especially at German universities. Doctoral programs were developing which permitted a greater specialization in economic theory. Professional journals were established and the publication of texts in economics expanded rapidly, frequently with "Principles" as a title. American scholars were achieving increasing recognition in the older centers of study.

John Bates Clark, who studied at Heidelberg under Karl Knies and later taught at Columbia University, is considered by several commentators the first prominent American economic theorist. Clark's

definition of capital denied land a separate role. He argued that the traditional treatment of land was based on its absolute fixity as opposed to other factors, as well as the differential nature of its return. His analysis fixed all "instruments" or resources and illustrated that the distributive shares were alike determined in a differential fashion. Three other important theorists corresponding to this era were Frank Fetter, Irving Fisher and Herbert J. Davenport. Although they debated frequently and at length with one another as well as with Clark, they were unified in their rejection of the traditional approach.

The debate on the significance of land in economic theory was enlivened with the publication of Clark's The Distribution of Wealth in 1899 and Fetter's articles in the American Economics Association Publications and the Quarterly Journal of Economics. 24 Economists who applied the "traditional" classification seemed driven in their attempts to defend it against the "modern" view. Fetter's arguments were more detailed and emphatic than those of previous authors. He challenged Boehm-Bawerk's reasons for viewing land as separate from capital. After refuting his arguments one by one, he concluded that Boehm-Bawerk was, ironically, subject to the lingering influence of a labor theory of value by perceiving land as a gift of nature while capital was the result only of labor. 25 Within the same year, he attacked Marshall's position by arguing that Marshall had mixed individual vs. societal and "static" vs. "dynamic" views in distinguishing land from capital. 26 Essentially, Fetter felt that land should be

considered augmentable under dynamic conditions in a manner commensurate with capital. Furthermore, he argued that a distinction based on a societal rather than an individual viewpoint relied upon a "real cost" concept of rent. Where Marshall had found the property of extension (situation) leading to "true rent" even in a "new country," Fetter maintained that from a "static" view, no such distinction could be made between incomes from a property of a factor and the income of the factor itself. Marshall's response in the 1907 edition of <u>Principles of Economics</u> was that "extension" was the chief property of land and thus justified consideration of "true rent"; he added that other properties as well work to co-determine the composite value of land. <sup>27</sup> Fetter's own classificatory system differed radically from previous usage. <sup>28</sup> In another article, he stressed the impossibility of a practical division between land and capital. He stated:

. . . the notion that it is a simple matter to distinguish between the yield of natural agents and that of improvements is fanciful and confusing. . . . the objective classification of land and capital as natural and artificial agents is a task that always must transcend the human power of discrimination.  $^{29}\,$ 

From another standpoint, Fetter was concerned (as were other economists of the time) with the terminological differences extant between academic and business usage of terms. He pointed out that the distinction between land and capital was of little importance to practical businessmen.

Irving Fisher's definition of capital included land consistently.

In <u>Elementary Principles of Economics</u>, he pointed out that other

authors limit the concept of capital, but argued, "Such a limitation, however, is not only difficult to make, but cripples the usefulness of the concept in economic analysis." Elsewhere, he conceded to the importance of land as a special category of capital as well as to the significance of land's relative fixity in questions of taxation. 31

Herbert J. Davenport, Brown's colleague at Missouri, investigated the separation of land from capital in more detail than did Fisher, although he agreed in large part with Fisher's view of capital. In the preface to Value and Distribution in 1908, he listed the doctrines he would eliminate from economic theory. Last on the list was the tripartite classification of the productive factors. Denying that a clear distinction could be made on technological grounds, he suggested that as many factors could be distinguished as were pertinent though they be myriad. 32 As to the relative fixity or perceived inelasticity of the supply of land, Davenport pointed out that this view involved conjecture or prophecy and as such, should not be admissible in rigorous theory. 33 Although he was convinced on technical grounds that no distinction was tenable, he did examine the influences behind the tradition. In commenting on the origins of the distinction, Davenport said: "With these spatial qualities of land are more or less closely associated certain legal, jurisdictional and territorial aspects possessing great social significance.  $^{"34}$  He indicated that the English commonlaw distinction between realty and personalty is parallel to and interrelated with the traditional division of the factors. For Davenport, separating land from capital was valid "a larger social, historical

and philosophical view"<sup>35</sup> and invalid for competitive analysis. What he may have been referring to in the first case was his Veblen-like views of "capitalized privilege and predation" in which he included land ownership.<sup>36</sup>

In an American Economics Association Publication in 1902 titled "Rent in Modern Economic Theory," Alvin S. Johnson, one of Clark's students, included a long chapter on land as an independent factor in production. Johnson began with the proposition that only if land has distinct characteristics of true economic significance can rent from land be treated as a distinct class of income. He discounted the "origins" or "gifts of nature" as inadequate or metaphysical. Where Marshall and Commons had found situation or extension as a distinguishing element, Johnson denied that this was substantial enough to make the distinction meaningful. The argument that the value of capital will tend to equal "cost" while the value of land will exceed its "cost" he dismissed as relying upon unreal assumptions with regard to the capital market, i.e., perfect competition with perfect knowledge or insurance. He further found economic land to be augmentable, but he added: "The laws which govern the increase of land are not identical with those which cause capital to increase."<sup>37</sup> Thus, ultimately, he accepted land as a factor for dynamic analysis of price and income movements.

At least eleven members of the American Economics Association were given an opportunity to respond to a paper by Fetter presented at the Association's meeting in 1903. Their response was not only to Fetter's

position but also, in part, to the well-known views of J. B. Clark on the subject. While the responses were largely critical, they did contain concessions to the newer approaches. Thomas Nixon Carver maintained that a clear distinction between income from land and other incomes existed in the particular sense that "rent does not enter into cost or into price." He added: "Whereas production would be quite as efficient as it now is even if no one were allowed rent as a personal income." Carver conceded, however, that for a functional view of distribution (rather than a personal view), the distinction was unimportant. Carver's remarks were rebutted by Fetter who argued that land rent is necessary to maintain the supply of land's productive qualities as well as induce their expansion.

Among the other dissenting discussants were Jacob H. Hollander, Richard T. Ely, James E. LeRossignol and W. G. Langworthy Taylor. Hollander provided a defense along the lines of Marshall, arguing that land (as opposed to capital) would be available for "normal, long-time" production only in diminishing efficiency with respect to extensive use. Ely objected, in this instance, that Fetter's approach underestimated the "inseparable conditions of land." Ely's position in later writings emphasized that he viewed land as differing from capital in degree only: "Land in any usable shape had normally and regularly to be produced." LeRossignol stressed the difference between goods which are reproducible and those which are not. Finally, Taylor emphasized, in the dynamic view, land's greater inherent scarcity.

Henry Seager in a review of Clark's The Distribution of Wealth

#### commented:

... from the point of view of economic dynamics the fact that land is a gift of nature while other instruments are themselves the products of human industry attaches to the former an interest which the latter are without. 42

Charles Tuttle presented a similar critique of this aspect of Clark's book. 43

John Commons, a foremost institutionalist, maintained that for social and ethical reasons, land should be viewed as distinct from capital. He acknowledged that soil is capital but situation per se is not, as it neither produces nor is it produced. Land in the sense of its situation was for Commons a "social relation." He argued: "If there is a difference between patent right and capital, there is a similar difference between land and capital." 44

Frank T. Carlton's article, "The Rent Concept, Narrowed and Broadened," published in the <u>Quarterly Journal of Economics</u> 1907, was illustrative of the strategic retreat taken by many writers in their defense of land as a separate factor. Reacting primarily to Clark and Johnson, Carlton pointed to the rapid growth of urban lands wherein the capital and site values may be more easily distinguished than is the case in agriculture. He followed Commons by defining land as only that which "furnishes standing room and situation with regard to markets." He proceeded to broaden the concept of rent by including special privileges or special relations to markets which cannot be duplicated or physically depreciated.

Frank Taussig retained the classical division of the factors while

admitting to the practical difficulty of distinguishing land from capital; he referred the term "natural capital" to designated land and other "natural agents." Making a number of qualifications, he argued that there was a broad margin toward which the return to capital would tend while no such tendency governed the return to "natural capital." For Taussig, truly permanent improvements embodied in land should be treated as land and their return as rent. 47

E. R. A. Seligman closely follows Marshall's approach to the classification of factors by alternatively using a two, three or four breakdown, whichever was viewed as appropriate. For example, if capital were viewed as a fund, then land becomes a subcategory. Seligman's justification for the separation of land from capital was that he found "peculiar consequences" in the law of diminishing returns when applied to land. 48

Harry Gunnison Brown's position reflected portions of the earlier discussions. He accepted the narrower view of the rent concept in defining land as "land space," thereby excluding all improvements associated with land. As did other economists, he included (but without great emphasis) mineral and water resources in his concept of land. The return to "land space" was thus a situation rent which is very similar to Marshall's true or ground rent. Brown's primary defense of the continued distinction was based on the nonreproducibility of land space as a key property distinguishing it from ordinary goods. He admitted that this property was not unique to land space, since works of art, genius etc. have a like characteristic. The reproducibility

of land space was interpreted not only as a physical improbability, but also as entailing prohibitively high marginal costs in all but exceptional circumstances. Brown attempted to integrate his distinction between land and capital into the theory of value and distribution. His attempt involved establishing that the return to land space was only superficially similar to the return to "made capital." The essential difference in his view rested on the mode of their respective valuations and the belief that capital was a derivative factor. These arguments will be elaborated on in the succeeding chapter as they bear directly on Brown's part in controversies dealing with capital and interest theories.

When Brown began his academic career, the question of the place of land in economic theory was far from resolved. Several more contributions to the debate were yet to be made, usually in connection with discussions of capital theory, methodology or simply terminology. The exchanges of Knight and Kaldor may be noted as one example. For Knight:

Land is capital merely; defined in any realistic way, it presents an infinite variety of conditions as to maintenance and replacements, and possibilities for increase in supply, as does any other general class of capital instruments.<sup>51</sup>

## Also:

. . . The notion that what are called "natural agents" are not produced is false and reflects a false conception of production.  $^{52}\,$ 

## For Kaldor:

. . . even if the distinction between "permanent" and "non-permanent" resources or between "original" and "produced" is untenable or irrelevant, there is still a distinction

to be drawn between "producible" and "non-producible" resources.  $^{53}$ 

#### L. M. Fraser in 1937 commented:

. . . The truth is that economists have not as a whole clearly made up their minds what to mean by "land"--much less, how important a part it should play in their expositions of value theory. 54

Some general trends in the earlier discussions can be discerned. Marshallian theory retained the usage of land, but greatly reduced its theoretical importance. Marshall's justifications, although more precise than Ricardo's "original and indestructible powers" were open to question. Modes of analysis, especially the general equilibrium approaches of Walras and Pareto, facilitated the exclusion of land in the sense that their assumptions attributed to any "factor" that property which was thought to be representative of land alone. Also, the growing concentration on price theory, as reflected in Fisher, Davenport and others, found the inclusion of land as a factor redundant given their definitions of capital.

Given the strengths of these variations of neoclassical economics as well as emerging statistical studies which indicated that a surprisingly small share of income accrued in the form of rent, <sup>55</sup> it would appear that an explanation for the continuing usage of land would be in order. One must bear in mind the strength of tradition in economic thought. Marshall's thought on the subject "marginalized" land but retained it as well. His treatment left open a limited acceptance of the views of Ricardo and J. S. Mill. Thus, the followers of Marshall tended to carry forward variations of his views. As I have noted

previously, many of the justifications for retaining land as an independent factor draw implicitly on Marshall. Other prominent theorists such as Wicksell and Boehm-Bawerk undoubtedly had a like influence on their readers.

The explanation must be supplemented with socio-political considerations. Political economists of the latter nineteenth century were uniformly concerned with social questions relating to land and land ownership. This may be seen in reference to several arguments mentioned above that presented social or ethical reasons for the retention of land as a factor. This reasoning, of course, had origin in the connection between social class and a particular type of income. The connection was surely eroding in most European countries and, perhaps, was never perceived as strongly in this country. Yet many political economists gave currency to the classification of incomes as "earned" and "unearned." For them, the rent of land and monopoly profits were the prime examples of "unearned" incomes. In addition, toward the end of the century, economists became keenly interested in both the practical and theoretical questions of taxation and tax reform. In this respect, the work of John Stuart Mill and Henry George was important since most students of economics of the time were likely to have read both. In his work, Mill advocated with qualifications greater taxation of land as had earlier English reformers. The influence of George (although academic reaction to his theories was largely negative)  $^{56}$  was widespread and profound for his teachings motivated considerable interest in the study of political economy. <sup>57</sup> Of George's ideas at the time

of his death only the single tax survived in active academic debate.

The underlying principles of his proposal gathered wide support among economists even if its implementation in its most radical form did not.

The peculiarities of land so often mentioned by the economists cited above also motivated its retention as a concept in economic theory when stronger currents of thought found little or no use for it. Some of these peculiarities became the focus of special fields of study such as land economics, aspects of urban economics and more recently resource economics.

Harry Gunnison Brown in his efforts to emphasize his concept of land and integrate it into economic theory would find increasingly fewer colleagues with a like interest. His advocacy of land value taxation played a double role in his theoretical defense of land as an independent factor. First, if land were to be treated exactly like capital, economic arguments for its special taxation would in effect be erased. Second, even if land were treated as a sub-category of capital, unique for some purposes, the effect would be to diminish the weight and clarity of the arguments for land value taxation. However, in surveying the views of the early neoclassical economics and his prominent contemporaries, Brown's position was yet within the bounds of a somewhat hazy orthodoxy.

## Endnotes

- <sup>1</sup>Clark Warburton, "Economic Terminology: Factors of Production and Distributive Shares," <u>American Economic Review</u> 18 (March 1928): 73.
  - <sup>2</sup>Alfred Marshall, "On Rent," Economic Journal 3 (1893): 76.
  - 3Ibid.
  - <sup>4</sup>Ibid., p. 77.
- <sup>5</sup>Frank Y. Edgeworth, <u>Collected Papers Relating to Political Economy</u>, Vol. 1 (New York: Burt Franklin, 1925), pp. 33-35.
- 6Edwin Cannan, A History of the Theories of Production and Distribution in English Political Economy 1776-1848 (London: Rivington, 1894; reprint ed., New York: Augustus Kelly, 1967), p. 33.
- <sup>7</sup>Edwin Cannan, <u>A Review of Economic Theory</u> (London: P. S. King & Son, 1930; reprint ed., New York: Augustus Kelly, 1964), pp. 241-249.
- <sup>8</sup>Knut Wicksell, <u>Lectures on Political Economy</u>, Vol. 1 (New York: Macmillan and Company, 1934; reprint ed., New York: Augustus Kelly, 1967), p. 185.
  - <sup>9</sup>Ibid., p. 145.
- $^{10}\text{Gustav Cassel}, \underline{\text{The}}$   $\underline{\text{Theory}}$  of  $\underline{\text{Social}}$   $\underline{\text{Economy}}$  (New York: Harcourt Brace and Co., 1932), p.  $\underline{\text{167}}.$
- <sup>11</sup>George J. Stigler, <u>Production and Distribution Theories</u> (New York: Agathon Press, 1968), pp. 192-193.
- 12 Eugen V. Boehm-Bawerk, The Positive Theory of Capital (New York: G. E. Stechert & Co., 1923), p. 55.
  - <sup>13</sup>Ibid., p. 56.
- 14 Wicksteed was noted by Lionel Robbins to have had considerable sympathy with land nationalization programs in his introduction to The Common Sense of Political Economy. Menger conceded the relative immobility of land as being of economic significance and Von Wiesner favored the confiscation of "unearned" urban rents, as noted by Stigler in Production and Distribution Theories.
- $^{15}$ Athanassios Skouras, "Land and Taxation as Issues in Economic Theory," <u>American Journal of Economics and Sociology</u> 39 (October 1980): 378.

- <sup>16</sup>Vilfredo Pareto, <u>Manual of Political Economy</u> (New York: Augustus Kelly, 1971), p. 321.
- 17 John Roscoe Turner, The Ricardian Rent Theory in Early American Economics (New York: The New York University Press, 1921), p. xii.
  - <sup>18</sup>Ibid., pp. 146-147.
  - <sup>19</sup>Ibid., pp. 184-185.
- <sup>20</sup>Francis Amaso Walker, Political Economy (New York: Henry Holt & Co., 1888), pp. 34, 61.
- <sup>21</sup>Simon N. Patten, <u>Theory of Prosperity</u> (New York: Macmillan Company, 1902), p. 5.
- <sup>22</sup>John Parrish, "The Rise of Economics as An Academic Discipline: The Formative Years to 1900," Southern Economic Journal 34 (July 1967): 1-17.
- 23 John Bates Clark, <u>The Distribution of Wealth</u> (New York: Macmillan Company, 1899), p. 388.

- 24 Frank A. Fetter, "Recent Discussion of the Capital Concept,"

  Quarterly Journal of Economics 15 (November 1900): 1-45.

  Frank A. Fetter, "The Passing of the Old Rent Concept," Quarterly Journal of Economics 15 (May 1901): 416-455.

  Frank A. Fetter, "The Relations Between Rent and Interest,"

  Publications of the American Economics Association 5, ser. 3 (February 1904): 176-240.
  - <sup>25</sup>Fetter, "Recent Discussion," pp. 34-37.
  - <sup>26</sup>Fetter, "The Passing of the Old Rent Concept," pp. 421-423.
- <sup>27</sup>Alfred Marshall, <u>Principles of Economics</u>, 8th ed. (New York: Macmilland and Company, 1907), p. 422.
- $^{28}$ Frank Fetter, The Principles of Economics (New York: The Century Co., 1904), pp. 257-264.
  - <sup>29</sup>Ibid., pp. 189-190.
- 30 Irving Fisher, Elementary Principles of Economics (New York: Macmillan Company, 1911), p. 34.
  - <sup>31</sup>Ibid., p. 390.

- 32Herbert J. Davenport, <u>Value and Distribution</u> (Chicago: University of Chicago Press, 1908), p. 128.
- $^{33}\text{Davenport}$  pointed out that food may become in the future wholly a laboratory product without agricultural application.
  - <sup>34</sup>Davenport, <u>Value</u> and <u>Distribution</u>, p. 133.
- 35Herbert J. Davenport, "Social Productivity versus Private Acquisition," Quarterly Journal of Economics 25 (November 1910): 104.
- <sup>36</sup>Herbert J. Davenport, "The Extent and Significance of the Unearned Increment," <u>Publications of the American Economic Association</u> 11 (April 1911): 322-331.
- 37 Alvin S. Johnson, "Rent in Modern Economic Theory," <u>Publications</u> of the <u>American Economic Association</u> 3, ser. 3 (February 1902): 920.
- . 38 Supporting Fetter's views were Winthrop Daniels and Franklin Giddings in the published proceedings.
- $^{39}$ Thomas Nixon Carver, discussant of Fetter's paper, "The Relations," p. 200.
  - <sup>40</sup>Ibid., p. 201.
- 41Richard Ely, "Land Income," <u>Political Science Quarterly</u> 43 (September 1928): 423.
- 42Henry Seager, Review of J. B. Clark's <u>The Distribution of Wealth, Annals of the American Academy of Political and Social Sciences</u> 16 (September 1900): 127.
- 43Charles Tuttle, "Clark's <u>Distribution of Wealth</u>," <u>Yale Review</u> 11 (August 1902): 179.
- $^{44}$  John Commons, Review of John Hobson's <u>The Economics of Distribution</u>, <u>Annals of the American Academy of Political and Social Sciences</u> 16 (July, 1900): 135.
- 45Frank T. Carlton, "The Rent Concept, Narrowed and Broadened," Quarterly Journal of Economics 22 (November 1907/8): 53.
- 46 Frank Taussig, <u>Principles of Economics</u>. Vol. 1 (New York: Macmillan Company, 1926), p. 128.
  - <sup>47</sup>Ibid., p. 93.

- $^{48}$ E. R. A. Seligman, <u>Principles of Economics</u> (New York: Longman, Green and Company, 1926), pp. 306-307.
- $^{49}\text{Harry Gunnison Brown, } \underline{\text{Economic Science and the }} \underline{\text{Common Welfare}}$  (Columbia, Mo.: Lucas Brothers, 1931), pp. 266-267.
  - <sup>50</sup>Ibid., p. 273.
- 51 Frank Knight, On the History and Method of Economics: Selected Essays (Chicago: University of Chicago Press, 1956), p. 54.
  - <sup>52</sup>Ibid., p. 53.
- 53Nicolas Kaldor, <u>Essays on Value and Distribution</u> (Glencoe, Ill.: The Free Press of Glencoe, Illinois, 1960), p. 174.
- <sup>54</sup>L. M. Fraser, <u>Economic Thought and Language</u> (London: A. & C. Black, 1937), p. 386.
- $^{55}$ W. I. King, The Wealth and Income of the People of the United States (New York: Macmillan Company, 1915).
- <sup>56</sup>See <u>Critics of Henry George</u>, Robert V. Andelson ed. (Rutherford: Fairleigh Dickinson University Press, 1979).
- $^{57}$ For example, Frank Fetter was reported by Dorfman to have become interested in political economy through the reading of George, yet he became a stern opponent of George's ideas.

#### CHAPTER THREE. CAPITAL AND INTEREST THEORIES

In the years of Brown's education, questions on capital and interest were considered to be among the most, if not the most, difficult subjects of economic theory. Boehm-Bawerk and Fisher both attested to their intricacy. Moreover, numerous debates and exchanges in journals attracted wide interest, especially in this country. The longest and perhaps best known of these exchanges was between Boehm-Bawerk and John Bates Clark concerning (among other points) the concept of capital. Boehm-Bawerk's theories had greatly influenced the thinking of American economists; his theory of interest was, however, received unevenly. Some economists such as Fetter, Patten and Taussig were inclined to accept it in part and emphasize Boehm-Bawerk's "time preference" explanation of interest rates. Others such as Seligman and Seager tended to reject the theory for explanations of interest rates which emphasized the "productivity" of capital along the lines of Clark. Irving Fisher's acclaimed publication, The Theory of the Rate of Interest, took an intermediate position. In an article in  $\frac{1}{2}$  and later in his Elementary Principles of Economics, Fisher reiterated his theory in simplified form and introduced the term "impatience" to distinguish his view from Boehm-Bawerk's "agio" theory, and to replace the term "time preference" which he had earlier employed. Fisher saw the term "impactience" as expressing the "real basis of interest," as well as constituting "a fundamental attribute of human nature." 3

In 1912, Henry Seager<sup>4</sup> initiated an exchange which ultimately

involved Fetter and Brown as well as Fisher.<sup>5</sup> Seager attacked Fisher's "principles" treatment of capital and interest. Fisher would later counter that this was unfair as his more complete statements were iqnored. As mentioned in the previous chapter, Seager took issue with a definition which incorporated land as opposed to Boehm-Bawerk's formulation. Moreover, he felt Fisher, in rejecting Boehm-Bawerk's third explanation for interest or the "technical superiority of present over future goods," had denied a role to the productivity of capital in determining interest rate levels. Therefore, Seager implied that Fisher's theory was methodologically incapable of serving as a theory of production and distribution. Fisher had, in his first approximation, taken income as given but had then relaxed the assumption in his second approximation in The Rate of Interest. Fisher also countered that he had already given special emphasis to the role of productivity in his theory (if not explicitly in his text) and felt that his contribution in this regard was the most original and difficult of the undertaking. $^{6}$ 

Seager went on to criticize Fisher's refutation of productivityrelated theories. Boehm-Bawerk had, along with others, found a <u>petito</u>

<u>principii</u> fallacy in using the productivity of capital as an explanation
for interest wherein implicitly an existing interest rate was presupposed in the valuation of capital via the discounting of future income from it. To Fisher's reiteration of this charge, Seager gave a
somewhat oblique defense. He first charged Fisher with using land as
representative of capital, thereby obscuring the role of the "expenses"
of production in the determination of value in exchange. Fisher had

used a hypothetical example of an orchard whose physical productivity doubled while the value of its products remained unchanged; the return or interest would remain approximately the same while the value of the orchard would approximately double. Seager agreed that in this case the interest return would remain the same, but for a different reason. Viewing the orchard as consisting of reproducible machines or tools, Seager argued that these tools would be multiplied under competitive condition so as eventually to eliminate in large part a rise in the value of the tools. Yet, the greater returns to the tools would have insufficient impact on the capital market to significantly alter interest rates. Seager clearly felt that Fisher had obscured the issue by adopting the not-so-easily reproducible orchard for his example. Also, inadvertently or not, the orchard example tended to identify productivity theorists with older discredited theories which attempted to find in the productivity of nature a cause for interest.

Fisher recognized that his first example was insufficient and altered the proposition to that of a universal doubling of capital's productivity. Briefly he argued:

It is true that doubling the productivity of the world's capital would not be entirely without effect upon the rate of interest; but this would not be in the simple ratio supposed. Indeed, an increase in the productivity of capital would probably result in a decrease, instead of an increase, of the rate of interest.

He added that the value of capital would be at least doubled. For Seager, this result was unimaginable, and he argued as before that:

. . . time being allowed for an adjustment to the new conditions, the values of the produced means to further

production will be brought into conformity to the expense of producing them.  $^9$ 

Thus, for Seager, some large increase in the interest rate, if not a doubling, was inevitable. In Fisher's reply to Seager, he expanded his argument by considering effects upon the prices of capital's products and the costs of producing capital. He maintained that product prices should fall while costs should rise, thereby mitigating a substantial rise in the return to capital. Further, the ultimate effect would be a lowering of the interest rate as the larger incomes forthcoming to the owners of capital would lower rates of impatience to which interest rates must eventually adjust. <sup>10</sup> Seager was unconvinced by Fisher's rebuttal. He replied: "He fails to comprehend clearly the way in which productivity and time discount operate in the determination of the current rate of any given time period." <sup>11</sup>

Brown, then Fisher's colleague at Yale, was similarly unconvinced. He published an article in 1913 titled "The Marginal Productivity Versus the Impatience Theory of Interest." The article was largely supportive of Seager's position. His stated position and the attempt of the paper was to show:

. . . that productivity and impatience are coordinate determinants, i.e., that productivity is as direct a determinant as is impatience, and that productivity may be, in a modern community, the more important determinant.  $^{13}$ 

Brown stated in several instances that he was an earlier adherent of "time preference" theories of interest such that Seager's paper may have been influential in an uncharacteristic change in opinion by Brown.

Brown's dissent from Fisher's theory rested on the observation

that Fisher failed to admit that productivity had a <u>direct</u> rather than an indirect influence on the rate of interest through its effect on impatience rates. Brown acknowledged that the productivity of waiting <sup>14</sup> in Cassel's terms could affect the individual rates of impatience and thus interest rates, but he wished to establish that the productivity of waiting could directly influence these rates. Here, he was facing the problem with which Boehm-Bawerk as well as others had struggled. In addition to this, he would have to meet Fisher's refutation of Boehm-Bawerk's arguments.

Brown began by assuming that "indirect" production could be indefinitely extended without reducing the reward of marginal waiting below ten per cent. He then proceeded to explain how this would influence both the supply of and demand for present goods. In terms of demand, he argued that any rate of exchange (of present versus future goods) below ten per cent will result in an excess demand for present goods. To show that this excess demand need not necessarily be due to "impatience," he presented the simple case of a person needing a certain amount of present goods with the options of working at direct production to procure them, or borrowing them and undertaking roundabout production. The decision, he maintained, would not be based on the desire to provide for present goods out of future abundance but that of comparing the outcomes of the options. Brown was perhaps drawing on Boehm-Bawerk<sup>15</sup> when he stated: "He is comparing two futures, rather than a present and a future." <sup>16</sup> Davenport, in a review of Fetter's Principles of Economics in 1916, accepted Brown's point as relevant.

## Davenport said:

... it is, however, not true that interest can emerge where present consumables are inadequate for present need, or where, through substitution for future purposes, they are made less than adequate. The interest contract may present nothing more or other than a choice between future incomes, no question of present enjoyment of incomes possibly entering the case. 17

Fisher had criticized Boehm-Bawerk's demonstration of the "technical superiority of present goods" showing that with the first two grounds for explaining interest being absent.

. . . the only reason anyone would prefer the product of a month's labor invested today to the product of a month's labor invested next year is that today's investment will mature earlier than next year's investment. 18

By insisting that a <u>present</u> comparison of options was the relevant view, Brown was making a point with respect to the limits of a pure preference approach to interest determination, but was not successfully defending the "technical superiority of present goods" as an independent determinant of the interest rate. Guy Arvidsson suggested years later a possible way out for the discussants. 19

On the supply side, Brown showed, with the same assumptions, that the supply of present goods would be decreased if the rate of exchange were anything less than the assumed productivity of "waiting" due to the supplier choosing to adopt roundabout methods to attain a greater final product. He again argued that "impatience" was not decisive in this case but that "nature or invention, or more properly both" is what gives them the option of receiving more for present effort. As to the issue between Fisher and Seager on the hypothetical doubling of

productivity, Brown agreed with Seager, so long as the productivity increase is defined as the increase in the surplus marginal product of indirect over direct production. He conceded, however, to Fisher that an increase in wealth could eventually reduce impatience and further the extension of indirect production such that a lower marginal product of waiting could result.

Another significant difference in Fisher's and Brown's views was Brown's insistence, referred to previously, that capital's value, unlike that of land, was not necessarily due only to its expected future earnings and a discount rate determined by impatience. He stated:

We may say that a person's valuation of capital, along with the valuations of other persons in a like situation, is less the direct result of a previously existing market rate of interest, than it is, by affecting his or their attitude towards the market, a determinant of the rate of interest.  $^{21}$ 

Emphasizing the difference between land and capital (that in large land has no cost of production), Brown argued that the given surplus obtainable from the use of capital will have the effect of fixing not only the rate of discount but also the rates of impatience.

He then altered his assumption to that of a constant marginal product of waiting with respect now to any indefinite <u>decrease</u> of roundabout production, and proceeded to show how the demand for and supply of present goods would be affected by the superiority of roundabout production so as to hold interest rates down to this assumed level. Finally, in the article Brown reversed the assumption by taking a constant natural rate of impatience invariant with respect to changes in

the income stream with the marginal productivity of waiting declining as indirect production is extended. In this case, the marginal productivity would adjust to the impatience rate via the extension or reduction of indirect production. Brown concluded that in the real world adjustment would take place in both rates, but that impatience was not:

. . . the fundamental cause of modern interest or even a cause through which all other causes must operate, but that it is one of two coordinate causes and is also to some extent a joint consequence, with interest, of the other cause, the superiority of indirect production.<sup>22</sup>

He clearly felt marginal productivity did not only influence the demand for present goods and that impatience did not only limit the supply of present goods.

In 1914, Frank Fetter presented an article responding to Brown's article as well as Seager's and the response by Fisher. 23 Fetter's well-known position was that of a pure time preference theory of interest and accordingly, he referred to himself as a capitalization theorist. In the article, he was particularly concerned with Fisher's partial concessions to productivity influences in interest rate determination. Moreover, he sought to show that time valuation was a prerequisite to the determination of interest rates and that such a valuation did not imply a pre-existing money interest rate and that, therefore, Fisher's charge of circular reasoning was mistaken. Fetter called Brown's theory "eclectic," presumably because it lacked a single unambiguous cause for interest. He offered three specific objections. First, he maintained that those examples which assumed a rate of productivity begged

the question and failed to establish technical productivity as a cause of interest. Second, he argued Brown's perspective was oriented toward the enterpriser or middleman and thereby ignored the ultimate influences and motives of the consumer. And last, he rejected Brown's distinction between land and capital where the cost of production concept was used to support the distinction.

Brown replied in the next issue of the journal to Fetter's criticisms as well as to Fetter's time-preference or psychological theory of interest. He described this theory in the following manner:

Not only do the time-preference theorists explain the value of all capital by the discount process, but they explain cost-of-production in the same way. The expense of hiring labor to construct capital is said to be fixed by the discounted value of the future benefits constructed. The cost of raw materials and machinery and, further back, the wages of labor employed to produce these, likewise depend, directly only upon the far future benefits to be yielded.<sup>24</sup>

From this description, Brown clearly felt that the "pure" theory was unrealistic and, in an elaborate example, tried to show that the cost of production of capital must play a role in its valuation along with time preference. As in his previous article, he used quantities of goods to form his rate of productivity instead of employing value terms to avoid the circular reasoning charge. Fetter pointed out in a rejoinder that this constituted a present good standard which disguised an implied value relation. Fisher later indicated in the 1930 revision of The Theory of Interest that the example was acceptable as one possible case and that Brown's conclusions followed, given his conditions. However, in Brown's Cursoe-type example he repeated an

argument to which both Fetter and Fisher expressed dissent. He posited two coexistent methods of producing the same good; one was direct and the other roundabout. Fetter saw this as only a temporary possibility in that it could occur only in a competitive economy when the rate corresponding to the "gain" from the roundabout process was coincident with the rate of time preference. Otherwise, one of the two processes would be uneconomic. In Fetter's words, "Time preference dominates the choice of techniques." Although Fisher rejected this view as too narrow in that it ignored at any moment in time "the opportunity of choosing among many income streams," he later faulted Brown for trying to prove too much with the example.

In a 1929 article, "Capital Valuation and the Psychological School,"

Brown made clearer his divergence with current thought on the valuation

of capital and its relation to the causes of interest:

. . . it may be noted that the idea that the productivity (or the net gain from roundabout production) has a <u>direct</u> effect on the interest rate, and not merely an indirect effect, goes logically with the idea that cost has a <u>direct</u> effect on capital value. On the other hand, the idea that capital value is determined only <u>through</u> discounting is part and parcel of the idea that the interest rate is affected only through time preference.<sup>29</sup>

The "indirect effects" of cost on capital which Brown refers to were those of discounted future repair costs and changes in the present costs which alter the perceived value of the future services. The direct influence which he wished to emphasize was to operate via opportunity cost on the demand for as well as the supply of capital goods. He added to the normal considerations of long-run demand and supply, the

possibility of a demander becoming a supplier and vice versa. Following Davenport, he defined the cost of production as "the amount of other goods which the same effort and sacrifice would produce." Thus, he argued that, in this sense, long-run supply of and demand for capital depend on the present cost of production and that, therefore, the value of capital is influenced directly by its cost of production. He illustrated his view in the following example:

Nowell is a fisherman. His usual catch is \$40 worth of fish a week. His boat, a necessity of his business, is wearing out. He needs a new one very soon. He is a pretty good carpenter. He can build himself a satisfactory boat in a week's time. Kelleher, a dealer, offers to sell him a boat for \$100. Nowell and other fishermen similarly situated refuse to pay such a price. Thus, the demand for Kelleher's boats is affected by the opportunity cost to Nowell and to others of building their own boats. Nowell refuses to pay Kelleher \$100.31

## Brown believed that:

... in equilibrium we should ordinarily have a value for capital (assuming it to be worth constructing and not yet depreciated) which would be the same as its marginal cost and also the same as the discounted value of its future services. . . . For if capital which has its value directly (and not indirectly) controlled by opportunity cost, is able to add to production, in its lifetime, goods in excess of those which measure its costs (on the opportunity cost basis) then its productivity influences the interest rate directly and not merely through first affecting the distribution of income over time and thereby affecting time preference.<sup>32</sup>

Brown, then, as in the previously cited article, applied his ideas to the distinction between land and capital. The value of land apart from its improvements, etc. is arrived at solely by discounting prospective net income at the current rate of interest while the value of capital is directly affected by the present costs of production or

duplication. Land or land space not practically reproducible earns, for Brown, a situation rent best seen as "an absolute amount measured and determined by the surplus over production at the margin." Thus, the similarity between interest and rent viewed as a percentage of the values of capital and land respectively is only a superficial likeness.

There were two responses to Brown's article. 34 William W. Hewett of the University of Cincinnati accepted Brown's arguments in general but wished to expand them by applying Marshall's concept of the short and long run, interpreting them as referring respectively to a period where a market disturbance has led to a disequilibrium and a period where there is a general tendency toward equilibrium. For Hewett, in the short run the value of capital tends to equal the discounted prospective income and in the long run, the cost of reproducing the capital. Hewett's major criticism was that "the option to reproduce capital can be made instantly effective," $^{35}$  and thus he suggested that Marshall's concept of quasi-rent be utilized to describe the return to capital in the short run. The other response was from Edwin Cannan which dealt primarily with the arguments Brown had used to separate land from capital. Cannan noted that Brown avoided Ricardo's inclusion of fertility as part of land and that situation value "in the useful sense of relative accessibility is altered by human effort every day."<sup>36</sup>

Brown replied to both comments.<sup>37</sup> He made a partial concession to Hewett in admitting that the alternative opportunity of switching to the production of a good temporarily in excess demand may well be

a practical impossibility for many buyers. However, he maintained that as long as the opportunity was available to some, the effect would be immediate and tend to reduce the effects of the supposed scarcity although the short-run price of capital would tend to exceed that of the long-run. Hewett's reply to this was that his perception of the extent of the alternatives was much more limited than Brown's. To the first of Cannan's points, Brown replied that he had always maintained that the value of land due to the maintenance or enhancement of its fertility be considered apart from land's situation value as capital. Of greater significance, he argued that the situation or site value of land may well have been humanly produced, but that this, in all but exceptional cases, did not militate against his point. A reasonable duplication of a site whose value rests on advantages in transportation, communication or location with respect to population, etc., is a practical consideration only to a mammoth corporation or a collective action by some institution. Brown argued that such decision-making bodies and the practical context for such decisions were not commonly found in the current situation. He did, however, admit to the existence of borderline cases, such as the founding of Gary, Indiana. Brown found such cases inadequate to support the theory that the cost of reproduction or duplication could to any significant degree influence land's site value.

In 1928, Fisher wrote Brown as he was preparing a revised version of <a href="The Rate of Interest">The Rate of Interest</a>. He indicated in the letter that only he and Brown were in agreement as to the essentials of a theory of interest.

Fisher also said that he felt that the "productivity" side of his theory was an original contribution although he found Brown's references in his text to Jevons and Davenport to cast some doubt on this. Fisher said of The Rate of Interest:

. . . (it) is the only serious work of mine the reception of which has been a profound disappointment and it is a great humiliation now to find the only other writer who agrees doesn't realize it!  $^{38}\,$ 

Fisher went on to request that Brown criticize the manuscript in detail.

Brown did criticize at least Fisher's statement of the "opportunity principle" which Fisher thanked him for in the preface to <u>The Theory of Interest</u>. <sup>39</sup> Brown made notes in preparation to answer Fisher. In them he indicated that he felt their differences to be substantive and that he doubted that Fisher would accept his emendations. <sup>40</sup> In a chapter titled "Objections Considered," Fisher addressed his continuing disagreements with Brown and in particular his 1929 article. Fisher reproduced a more detailed version of Brown's example, <sup>41</sup> and then stated:

I accept all of Professor Brown's reasoning and conclusion except his application to me. His contention that the cost of duplicating existing capital will influence the value of capital is perfectly correct, but so is the discount formula.  $^{42}$ 

He pointed out that Brown's example was an isolated or nonmarginal case, and when "Nowell" made a marginal decision in a "perfect" market, he would choose the income stream which maximizes at the market rate of interest his present worth. Turning to a brief consideration of the cost concept, Fisher alluded to Davenport's view as generally correct.

Fisher maintained that future costs with respect to capitalization enter on the same footing as does future income, but that past costs only influence present valuations indirectly as they affect future expected income or cost. This indirect influence of cost would be through the limiting of supply which alters the quantity and value of future services.

Brown apparently was never willing to concede these arguments to Fisher as he repeated his ideas in several later articles and succeeding editions of his textbook. He may have thought that his argument with respect to the opportunity cost influence on the demand for capital was not adequately addressed by Fisher. Also, one might speculate that Brown saw Fisher's identification of "past" costs not to be descriptive of what he saw to be "present" opportunity costs.

In the aftermath of the above exchange, Brown contributed a somewhat obscure comment to the <u>American Economic Review</u>. His stated purpose of the comment was to:

. . . merely show that such an attack as Marshall levels against the opportunity cost theory as applied to rent has neither less nor more validity against the opportunity cost theory as applied to wages or interest.  $^{43}$ 

Although Brown did not mention it, his attention was probably drawn to the question by an exchange initiated in the <u>Economic Journal</u> by F. W. Ogilvie in the previous year. 44 Ogilvie had questioned the continued service of Marshall's thought on rent. Specifically, Marshall was criticized for failing to note that his argument, for the "inexpediency" of saying that the rent of land does not enter into the price of

its product, that it would be similarly inexpedient to say that the wages of labor do not enter into the price of what it produces. Brown simply expanded upon this point by illustrating that like the no-rent margin for land, one could conceive of a "no-wage" margin for labor and a "no-interest" margin for capital. Perhaps due to Brown's earlier articles, he was charged by R. W. Souter for having suggested that those who deny the distinction between land and capital do so on the basis of the doctrine of opportunity cost. Souter also classified Brown as a "repressed utopian." Souter's interpretation appears to rely heavily on imputation and is not substantiated by what Brown actually wrote in the comment.

In 1944, Brown published an article, "An Off-Line Switch in the Theory of Value and Distribution," wherein he argued that Boehm-Bawerk had erred on two counts and misled those who elaborated on his theory. First, Brown felt that his concept of direct production involving only the "naked fist" was misleading. He proposed an alternative concept to distinguish direct from roundabout methods of production: immediacy of the end product regardless of the mixture of capital, labor and land utilized in the process to be used. Thus, Brown would broaden the alternatives of a worker in the sense that his or her minimum offer price for his or her labor be set by the augmented opportunities available in "direct" production or the production of "present" (immediately consumable or nearly so) goods. Assuming some general degree of possible substitution in the production of "present" versus capital goods, he maintained that the marginal cost of the production of capital goods

was the "present" goods that the factors producing capital might produce instead. In this manner then, Brown argued for a direct influence of the cost of production on the value of capital as in his earlier writing. In a 1962 article, Brown noted the current acceptance, if not dominance, of Fisherian interest theory and took the occasion to reiterate his dissent. 46

In summarizing Brown's contributions to this area of economic thought, especially in the years 1913 to 1931, his influence on Fisher's revision of The Theory of Interest would appear to be of the greatest significance. Fisher commented in the book that anything new which he offered in his revision "was chiefly on the objective side" 47 wherein he cites only Brown's text, Economic Science and the Common Welfare, as a "somewhat similar treatment" 48 in a nonmathematical form. Gottfried Haberler commented in his review that Fisher was at great pains to clarify the role of productivity in interest determination, but that his explanation still left doubts. 49 The emphasis which Brown wished to lend to the role productivity in interest determination was greater in Fisher's revision, however, it was less than that desired by Brown. As noted above, Brown saw productivity as having a direct affect on interest rates coordinate with time preference but for practical purposes dominating time preference. His disagreements with Fisher stem, I believe, from the following considerations. First, he was unable, as was Boehm-Bawerk, to convince Fisher of an independent influence of productivity on interest rates. Second, his own arguments utilizing the broad opportunity cost concepts of Jevons and

Davenport were not accepted by Fisher. Especially his attempt to portray a supply and demand interdependency in the capital market received no comment from Fisher or any other critic. Although conceivable, the possibility was, and still is, viewed as having a negligible effect, at least under competitive conditions. Third, Brown as well as Seager, found Fisher's and even more so Fetter's emphasis on time preference to be deficient as a realistic explanation for interest rate determination and capital valuation. This may be due in part to their strong assumption of perfect foreknowledge. Subsequent capital theorists such as Knight and Hayek would reformulate these questions and find a much more persuasive influence of productivity in interest rate determination. The position taken by Brown in the time period referred to above appeared to be representative of a not uncommon attitude, despite inadequacies in its presentation, that the role of physical productivity was not then being accorded its rightful place in explanations of interest. <sup>50</sup> A contemporary commentator on the state of economic theory, Daniel H. Hausman, pointed out continuing difficulties with capital theory in the following manner:

Economists do not understand the phenomena of capital and interest. They do not understand why the rate of interest is generally positive (and thus how it is that capitalism can work).  $^{51}$ 

## **Endnotes**

- $^{1}$ Irving Fisher, "The Impatience Theory of Interest," <u>Scientia</u> 9 (1911): 380-401.
- <sup>2</sup>Irving Fisher, <u>Elementary Principles</u> of <u>Economics</u> (New York: Macmillan and Company, 1911), p. 386.
  - <sup>3</sup>Ibid., p. 387.
- Henry Rogers Seager (1870-1930) studied at Halle in Berlin and at Vienna. He favored the approach of the Austrians to that of the German historical school. He received his doctorate from the University of Pennsylvania working with Simon Patten. See <u>Labor and Other Economic Essays</u> (New York: Harper & Brothers, 1931) and in particular the introduction by Wesley Clare Mitchell.
- <sup>5</sup>Henry Seager, "The Impatience Theory of Interest," <u>American Economic Review</u> 2 (December 1912): 834-851.
- <sup>6</sup>Irving Fisher, "The Impatience Theory of Interest," <u>American Economic Review</u> 3 (September 1913): 610-618.
- <sup>7</sup>Irving Fisher, <u>The Rate of Interest</u> (New York: The Macmillan Company, 1907), pp. 15-16.
  - 8Ibid.
  - <sup>9</sup>Henry Seager, "The Impatience Theory," p. 487.
  - <sup>10</sup>Irving Fisher, <u>The Rate of Interest</u>, p. 16.
- 11Henry Seager, "Comment on the Impatience Theory of Interest,"

  <u>American Economic Review</u> 3 (September 1913): 618-619.
- 12Harry Gunnison Brown, "The Marginal Productivity Versus the Impatience Theory of Interest," <u>Quarterly Journal of Economics</u> 27 (August 1913): 630-650.
  - <sup>13</sup>Ibid., p. 634.
- $^{14}\mbox{Although Brown follows Cassel's treatment of "waiting" as a factor of production, he uses the term as roughly synonymous with capital.$
- <sup>15</sup>See Eugen Boehm-Bawerk, <u>Capital and Interest</u>. Vol. 3. (South Holland, Ill.: Libertarian Press, 1959), pp. 178-179, 238.
  - <sup>16</sup>Brown, "Marginal Productivity," p. 637.

- <sup>17</sup>Herbert J. Davenport, "Fetter's <u>Principles</u>," <u>Journal of Political</u> Economy 24 (1916): 347.
  - <sup>18</sup>Fisher, <u>The Rate of Interest</u>, pp. 70-71.
- <sup>19</sup>Guy Arvidsson, "On the Reasons for a Rate of Interest," <u>International Economic Papers 6 (1956): 23-33.</u>
  - <sup>20</sup>Brown, "Marginal Productivity," p. 641.
  - <sup>21</sup>Ibid., p. 644.
  - <sup>22</sup>Ibid., pp. 649-650.
- <sup>23</sup>Frank Fetter, "Interest Theories, Old and New," <u>American</u> <u>Economic Review</u> 4 (March 1914): 68-92.
- 24 Harry Gunnison Brown, "The Discount Versus the Cost of Production Theory of Capital Valuation," American Economic Review 4 (June 1914): 342.
- <sup>25</sup>Frank Fetter, "Capitalization Versus Productivity Rejoiner," American Economic Review 4 (December 1914): 856-859.
- <sup>26</sup>Irving Fisher, <u>The Theory of Interest</u> (New York: Macmillan and Company, 1930; reprint ed., New York: Augustus Kelly, 1965), pp. 192-194.
  - <sup>27</sup>Fetter, "Capitalization Versus," p. 848.
  - <sup>28</sup>Fisher, <u>The Theory of Interest</u>, p. 469.
- <sup>29</sup>Harry Gunnison Brown, "Capital Valuation and the 'Psychological School,'" American Economic Review 19 (September 1929): 360.
- <sup>30</sup>Harry Gunnison Brown, <u>Economic Science and the Common Welfare</u> (Columbia, Mo.: Lucas Brothers, 1931), p. 249.
  - 31Brown, "Capital Valuation," p. 359.
  - <sup>32</sup>Ibid., p. 359.
  - <sup>33</sup>Ibid., p. 362.
- 34William W. Hewett, "Capital Value Once More," American Economic Review 19 (December 1929): 646-648.

  Edwin Cannan, "Land and Capital," American Economic Review 20

(March 1930): 78-79.

- 35Hewett, "Capital Value," p. 648.
- <sup>36</sup>Cannan, "Land and Capital," p. 79.
- 37 Harry Gunnison Brown, "Land, Capital and Opportunity Cost: A Reply," American Economic Review 20 (June 1930): 248-251.
- $^{38}$ Irving Fisher to Harry Gunnison Brown, 10 May 1928, Joint Collection University of Missouri Western Historical Manuscript Collection, Columbia, Mo.
  - <sup>39</sup>Fisher, <u>The Theory of Interest</u>, p. xi.
  - $^{40}\mathrm{Brown}$ , Notes, Joint Collection, Columbia, Mo.
  - <sup>41</sup>Fisher, <u>The Theory of Interest</u>, pp. 463-464.
  - <sup>42</sup>Ibid., p. 464.
- 43Harry Gunnison Brown, "Opportunity Cost: Marshall's Criticism of Jevons," <u>American Economic Review</u> 21 (September 1931): 498-500.
- 44 F. W. Ogilvie, "Marshall on Rent," <u>Economic</u> <u>Journal</u> 40 (March 1930): 1-24.
- $^{45}\text{R.}$  W. Souter, "Land, Capital and Opportunity Cost,"  $\underline{\text{Economic}}$  Review 22 (June 1932): 207.
- 46 Harry Gunnison Brown, "An Oversight in the Dominant Theory of Interest," American Journal of Economics and Sociology 21 (April 1962): 203-207.
  - <sup>47</sup>Fisher, <u>The Theory of Interest</u>, p. 183.
  - <sup>48</sup>Ibid., p. 182.
- 49 Gottfried Haberler, "Irving Fisher's Theory of Interest," Quarterly Journal of Economics 45 (May 1931): 499-526.
- $^{50}$ A reviewer of Fetter's <u>Principles</u> of <u>Economics</u>, H. A. Millis, made this point in the <u>Quarterly Journal</u> of <u>Economics</u> 30 (May 1916): 564.
- <sup>51</sup>Daniel Hausman, <u>Capital</u>, <u>Profits</u> <u>and</u> <u>Prices</u> (New York: Columbia University Press, 1981), p. 191.

## CHAPTER FOUR. MONETARY ECONOMICS AND A VIEW OF KEYNESIANISM

As one would anticipate, Harry Gunnison Brown was a strong and life-long adherent of the monetary approach of Irving Fisher. He began his career when such views were considered orthodox, saw their eclipse in the decade of the thirties, and witnessed their revival in part in his later years. Joseph Dorfman in The Economic Mind in American Civilization characterized Brown as a monetary specialist. This is not strictly true since his concentration produced only four articles along with the relevant sections of his texts prior to 1940. But the characterization is accurate insofar as he did collaborate with Fisher in The Purchasing Power of Money and in later years would write articles on macroeconomic issues, some of which were critical of Keynesian views. Brown also read and commented on the manuscripts of other books by Fisher, such as Booms and Depressions. As Dr. Paul Junk noted, in 1935 Fisher called Brown one of eleven economists in the United States "who understood the real significance of money." Milton Friedman has commented favorably on his work in the area of money. 2 W. H. Hutt in his The Keynesian Episode ranked Brown with such economists as Wicksell, Cannan, Mints, Hayek, Viner, Kemmerer and Benjamin Anderson as leaders in the pre-Keynesian thought on money. 3 Leland Yeager and James Dorn have recently identified Brown's expression as being in the tradition of the "theory of monetary disequilibrium."4

Brown's exact role in <u>The Purchasing Power of Money</u> is impossible to determine. Fisher felt that Brown's efforts were so extensive that

they deserved acknowledgment on the title page. As Fisher stated in his preface:

There are two persons to whom I am more indebted than to any others. These are my brother, M. Herbert W. Fisher and my colleague, Dr. Harry G. Brown. . . . My thanks are due. . . to Mr. Brown for his general criticism and suggestions as well as for detailed work throughout. In recognition of Mr. Brown's assistance, I have placed his name on the title page.  $^5$ 

What can clearly be discerned is that Brown took advantage of this experience and wrote several texts of his own within a few years.

Brown published three articles on monetary topics while still an instructor at Yale; all three were cited by Fisher in <a href="The Purchasing">The Purchasing</a>
Power of Money. The first was titled "A Problem in Deferred Payments and The Tabular Standard." It considered the problems of price indexing set forth by Correa Walsh and Fisher. Brown explained how the stated purpose of the tabular standard (that of insuring ideally that contracting parties receive or pay back with interest purchasing power over an equivalent amount of goods) was complicated by the type of good to be chosen as a standard: capital or consumption goods. Brown saw no solution but that of a practical compromise which was to:

- . . . weigh the price change of each kind of good in proportion to neither an existing stock nor to consumption during any period, but in proportion to the value of the "exchanges" of that kind of goods during the period.
- R. A. Jones in a recent article credited Brown with having "convincingly demonstrated that the linking of payments to a price index could not generally eliminate all price risk for both the payer and recipient."  $^{10}$

Brown's second article was primarily a description of commercial banks' role in financial intermediation, emphasizing the part played by banks in interest rate determination. <sup>11</sup> This short article is remarkably far-sighted in that he remarks on the efficiency aspects of financial intermediation and its contribution to economic growth. In addition, Brown noted in 1909 that banks and trusts were beginning to pay interest on demand deposits. He reasoned that the convenience return to depositors and the competition among banks were not sufficient to attract deposits adequate to meet loan demands.

The third article, "Typical Commercial Crises Versus a Money Panic," appeared in the Yale Review in 1910. 12 In it, Brown attempted to describe a typical credit cycle which culminated in a speculative crisis. The key factor in the cycle was the lagging adjustment of nominal interest rates to unanticipated changes in the price level. Charles Kindleberger in his Manias, Panics and Crashes would later refer to this as the "Fisher-Brown" thesis. 13 The credit cycle would feature alternating periods of speculative prosperity and depression, even with a sound banking system. (Brown appears to be drawing primarily from the early work of Fisher 14 and that of Wicksell. 15) However, with a less than sound banking system, a loss of confidence would tend to precipitate a money panic. The panic period, according to Brown, would typically feature the case where currency had been plentiful and suddenly becomes scarce, driving rates abruptly upward. He then tried to identify those crises in the United States since 1873 which displayed these characteristics, taking into account those

which were due, at least in part, to other, non-monetary causes. Using what he admitted to be inadequate data, Brown examined the crises of 1873, 1882-84, 1890, 1893 and 1907. He found indications that in most of these crises, low real (virtual) rates of interest may have stimulated credit expansion, leading to a high ratio of deposits to reserves, thus precipitating a crisis which featured falling prices and a rapid rise in nominal interest rates.

Brown originally published his principles text, Economic Science and the Common Welfare, in 1923. It underwent several editions and in 1942 the title was changed and subsequent editions retain the new title, The Basic Principles of Economics. 16 In three early chapters, he dealt with the relationships of money, commercial banking and business cycles to prices. His statement and explanation of the equation of exchange followed that of Fisher. He maintained that, despite other influences: "The effect of an increase of money is to make prices higher than they would be if the quantity of money did not increase." 17 He also emphasized "the evils of a fluctuating price level." In regard to banking and prices, Brown's 1942 edition put greater emphasis on open market operations and indicated a greater confidence in the Federal Reserve system's ability to control the level of prices than did the 1931 edition. In the same section, he entertained the question of whether demands for higher wages could raise the level of He concluded that: prices.

We can . . . more reasonably think of wages and price changes as being, in the main, joint effects of a common cause, than as being, either, the cause of the other.  $^{18}$ 

In a chapter titled "Depression, Prosperity and Prices," Brown analyzed the business cycle along the lines of Mitchell, Fisher and Davenport. Mitchell's <u>Business Cycles</u> may have convinced him to abandon Fisher's earlier emphasis on the lagging adjustment of nominal interest rates as the key explanation for cycles. Also, as Dorfman pointed out, he introduced qualifications of his own. Dorfman singled out his emphasis on propensities to spend. Brown had said that:

No theory of prices can be accepted as perfect and complete which makes the price level depend upon the quantity of money and bank deposits without reference to the general readiness to spend or hesitancy in spending.  $^{19}$ 

Brown further emphasized this point:

But from one phase of the business cycle to another phase of the same cycle, changes in the readiness to spend are perhaps of equal and possibly greater significance [than changes affecting the supply of money]. 20

In the case of a depression, he noted that a general unwillingness to spend was of particular importance in the case of businesses, as this would imply an unwillingness to borrow, despite low or falling interest rates. This unwillingness was explained in part by the reluctance of businessmen to accept lower prices for their goods as well as that of labor to accept lower nominal wages. Revival from a depression should be accompanied, if not preceded, by an expansion of credit. However, just as important for Brown was a positive change in business sentiment. The increased buying and hiring by businesses would be facilitated by the increase in credit and, for a time, the general price level would not be increased as businesses and workers would accept the existing lower prices and wages respectively. Leland Yeager has noted that

Brown's emphasis on the inability of the price system to quickly respond to a monetary disturbance was similar to the emphasis of Clower, Leijonhufvud and Alchian on informational difficulties. <sup>21</sup>

In discussing the crisis and ensuing depression, Brown felt that one of the many symptoms of a slowing prosperity was "the condition of bank reserves and the policy of the controlling central bank system."<sup>22</sup> Speculative buying, unevenness of demand or maladjustment of production may arise over the course of prosperity, but these in and of themselves, should not cause a crisis. He looked to the condition of banks for indication of a turn-around. Banks whose loans had grown relative to their reserves may raise their rates or arbitrarily limit further credit. The perceived deficiency of reserves could also be due to restrictive central bank policies. Higher rates and restricted credit would impact on the demand for goods and services as well as alter purchasing plans due to the expectation that prices will cease to rise at past rates. As one firm finds credit more difficult to obtain, it will begin to limit the credit it extends to customers. As prices begin to fall, a further incentive to postpone purchases becomes part of the cumulative process. For Brown, there was "doubtless some level of prices, wages etc., low enough so that, even with greatly diminished spending business would be active."23 Yet, he recognized that the process of readjustment may well last a long period of time, entailing great waste of capital and manpower as well as extensive social costs. Yeager in his article, "The Keynesian Diversion," used Brown's explanation of a business depression as one example of a positive contribution by a quantity theorist to the process of integrating monetary theory and disequilibrium theory.  $^{24}$ 

Brown averred that at least a mitigation of the severity of crises and depressions was possible. A panic (which he defined as "a disorderly process of attempted liquidation")<sup>25</sup> could be checked by the ability of the Federal Reserve to issue an unlimited volume of Federal Reserve notes. The mitigation of the swings in the business cycle would require continuing Federal Reserve stabilization policies.

He chose to show in his text the fallaciousness of the "over-savings" hypothesis of business depression. He argued that the hypothesis depended on the assumption that the savings of the capitalist-employers somehow prevents them from buying. He maintained that this group could (1) spend on immediately consumable goods, (2) spend on durable or investment goods, (3) hoard their earnings, (4) throw them into the sea. Alternatives (1) and (2) should, if taken, result in no deficiency in effective demand. In the later cases, he argued that the temporary or permanent reduction of money in circulation must result in a lower price level. He concluded:

It is no answer to the argument presented above, to say that decreased money in circulation, together with a general disinclination to accept reduced prices, wages etc. may lead to a depression. For to say this is to admit that problem is a monetary and credit problem and is to give away the whole case for "all-around over-production." <sup>26</sup>

During the thirties, Brown made only one statement on the causes of the depression. In an article titled "Nonsense and Sense in Dealing with the Depression," published in the <u>Beta Gamma Sigma Exchange</u>,

he strongly faulted the actions of the Federal Reserve. He, as Dorfman noted, felt no qualms about abandoning the gold standard if ultimately it interfered with the means to bring about a recovery. Although his views were close to those of Cassel, Fisher and James Harvey Rogers, some important differences may be noted.

Brown began the article by attacking several contemporary proposals as inimical to the goal of recovery. He mentioned the proposed sales tax, the proposed payment for holding agricultural land out of production, the proposed relaxation of anti-trust laws and the proposals from whom he called the "uncompromising deflation theorists." Thomas M. Humphrey in a 1971 article, "Role of Non-Chicago Economists in the Evolution of the Quantity Theory in American 1930–1950," stated that Brown, along with Fisher and W. I. King, were critical of Federal Reserve policies but did not hold the Reserve "largely responsible for the initial turndown in business activity." Brown, on the occasion of his paper and in his correspondence, did make such a charge. He stated:

A major cause of the depression—in my own opinion the outstanding cause as far as the United States is concerned—is an inept policy of those in charge of our Federal Reserve system.  $^{32}$ 

He felt that those in charge were not aware of the extent of their ability to affect business prosperity. Specifically, he argued that the Federal Reserve in 1928 and 1929 had been unduly restrictive in both open-market and discount rate policies. He thought that the reversal of policy in early 1931 was too late and too restrictive to have been

effective, given the existing conditions. He advocated (along with Rogers and others) a collaboration between the Treasury and the Federal Reserve wherein the government would borrow extensively from banks and spend these newly created monies in public works projects. Brown considered this a permissible unbalancing of the budget, especially since the bonds could be sold at low rates. He went on to suggest that Federal Reserve board members had been influenced by sound banking principles in their actions and did not fully realize that these principles were not applicable to central banking policy making.

With regard to international financial considerations, Brown posited that it should be possible to restore prosperity and maintain stability at a higher price level, though he anticipated that the gold outflow might necessitate a presidential embargo on gold exports. He believed that gold holdings were sufficient in 1933 to support credit demands and maintain the gold standard domestically. His feeling was that the gold standard had become a "sacred cow" in American monetary policy. His opinion on longer-run policy was that:

. . . it would be better to stabilize the general price level by open market purchases and sales of eligible securities as well as gold and not be dependent upon any need to interfere with the importation and exportation of gold.  $^{33}$ 

As to the effects of a "world-wide scramble for gold," he reasoned that "we had been not so much sinned against as sinning." His view seems to have been that this country must suffer the consequences of repercussions from abroad, especially since the situation may well have been the result, at least in part, of errors in our monetary policy.

Other than in this article, Brown's views on the depression of the thirties may be examined in his correspondence with James Harvey Rogers. Rogers served on national committees designated to investigate the causes of and remedies for the economic crisis. He was best known, however, for his work as financial advisor to President Roosevelt. Brown corresponded frequently with Rogers, expressing his opinions and at times urging him to support certain policies. In his letters, Brown showed support for the Goldborough Bill which Fisher, among others, had worked on. He noted in support of the bill that he had recently learned that Wicksell had advocated price stabilization utilizing credit control including open market operations and international cooperation. Rogers predicted that despite his own kindly feelings for the bill that it would ultimately be vetoed by President Hoover and that some less objectionable approach must be followed. 37

In a November 1933 letter to Rogers, Brown stressed that the key to recovery was a monetary policy which sought to increase purchasing power as a first priority over attempts to control exchange and maintain the price of gold. Self-ing the investigations of his colleagues at Missouri, Elmer Wood and Karl Bopp, he defended attempts to use open market operations to bring about a stimulus for recovery. He noted the reluctance to lend or invest in all but government securities, but he pointed out that even these purchases would prove stimulatory. He suggested that the large excess reserves held by banks was linked in part to vacilation in Federal Reserve policy and that a stronger policy would induce banks to reduce their idle holdings. Brown also commented

on the monetary critics of a managed currency in the press and in academia. 38 He felt that they could be overcome should the policy he advocated experience some measure of success. He expresses pessimism with regard to the behavior of the Board of Governors and inquired of Rogers if there was reason to hope for a change in policy. Rogers, in his reply, stated substantial agreement with Brown's views, but cited political difficulties which he was unable, for reasons of discretion, to explain completely. 39

Brown wrote the Committee for the Nation expressing his dissent from the President's gold purchasing program in late 1933.40 While he supported a system which allowed for change in the price of gold, he objected that gold purchases made with ninety-day Reconstruction Finance Corporation (R.F.C.) debenture were not likely to result in an increase in the money supply which in the existing conditions was sufficient. He went on to suggest that in the face of the Federal Reserve's recalcitrance on open market policy that some separate commission be formed with power to force compliance by the Board of Governors.

Brown urged Rogers on several occasions to publicly support a petition originated by agricultural economists, F. L. Thomsen and O. R. Johnson and others, which had been revised in response to comments by Commons, Fisher and Rogers. He stated that he was aware that the unanimity found among economists in opposition to tariff restrictions would not be forthcoming on questions of monetary policy. The petition itself was an attempt to emphasize the plight of agriculture and to strongly advocate a truly stimulatory monetary policy

for the benefit of agriculture as well as industrial recovery. Brown was anxious to have the petition presented to Congress in light of what he called "the one presented by our conservative brother economists with its low obesiance to the sacred gold standard." While Fisher had encouraged Rogers to work on the "inside," Brown questioned the effectiveness of this strategy for Rogers as he was in the main advising officials whose philosophy on monetary and banking matters was inimical to his own. He stressed to Rogers the plight of the Midwest and concluded his letter, saying:

There is a fabled center of spirit life which is said to be paved with good intentions. Stupidity in the direction of our national economic affairs when it leads to such consequences is not too harshly to be judged as criminal.<sup>43</sup>

In 1937, fears of an inflationary movement arising from a massive inflow of gold and the announced scheme to pay for the gold with new government securities prompted Brown to write to Fisher. 44 He argued that these additions to the national debt, especially if they were large, would greatly increase the interest charge on the debt. He suggested an alternative he found to be embedded in the Agricultural Adjustment Act of 1933 which would allow the Secretary of the Treasury to refuse to buy gold at the parity level of \$35 an ounce and, thereby, allow its price to fall. Brown felt that this alternative in the face of a massive gold inflow should be considered, and despite the legal provisions for the maintenance of parity that provision for a changing official price of gold had been provided for. Fisher, in his notes made on the letter, indicated his agreement and his intention to bring

this matter up in Washington.

Brown, in a later edition of his text, argued that the stability of the price level would be enhanced if the general monetary policy of the Federal Reserve and the government could be anticipated reliably. Heseemed to have felt that anticipation of price movements by the public would tend to speed recovery as well as slow excessive spending in an up-turn. He never expressed a view on the advisability of "money rules," but the above might indicate his qualified support. He also stressed that monopolistic conditions contributed to the adversity of a depression and counseled continued enforcement of existing antitrust legislation.

Irving Fisher's 1920 book, <u>Stabilizing the Dollar</u>, mentioned Brown in the preface as one of several unpublished "anticipators" of his ideas. Indeed, Brown evinced support of Fisher's general principles, if not acceptance of his specific program, <sup>45</sup> as did many other economists of the era. In the mid-thirties, several arguments were presented to the disipline in advocacy of what was then known as the 100% Plan or the Chicago Plan. Henry Simons <sup>46</sup> and Lauchlin Currie <sup>47</sup> contributed to the proposal and it was accepted by Irving Fisher who presented his own version in 100% Money in 1935. Several articles appeared which were critical of some aspects of the plan but were supportive of it in general. (It should be noted that Fisher's version attempted to link the plan with overall price stabilization, unlike earlier versions.) In 1940, Brown published an article which was critical of the plan. <sup>48</sup> In it, he brought up objections which he judged to be both important and

generally overlooked. The objections he presented were intentionally general in order to respond to the various versions of the plan. He argued that the advantages gained from the intermediary role of banks would be reduced under the plan. Specifically, the implicit convenience return to depositors would have to fall with the requirement of one hundred per cent backing of demand deposits. He objected to a proposed subsidization of deposit banking which would allow banks to continue to offer free or low service charges on checking accounts. He feared the possible incursion of political influence as well as the creation of an economic distortion. Were subsidization linked to national debt retirement as had been suggested by Fisher, <sup>49</sup> he argued that the concept of the debt would undergo distortion and eventually lead to a perpetual government obligation of unknown proportions.

Brown then challenged what appeared to be the fundamental or underlying premise of the proposal which was in Frank D. Graham's words:
"One-hundred per cent reserves will stop the private manufacture of money and nothing short of this will serve." Graham said this in a rebuttal to Brown's article. Two quite distinct perceptions of a proper banking system can be noted. For Graham and others advocating this reform, the banking system should be restrained from offering liquidity with interest on its accounts. He stated that such practice "is responsible for most of the financial crises of history." Brown felt that the system, as was, was adequate if effective central banking principles were adhered to. Brown asked why 100% was a sacred figure and why other means could not be found to make deposit banking adequately

safe and stable. He also pointed out that other institutions may prosper by offering accounts which can be withdrawn on short notice. Such near money might become an attractive alternative to demand deposits, and movements in these accounts would have effects similar to the effects the plan was intended to arrest. Additional legal attempts to separate or isolate demand deposits from other assets would so deprive individuals of options that such legislation would be unlikely to find support. Brown concluded that less radical changes in the monetary and banking system should be examined to attain the desired stability. (It is worthy of note that Brown, as well as the proponents of the plan, demonstrated little confidence in the recently formed Federal Deposit Insurance Corporation's ability to avoid bank failures. This perhaps may be explained by the low levels of insurance offered by this institution in its early years.)

While in his sixties and seventies, Brown wrote several articles on topics in macroeconomics. His principal concerns were wartime price controls and subsidies, the growth of the national debt, and the Keynesian "revolution." All but one of these articles were published in the American Journal of Economics and Sociology. In one of these articles, Brown reflected on the New Deal legislation and found much that was ill-advised if not contradictory to the stated purposes of the acts. <sup>52</sup> He attacked provisions of the Agricultural Adjustment Acts of 1933 and 1938 that intended to limit agricultural supplies so as to raise prices by pointing out that the general effects of the programs were only to the benefit of a privileged group of grower-owners and were

detrimental not only to farm labor and renters of farm land, but consumers as well. He further argued that the Federal Fair Standards Act of 1938 which fixed minimum wages for certain occupations tended to result in greater unemployment and lower wages in occupations not covered by the act. In a similar fashion, he attacked the "fair trade" legislation of the period.

Writing in 1942, Brown was critical of the decision to employ wartime price controls, but he recognized exceptions and suggested alternatives. <sup>53</sup> He felt that the difficulties, inefficiencies and injustices of a necessarily piecemeal approach to price controls rendered this method inferior to a program of heavy taxation of incomes to assist in meeting wartime expenses. He recognized, however, that wartime priorities could necessitate emergency production priorities and the rationing of certain goods, especially as the revamping of the tax system would take time and the result would be unlikely to be adequate in all respects. He also saw price regulation and rationing as temporary necessities to avoid panic buying and hoarding which, however, would be lessened if inflationary pressures were not so severe. In addition, he found redundant the idea that government subsidization of certain lines of industry would somehow serve to keep down or reduce prices in these lines. <sup>54</sup>

Brown's views about proper war financing were closely related to his objections to the increasing national debt. He maintained that the New Deal policies promoting business revival and stemming inflationary pressures added to the debt. Those instances in which the government

borrowed from banks as opposed to individuals, businesses, etc., to finance public works projects caused the debt to increase. And to the extent that the gold inflow to the Treasury was sterilized through the sale of government bonds, the debt grew as well. Brown saw the acceptance by economists of these increases as well as the much greater increases during the war as insufficiently critical. His objection was that unrestrained increases in the debt would necessitate future taxation to pay the interest on the debt and this may in turn inhibit incentives which promote productive efficiency. He pointed out that although an internally held debt imposed no necessary intergenerational burden, this was not relevant to the question of the consequences he foresaw. Brown's view of the tax system was that it unnecessarily inhibited incentives for productive efficiency, and he assumed that a rapidly increasing debt would or could result in a heightening of the disincentives. In addition to future disincentives, he felt that a large and growing debt would provide further incentive for the government to adopt inflationary policies. 55 Although he did not attempt to predict a timetable for when these negative influences would become economically significant, he argued that alternatives to the growth of the debt could and should be found. 56

Brown appeared to be reflecting on his wartime thinking in his last article in the <u>American Economic Review</u> in 1952 which he titled, "Cost of Production, Price Control and Subsidies: An Economic Nightmare." He observed that the growing tendency in the discipline was to define costs with respect to the individual outlays of the firm. He

felt that this tendency was responsible for erroneous support for the program of subsidies during the war and in the post-war era. He suggested that a broader view of cost, seen as the alternative opportunities available to each factor of production, was the more useful view. The argument for subsidization was that prices could be held down or reduced by payment of subsidies to "high cost" firms only, with the loss to the taxpayers exceeded by the gain to consumers. He argued that theoretically one could not distinguish a "high-cost" firm, since any firm is likely to contain both "high" and "low" cost elements. Thus, for Brown, subsidies would have to be paid to the factors of production with "high" opportunity costs which, however, are no more productive than factors with "lower" opportunity costs. The subsidy program would be unfair, administratively difficult to apply and would deprive a factor with low opportunity costs the protection to its returns afforded by the existence of factors with higher opportunity costs which could and would change their occupation should their returns fall.

Brown commented in a letter to Lester Chandler in 1940 that he did not feel that the approach of Keynes need necessarily be followed "in order to make use of a demand and supply analysis in relation to money." He argued that the Fisher equation for money and bank credit could be interpreted for this purpose. He, however, did not follow up on his own suggestion.

Brown as a monetarist was not taken with the rise of Keynesian ideas in the later part of his career. Keynes' growing influence on

the discipline was apparent by the late thirties. A former student of Brown's, Joel Dirlam, reported in 1939 that the graduate orals at Yale included several questions on Keynes. He also mentioned that James Harvey Rogers believed that Keynes had thought everything out clearly first and then had consciously mixed it up when he set it down. <sup>59</sup> Brown made no mention of Keynes' ideas until 1948 when he wrote an article titled "Two Decades of Decadence in Economic Theorizing." His view was that Keynesianism was a fad and, moreover, a rather unproductive one. He began the article with a defense of the monetarist interpretation of the depression. He stated:

The truth probably is that central banking policy has more to do with the alternation of prosperity and depression, and that central banking policy affects business activity through affecting the volume of circulating medium of which bank deposits subject to check are, at any rate in English-speaking countries, the major part. 60

Brown, like many other earlier critics of Keynes, <sup>61</sup> questioned whether there was anything new or even useful in the <u>General Theory</u>. He pointed out that the concept of the multiplier was not new and had been adequately understood in terms of the "velocity of circulation." He also argued at length that "liquidity preference" could not cause a depression. As noted above, Brown included a "reluctance to spend or lend" in the contributing factors in the length and severity of a depression. However, he felt that there was no evidence that a depression was initiated by liquidity preference considerations which were manifested "independently of any adverse banking or general monetary policy." <sup>62</sup> Citing Keynes as saying: "The concept of hoarding may be regarded as

a first approximation to the concept of liquidity preference,"<sup>63</sup>

Brown said that the desire for liquidity in a depression could be overcome with wise monetary policy.

In the same article, Brown criticized statements made by Lloyd A. Metzler and Alvin Hansen. In a 1946 article, Metzler noted the demise of Say's Law of Markets and posited that, as a result, general overproduction in the economy was a theoretical possibility. Brown felt that Metzler failed to adequately qualify his argument, and maintained that there would be no overproduction even with price rigidities unless a sufficient expansion in the money supply to the "currently produced goods" market was not effectuated. Brown also criticized Hansen's book, Fiscal Policy and Business Cycles. He found particularly that Hansen's hypothesis that a slowing population growth rate was in part responsible for the depression to be without merit. Brown thought that Hansen's argument contained an untenable assumption wherein the diminished demand for housing would result in a similarly diminished demand for goods in general. Hansen had also emphasized the relative decline in new industries in the depression years which Brown rejected as a causative factor, arguing that Hansen had not shown how aggregate demand must fall as a result of this lack of new industry. In reply to Hansen's assertion that the supply of money and its rate of utilization (MV) would "adjust themselves to the demands of the underlying real factors," Brown argued that this was to assume a monetary policy somehow attuned to the changes in these "real" factors in the economy. For Brown, the search for explanations for the depression need not go beyond

institutional mismanagement of the money supply combined with the price, wage, rental and interest rigidities in the economy. He cited that work of Henry Simons as an effective critique of the "new" economics.

Several years later (at age seventy-nine), Brown reiterated his objections to the ideas of Keynes and Hansen. For statistical support, he referred to the work of Clark Warburton. He chided the Keynesian economists for not considering land value taxation as a partial remedy for the supposed difficulties of a periodically low marginal efficiency of capital. He maintained that with land value taxation, taxes on capital could be reduced, thereby raising the expected return on capital investments.

Once again, it is difficult to accurately assess Harry Gunnison Brown's contribution in the area under consideration. His theoretical contributions as a long-time monetarist are certainly of interest. He sought, as had Fisher, the means by which an economy could thrive with a reasonably stable price level. He often stated that he would despair for the future of the price system if the government proved incapable of taking the necessary stabilizing measures. It can be noted that his position on the effectiveness of central bank policy was very optimistic in comparison with that of most monetarist-leaning economists of the present day. His greatest achievement may well have been the influence he had on his students. One student of his, Beryl W. Sprinkel, commented on Brown in the following manner:

He was a great inspiration to me and perhaps the kindest thing I could say is that I did not have to "unlearn"

anything he taught me when I reached Graduate School at the University of Chicago.  $^{66}\,$ 

I will defer a listing of the students of Brown who were later active in monetary areas until Chapter Nine.

## **Endnotes**

- <sup>1</sup>Paul E. Junk, <u>Selected Articles by Harry Gunnison Brown</u> (New York: Robert Schalkenbach Foundation, 1980), p. x.
- $^2\mbox{Beryl W. Sprinkel, letter to author, 16 December 1981. Personal files of Christopher Ryan, Iowa City, Ia.$
- <sup>3</sup>W. W. Hutt, <u>The Keynesian Episode</u> (Indianapolis: Liberty Press, 1979), p. 4.
- <sup>4</sup>Leland Yeager, "The Keynesian Diversion," <u>Western Economic</u> <u>Journal 11</u> (June 1973): 162.
- James A. Dorn, "Introduction: A Historical Perspective on the Importance of Stable Money," <u>Cato Journal</u> 3 (Spring 1983): 3.
- $^5 Irving$  Fisher, The Purchasing Power of Money (New York: The Macmillan Company, 1911), p. xi.
- <sup>6</sup>Harry Gunnison Brown, "A Problem in Deferred Payments and the Tabular Standard," <u>Quarterly Journal of Economics</u> 23 (August 1909): 714-718.
- <sup>7</sup>Correa Walsh, <u>The Measurement of General Exchange-Value</u> (New York: Macmillan and Company, 1901).
- <sup>8</sup>Irving Fisher, <u>The Nature of Capital and Income</u> (New York: The Macmillan Company, 1907).
  - <sup>9</sup>Brown, "A Problem in Deferred Payments," p. 718.
- 10R. A. Jones, "Which Price Index for Escalating Debts?" <u>Economic Inquiry</u> 18 (April 1980): 222.
- 11 Harry Gunnison Brown, "Commercial Banking and the Rate of Interest," Quarterly Journal of Economics 24 (August 1910): 743-749.
- 12 Harry Gunnison Brown, "Typical Commercial Crises Versus a Money Panic," Yale Review 19 (August, 1910): 168-176.
- <sup>13</sup>Charles Kindleberger, <u>Manias</u>, <u>Panics</u> and <u>Depressions</u> (New York: Basic Books, 1978), pp. 30, 217.
- 14 Irving Fisher, <u>The Rate of Interest</u> (New York: The Macmillan Company, 1907).
- 15Knut Wicksell, "Der Bankzins als Regulator der Warenpreise," Jahrbücher für National-Ökonomie und Statistik 13 (February 1897): 228-248.

 $^{16}{\rm I}$  would like to note that I have worked only with the 1931 edition of Economic Science and the Common Welfare published by Lucas Brothers of Columbia, Missouri, and the 1942 edition of Basic Principles of Economics, also by Lucas Brothers. Although the two editions are quite similar, the later edition is longer by about sixty pages due to additions. The 1923 or the original text was 273 pages in length, while the later editions exceed 500 pages. In this chapter, I will cite the 1942 edition as Basic Principles.

```
<sup>17</sup>Brown, <u>Basic Principles</u>, p. 51.
```

<sup>&</sup>lt;sup>18</sup>Ibid., p. 89.

<sup>&</sup>lt;sup>19</sup>Ibid., pp. 89-90.

<sup>&</sup>lt;sup>20</sup>Ibid., p. 94.

<sup>&</sup>lt;sup>21</sup>Yeager, "The Keynesian Diversion," p. 160.

<sup>&</sup>lt;sup>22</sup>Brown, <u>Basic Principles</u>, p. 105.

<sup>&</sup>lt;sup>23</sup>Ibid., p. 109.

<sup>&</sup>lt;sup>24</sup>Yeager, "The Keynesian Diversion," p. 162.

<sup>&</sup>lt;sup>25</sup>Brown, <u>Basic Principles</u>, p. 110.

<sup>&</sup>lt;sup>26</sup>Ibid., p. 129.

<sup>&</sup>lt;sup>27</sup>Joseph Dorfman, <u>The Economic Mind in American Civilization</u>, Vol. 4 (New York: Viking Press, 1959), pp. 299-300.

 $<sup>^{28}\</sup>mbox{Gustav}$  Cassel, Testimony before the Banking and Currency Committee of the House of Representatives, May 1928.

 $<sup>^{29} \</sup>text{Irving Fisher, } \underline{\text{Booms}} \ \underline{\text{and}} \ \underline{\text{Depressions}} \ \text{(New York:.} \ Adelphi Company, 1932).}$ 

<sup>&</sup>lt;sup>30</sup>James Harvey Rogers, <u>America Weighs Her Gold</u> (New Haven: Yale University Press, 1931).

Thomas M. Humphrey, "Role of Non-Chicago Economists in the Evolution of the Quantity Theory in America 1930-1950," <u>Southern Economic Journal</u> 38 (July 1971): 15.

<sup>32</sup> Harry Gunnison Brown, "Nonsense and Sense in Dealing with the Depression," <u>Beta Gamma Sigma Exchange</u> (Spring 1933): 99.

<sup>&</sup>lt;sup>33</sup>Ibid., p. 106.

- <sup>34</sup>Ibid., p. 106.
- $^{35}$ "Obituary for James Harvey Rogers," <u>American Economic Review</u> 29 (December 1939): 913-914.
- $^{36}\mathrm{Harry}$  Gunnison Brown to James Harvey Rogers, May 1932, Rogers Papers, Yale University Library, New Haven.
- <sup>37</sup>James Harvey Rogers to Harry Gunnison Brown, 21 May 1932, Rogers Papers, Yale University Library, New Haven.
- <sup>38</sup>Harry Gunnison Brown to James Harvey Rogers, 23 November 1933, Rogers Papers, Yale University Library, New Haven.
- <sup>39</sup>James Harvey Rogers to Harry Gunnison Brown, 27 November 1933, Rogers Papers, Yale University Library, New Haven.
- $^{\rm 40}{\rm Harry}$  Gunnison Brown to the Committee for the Nation, 14 December 1933, Rogers Papers, Yale University Library, New Haven.
  - <sup>41</sup>Ibid., p. 1.
  - <sup>42</sup>Ibid., p. 2.
  - <sup>43</sup>Ibid., p. 2.
- 44 Harry Gunnison Brown to Irving Fisher, 6 February 1937, Fisher Papers, Yale University Library, New Haven.
- 45 Irving Fisher, <u>Stabilizing</u> the <u>Dollar</u> (New York: The Macmillan Company, 1920), Chap. 4.
- 46Henry Simons, "Rules Versus Authorities in Monetary Policy," <u>Journal of Political Economy</u> 44 (February 1936): 1-30.
- 47A. G. Hart, "The Chicago Plan for Banking Reform," Review of Economic Studies 2 (1934/1935): 104-117.
- $^{48}\text{Harry Gunnison Brown, "Objections to the 100% Reserve Plan,"}$   $\underline{\text{American Economic Review}}$  30 (June 1940): 309-314.
- $^{49}$ Irving Fisher,  $\underline{100\%}$  Money (New York: Adelphi Company, 1935), pp. 206-207.
- 50 Frank Graham, "100 Per Cent Reserves: Comment," American Economic Review 31 (June 1941): 339.
  - <sup>51</sup>Ibid., p. 339.

- 52Harry Gunnison Brown, "The System of Free Enterprise and Its Caricature," <u>American Journal of Economics and Sociology</u> 1 (October 1941): 87-98.
- 53Harry Gunnison Brown, "Fiscal Policy and War-Time Price Control," American Journal of Economics and Sociology 2 (October 1942): 1-14.
- 54Harry Gunnison Brown, "Subsidies and War-Time Price Control,"
  <a href="mailto:American Journal">American Journal of Economics and Sociology</a> 3 (July 1943): 453-457.
- 55Harry Gunnison Brown, "The Danger in the Mounting National Debt," American Journal of Economics and Sociology 3 (October 1943): 1-14.
- 56 Harry Gunnison Brown, "The Size of the National Debt," American Journal of Economics and Sociology 11 (October 1951): 55-60.
- <sup>57</sup>Harry Gunnison Brown, "Cost of Production, Price Control and Subsidies: An Economic Nightmare," <u>American Economic Review</u> 42 (March 1952): 126-134.
- <sup>58</sup>Harry Gunnison Brown to Lester Chandler, 4 October 1940, Joint Collection University of Missouri Western Historical Manuscript Collection, Columbia, Mo.
- <sup>59</sup>Joel B. Dirlam to Harry Gunnison Brown, 29 April 1939, Joint Collection University of Missouri Western Historical Manuscript Collection, Columbia, Mo.
- Harry Gunnison Brown, "Two Decades of Decadence in Economic Theorizing," American Journal of Economics and Sociology 7 (January 1948): 145-172.
- <sup>61</sup>A. C. Pigou, Frank Knight, Gottfried Haberler, Gustav Cassel and Jacob Viner were some of the earlier critics of the <u>General Thought</u>.
  - 62 Brown, "Two Decades," p. 165.
- 63 John Maynard Keynes, The General Theory of Employment, Interest and Money (New York: Harcourt, Brace and Co., 1936), p. 174.
- $^{64}\text{Harry Gunnison Brown, "The Keynes-Hansen 'Demand for Labor' Notion," American Journal of Economics and Sociology 18 (January 1959): 149-156.$
- Harry Gunnison Brown, "Monetary and Fiscal Counter-Depression Policy," <u>American Journal of Economics and Sociology</u> 18 (July 1959): 337-351.

Brown cited Warburton's "Monetary Velocity and Monetary Policy" in the Review of Economics and Statistics 30 (November 1948) and his "Bank Reserves and Business Fluxuations" in the Journal of the American Statistical Association 3 (December 1948).

 $^{66} \rm Beryl$  W. Sprinkel, letter to author, 16 December 1981, Personal files of Christopher Ryan, Iowa City, Ia.

## CHAPTER FIVE. TAXATION

In Brown's early years at the University of Missouri, he taught the advanced undergraduate course in what was then "public revenues." As not infrequently occurs, the years of interaction with students in a particular subject coupled with the publication of various articles dealing with the same subject culminated in the writing of a textbook. The Economics of Taxation was published by Henry Holt and Co. in 1924. It was reprinted in 1938 by Lucas Brothers and in 1979 by the University of Chicago Press. The initial reviews by Henry Simons, 1 Frank Knight and Fred Rogers Fairchild were favorable; however, each reviewer expressed certain objections. Simons took specific exception to certain points which will be mentioned later, but he concluded:

Professor Brown has contributed a great deal of acute analysis to a more or less special field of inquiry in which most of the stuff that is written and preached is of exceedingly unattractive quality.<sup>4</sup>

Knight noted that: "The economic analysis is at all points careful, thorough and competent, and is stated with admirable lucidity." Fairchild, a successful author of textbooks, had similar praise for the book. Some fifty-five years later, Arnold Harberger in a publisher's blurb for the reprint stated: "This is truly a classic." 6

Brown's preface to the text was a noteworthy comment on contemporary approaches to the study and instruction of economics. He argued that with few exceptions, advanced or intermediate courses in economics were less rigorous in terms of theory than the introductory "principles" courses. The tendency was, he maintained, to elaborate on an area of

economics such as public finance in a narrative or descriptive fashion rather than attempting to deepen the students' theoretical grasp of the economic principles involved. For Brown, this was detrimental. In his words:

Only a thorough study of the cause and effect relations in taxation can, in fact, make one a competent leader of opinion on tax problems.

Thus, Brown's approach was to present ten chapters dealing primarily with tax shifting and incidence. This was done without the usual historical background found in McCulloch, Bastable or Seligman. Also, he generalized about the type of tax to be discussed. For example, he treated the incidences of taxes on capital and land in lieu of examining the effects of a property tax per se. A tax on labor incomes would be studied prior to considering income taxes. This prompted Fairchild to object:

This book deals exclusively with abstract theory, telling us virtually nothing of the relation of these theories to the facts of present-day problems.  $^8$ 

That at least a part of this criticism was anticipated by Brown is evident in his preface. He believed it was unwieldy to deal with specific tax forms as opposed to basic taxation, whether realistic or not, of commodities, labor, land and capital. He felt that the development of general principles of taxation would be better served in this way. Moreover, he recognized and regretted the lack of inductive or empirical verification of the theory he presented. While welcoming empirical studies of tax incidence along the lines of Fisher and Mitchell, Brown argued that those who would criticize the book for being too theoretical

were likely to be ignorant of the difficulty of the required statistical analysis.  $^9$ 

In his introductory chapter, Brown placed the study of taxation within the broader area of public finance. He thought that questions of taxation, and especially of its incidence, could be most fruitfully explored with economic analysis. In addition, he felt that this could be done objectively. Knight pointed out that Brown did not deal with the "objectives of taxation and canons of justice." Brown maintained that knowledge of tax incidence was a necessary prerequisite to any discussion of proper policy. His stated intent was:

. . . to keep the problems of policy in the background, and devote attention to the discovery and explanation of economic laws as such, leaving it to the readers to make such application of the conclusion reached as may seem to be proper. 10

By then, he was a recognized advocate of land value taxation, yet none of the reviewers (and in particular Knight) found Brown's personal bias reflected in the book.

The benchmark of scholarship at that time was largely set by

E. R. A. Seligman. The breadth of Seligman's work in the field of taxation was unparalleled. His major works, The Shifting and Incidence of Taxation (1892), Essays on Taxation (1895) and The Income Tax (1911), clearly established him as the leading American authority on the subject. Brown frequently referred to Seligman, although often to dissent from his views. There is a similarity between Brown's and Seligman's works: both attempted to synthesize past thought on the subject, rendering the determination of original contributions difficult.

Brown's methodological approach to the determination of tax incidence is difficult to classify in modern terms. He proposed first that the effects of a tax be examined by analyzing "the conditions of supply and demand insofar as they are significant for our purposes." 11 Further, his approach was nominally that of partial equilibrium analysis. However, as a student of Fisher, he was aware of the deficiencies in applying such analysis to many considerations. Therefore, in most instances he extended the theoretical analysis toward a general equilibrium approach without the aid of a formal model. Simons referred to his attempt: "Especially noteworthy is the emphasis upon the extent of the diffusion process and precise definitions of its limits." 12 Brown did not specifically employ balanced-budget incidence; rather, he implied that the governmental expenditures from tax revenues would have minor or neutral effects, although he was aware of complications arising from this source. Nor can his approach be described as one of differential incidence, as he did not utilize a basis of comparison such as a proportional income tax. He would introduce a tax, analyze its incidence in the hypothetically simplest case and then extend the analysis to what he saw as relevant variations in each case. These variations might be long versus short run incidence, differing cost conditions, general versus specific taxation, etc.

Brown's first two chapters were also unorthodox in that he first treated monetary inflation as a type of taxation and secondly discussed the incidence of governmental borrowing. He wished to emphasize that governmental issue of inconvertible paper money was, in effect,

taxation. He proceeded to show the effects of an increase in paper money in two cases. First, where the new issue serves primarily to displace metallic money via the workings of Gresham's law, he argued that there would be no special burden on the issuing country's residents. He assumed: no barriers to trade, gold as the medium of international exchange and that the government spend the new money on domestic goods and services. The initial rise in prices is modified as purchases from abroad increase with gold as payment. Thus, in roughly equivalent terms, the public loses goods to the government and replaces them with foreign goods. Then, if the paper money remains an acceptable substitute for the metallic money, no significant burden falls on the public.

Brown's second case was one in which the paper issue is continued beyond the point where metallic money ceases to circulate. Here, the government in effect bids away a portion of goods and services initially corresponding to the percentage increase in the money supply. For this result to hold, he employed several simplifying assumptions. First, the price rise could not be moderated by increased importation, as there would be no international reserves and the paper money would depreciate so as to check any increase in imports unless there were foreign speculation in this currency. Also, the velocity of circulation was assumed to be unchanged. (However, Brown felt that it would increase with a rapid inflation, citing the cases of Germany and Austria.) Finally, for the proportionality to hold, he assumed that the second-round effects of the new money spent by the government were not yet realized. With money incomes as well as prices proportionately

higher, the burden on the average of this "taxation" was "the wealth and services abstracted from them by the government when the new money was first put into circulation." 13

He then discussed the distributional effects of this induced inflation. In the most simple of cases--with prices all rising at the same rate--the burden was distributed according to the proportion of purchases, thus resembling, at least nominally, a general sales tax. He noted that, in practice, prices and incomes do not rise to the same extent nor at the same rate, causing the burden to be shared unequally. Brown emphasized the role of expectations in the process whereby some gain and others lose as a result of inflation. He concluded with the admonition that such induced inflations must be recognized as being taxation and should be seen by enlightened politicians as an undesirable alternative to direct taxation, despite the political difficulty of doing so. He further condemned the tendency of conservatives to find scapegoats for inflation in organized labor on the one hand and radicals to find scapegoats in profiteering capitalists on the other.

Brown began his discussion of government borrowing with some general comments related to wartime finance. He referred to the exchange between T. N. Carver and H. J. Davenport which took place during and after World War I. The alternatives of bond issuance and higher taxation were examined for their economic consequences. Brown here appeared to wish to emphasize an essential similarity of these two alternatives in that they both redirect economic resources from the private to the public sector. He felt that subtle and unpredictable

differences may arise with regard to saving and investment behavior. He arqued:

Discouragement to business or charitable contributions can only result if the tax method takes a larger proportion of the funds secured than does the bond-issue or borrowing method, from the particular persons who are inclined to business investment or to charity. 14

Brown felt that the bond-issuance was more likely to draw funds from those having a greater tendency to save and invest. He was not specific as to how the taxes were to be raised, but appeared to be thinking of a proportional income tax.

Brown, although not explicitly at this time, had reservations about government borrowing even for wartime revenue which he recognized as politically expedient. However, he did not subscribe to the idea that such borrowing imposed a burden on posterity, where the borrowing is from the country's own citizens. He demonstrated the possibility wherein a person may hypothetically buy a bond and end up exactly repaying oneself the interest and principal through tax payments. He then showed that the much more likely case would involve intra- and inter-generational transfers, but that later generations as a whole would not be burdened. He did note, however, that discriminatory tax schemes and extensive immigration would alter the conclusion somewhat in practice. He briefly considered Davenport's idea that war finance was "a mortgage of the masses to the classes." That this was a possibility wherein the bond issue was primarily sold to wealthier citizens Brown admitted, but he pointed out that the incidence and effects of the total tax system would have to be considered to support this contention.

Brown's prime reservation about government borrowing lay in its inflationary tendencies in practice. Only if there were a reduction in private spending commensurate with the increased purchasing power lent to the government through bond sales, would the process not be inflationary. Especially under conditions of war, Brown thought that this was unlikely. Banks would tend to lower reserve requirements, purchase government bonds themselves with extended credit in the form of checking accounts or bank notes and allow as collateral government bonds on private loans. In addition, this would to some degree extend the borrowing needs of the government as prices rose, depending upon the elasticities of supplies. Brown formally herein offered no opinion on the desirability of a restrictive policy regarding bank behavior sufficient to stem the inflationary tendencies. However, reacting to the growth of the national debt during World War II, Brown adamantly opposed what he considered to be an unwise growth in debt financing. <sup>16</sup>

In the remainder of the book, Brown considered several forms of government finance which were not taxes in disguise. He treated first taxes on competitively produced goods and second, taxes on monopolistically produced goods. The two chapters (consisting of some eighty pages) represent a summation of the then current views in microeconomics, drawing most heavily on Marshall, Seligman and Davenport. Having written well before the concepts of imperfect competition were elaborated on by Robinson and Chamberlin, Brown anticipated some of these developments in theory, as will be shown later. The theory of the firm he utilized lacked the precision of later presentations and

this, on at least one occasion, led Brown to err. One of the earliest to incorporate both imperfect competition conditions and a more detailed theory of the firm into studies of incidence was John F. Due in his <u>Theory of Incidence of Sales Taxation</u> written in 1939. 17 Due cited Brown not only more frequently than any other writer, but, with few exceptions, favorably. Brown would later (in 1939) contribute an article titled "The Incidence of a General Output or General Sales Tax" which would add significantly to and amend his chapters on the taxation of commodities; this will be examined later.

Brown first treated the case of a tax on the production of goods in a perfectly competitive industry where constant costs prevail over the relevant range. Assuming that all producers in the industry are marginal in the sense that any lower net return would force them to cease production of the good, then this tax would be shifted in its entirety to the consumers of the good. Brown recognized the likelihood of there being infra-marginal producers in the industry but treated this incidence under that of increasing costs.

Brown next turned to the consideration of the effect of commodity taxation on the general price level and was severely criticized for the attempt by Simons. Brown found that a tax on a particular commodity produced under constant costs would not alter the general price level. The tax would result in the price of the taxed good rising by almost the amount of the tax and all other prices falling slightly so as to leave substantially unchanged the general price level. He assumed no international trade effects, an unchanged money supply and a constant

velocity of circulation. Simons appeared to feel that the treatment was an oversimplification, but he did not elaborate on his own approach. He said that the argument "appears to presuppose an altogether mysterious disappearance of effective demand." Brown very briefly extended his argument to a tax on all goods, maintaining that the effect would be to lower all money incomes in relation to the prices of these goods. The 1939 article mentioned above elaborated on and modified this conclusion.

The case of increasing cost of production for the competitive industry was examined by Brown. He felt this to be the normal or inevitable case as extension of production would eventually tend to encounter rising costs. He noted that the factors of production may differ in their likely contributions to increasing costs. A tax in this case was found to be partially shifted to consumers, but would also burden the factors of production in all but the extreme instance of a totally inelastic demand for the good. Brown's reasoning was that the incomplete shifting of the tax would drive from the industry those factors which were marginal between this and other industries and reduce industry supply. Further diffusion effects of the tax he saw as operating either through the higher price of the taxed good or the altered factor supplies. The higher price may reduce spending on other goods or the addition to the factor supplies of other industries may lead to lower prices and money incomes there, however slightly. Brown saw no general or average effect on prices unless efficiency was lessened by the changes wrought by the tax. He illustrated his general

point with examples and graphs. His emphasis on the possibility of changes in factor prices was unusual at that time; Due noted that this possibility "has been for the most part ignored despite the fact that in terms of orthodox value analysis the incidence would be modified significantly by changes along these lines." Due also pointed out that Brown's further treatment of short- as well as long-run incidence was an early contribution. Brown maintained that the industry's short-run supply was likely to be less elastic than in the long run, due to the existence of specialized factors--especially capital and labor. Thus, the extent of the shifting of the tax to consumers would be less in the short run, as would the rise in price. In the long run, the competitive conditions would dictate an almost complete shifting to consumers unless elements taken as exogenous (such as tastes or technology) change.

With respect to the case of decreasing costs, Brown said: "It would seem, then, only doubtfully worthwhile to discuss the incidence of a competitive industry operating under decreasing costs." Knight in his review concurred that, in general, the case is of "doubtful occurrence," but noted that this view was considered unorthodox. Brown argued that the external economies to an industry resulted in no advantage to a single management but only operate as an inducement to larger scale production in the area where the economies were effective. A tax on production would, were all producers marginal, result in a higher price by the amount of the tax plus the increased cost to the firms of producing a smaller quantity. He also pointed out that where

no external economies were present, internal economies may not lead to a monopoly situation. This would be true where no one plant is capable of providing all of the product demanded and thus increasing or constant cost conditions arise. Brown recognized that unless cost conditions changed in transition, no Marshallian stable equilibrium was possible and the inevitable result would be monopoly. The tax, therefore, would have an uncertain incidence depending largely on the pricing strategies of the competing firms and their capacities of supply with regard to total market demand. The extremes of incidence in this transitory state were between no shifting and a complete shifting of the tax.

Finally, in this chapter Brown noted a further effect of a commodity tax which he termed a net loss in utilities to the community. This appears to be his term for excess burden. He suggested that if the product taxes were considered injurious, the net effect of the tax may be beneficial to the community.

The possible effects of a tax on the production of a monopoly were first analyzed by Cournot. Brown's treatment of some eighty-six years later was described by Due as the most complete of the then more recent analyses. Brown began by noting that the monopolistically determined price after the imposition of the tax could stay the same, rise by more than the amount of the tax, or by less. He referred to the different demand conditions, following Marshall to illustrate the first and second possibilities where constant costs prevail. The tax would not be likely to be shifted where a small rise in price greatly diminished

the quantity demanded, assuming the pre-tax price to be at or near a point on the demand curve where it becomes more elastic. Here, Brown pointed out that the most profitable alternative for the monopolist may be to absorb the tax. The tax may be more than shifted where the monopolist faces a demand which becomes much more inelastic above the current price. Thus, he made use of what would later be known as "kinked" demand curves. Finally, he utilized a geometrical proof to show that a linear demand curve would result in a price increase of one-half of the amount of the tax.

Where the monopolist operates with increasing costs,  $^{25}$  Brown argued that the increase in price and the shifting would be less than in the case of contant costs in all of the above demand situations. He stated simply that: "The gain from raising the price, when a tax is levied, is sooner offset by the loss from cutting off some of its former business." 26 In the case of decreasing costs or that of a "natural" monopoly, he found the distinction between the short and long run to be significant. His reasoning was that in the short run (with the exception of where the tax resulted in the abandonment of the business), the monopolist would only consider operating costs which would be largely unchanged. However, this would not be true in the long run and the monopolist would tend to raise the price by more than he would in the case of constant costs. Brown demonstrated this by using the same demand for both constant and decreasing cost conditions in examples using graphs and tables. Brown rationalized his conclusion in the following manner:

For by raising its price it gains as much on each unit of business still done as if it operated under conditions of constant cost; while its loss on the business cut off is less since the cost of this business (except for marginal units) is greater than in the case of constant cost.<sup>27</sup>

Brown's conclusion was the opposite of the earlier views of Seligman<sup>28</sup> and H. C. Adams<sup>29</sup> but in accord with that of Edgeworth.<sup>30</sup> He concluded by noting that a tax on monopoly's net profit could not be shifted.

Brown was aware that imperfect information on the part of the monopolist and governmental regulation of monopolies would render uncertain his conclusions. Also, he mentioned the difficulties of deciding whether monopolistic or competitive conditions tended to prevail in a given case. He questioned: "What shall we say, for instance, of a tax on entertainments in towns and cities having one, two or three movie theaters?" 31

In a footnote, Brown entertained the somewhat minor but illustrative question of how a specific or per unit tax would differ in its effects from one which was ad valorum. It is illustrative in that it shows how his approach could lead to errors or at least to some confusion. Brown was specifically concerned with how a specific and an ad valorum tax would alter final prices in the competitive and monopolistic cases. He found in the competitive case no fundamental difference in the effects of these methods of taxation. He reasoned that, in general, in the monopoly case, the ad valorum tax on gross revenues would not tend to raise the price as much as would a specific tax. He was aware that this was not always true but he felt that this was due to the difficulties of making the comparison. He presented in tabular

form two different models of comparison, first one of equal yields and then, roughly one of equal initial burden. Although the second comparison bore out his reasoning, he failed to discover the reason for exceptions arising in his examples. Richard Musgrave has explained that had Brown assumed linearity of cost and revenue schedules as well as tax rates at or below the maximum yield, his reasoning "would have admitted of no exceptions." 32

Brown's next two chapters dealt with taxes on labor. He divided his brief treatment into three cases: taxes on wages in general; taxes on wages in a given line of work; and taxes on "surplus" labor incomes. A then largely hypothetical tax on wages had for Brown long-run effects which depended primarily on how population was affected. That the revenues from such a tax may be used to benefit wage-earners was not ignored, but he pointed out that this may not be the case, and that nominal incomes were lowered regardless with respect to other sources of income. The effect of such a tax on population growth was seen as uncertain although a sufficiently large tax would probably reduce the rate of growth and tend, thereby, to raise future wage rates. He further argued that should the rate of population growth fall, the land-owning class would definitely find its income reduced as the Physiocrats had maintained. However, he saw this only as a possibility contingent on many factors and he viewed an increased birth rate as a conceivable consequence of lower living standards.

Otto Von Mering in his text <u>The Shifting and Incidence of Taxation</u>
(1942) referred frequently to Brown's treatment of a wage tax on a

particular line of work or occupation. <sup>33</sup> Brown saw wages in the taxed line of work eventually rising to their original position relative to other lines of work and thus putting downward pressure on other wage rates. Mering objected to Brown's implication that labor and labor alone would bear the burden of the tax. <sup>34</sup> Furthermore, Mering noted that this was not compatible with Brown's view of the effect of a particular commodity tax presented here above. Mering was correct in part. However, Brown had qualified his position by pointing out that his conclusion required a redistribution of workers out of the taxed field which may not only be slow to take place but incomplete due to a lack of substitutibility in employments, tastes in work or the existence of rents in highly specialized areas of work. Mering's point as to the compatibility remained, yet Brown had indicated an awareness of this problem in the following passage:

. . . we have to reopen for possible qualification of our conclusion, the case of taxes on commodities. For although such taxes may seem to be shifted, in large part, on consumers, in the first instance, it is possible that in the long run some or all of the consumers (in our present problem, the wage-earners) will find the burden again shifted upon the shoulders of some other class or classes.<sup>35</sup>

Brown's last case was the incidence of taxes on surplus or unusually high labor incomes. He described the present system of income taxes as a discriminatory tax where it applied to labor incomes. He concluded that such a tax would not be likely to reduce the numbers in these high-paying areas, since advancement toward them would remain relatively unimpeded as long as lower incomes were not taxed at the same rate.

In an article published two years earlier and included in his text, Brown considered the incidence of compulsory insurance of workmen. 36 The article was probably inspired by his dissent from the then common opinion that the incidence of such a tax would ultimately lie with the consumers of the goods produced by insured workers. Brown cited Taussig<sup>37</sup> as holding in general the correct view, and in the article he expanded and refined this view. Compulsory insurance programs were under consideration in this country, and Germany in 1884, Great Britain in 1897 and recently the state of California in 1916 had implemented insurance programs. 38 Brown examined in succession the cases where the insurance was general (paid by all employers) and where only high-risk industries were made to pay with consideration for the awareness on the part of the employees of the advantages of compensation. He maintained along with Taussig that in the first case the long-run effect would be on labor markets and the incidence of the insurance premiums would fall on wage-earners alone with only minor qualifications. J. A. Brittain has pointed out that Brown assumed in addition to a fixed labor supply that "the tax would not increase the money supply and have little effect on aggregate demand." 39 In their text Public Finance, Earl Rolph and George Break referred to Brown's article as the original one to treat this subject.  $^{40}$  E. H. Downing in his posthumous Workmen's Compensation argued, as noted by Dorfman, that Brown had taken the marginal productivity doctrine to extremes to reach his conclusion. 41 Downing, an advocate of such insurance, appeared to mistake Brown's position and implied that he did not favor

compulsory insurance when he actually did.

Where insurance was required in only certain lines of work and the workers fully value the certainty of compensation in the case of accidents, the result, as Brown saw it, was ultimately a reduction in the demand for insured labor on the part of firms and an increase in the supply of labor to the insuring firms. Thus, employment should remain the same at a wage lower by the amount of the premium. He then considered the situation wherein workers impute no value to the insurance and demand for the industry's product is inelastic. The workers, at least those who are marginal between their present and other employment, will resist wage reduction which would normally result in higher prices of the product. With an inelastic demand, consumers would tend to buy less of other goods which in turn would bring about lower wages and prices in these industries, thus compensating consumers in general. For Brown, the burden ultimately lies with the workers in other industries with no net effect upon the returns to capital and land. However, as noninsured workers are diverted to the insured lines, the burden would be shared more equally among all workers. Where the demand is elastic, the result is the same but the impact of labor leaving the insured industry would be greater than the effect of redirection of spending on the part of consumers.

Brown mentioned several qualifications to his argument such as possible efficiency losses, special cost and competitive situations and population effects. He wished to emphasize that his was a long-run view and that actual adoption of such programs would appropriately burden

employers initially. Also, if premiums were made to depend, for example, on safety conditions at individual plants, the incentives created for employers would have desirable consequences.

Brown's treatment of the incidence of taxes on capital and capital income is similar in some respects to the early work of Arnold Harberger. He considered first the incidence of a tax on capital used in some but not all industries. This is comparable to Harberger's corporate and non-corporate division of the economy. It is also applicable to the question of the incidence of a tax on urban real property as was noted by Herbert A. Simon in a 1943 article. Simon therein indicated that conceptually a tax on urban property could be separated into a tax on site value and a tax on improvements, i.e., housing. 43

Once again, Brown used the competitive case and noted that little or no shifting of the tax may take place in the short run. This would be the case were the taxed capital durable and specialized. The owners of such capital would bear the burden of the tax. However, in the long run Brown maintained that capital would tend to leave these industries, resulting in a higher relative price for their products. A possible imputation of incidence at this point was rejected by him as superficial. For Brown, neither consumers of these goods nor workers in these industries were likely to bear the ultimate burden of the tax. Lower prices of goods produced with the nontaxed capital should, on the average, compensate consumers. In the case of labor, should the lowered productivity not be compensated with higher prices, migration to other

industries should approximately leave the wage level as before. Brown concluded that:

The burden of the tax on some capital is finally (assuming that it does not tend to decrease the aggregate volume of capital) distributed upon the owners of all capital in the taxed community.  $^{44}$ 

He implied that this "distribution" would tend to burden what he called the "more strongly competitive capital."  $^{45}$  Simon in his article noted that:

Professor Brown has performed a very valuable service, however, in pointing out that a tax upon a particular use of capital has repercussions upon income from capital in general.  $^{46}$ 

Simon's "however" refers to his criticism of Brown's methodology, especially in that he made no explicit assumption about the elasticity of the demand for capital goods relative to that of all other goods. Peter Mieszkowski credits Brown with an early recognition of the close similarity of a general property tax (where the tax is at the same rate taxing all income producing wealth) and a general profits tax. <sup>47</sup> He objected, however, to Brown's conclusion that the entire burden of a property tax would fall on all capital's earnings. Mieszkowski went on to show how consideration of substantially different spending patterns among income groups would make Brown's view only partially correct. <sup>48</sup>

Turning to the case where all capital is taxed, Brown argued that the effect of the tax on the aggregate supply of capital would determine the tax's incidence. He pointed out that, with an open economy, such a tax may reduce foreign investment in the taxing country and increase overseas investment but he did not pursue this argument. He

felt that the effect of a tax on aggregate savings was a complex question. He could not find deductively a satisfactory relationship between rates of interest and savings levels. What he described as the common supposition that savings will be decreased as rates of return are diminished by the tax he felt could not be regarded as a certainty. He pointed out that the tax may be shifted in part via higher interest rates to all capital users. Should, however, savings remain largely unaffected, the burden would fall on capital owners. He would only say that a tax which seriously decreased net returns would be likely to be shifted, especially in the longer run.

Brown then examined the relevant aspects of property and income taxes as they affect capital income. He made a case for the proposition that a graduated tax on capital income would tend to discourage savings less than a proportional income tax of equal yield. He then traced briefly theories of taxation from the "ability" theory to the "equal" and "least" sacrifice theories and made clear his doubts about those theories which ignore market considerations.

The possible incidence for excess profit taxes was analyzed. (In 1919, such a tax had been enacted by Congress.) Brown indicated three ways in which this tax could be shifted. First, he thought that the tax may retard somewhat the redistribution of capital and secondly penalize risky industries. Finally, the tax might, as may a tax on capital, reduce the accumulation of capital. Brown did admit that a monopoly could be taxed so that no shifting of the tax was possible. But, he added that the cost and difficulties of evasion could still have

economic effects especially if the tax were viewed as being temporary.

Brown wrote at great length on the subject of taxes on land. His conclusion that a tax on pure land value would fall exclusively on landowners and be fully capitalized in the price of land was the traditional one where static, general equilibrium analysis was employed. Although some writers in the past had attempted to challenge the view that a tax on land value could not be shifted, none did so successfully. Few ideas in economic thought remain sacrosanct. Martin Feldstein in 1977 argued that shifting of a pure land tax could take place due to induced capital accumulation or due to portfolio balance requirements. 49 However, in response Calvo, Kotlikoff and Rodriguez maintained that whether there would be shifting depended on the nature of the lifecycle model used in the dynamic analysis. 50 They went on to demonstrate that a compensated tax on pure land rents would not be shifted in the long run in a life-cycle model with intergenerational transfers. On Brown's part, the only qualification of the principle were instances where a tax on land value actually taxed more than the site value including elements which were better classified as capital. For Brown, the impossibility of decreasing the supply of land made shifting likewise impossible. Since Brown's analysis and advocacy of land value taxation are treated in the following chapter, I shall postpone further discussion of his arguments in this area.

Brown discussed the incidence of taxes on the sales of land and capital as well as the incidence of taxes on loans and security transactions. He found in general that the burden would depend on the

relative elasticities of supply and demand in the relevant markets.

He chose to include consideration of import and export levies or tariffs. Considering a protective tariff as a tax, he concluded that in general the tariff or export duty burdened consumers more than it aided the protected producers. That some or all of a tariff would fall on foreign producers, Brown showed would require exceptional circumstances. 51

Brown's last article of significance on tax incidence, "The Incidence of a General Output or a General Sales Tax," appeared in 1939 in the <u>Journal of Political Economy</u>. <sup>52</sup> It represented a refinement of his earlier thought as well as a correction of some earlier views. His interest in this subject was perhaps sparked by the rise of state retail taxation in the decade of the thirties and what he perceived to be a faulty analysis of the incidence of such taxation. The then commonplace conclusion was that taxes on retail sales would be passed on to and borne by consumers. Due noted Brown as an exception to this view in his book which was completed in thesis form but not published until after Brown's article appeared. Brown's conclusion was that, with certain qualifications, such a tax would ultimately fall on the owners of the factors of production. Due said:

It is interesting to note that no discussion of retail tax incidence has considered this aspect at all; the usual brief analysis merely indicated that the tax will pass to consumers, and ignored entirely the reactions on investment, unemployment and interest rates which are inevitable under the orthodox theory of distribution on which the analyses are based.  $^{53}$ 

In 1953, Richard Musgrave credited Brown with being the first to note

the fallacy wherein it was presumed that a general sales tax would raise the prices to consumer goods and not reduce cost payments to factors.  $^{54}$  Earl R. Rolph in 1952 commented:

In 1939 Professor H. G. Brown demonstrated in a rigorous fashion that a general system of excises is not shifted to consumers, does not affect the product mix, but does reduce factor incomes. For reasons not easily discerned his argument has rarely even been thought worth refuting.  $^{55}$ 

Brown began his argument by assuming that the tax would apply to "all lines of production" including purchases by the government. He implicitly assumed perfect competition in both the factor and commodity markets, a given supply of money and perfectly inelastic factor supplies. Brown, as in other analyses, was vague with regard to the uses of what he assumed to be new tax revenue. Due suggested that he wished to assume that the use of the revenue would not alter the aggregate money demand for goods. <sup>56</sup> H. P. B. Jenkins, however, interpreted him as having intended that the tax would not cause any additional divergences between marginal rates of substitution of goods in production and those in exchange. <sup>57</sup> In any case, Brown was aware that collective versus individual spending patterns could alter relative demands for goods and have an effect on relative prices.

Brown maintained that a general sales tax would not reduce output and thus prices need not rise unless for exogenous reasons the money supply were increased. Here, he appears to be following J. S. Mill.  $^{58}$  He further argued that the reduction in factor incomes would be proportionate which in turn implied that labor would contribute more than capitalists and landowners in absolute terms. He described the general

output tax as "in practical effect, the same as if it raised all prices . . . without either decreasing or increasing money incomes."  $^{59}$ 

Brown then turned to a more practical analysis of state retail taxes wherein rates vary from state to state. Here, he found that retail prices would rise roughly by the amount of the tax in the taxing state while slightly lowering retail prices in surrounding states. He saw the tax as driving a "wedge" in his terms between retail and wholesale prices. In a correction to the article, he stressed that:

. . . average prices (counting producers', wholesale and retail prices and also individually received wages, interest and rent and the governmentally received tax monies) as actually charged and paid in the markets, are not made either higher or lower by output or sales taxes, and that the average is, therefore, the same regardless of where the "wedge" is driven.<sup>60</sup>

He added in the correction that the additional transactions created by the collection of the taxes may slow the spending of money for goods which is the equivalent of saying that the velocity of circulation would be reduced. However, he thought this to be of little quantitative significance. The existence of friction in the form of sticky prices and wages was used by Brown to show how the introduction of sales taxes may have contributed to the unemployment problems of the era. This obtains from his argument that in the long run the general sales tax could not raise commodity prices.

Brown sent copies of his article to several economists who were specialists in taxation and received responses from among others, Howard Bowen and Richard Musgrave. Bowen praised the article saying, "I am glad that you have pointed out so clearly the true nature of

general output and sales taxes."<sup>61</sup> Musgrave, although agreeing that the tax was likely to be shifted backward, felt that an increase in money velocity could also result in forward shifting of the tax.<sup>62</sup> Brown responded that he could see no reason to attribute a rise in money velocity to the imposition of a general sales tax, but did concede that the velocity might fall slightly.<sup>63</sup> Musgrave expressed other objections which he elaborated on in subsequent publications and will be treated next.

With one exception, Brown's article received no published response for several years. Due, in Theory of Incidence of Sales Taxation, appeared to accept Brown's reasonings if what he called the "traditional analysis" is employed and a given level of income is assumed. Due later came to refer to this as the "Brown Case" or the "Rolph-Brown Case."64 Rolph's paper cited above was a direct challenge to the orthodox view of sales tax incidence. He not only accepted Brown's view of sales tax incidence, but argued that it should be extended to the case of partial excise taxes as well. Both Due and Musgrave objected to the views of Brown and Rolph for different reasons. Due in a 1953 article found Brown's assumptions, explicit and implicit, led to a case of "very limited scope and usefulness." The assumptions of perfect competition with perfectly inelastic factor supplies do certainly limit the analysis; they do, however, provide a convenient and useful starting point for such analysis. The lack of a clearly stated assumption with regard to the effect of the new tax revenue upon product and factor demand was also emphasized by Due in his criticism.

Brown as mentioned above seemed to envision somewhat vaguely a neutral or minor effect. In 1953, Musgrave conceded that factor payments may fall but found fallacious the view that the tax would ultimately fall on the owners of the factors in a manner equivalent to a proportional income tax. "The direction of adjustment" for Musgrave "does not determine incidence."66 The difference for Musgrave was that adjustments on the income-uses side would not leave the two taxes equivalent as the market price for unripened capital goods would fall relative to the market price of consumer goods. Brown made no provision for "unripened" capital goods and appeared to have conceived the general sales tax to affect both capital and consumer goods whether purchased by the private or public sector. Jenkins writing in 1955 found that Brown was "not quite able to distinguish between the price effects of his tax and those of his assumed constant quantity of money. 67 However, he found Brown to be quite close to grasping the significance of the distinction between the direction of adjustment to the tax and the direction of tax shifting. Brown's statement as to the direction of adjustment given above was interpreted by Jenkins as a prediction of partial forward and backward adjustment. He faulted Brown for not attributing this to a decrease in the circular velocity of money in active circulation or the monetary effect of the tax.

In conclusion, Brown's work in the area of taxation was an important contribution. Yet, it is understandable that it is only very rarely referred to in contemporary texts.<sup>68</sup> From the post-World War II era on, the level of sophistication in tax incidence studies has risen

markedly, yet Brown's work should be counted as one of the bases upon which this advance took place. In particular, he may be seen as a precursor of a general equilibrium approach to the study of tax incidence. Arnold Harberger commented in a letter to the author:

My respect for him is enormous. He belongs in a league with Seligman and Hotelling as the best contributors to the literature of public finance over an entire generation of economists.  $^{69}\,$ 

In addition to his work considered here, his analysis of land value taxation was extensive; this and his advocacy of land value taxation will be treated in the next chapter.

## Endnotes

- Henry C. Simons, Review of <u>The Economics of Taxation</u>, <u>Journal of Political Economy</u> 34 (February 1926): 134-136.
- <sup>2</sup>Frank Knight, Review of <u>The Economics of Taxation</u>, <u>National Municipal Review 14 (April 1925): 377-378.</u>
- <sup>3</sup>Fred Rogers Fairchild, Review of <u>The Economics</u> of <u>Taxation</u>, <u>American Economic Review</u> 16 (June 1926): 343-344.
  - <sup>4</sup>Simons, Review of, p. 136.
  - <sup>5</sup>Knight, Review of, p. 377.
- $^6$ Harry Gunnison Brown, <u>The Economics of Taxation</u> (Chicago: University of Chicago Press, 1979) reprint, back cover.
  - <sup>7</sup>Brown, The Economics, p. vi.
  - <sup>8</sup>Fairchild, Review of, p. 343.
- $^9\mathrm{Brown}$  felt that the data available were likely to be inadequate and referred to the problem of utilizing the method of "least residues" which would entail a very large task.
  - <sup>10</sup>Brown, <u>The Economics</u>, p. 9.
  - <sup>11</sup>Ibid., p. 56.
  - <sup>12</sup>Simons, Review of, p. 135.
  - <sup>13</sup>Brown, <u>The Economics</u>, p. 19.
  - <sup>14</sup>Ibid., p. 36.
- 15Herbert J. Davenport, "The War Tax Paradox," American Economic Review 9 (March 1919): 34-36.
- Harry Gunnison Brown, "The Size of the National Debt," American Journal of Economics and Sociology 11 (October 1951): 55-60.
- <sup>17</sup>John R. Due, <u>The Theory of Incidence of Sales Taxation</u> (Morningside Heights, N.Y.: King Crown Press, 1942).
  - <sup>18</sup>Simons, Review of, p. 135.
  - <sup>19</sup>Due, <u>The Theory of</u>, p. 215.

- <sup>20</sup>Ibid., p. 212.
- <sup>21</sup>Brown, <u>The Economics</u>, pp. 92-93.
- <sup>22</sup>Knight, Review of, p. 378.
- <sup>23</sup>Due, <u>The Theory of</u>, p. 218.
- $^{24} \text{Alfred Marshall, } \underline{\text{Principles of Economics}}, 8 \text{th ed.}$  (London: Macmillan and Co., 1938), pp. 480-483.
  - $^{25}\mathrm{Brown}$  used as an example a monopoly based on control of resources.
  - <sup>26</sup>Brown, <u>The Economics</u>, pp. 117-118.
  - <sup>27</sup>Ibid., p. 129.
- $^{28}$ E. R. A. Seligman, "The Shifting and Incidence of Taxation," Publications of the American Economic Association 7 (March and May, 1892): 156-159.
- H. C. Adams, The Science of Finance (New York: H. Holt and Co., 1898), p. 398.
- <sup>30</sup>F. Y. Edgeworth, "The Pure Theory of Taxation," <u>Economic</u> <u>Journal</u> 70 (June, 1897): 226-238.
  - 31Brown, The Economics, p. 131.
- $^{32}$  Richard Musgrave, <u>The Theory of Public Finance</u> (New York: McGraw-Hill Co., 1959), pp. 304-305.
- 33Otto Von Mering, <u>The Shifting and Incidence of Taxation</u> (Philadelphia: The Blakiston Co., 1942).
  - <sup>34</sup>Mering, <u>The Shifting</u>, p. 103.
  - <sup>35</sup>Brown, The Economics, p. 142.
- <sup>36</sup>Harry Gunnison Brown, "The Incidence of Compulsory Insurance of Workmen," <u>Journal of Political Economy</u> 30 (February 1922): 67-77.
- 37 Frank W. Taussig, <u>Principles of Economics</u>, Vol. 2, 3rd ed. (New York: The Macmillan Company, 1926), pp. 353-356.
  - <sup>38</sup>Taussig, Principles, pp. 354-356.
- <sup>39</sup>J. A. Brittain, "The Incidence of Social Security Payroll Taxes," American <u>Economic Review</u> 61 (March 1971): 113.

- <sup>40</sup>Earl Rolph and George Break, <u>Public Finance</u> (New York: The Ronald Press, 1961), p. 61.
- York: Viking qress, 1959), Vol. 4,  $\frac{\text{Mind in}}{\text{p. }115}$ . American Civilization (New York: Viking qress, 1959), Vol. 4,  $\frac{\text{Mind in}}{\text{p. }115}$ .
- 42Herbert A. Simon, "The Incidence of a Tax on Urban Real Property," <a href="Quarterly Journal of Economics">Quarterly Journal of Economics</a> 57 (May 1943): 416-429.
  - $^{
    m 43}$ This point will be examined in Chapter Six.
  - 44Brown, The Economics, p. 183.
  - <sup>45</sup>Ibid., p. 183.
  - <sup>46</sup>Simon, "The Incidence, p. 422.
- 47 Peter Mieszkowski, "The Property Tax: An Excise or Profits Tax?" <u>Journal of Public Economics</u> 1 (April 1972): 73.
- 48 Peter Mieszkowski, "Tax Incidence Theory: The Effects of Taxes on the Distribution of Income," <u>Journal of Economic Literature</u> 7 (1969): 1110-1111.
- 49 Martin Feldstein, "The Surprising Incidence of a Tax on Pure Rent: A New Answer to an Old Question," <u>Journal of Political Economy</u> 85 (April 1977): 349-360.
- Guillermo A. Calvo, Laurence J. Kotlikoff and Carlos Alfredo Rodriguez, "The Incidence of a Tax on Pure Rent: A New (?) Reason for an Old Answer," <u>Journal of Political Economy</u> 87 (August 1979): 254-262.
  - <sup>51</sup>Brown, The <u>Economics</u>, pp. 301-304.
- 52Harry Gunnison Brown, "The Incidence of a General Output or a General Sales Tax," <u>Journal of Political Economy</u> 47 (April 1939): 254-262.
  - <sup>53</sup>Due, The <u>Theory of</u>, p. 148.
- <sup>54</sup>Richard Musgrave, "On Incidence," <u>Journal of Political Economy</u> 61 (August 1953): 318.
- 55 Earl R. Rolph, "A proposed Revision of Excise-Tax Theory," Journal of Political Economy 55 (April 1952): 103.
- <sup>56</sup>John F. Due, "Towards a General Theory of Sales Tax Incidence," Quarterly Journal of Economics 68 (May 1953): 258.

- <sup>57</sup>H. P. B. Jenkins, "Excise Tax Shifting and Incidence: A Money Flows Approach," <u>Journal of Political Economy</u> 62 (April 1955): 125-149.
- 58 John Stuart Mill, <u>Principles of Political Economy</u> (London: Longmans, Green and Company, 1909), Book 5, Chap. 5.
  - $^{59}$ Brown, "The Incidence of," p. 257.
- 60Harry Gunnison Brown, "The Incidence of a General Output or General Sales Tax: A Correction," <u>Journal of Political Economy</u> 49 (June 1939): 419.
- <sup>61</sup>Howard Bowen to Harry Gunnison Brown, 19 May 1939, Joint Collection University of Missouri Western Historical Manuscript Collection, Columbia, Missouri.
- <sup>62</sup>Richard Musgrave to Harry Gunnison Brown, 21 November 1939, Joint Collection University of Missouri Western Historical Manuscript Collection, Columbia, Mo.
- 63Harry Gunnison Brown to Richard Musgrave, 28 November 1939, Joint Collection University of Missouri Western Historical Manuscript Collection, Columbia, Mo.
  - $^{64}\mathrm{Due}$ , "Towards a General Theory," p. 258.
  - <sup>65</sup>Ibid., p. 260.
  - <sup>66</sup>Musgrave, "On Incidence," p. 318.
  - <sup>67</sup>Jenkins, "Excise Tax Shifting," p. 125.
- $^{68}$ Based on a brief informal survey of texts in public finance, I found that texts of the post-World War II period up to the mid-sixties tended to cite Brown, while more recent ones do not.
- <sup>69</sup>Arnold Harberger, letter to author, 15 October 1984. Personal files of Christopher Ryan, Iowa City, Ia.

## CHAPTER SIX. LAND VALUE TAXATION

One year after Brown joined the faculty of the University of Missouri, the first major study of the single tax movement in the United States was published in 1916. Its author, Arthur Nichols Young, in a concluding survey, indicated that:

The American single tax movement has not had large accomplishments either in the way of legislation secured or number of adherents gained for its essential principles.  $^{1}$ 

In his study, Young did not identify any academic economist who defended these "essential principles." In the succeeding years, Harry Gunnison Brown would move purposefully to fill this void.

That the economics profession was opposed to George's proposed reform is not an unfair exaggeration. A simple listing of prominent American political economists who adamantly opposed the single-tax idea is indicative of the position of the profession. Beginning with William Graham Sumner<sup>2</sup> and Francis A. Walker,<sup>3</sup> a brief list would include John Bates Clark,<sup>4</sup> Richard Ely,<sup>5</sup> Simon Patten,<sup>6</sup> Frank Fetter,<sup>7</sup> E. R. A. Seligman,<sup>8</sup> and Frank Knight.<sup>9</sup> Outside of this country, a few of the notable opponents were Edwin Channan,<sup>10</sup> F. Y. Edgeworth,<sup>11</sup> and Gustav Cassel.<sup>12</sup> This is not to imply that these diverse and prestigious scholars were uniformly hostile to Henry George and his ideas. Frank Fetter was influenced to pursue the study of political economy by George's Progress and Poverty.<sup>13</sup> Seligman found support in George's writing for his denunciation of the existing property tax system.<sup>14</sup> Ely was careful to praise George for "bringing forth the land problem

as one of paramount importance."15

The view of Brown as a solitary crusader is, however, misleading. Many economists of his time favored modified versions of the single tax, in particular where it would be applied only to future increments in the value of land. In 1904, Charles Fillebrown circulated a questionnaire to members of the American Economics Association wherein the statement: "It would be sound public policy to make the future increase in ground rent a subject of special taxation" was responded to positively by seventy-seven of the eighty-seven who replied. Thomas Nixon Carver, Frank Taussig, 18 John Commons, 19 and Herbert J. Davenport were some of the economists of the time with whom Brown could find varying degrees of affinity. Irving Fisher (according to Brown) maintained a long silence on this question. Somewhat later, Irving Fisher along with Frank Graham, Raymond Bye and Paul Douglas expressed favorable opinions as well. Outside of this country, Leon Walras and Knut Wicksell can be considered proponents of land value taxation.

Brown's advocacy of land value 25 taxation does stand in marked distinction to that of his colleagues of note, with the possible exception of John Commons. His position, as is to be seen, was somewhat between that of the orthodox "single taxers" and the "single-taxers of a looser observance" as Davenport declared himself to be. Brown's advocacy, introduced by an article in 1917 titled "The Ethics of Land Value Taxation," would entail multiple considerations. First, theoretical questions in economics, such as the place of land in economic theory as well as the meaning given to the concept of rent, were

treated in part in Chapters Two and Three in this paper. He was also concerned with examining the economic effects of increased land value taxation in defense of what he perceived to be beneficial outcomes, and refuting erroneous criticisms. As ethical or philosophical concerns were endemic to the proposed tax reform, he addressed them as well. In addition, strategies on how to best promote land value taxation in such a manner so as to enhance not only its intellectual but political acceptance could not be ignored. Finally, Brown was forced to react to the changing social and economic conditions over many years as well as to the varying intellectual currents of thought.

Brown incorporated the article mentioned above into a book published in 1918 titled <u>The Theory of Earned and Unearned Incomes</u>. 26

In 1921, he produced a smaller work titled <u>The Taxation of Unearned Incomes</u>, which was revised and expanded in a 1925 edition. This book in turn was expanded into <u>The Economic Basis of Tax Reform</u> 27 in 1932. He published articles on land value taxation in a wide variety of journals and when the <u>American Journal of Economics and Sociology</u> was founded, he became one of its major contributors as well as a member of its editorial board.

Specifically, Brown's interpretation of the single-tax idea was that income derived from the site value of land (which he considered to be unearned) should constitute the first source for governmental taxation. A program then for tax reform would entain the eventual substitution—to the extent possible—of land value taxation for all other types of taxation, which he found to be both economically harmful and

philosophically unsound. He never maintained that the revenues from the taxation of land values would suffice. His son, Phillips H. Brown, related to me that his father privately referred to himself as a "triple-taxer" and was willing to accept inheritance taxation, income taxation and perhaps use taxation (such a gasoline tax) to obtain the needed revenues that the taxation of land values could not generate. In addition, he was willing to entertain considerations which would allow landowners to claim some portion of their rent corresponding to site value. In contrast to Davenport, Carver and others, he tended to reject the view that only future increments in land value should be taxed. In this regard, and in implicitly arguing for a very large percentage tax on land value, Brown could claim little or no active support within the profession.<sup>29</sup> He rejected the natural rights and labor theory of value elements in George's thought as unnecessary to the support of land value taxation. Also, in contrast to some Georgists, he did not feel that the tax program, in and of itself, was an economic and social panacea. Although he favored nationwide taxation of land values, he was, from the outset, willing to support (as he did later, quite actively) local experimentation with such taxation. He did, however, fear a too moderate or too gradual implementation of the tax program could blur the benefits and have, in some cases, perverse results. He noted in a 1930 article that

I am sometimes spoken of a single-taxer by persons who are opposed to the single tax, while some of the thoroughgoing single-taxers profess themselves not wholly satisfied with my orthodoxy. The truth is that I recognize the fundamental justice and common sense of the single tax idea.  $^{\rm 30}$ 

As could be observed in Chapters Two and Three, Brown's arguments for the place of land in economic theory and the interpretation of economic rent had strong overtones of the classical writers, in particular Ricardo and J. S. Mill. He frequently referred to himself as an economist "unemancipated" from the classical tradition, implying ironically that his opponents had gone too far in their break with the classical teachings. He thus attempted to fuse the doctrines of the classical writers, who emphasized the unique role of land in the determination of value, and the marginal utility analysis of the more "modern" economists. His key device in this attempt was his interpretation of the opportunity-cost concept which he attributed to Davenport. Brown viewed long-run demand as being affected in part by the cost of production. He said:

Normal or long-run demand may therefore be said to depend on the utility or desirability of the goods demanded, on the utility or desirability of the other goods which have to be sacrificed if these are to be enjoyed, on the disutility or sacrifice of producing the goods necessary to pay for the goods, and, by way of comparison, on the disutility or sacrifice necessary to produce, instead of buying, the goods desired. 31

This last comparison he maintained was equivalent to the opportunity-cost principle of Davenport. John Commons noted that Brown had, somewhat inadvertently, shown the equivalency of Henry Carey's "disopportunity value" and Davenport's opportunity-cost principle to the "cost of reproduction." In simpler terms, Brown declared:

There is a very real sense, then, in which the demand for an article, and the amount which consumers will pay for it, depends upon its cost of production. They will not, in the long run, pay more for it than the amount of other goods which the same sacrifice will produce. $^{33}$ 

He defined "land" as land space excluding fertility, improvements such as drainage and other items which he considered to be capital. The key property of land space was its nonreproducibility. Thus, land space could have no cost of production and constituted the most important element in what he called the second class of commodities as opposed to a first class of ordinary commodities, the demand for which depended not only on their utility but also on their cost of production. In this manner, Brown justified a separate treatment of land in economic theory. He added to this a related argument that the return to land space was unearned.

That the economic return to land was not wholly earned by its owners was tenet of classicial political economy. Adam Smith, David Ricardo and J. S. Mill all tended to take his view. However, this proposition was vigorously and diversely attacked from the onset. In a latter day example in 1894, J. Shield Nicholson wrote:

Mill himself was partly to blame for the excursions which he made into the applications of social philosophy to practice. It is these excursions we are indebted to for the fantastical notion of the unearned increment. . . . 34

In contrast, L. L. Price in an <u>Economic Journal</u> article in 1891 commented: "The unearned character of a payment for the 'original and indestructible powers of the soil' can hardly be denied. . . ."<sup>35</sup> The two statements are illustrative of a division within the discipline with regard to the manner and extent to which ethical or moral considerations should be entertained in economic studies. The practice of

distinguishing earned from unearned incomes carried over into the 20th century in the language of economics; but it faced increasing dissent. Thomas Nixon Carver, for example, suggested as an alternative a tripartite division of forms of incomes received into earning, findings and stealings, under which increments to site values were considered findings. Herbert J. Davenport who labored to rid economic theory of such value judgments was, nevertheless, very reluctant to relinquish this distinction because this would excuse incomes which he perceived to be socially unproductive. He divided these into the capitalized bounty of nature, capitalized privilege and capitalized predation. To many, the inclination was to reject such a division or to use the term "unearned" only in parentheses. However, usage of the terms was common even among those who opposed the single tax notion or socialistic views.

In <u>The Theory of Earned and Unearned Incomes</u>, Brown presented his rationale for declaring the payments to the owners of land to be unearned. The marginal product of land or the "economic rent" was unearned in that the owner of land proportioned no equivalent service to the community. A renter received only a privilege to utilize the land while a receiver of an interest payment had proportioned a service in the form of saving. He went on to argue that the site value of land was originally zero and the present value is attributable not to its present owner, but to society. He made clear that unearned incomes were not unique to land. A monopolist's profit or wage was also unearned as were positive returns to disservices and negative services.

He argued that the transfer of land did not legitimize the incomes earned, even if "earned" income were used to purchase it. The new owner would, as had the old owner, proceed to collect, explicitly or implicitly, for the value of the services of the land which neither the first nor second owner produced. He asked: "Is such doctrine good utilitarianism? Is its application good social policy?" Brown similarly viewed (with minor qualifications) the returns to the owners of natural resources such as mines, oil deposits, virgin timberlands, etc.

Of course, Brown's position on these questions followed that of Henry George as did his proposed remedy. He rejected public ownership of land and other natural resources through purchase because it would represent a validation of unjust claims. Therefore, in a competitive business system, only the appropriation of economic rent through taxation for the general benefit would remedy the situation.

Among the rebuttals to Brown's argumentation was a challenge of the terms "earned" and "unearned," with respect to incomes. Willford I. King directly attacked such usage in 1921. 39 He noted that it was becoming increasingly common and that, despite the lack of sanction for it in "standard" texts on economics, many economists used it or admitted to its validity. He maintained that for practical considerations, the distinction was not useful nor could it be made so in a logical manner. He argued that all incomes were not necessarily earned but should be treated as such in economics:

. . . the attempt to divide incomes into categories designated as "earned" and "unearned" seems to serve no purpose

and this classification appears to have been devised, not with an intent to aid science or statescraft, but in an effort to stigmatize the institution of private property. . . .  $^{40}$ 

Although the article was very critical of Brown's views, he made no immediate reply. John Commons did comment on the article in his <u>Institutional Economics</u>. He agreed that from the viewpoint of private business enterprise, King's denial of the distinction of incomes was sound. However, from the viewpoint of society, this was not true due to the effects of speculation in land on industry and agriculture. <sup>41</sup> Commons agreed in part with Brown that income from speculation in land could be distinguished from other incomes because individuals do not create site value and thus speculation in site values represent no contribution to the commonwealth.

A closely related question was whether, were land to be taxed, the current rent should be taxed or only the future increments to the rent. Several economists who were inclined to support taxation along "single tax" lines such as Taussig, Carver and Davenport adamantly insisted that only future increments be taxed. The taxation of these increments to land value derived from John Stuart Mill whose father James also advocated it as prior to that had the Scotsman, William Ogilive. 42 Germany had experimented most extensively with such a tax and it was a controversial element in the Lloyd-George budget of 1909. 43 Arthur Young pointed out the province of Alberta was the first government in North America to employ a tax of this type. Knut Wicksell expressed an opinion on this subject, with which John Commons would have agreed:

Incidentally, once the right of expropriation of private land for public purposes is recognized, the proposed participation of the community in future increases in land values can hardly be opposed.  $^{44}$ 

Brown from the outset debated this issue, taking the side of the Georgists.

Brown referred to the issue as one of "vested rights" in property. He attempted to meet the objection voiced in one instance by Fred Fairchild that to take a part or the whole of the value of land through discriminatory taxation without compensation would be like "changing the rules of a game, while the game is in progress to the disadvantage of one contestant."45 Brown began with the analogy that an increased tax upon income (although personal income may not normally be capitalized and sold) was fundamentally no different from a like percentage increase in land value taxes. He noted that with an increased tax on personal incomes, "confiscation" or a violation of an implied pledge by society would be seldom mentioned in a discussion of a higher tax. He further noted that monopoly profits had been permitted in the past and the owners of the monopoly had certainly formed expectations of continued profits. In a similar manner, protective tariffs had been implemented in the past, discriminatorily affecting incomes received. As the regulation of a monopoly or the removal of a tariff was normally undertaken without consideration of compensation for those adversely affected, Brown questioned why land value taxation could not be similarly treated. In his view, the return to landowners corresponding to the situation value of the holdings was better seen as a tribute which

corresponded to no service, past or present, in the benefit of those who must pay it. Land-holding was only a negotiable privilege or franchise which society could, should it so choose, remove most expediently through a program of gradually increased land value taxation. He felt that a gradual program, which would probably be implemented through local action, would not cause great losses to the majority of landowners, especially to smaller holders who live on their own land.

Brown pointed out that the advocacy of taxing only the future increments was inconsistent if it was done to avoid the question of "vested rights." In a growing country, the capitalized value of land is likely to reflect in part the expectation of rising land prices, and to tax away these future increases in yield would be confiscation in the same sense as would a tax on the current yield. Admitting that the degree of confiscation may be less, he maintained that any defense of the more moderate approach relied upon arguments which would support a more far-reaching reform. 46

Brown's arguments on vested rights which appeared frequently in his writing received little reaction. Frank Knight, noting his own "altogether negative" view of the single tax, agreed with Brown that objections to the single tax were equally operative in opposing a tax only on future increments. Ward L. Bishop in reviewing The Economic Basis of Tax Reform said that Brown had made "probably as strong an argument as can be made against the sanctity of 'vested rights'." An anonymous reviewer of The Theory of Earned and Unearned Incomes in a 1920 issue of the Political Science Quarterly said that Brown's

discussion of "vested rights" deserved attention. This reviewer also commented: "The book should disprove once and for all the shallow myth that no economist has favored the single tax." Lastly, Harold Hotelling in a 1938 article noted:

The proposition that there is no ethical objection to the confiscation of site value of land by taxation, . . . has been ably defended by H. G. Brown.  $^{50}\,$ 

The single tax idea, especially where moderately interpreted as a program to increase the taxation of site values and relieve the tax burden on "improvements," elicited arguments which tended to be more economic than ethical in nature. An exchange of articles in the Economic Journal on the question of the economic effects of the taxation of site values preceded and followed the Lloyd-George budget of 1909. The principal concern was the effect that increased site value taxation relative to taxes on buildings and improvements would have on urban population density. Edwin Cannan argued that the effect would be to disadvantageously increase urban congestion. He stated: "What is taken away in site values is simply slopped away in increased costs.  $^{51}$ By "increased costs," Cannan appeared to be referring to negative externalities arising from the greater population density. Edgar Harper and C. F. Bickerdike contested Cannan's conclusions. Bickerdike maintained that there could well be positive production externalities and in addition, were the additional site value taxes earmarked for community improvements, the net result should be positive. 52 The negative externalities would serve ultimately as a check on undue growth of the center cities. Of an altogether different disposition

were Charles Trevelyan and Joseph Wedgewood, M. P., who favored a nationwide program of increased site value taxation. Trevelyan argued that in the existing system, both urban and rural landlords "force" small manufacturing concerns to the cities, thus contributing to the over-population there." Wedgewood, an avowed land-taxer, objected that the discussants had based their arguments on "purely utilitarian grounds" and had ignored consideration of freedom and justice. 54

In the United States, urban congestion was not so great of a concern at that time and the debate was ignored for many years here at least until the early sixties. However, single tax proposals and propaganda in this country and in Canada appeared to have provoked renewed opposition from many economists. The rebuttals to these charges were provided largely by Brown, Davenport and Commons. Alvin Saunders Johnson, a former student of J. B. Clark, published an article in the Atlantic Monthly in 1914 titled "The Case Against the Single Tax." Johnson reintroduced an argument of J. B. Clark's that the unearned increment played a vital role in this country's economic development. In his words, "It was the unearned increment which opened the West and laid the basis for our present collossal industrialism." He reasoned that the extension of the economically productive border of the country was hastened as the prospect of the increment induced pioneers to endure hardships and substandard present returns. A by-product of the western migration was the positive effect upon the return to the workers remaining in the eastern areas. In 1916, T. S. Adams used this same argument as one case of a more general diffusion of the unearned

increment. He concluded that "farmers and farms are more numerous, farm products more plentiful, and farm prices are lower, because of the unearned increment." In addition, he argued that the increment resulted in lower railroad rates. Both Brown and Davenport separately replied to these points in 1917. Brown first questioned whether the real inducement for the pioneers was not the prospect of a higher return to their labor rather than a problematic rise in land values. Second, even if the prospect of rising land values was an essential part of the incentives, he questioned whether a more gradual spreading of the population westward might not have been preferable. He also pointed out that the contentions made ignored the role of government subsidization in the form, for example, of the protection provided by the army.

Davenport stressed in his article that the claim for the unearned increment was grossly exaggerated. To Adams he replied and Brown cited his statement later that:

I submit that the net social result of sending men out where "farmers work for less than day's wages, if we measure his reward in annual income alone," is, so far, to waste the labor of each man. . . . In the form of a mortgage on the future we have been paying the pioneers for wasting their time.  $^{57}$ 

It is of some interest to note that some contemporary studies of the role of federal land grant subsidies tend to show that they were of dubious value.  $^{58}$ 

Richard Ely formulated another argument which sought to establish that the increments to land value were actually earned. In 1920, he suggested that the classical theory of rent had not adequately considered the costs which a landowner, urban or rural, incurred in the

period of transition from one use to another, higher one. The "ripening" costs were socially necessary for the land to reach the higher plateau of use, and thus the income from the utilization of sale of the land was earned. A land tax would then tend to force the land into production before the ripening period was completed and result in a lower productivity than could otherwise be achieved. Ely reasoned that the classical economists had been concerned primarily with agricultural land and had not seen (as was clear with urban property) that bringing land into production required time and should not be considered costless. Harold Groves suggested in Tax Philosophers that Ely's "ripening costs" seem at least in part to refer to interest and risk on investments. Brown would classify this as the capital component of land value apart from its site value.

Although Ely did not explicitly associate his theory of "ripening costs" with speculation in land, he did utilize expectations with respect to the future value of land. As seen above, J. B. Clark, Alvin Johnson and T. S. Adams saw land speculation as accelerating the utilization of land. Brown noted a seeming contradiction between this view and that of Ely who saw "speculation" as delaying the use of land. He also contrasted Ely's view to that of economists who maintained that land speculation resulted in very little land being held out of use. On several occasions Brown sought to defend George's thesis that speculation in land tended to "hold good land out of use, so forcing resort to poorer land, decreasing the productivity of industry, lowering wages and raising land rent." In reply to Ely, he conceded that

some service may be rendered by land speculation, and cited Fisher's The Nature of Capital and Income in support of this opinion. However, he argued that disservices are likely to be rendered as well in the form of the economic waste entailed by the unnecessary extension of the infrastructure of services and in transportation costs. But he did concede to Ely that land speculation did not necessarily result in unusual gains on the average. He argued that George had not made this argument either. However, Brown felt that economic effects of this seemingly irrational "gambling" on the part of only a minority should not be ignored.

Frank Knight, in a brief review of one of Brown's books, objected to the "familiar single-tax heresy that taxes on land value would have any appreciable effect in the way of bringing additional land into use." From another perspective, Davenport opined that unless one hundred per cent of the rent of land were taxed away, land speculation would actually increase with higher rates of taxation. He declared as a "fundamental" principle of taxation that any taxation should be proportionate to present income. Brown's differences with the two writers appear to lie in the nature of land speculation in the case of Knight and in the method of taxation in that of Davenport. Brown maintained that when both used and unused land were taxed alike, the tendency would be for the speculative return to land holdings to fall, thus increasing land usage. He assumed in his argument that the speculator was not capable or was uninterested in making improvements and, in addition, tended to overestimate the prospective rise in land value.

Thus, the prospective return for such a land holder must fall relative to that of those who intend to make improvements on the land, regardless of the percentage of rent taken by the tax. Moreover, if taxes on capital were relieved as a result of the increased land tax, the differential would be greater. However, Brown noted that, in quantitative terms, this advantage of land value taxation was relatively minor. Brown's reluctance to emphasize this advantage was not characteristic of later expressions on the subject. He may have originally felt uncertain as to the magnitude of the economic effects, which seem to rely on the size of the purely speculative forces induced to leave the land market as a result of the tax.

Another argument commonly advanced against the implementation of high land value taxation was whether the site value of land could be accurately assessed in practice. Early opinions in this regard varied widely. Seligman said in one instance:

It is quite impossible in practice to distinguish improvements on the land from improvements in the land. No attempt is ever made, in assessing land values, to differentiate the two.  $^{64}\,$ 

Brown pointed out that Seligman's use of words in this instance was confusing as the proposition was to separate site values from the value of all improvements. Alfred Marshall considered the difficulty "undoubtedly very great" but

. . . of a kind to be diminished rapidly by experience: the first thousand such assessments might probably give more trouble, and yet be less accurately made than the next twenty thousand.  $^{65}\,$ 

Commons felt that the greatest difficulty was in valuing the fertility

value relative to the value of bare land and that urban site valuation should be easier and more accurate. Brown did not comment extensively on the problem. He conceded that the possibility of some unfairness existed due to inaccurate assessments. However, he viewed these as temporary problems, and argued that errors or inadequate data would create minor penalties on thrift and improvement compared to a system of taxation which deliberately penalized them. In a 1970 study, Ursula Hicks commented that a number of countries presently use land value taxation so it cannot be said that it is not practicable. In the same study, Kenneth Back said: "I am satisfied that highly accurate and consistent land valuations can be established." He added that although it would be administratively feasible, it should not be assumed to be administratively simple or necessarily less costly.

Yet another source of opposition to the single tax notion was that land was an inadequate tax base. This was an early criticism which questioned whether a 100% tax on land would provide sufficient revenue for all public purposes. In that era, the question was largely conjectural. Brown, as indicated above, never held that such a tax would suffice. He argued that all that was required was that the economic rent be reasonably large; whether it should be adequate for local or other governmental needs was an irrelevant objection to its application as a first source of public revenue. The adequacy of land as a base for local governmental revenue continues to be a matter of debate.

Many economists still feel that land value taxation would not be a significant source of revenue. Mason Gaffney has argued that land values have

been underestimated for a number of reasons and other effects of land value taxation have been frequently ignored in attempts to assess the adequacy of land as a tax base. He concluded in one study that land values equal or exceed building values in the United States. <sup>69</sup> Dick Netzer once commented on the local adequacy of land value taxation in a letter to Brown. He said:

Once school costs are removed from consideration, the land value tax does come very close to satisfying the revenue adequacy criterion, I believe.  $^{70}$ 

Brown, as noted above, was willing to entertain considerations which would allow landowners the right to retain some portion of the rental return. He agreed that, where land value had been increased due to street construction and the owner had contributed by way of special assessment, the owner was entitled to a return on this investment if one was forthcoming. He was more circumspect with respect to the return on what we would call "land development." He preferred to place this in a category of a limited service analogous to that of an invention. Thereby, he argued that possibly some special return might be allowed, but as with a patent, only over a limited period of time. His reluctance to accept a return was founded in his belief that the investors in such development projects should not utilize expected increments in land value in their calculations. He maintained that foresight with regard to the shifting or increasing of population rendered no real service and was not deserving of a special return.

In discussing the "ability to pay" theory of taxation, Brown conceded that there might be some adverse distributional effects in a heavy

reliance on land value taxation. He rejected the ability-to-pay principle as the sole basis for a reform of the tax system. In a manner similar to that of Commons, 71 he maintained that if such a principle were to be applied, it must in the case that "earned" income be prevented from interfering greatly with the principle of "proportioning incomes received to services rendered." 72 The possibly adverse effects were that among those receiving a large proportion of their income in land rent may be found the "ubiquitous widows and orphans" and that among those receiving only a small portion of their income in land rent may be found the very wealthy. Brown responded in the first case that special provisions may be made and in the second that special taxes could be devised. His point was that these circumstances should not impede a tax reform leading to greater land value taxation and resulting benefits, both economic and ethical.

Robert V. Andelson has noted that Brown on one occasion described himself as a Malthusian. To the extent this is true, it forms a marked contrast to the view of George on population. Brown did express concern with the results of overpopulation in general and rather openly advocated family planning in his texts. This concern led him to make a minor theoretical qualification to his argument as to the effects of greater land value taxation. He felt that such taxation might work, however slightly, to the disadvantage of families who purposefully restricted their size so as to better endow their progeny. Brown was clearly thinking about the situation of a small, family farm with all land rent taxed away for the general benefit in times of

increasing population. This family in some cases in restricting its size may find its standard of living relatively reduced. Here, Brown would consider leaving the owner some portion of the rent so as to avoid this injustice.

In 1924, Brown published an article titled "The Single-Tax Complex of Some Contemporary Economists."<sup>75</sup> He was undoubtedly aware of the long-standing mutual antipathy between professional economists and the followers of Henry George. One perhaps extreme example of the attitude of these economists can be found in a Francis A. Walker reference to George's proposal. He said: "I will not insult my readers by discussing a project so steeped in infamy."<sup>76</sup> Single-taxers, meanwhile, tended to question the credentials of the profession, both scientific and moral. Brown's approach was more restrained in that he implied that the contemporary writers of texts in economics and in public finance were in varying degrees the victims of a legacy of bias. The bias was expressed in an excessively negative and frequently erroneous conception of the single tax idea. He reviewed the treatment accorded the single tax on land values in several texts and was criticized by one commentator for the causticity of his criticism of the authors. The basis of the bias was, he felt, a type of "defense complex" wherein "a reasonable consideration of the merits of the case will not be tolerated." $^{77}$  He further argued that the objectors had made rights in property a sacred cow and were unwilling or unable to consider the single tax proposal objectively. Among those criticized were E. R. A. Seligman, C. C.Phehn, Winthrop Daniels, Fred Fairchild,

Merlin Hunter and C. J. Bullock. Seligman, the most prominent of those listed, was thought privately by Brown to have attained a stature in the field of taxation which was not wholly deserved. Blacob Viner had written a review article in 1922 on textbooks in government finance which was highly critical of recent publications in this area. Who of his criticisms were cited by Brown in his article. In one of the cases, Viner charged Merlin Hunter with having misread Seligman and mistakenly stated that the impot unique of the Physiocrats had actually been adopted and abandoned as a failure.

Willford I. King responded to Brown's article with a rebuttal, "The Single-Tax Complex Analyzed," 80 about which Seligman commented that it "effectively ridiculed" Brown's contentions. 81 Whereas Brown's arguments were wry, King's response was not only clever in its mockery but even sardonic. King admitted that two of Brown's objections were valid and then proceeded to attack the single tax by reiterating, for the most part, existing arguments. King insisted, as had Seligman, that the term "single tax" be considered only in the precise context of George's proposal. Brown preferred to advocate greater land value taxation which he viewed as complementary to the goals of single taxation. He had asked that the particular argument of his article not be considered a defense of single tax principles, and perhaps for this reason, did not respond to King's article for several years. In 1943, he pointed out that King's views were typical of the authors of textbooks in public finance. 82 Brown continued to be unrepentent in his criticism of authors whom he felt slighted land value taxation.

Brown described what he saw to be the "probable effects of making land rent the chief source of public revenues."83 He assumed that this would remove most of the existing taxation of capital. There would be a rise in the rate of interest and a fall in the price of land; interest rates would rise as the net return to capital rose until more savings was forthcoming; land prices would fall with the capitalization of the higher tax on land rent and also from the temporarily higher rate of interest. He then applied these effects to the case of a small farmer, noting that such farmers would have the taxes on improvements of all types reduced. Thus, all or most of the farmer's taxes would be based on the unimproved or "run down" value of their land holdings. The farmer could, then, accumulate wealth at a greater rate, and if indebted, they could pay off the debt more easily. Were the farmers marginal, in the sense that average earning were only commensurate with a fair return on labor and capital invested despite good management, they would pay only a nominal tax. Assuming that the necessary governmental expenses would be paid by better situated farmers and urban land holders, the small farmers, so described, would benefit from public services to which they were temporarily unable to contribute.

Next, Brown examined the case of a prospective farm owner or tenant which would be nearly identical to that of a prospective home-owner. Land value taxation would facilitate the purchase of land through the savings on the purchase price as the higher taxes on land value could be paid with the interest on the savings. To argue this,

Brown appears to assume that the prospective owner has the funds equal to the original price, and invests the savings. If so, he did not prove his point. He clarified this later saying that:

. . . even if the lower price of land does no more than balance the higher tax on it, the reduction or removal of the other taxes is all clear gain.  $^{84}$ 

Thus, he argued that tenancy should be reduced and prospective farmers aided. He envisioned the tax reform as a partial removal of an occupational barrier wherein those with very little means could begin anew in farming. He saw the land tax in 1932 as representing a lighter burden on farmers during sustained periods of low farm prices, as rental values of farm land would fall in these periods. He admitted that some farmers would be worse off--at least temporarily--as a result of the tax, but these farmers would, in general, be in a better position to bear this burden and should as well consider the interests of their progeny.

Many critics of the single tax had pointed out that a one hundred per cent tax on land's economic rent was tantamount to a confiscation or nationalization of same lands. They frequently referred to this as a step toward socialism while others, such as Frank Knight, believed it to be the equivalent of anarchy. The confiscation of land values by the government was seen as economically disastrous as it would imply government ownership and management of land which would not attain the standard of efficiency achievable through competitive private ownership. Murray Rothbard commented in a similar manner on the scenario created by a 100% tax on land rent. He argued that, upon the application of

the tax, land would become valueless or free and that owners would have no incentive to charge any rent. Thus, no revenue would be forthcoming from the tax, and furthermore no market allocation of the land sites would be available and "everyone will rush to grab the best locations."

The full implications of 100% tax were rarely discussed in detail by either the proponents or the opponents as the question tends to strain one's imagination. Some critics did stress the ensuing economic chaos of such a dramatic change in the tax as well as the property system.

Brown, like other advocates, did not accept that a 100% tax was the equivalent of land nationalization. However, he would accept the reform would in a sense "confiscate" all site value. Property would retain "value" in terms of the improvements made upon it.

Brown responded to Rothbard in a 1958 article arguing that his deductions were erroneous and contradictory. <sup>88</sup> The owner's incentive to collect their rent, even should they own no improvements on the land, would be provided by the taxing body on penalty of sacrificing the title. In the more likely case where owners have invested in improvements, they retain an incentive to collect the rent to pay the tax and retain the title. Those who have not nor do not intend to make improvements on the land held could, of course, immediately give up their title, but the tax could then be collected from the renter were there one or within due time the new owner. Brown argued that if land were to be in a "state of non-ownership" as Rothbard proposed, why then the chaotic rush to grab the best locations? He did not go on to answer the implied question of Rothbard, and of Knight as well, as to how an efficient

allocation of sites would be accomplished as the sites would remain economically scarce. Were Brown to have answered, one can suppose that in large part the allocation would be according to market principles with certain aid from governmental agencies. Ignoring the added difficulties of expectations with respect to the tax reform, the agency in charge, one could assume, would try to maximize the yield on the tax. C. Lowell Harris pointed this out in his commentary on Rothbard in the Critics of Henry George. 89 Even with the 100% tax there would remain incentives to bid for the use of land on the part of those presently using it and those who wish to do so in the future. The agency controlling the title would grant to the highest bidder the right to use the land as long as the taxes were paid and to "sell" this right at their discretion. The bids would presumably be taken as revenue as well by the agency. Transfer or sale from one user to another may present a problem even if assessments were accurately made on the potential yield of the land site. The problem would be one discussed previously: to what extent would "speculation" in land values perform a service in directing land to its most efficient use? Assuming it was minimal, then the land "market" would function on the basis of the expected returns to the application of labor and capital to the site although the site itself can nominally have no return. There are, of course, other possible complications but Brown would have stressed in this case the tax relief gained for labor and capital. Rothbard Knight and others were correct in pointing out in this extreme case the greater reliance on the auspices of governmental agencies in

terms of the requirements of assessments accuracy and the performance of its broker role. Yet, some urban and land-use planners might welcome the opportunities presented. Also such a radical change would be highly disruptive but as Brown and others maintained, no such change was contemplated nor thought practical. For Brown, the 100% land value tax was, I believe, an ethical ideal somewhat analogous to Marx's pure communism which did not demand immediate and detailed analysis.

In 1936, George R. Geiger, a student of John Dewey, published a book titled <u>The Theory of the Land Question</u>. Brown was cited as having read the manuscript and he strongly influenced portions of the book. Geiger's earlier work on Henry George had been critically reviewed by Frank Knight. Knight maintained that:

There is no evidence, a priori or empirical, either (a) that speculative activity yields a larger return, in any representative sample of cases, than does activity where the results are actually in accord with expectations, or (b) that land acquisition or holding presents anything peculiar in comparison with other activities.<sup>91</sup>

Brown responded that George did not base his proposition on the belief that landowners receive an exceptional rate of return. To Knight's second point, Brown pointed out that George's view of land was analogous to slaveholding in that, regardless of the rates of return, the incomes derived were exploitive in nature. Brown constructed another analogy wherein at some nominal cost the ownership of a lake (Michigan) is acquired and charges for its use would then represent something "peculiar in comparison with other economic activities." Knight reiterated his

view in a 1953 article saying: "There is no socially-created unearned increment in the possession of landowners."  $^{93}$ 

Economic Review, to chide Kenneth Boulding for an inconsistency in his Economic Analysis. He found fault with Boulding's definition of "economic rent." In one instance, Boulding defined it to be the return to any factor in excess of the minimum amount necessary to keep that factor "in its present occupation," and in another he substituted the phrase "in continuous service." For Brown, this minor slip was of importance as he wished to retain the use of the term "economic rent" to signify the rent of land exclusive of the return to improvements. He asked: "Is the expression 'economic rent' now to do duty for every sense in which we may say that there is a 'surplus'?" Ben Fine in a recent article found Brown's question to be illustrative of the position of those who "reacted against the euthanasia for rent theory as a specific source of revenue tied to the land."

In his later articles, Brown increasingly referred to the urban problems of slums, blighted areas and suburban sprawl. Land value taxation he thought would assist in alleviating these problems by creating incentives for improvements and lessening speculation in building sites. In addition, he felt that lower-cost housing would result and reduce the need for the subsidization of housing and home ownership.

Studies of Australian land taxation by A. R. Hutchinson convinced Brown in 1949 that there was empirical support for the claims made for greater land taxation. <sup>96</sup> Hutchinson compared the Australian states based on the proportion of local real estate taxes levied on land value. He had ignored the state and national land taxes, as they produced relatively little revenue. (The national tax in effect in Australia between 1910 and 1952 has been discussed by many writers including, in 1960, Richard M. Bird who noted that analysis of the effects of the tax was complicated by continual alterations in the rates and exemption levels. 97 Bird found that when the tax was abolished in 1952, it provided only 1% of federal revenue.) Hutchinson found in those states taxing land value highly relative to improvements, in general, housing construction, acres under cultivation and population inflow increased substantially in relation to those states which did not base the property tax largely on land values. Brown recognized that the study was not conclusive as there might not have been sufficient similarity among the states, yet he felt it was a good prima facie case and worthy of further investigation. Mary Edwards recently has carried out a statistical study which supports Hutchinson's conclusions in that she found that the not-taxing of improvements tended to lead to an increase in the value of housing and the value of the total housing stock. 98 Brown served on the Board of Editors for a 1955 publication, Land-Value Taxation Around the World, which remains a unique resource for study in this area of taxation. 99

While living in Pennsylvania, Brown became active in promoting local land-value taxation. In 1951, the Pennsylvania legislature passed a bill allowing "third-class" cities to voluntarily adopt a

graded tax plan wherein the cities could gradually assess land and improvements separately and increase the tax on land value relative to that on improvements.  $^{100}$  In 1913, Pittsburgh and Scranton had adopted a similar plan as had also the city of New York. The new plan did not set fixed limits on the ratio between land and building taxes. Brown and his wife aided in the attempt to convince city authorities to adopt the plan. The results were, however, disappointing, and they attributed this to a lack of understanding of the benefits and the opposition of those with special interests. 101 Recently. the fortunes of land value taxation in the state have improved with new cities adopting the plan and cities such as Pittsburgh increasing the ratio of land to improvements taxation. Steven Cord, an active supporter of this movement and editor of Incentive Taxation, was quoted as saying that the land-tax idea "has moved out of the hands of the aficionados and into the mainstream of local politics" in western Pennsylvania. 102

Brown was also active in organizations supporting the single tax idea and was a contributor to <u>Land and Freedom</u>, the <u>Monthly Freeman</u> and <u>Henry George News</u> among others and from its inception the <u>American Journal of Economics and Sociology</u>. As mentioned earlier, he served on the editorial board of this journal along with, for a number of years, two other economists, Harold Hotelling and John Ise. Hotelling was sympathetic to land value taxation as originally was Ise, though the latter was shown to have altered his view by E. R. Brown. <sup>103</sup>

Intellectual and political currents during Brown's sixty odd years

of advocacy of land value taxation were generally not favorable to his cause. Progressive and populist movements existing in his early years were not drawn toward the single tax idea. Labor movements of a more radical bent were inclined to adopt socialistic programs. Moderate labor unions despite Samuel Gompers' support of George found in general no place for land value taxation in their agenda. The prominent intellectual periodicals such as the <u>New Republic</u>, <u>The Dial</u> and the <u>Atlantic Monthly</u>, despite their vagarities over time, were never taken with this proposed reform. Despite the affinity between Georgist and libertarian thought, two of the latter's prominent expositors were adamant opponents of the single tax (Rothbard and Knight). Nor is there any traceable influence in the traditional political parties.

The work of the Joseph Fels Fund, the Henry George Schools and Clubs and the Robert Schalkenbach Foundation in the promotion of land value taxation has not appeared to have commanded widespread attention. However, the ongoing efforts of the latter organization are indicative of the continuing attraction and relevancy of the ideas expressed by George over one hundred years ago. In academics, the Committee on Taxation, Resources and Economic Development (TRED) and the Lincoln Institute on Land Policy have been active and have published numerous studies.

Among their members, several are sympathetic to increased land value taxation. The Critics of Henry George, edited by Robert V. Andelson, and Steven Cord's Henry George, Dreamer or Realist are recent works which have renewed interest in and respect for the work of Henry George.

In conclusion, one could note that questions as to the most advantageous land and tax policies to be pursued remain with us and their importance has not diminished. Brown's life-long work in demonstrating the relevancy of land value taxation to these questions forms a singular legacy for students whether they share his conclusions or not. Pinkney Walker, a colleague of Brown's at Missouri, commented that Brown chose to most actively support land value taxation because so few economists were supporting any reform in this direction. <sup>104</sup> His academic standing was certainly not advanced by his work in this area and was probably adversely affected. His persistence and determination reflected the strength of his conviction in his chosen cause. From the time of his first publication on the subject forward, it could no longer be said that no economist of standing supported the single tax idea.

## Endnotes

- <sup>1</sup>Arthur Nichols Young, <u>The Single Tax Movement in United States</u> (Princeton: Princeton University Press, 1916), p. 312.
- <sup>2</sup>[William Graham Sumner], <u>Review of Progress and Poverty</u>, <u>Scribner's Monthly</u> 28 (June 1881): 312-313.
- $^3$ Francis Amasa Walker, <u>Land and Its Rent</u> (Boston: Little, Brown, 1883).
- <sup>4</sup>John Bates Clark, "The Ethics of Land Tenure," <u>International</u> <u>Journal of Ethics</u> 1 (October 1890): 62-79.
- <sup>5</sup>Richard T. Ely, Thomas S. Adams, Max O. Lorenz and Allyn Young, Outlines of Economics 5th ed. (New York: Macmillan and Company, 1930), p. 462.
- 6Simon Nelson Patten, "Another View of the Ethics of Land Tenure," International Journal of Ethics 1 (April 1891): 357-360.
- $^{7}$ Frank Fetter, The <u>Principles of Economics</u> (New York: The Century Company, 1904), pp. 374-375.
- <sup>8</sup>Edwin R. A. Seligman, <u>Essays in Taxation</u>, 10th ed. (New York: The Macmillan Company, 1925), pp. 66-96.
- $^9\mathrm{Frank}$  H. Knight, "The Fallacies in the Single Tax," The Freeman 3 (August 1953): 809-811.
- <sup>10</sup>Edwin Cannan, <u>A Review of Economic Theory</u> (London: P. S. King & Son, 1930), pp. 400-403.
- 11F. Y. Edgeworth, Papers Relating to Political Economy, Vol. 2 (London: Macmillan and Company, 1925), pp. 187, 192, 225, 232.
- $^{12}\text{Gustav}$  Cassel, The Theory of Social Economy (New York: Harcourt, Brace and Company, 1932), pp. 260-279.
- 13 Joseph Dorfman, The Economic Mind in American Civilication, Vol. 3 (New York: The Viking Press, 1949), p. 360.
- 14 Edwin R. A. Seligman, "Recent Tax Reforms Abroad," Political Science Quarterly 27 (March 1912): 469.
- $^{15}$ Richard T. Ely, "Landed Property as an Economic Concept and as a Field of Research," <u>American Economic Review</u> 7 (March 1917): 33.

- $^{16}$  Charles Fillebrown, chairman of a roundtable discussion "Agreements in Political Economy," <u>American Economics Association Publications</u> Series 3, 5 (1908): 117-123.
- 17Thomas Nixon Carver, <u>Essays in Social Justice</u> (Cambridge: Harvard University Press, 1915), pp. 281-303.
- $^{18}$  Frank Taussig, Principles of Economics, Vol. 2, 3rd ed. (New York: Macmillan and Company, 1926), pp. 80-82.
- 19 John Commons, "A Progressive Tax on Land Values," Political Science Quarterly 38 (March 1922): 41-68.
- <sup>20</sup>Herbert J. Davenport, "Theoretical Issues in the Single Tax," American Economic Review 7 (March 1917): 1-30.
- <sup>21</sup>Harry Gunnison Brown, <u>The Taxation of Unearned Incomes</u> (Columbia, Mo.: Lucas Brothers, 1925), p. 126.
- They did so in response to an inquiry by the American Association for Scientific Taxation as noted in <u>Significant Paragraphs from Henry George's Progress and Poverty</u>, Harry Gunnison Brown, ed. (New York: Doubleday, Doran & Co., 1928), Appendix, pp. 77-80.
- <sup>23</sup>Renato Cirillo, "Leon Walras and Social Justice," <u>American</u> <u>Journal of Economics and Sociology</u> 43 (January 1984): 53-60.
- <sup>24</sup>Knut Wicksell, "A New Principle of Just Taxation," in <u>Classics</u> in the <u>Theory of Public Finance</u>, Richard Musgrave and Alan Peacock, eds. (London: <u>Macmillan & Co.</u>, 1958), pp. 72-118.
- $^{25}$ I have chosen to use primarily the expression "land value" without hyphenation to express the economic value of land apart from improvements made on or in it. Other terms which I believe to be synonymous are used at times such as bare land value, site value and simply "land" value where the context makes this meaning clear.
- 26 Harry Gunnison Brown, The Theory of Earned and Unearned Incomes (Columbia, Mo.: Missouri Book Company, 1918).
- Harry Gunnison Brown, <u>The Economic Basis of Tax Reform</u> (Columbia, Mo.: Lucas Brothers, 1932).
- <sup>28</sup>Phillips Hamlin Brown, letter to author, 15 December 1981. Personal files of Christopher Ryan, Iowa City, Ia.
- $^{29}\text{This}$  is not to imply that there were no economists other than those mentioned previously who supported the single tax idea. It does imply that I found no economist of the stature of Brown who openly

- supported Brown's view. For example, William N. Loucks of the University of Pennsylvania wrote an article in the  $\underline{\text{Annals of the American}}$  Academy of Political and Social Sciences in 1930 in which he indicated strong support, yet I have not found any other writings by him.
- Annals of the American Academy of Political and Social Sciences 183 (January 1936): 63.
- 31 Harry Gunnison Brown, Economic Science and the Common Welfare 5th ed. (Columbia, Mo.: Lucas Brothers, 1931), pp. 244-245.
- $^{32}$ John R. Commons, <u>Institutional Economics</u> (New York: Macmillan and Company, 1934), pp. 813-814.
  - <sup>33</sup>Brown, <u>Economic</u> <u>Science</u>, p. 244.
- 34J. Shield Nicholson, "Address to the Economic Science and Statistics Section of the British Association," <u>Journal of Political Economy</u> (December 1893): 124.
- $^{35}$ L. L. Price, Review of <u>The Unseen Foundations of Society</u>, by the Duke of Argyll. <u>Economic Journal</u> 3 (1893): 264-271.
  - <sup>36</sup>Carver, Essays in Social Justice, pp. 282-303.
- <sup>37</sup>Herbert J. Davenport, "The Extent and Significance of the Unearned Increment," <u>American Economic Association Publications</u> 11 (1911): 322-331.
  - 38 Brown, The Theory of Earned, p. 208.
- 39Willford I. King, "Earned and Unearned Income," Annals of the American Academy of Political and Social Sciences 95 (May 1921): 251-259.
  - <sup>40</sup>Ibid., p. 259.
  - 41 Commons, <u>Institutional Economics</u>, pp. 840-841.
  - <sup>42</sup>Nichols, <u>The Single Tax Movement</u>, p. 276.
  - $^{
    m 43}$ This budget was rejected by the House of Lords.
  - <sup>44</sup>Wicksell, "A New Principle," p. 113.
- <sup>45</sup>Fred Roger Fairchild, <u>Essentials</u> of <u>Economics</u> (New York: American Book Company, 1923), p. 507.

- 46 Brown, The Economic Basis, pp. 191-195.
- 47 Frank Knight, Review of <u>The Taxation of Unearned Incomes</u>, <u>National Municipal Review</u> 14 (June 1925): 378.
- 48Ward Bishop, Review of <u>The Economic Basis of Tax Reform, American Economic Review</u> 23 (December 1933): 761-763.
- 49 Anonymous, Review of The Theory of Earned and Unearned Incomes, Political Science Quarterly 35 (1920): 693-694.
- $^{50}\text{Harold Hotelling,}$  "The General Welfare in Relation to the Problems of Taxation and Railway and Utility Rates," <u>Econometrica</u> 6 (July 1938): 256.
- <sup>51</sup>Edwin Cannan, "The Proposed Relief of Buildings from Local Rates," <u>Economic Journal</u> 17 (1907): 36-46.
- <sup>52</sup>C. F. Bickerdike, "The Principle of Land Value Taxation," Economic Journal 22 (1912): 1-15.
- $^{53}\text{Charles Trevelyn, "Land Value Taxation and the Use of Land,"}$   $\underline{\text{Economic Journal}}$  17 (1907): 30-35.
- 54 Joseph Wedgewood, "The Principle of Land Value Taxation," <a href="Economic Journal"><u>Economic Journal</u></a> 22 (1912): 388-397.
- $^{55}$ Alvin S. Johnson, "The Case Against the Single Tax," <u>The Atlantic Monthly 113 (January 1914): 33.</u>
- 56Thomas S. Adams, "Tax Exemption Through Tax Capitalization: A Fiscal Fallacy," <u>American Economic Review</u> 5 (June 1916): 279.
  - <sup>57</sup>Davenport, "Theoretical Issues," p. 25.
- $^{58} \text{Susan Previant Lee}$  and Peter Passel, <u>A New Economic View of American History</u> (New York: W. W. Norton & Company, 1979), pp. 307-325.
- $^{59}$  Richard Ely, <u>Outline of Economics</u> (New York: Macmillan and Company, 1933), pp.  $\overline{447-449}$ .
  - <sup>60</sup>Brown, The Taxation of Unearned Incomes, p. 128.
  - $^{61}$ Knight, Review of <u>The Taxation</u>, p. 378.
  - <sup>62</sup>Davenport, "Theoretical Issues," p. 16.
- 63Harry Gunnison Brown, "Land Speculation and Land Value Taxation," <u>Journal of Political Economy</u> 35 (June 1927): 402.

- <sup>64</sup>Seligman, <u>Essays in Taxation</u>, p. 91.
- $^{65}$  Alfred Marshall, <u>Principles of Economics</u> (London: Macmillan and Company, 1938), p. 804.
  - <sup>66</sup>Commons, "A Progressive Tax," pp. 53-59.
- <sup>67</sup>Daniel Holland, editor, <u>The Assessment of Land Value</u> (Madison: University of Wisconsin Press, <u>1969</u>), pp. 9-24.
  - <sup>68</sup>Ibid., p. 54.
  - <sup>69</sup>Ibid., pp. 157-212.
- <sup>70</sup>Dick Netzer to Harry Gunnison Brown, 11 February 1969, Elizabeth Read Brown, Columbia, Mo. Personal files of Christopher Ryan, Iowa City, Ia.
  - 71Commons, "A Progressive Tax," pp. 46-48.
  - <sup>72</sup>Brown, <u>The Economic Basis</u>, p. 213.
- 73 Robert V. Andelson, editor, <u>Critics of Henry George</u> (Rutherford: Fairleigh Dickinson University Press, 1979), p. 385.
- 74Harry Gunnison Brown, <u>Basic Principles of Economics</u> (Columbia, Mo.: Lucas Brothers, 1942), pp. 445-449.
- 75Harry Gunnison Brown, "The Single Tax Complex of Some Contemporary Economists," <u>Journal of Political Economy</u> 32 (April 1924): 164-190.
- $^{76}\mbox{Francis}$  A. Walker, Political Economy (New York: Henry Holt and Company, 1887), p. 419.
- 77 James Harvey Robinson, <u>The Mind in the Making</u> (New York: Harpers, 1921), p. 92.
- $^{78}\mathrm{Harry}$  Gunnison Brown to James Harvey Rogers, 4 October 1930, Rogers Papers, Yale University.
- 79 Jacob Viner, "Textbooks in Government Finance," <u>Journal of Political Economy</u> 32 (October 1924): 604-612.
- 80Willford I. King, "The Single-Tax Complex Analyzed," <u>Journal of Political Economy</u> 32 (October 1924): 604-612.
  - 81 Seligman, Essays in Taxation, p. 97.

- 82Harry Gunnison Brown, "Anticipation of an Increment and the 'Unearned Decrement' in Land Values," American Journal of Economics and Sociology 2 (April 1943), p. 347.
  - <sup>83</sup>Brown, <u>The Economic Basis</u>, p. 215.
  - <sup>84</sup>Ibid., p. 231.
  - 85Knight, "Fallacies," p. 810.
- $^{86}$ Murray Rothbard, <u>Power and Markets</u> (Menlo Park, Calif.: Institute for Humane Studies, 1970), p. 95.
  - <sup>87</sup>Ibid., p. 95.
- 88 Harry Gunnison Brown, "Foundations, Professors 'Economic Education'," American Journal of Economics and Sociology 17 (January 1958): 149-152.
- 89C. Lowell Harris, "Rothbard's Anarcho-Capitalist Critique," in Critics of Henry George, edited by Robert V. Andelson (Rutherford: Fairleigh Dickinson University Press, 1979), pp. 354-370.
- $^{90}$ George R. Geiger, <u>The Theory of the Land Question</u> (New York: The Macmillan Company, 1936).
- 91Frank Knight, Review of The Philosophy of Henry George, Journal of Political Economy 41 (October 1933): 688.
  - $^{92}$ Brown, "Anticipation of an Increment," p. 351.
  - 93Knight, "Fallacies," p. 810.
- 94 Harry Gunnison Brown, "Economic Rent: In What Sense a Surprise?" American Economic Review 31 (December 1941): 833-835.
- <sup>95</sup>Ben Fine, "The Historical Approach to Rent and Price Theory Reconsidered," <u>Australian Economic Papers</u> 22 (June 1983): 141.
- 96 Harry Gunnison Brown, "The Challenge of Australian Tax Policy," American Journal of Economics and Sociology 8 (July 1949): 377-400.
- 97Richard M. Bird, "A National Tax on the Unimproved Value of Land: The Australian Experience 1910-1952," <u>National Tax Journal</u> 13 (December 1960): 386-392.
- 98 Mary Edwards, "Site Value Taxation in Australia: Where Land is Taxes More and Improvements Less, Average Housing Value and Stock are Higher," American Journal of Economics and Sociology 43 (October 1984): 481-495.

- 99 Harry Gunnison Brown, Harold S. Buttenheim, Philip H. Cornick and Glenn Hoover, <u>Land-Value Taxation Around the World</u> (New York: Robert Schalkenbach Foundation, 1955).
- 100Will Lissner, "Pennsylvania's New Optional Graded Tax Law,"

  American Journal of Economics and Sociology 20 (October 1951): 41-43.
- 101Harry Gunnison Brown and Elizabeth Read Brown, "Obstacles to Adoption of Land Value Taxation," <u>American Journal of Economics and Sociology</u> 27 (October 1968): 387-392.
- 102 Gurney Breckenfeld, "Higher Taxes That Promote Development," Fortune (18 August 1983): 69.
- 103Elizabeth Read Brown, "How College Textbooks Treat Land Value Taxation," American Journal of Economics and Sociology 20 (January 1961): 162-163.
- $^{104}$  Pinkney Walker, "In Memorium," as quoted by Paul E. Junk in the preface to <u>Selected Articles by Harry Gunnison Brown</u> (New York: Robert Schalkenbach Foundation, 1980), p. xi.

## CHAPTER SEVEN. REGULATION AND RATE-MAKING

An early area of specialization in economics dealt with theoretical and practical questions on the regulation of transportation and public utility concerns. The Munn vs. Illinois decision of the Supreme Court and the Interstate Commerce Act of 1887 moved the railroad industry toward a regulated status, and the 1906 Amendment to the Act gave the Interstate Commerce Commission the authority to set maximum rates. Along with the legislative and judicial bodies and the state and federal commissions, economists took an active interest in the attempt to regulate railroads in the public interest. That the "public interest" could be furthered by regulation was an assumption shared by all of these parties as well as, perhaps, the managers of the railroads. 1

Harry Gunnison Brown's first published article<sup>2</sup> and his doctoral dissertation<sup>3</sup> were concerned with questions related to railroads and rate-making. His interest may have been sparked by the economic implications of recent judicial decisions and legislative acts. Also, Arthur T. Hadley, then president of Yale University and a friend of Irving Fisher, was an authority on railroad economics and maintained an interest in this field.<sup>4</sup>

Brown's 1916 <u>Transportation Rates and their Regulation</u>, published by Macmillan, was an endeavor to present a complete theory on the subject. In the preface, Brown cites John Bauer for a thorough reading and criticism of the text. Brown's 1925 article, "Railroad Valuation

and Rate Regulation," featured a defense of reproduction cost as a basis of valuation for rate-making. This article sparked a long-running debate with John Bauer and James C. Bonbright, among others. Alfred E. Kahn in 1970 referred to this article as containing the classic statement of arguments directed against the original cost valuation method in rate-making. Brown's subsequent articles and exchanges centered on this and related questions.

In a 1907 paper, Brown attempted to reconcile two views on how railroad rates should be based. 8 One view was that railroad traffic should be charged "what the traffic will bear," which would admit discriminatory charges. The other view was that charges should correspond strictly to costs. He assumed that the railroads, whether competing or noncompeting, were subject to "increasing returns" due primarily to the relatively high overhead costs with largely constant operating costs. He noted that in these conditions, additional freight should be desired as long as it pays at least the "special additional cost" incurred. The question of whether the extra freight should in addition pay its portion of fixed expenses Brown regarded as an open one. He appeared to take "marginal cost" pricing as a first principle and regard the distribution of the fixed costs as dependent on the competitive conditions. He then considered the relative rates charged by competing railroads and noncompeting railroads in terms of discrimination among places, commodities and corporations. He found as a generalization that competing railroads would, relative to noncompeting ones, tend to discriminate in favor of some cities, larger corporations

and certain commodities. The competing railroads would alter prices to attract business largely from competitors while the monopoly railroad would reduce rates only to attract new customers. Competition would force a reliance on cost of service as opposed to value of service and tend to distribute the fixed costs in proportion to direct costs incurred. He concluded that discriminatory reductions in rates were socially desirable as long as they result in increased traffic and not simply the diversion of traffic.

In this article and another published in the same year on the similarities of monopolistic and competitive pricemaking, <sup>10</sup> Brown clearly was not thinking of the competing railroads as being competitive in meeting the usual conditions for "perfect competition." Not only was his assumption of declining average costs over the relevant range incompatible with competition over time, but in the case of railroads only a limited number of competitors is conceivable. He seemed to ignore the possibility of ruinous competition resulting in a monopoly for the advantaged firm. He did indicate that should both rivals follow a price-cutting strategy, both would lose, but then he retreated from the question. 11 It is possible that he, like Hadley, as pointed out by Cross and Ekelund, <sup>12</sup> did not believe railroads to be natural monopolies and thus the declining costs would not prevail in the long Nevertheless, his approach seemed to be that of comparing a monopolistic situation with that of imperfect competition, especially emphasizing in the latter the ability to profitably expand business only at the expense of rival railroads. Thus, the imperfectly competing

firms face a more elastic demand for their services than would a monopoly railroad. Brown termed this as the "relative responsiveness" as opposed to the "absolute responsiveness" of demand. 13

The similarity which Brown wrote of in competitive and monopolistic pricemaking was, in essence, that of the shared condition wherein marginal revenue equals marginal cost. He did not, of course, express it in this manner. He assumed that in both types of market structure, firms would search for a greater profit by altering their prices. Following Cournot in a (for him) rare exercise in mathematics, he demonstrated how a firm would consider a price reduction. He identified the variables in the following fashion:  $P \approx \text{original}$ price,  $\Delta P$  = change in price,  $(P-\Delta P)$  = new price, S = original sales,  $\Delta S$  = contemplated increase in sales, (S+ $\Delta S$ ) = total new sales, E = . original total expenses,  $\Delta E$  = change in expenses,  $(E+\Delta E)$  = total new expenses. He expressed the condition under which the price reduction would be made as (1)  $(P-\Delta P)(S+\Delta S) - (E+\Delta E) \ge P \cdot S - E$ . Rearranging the expression becomes  $(P \cdot \Delta S - \Delta P \cdot S - \Delta P \cdot \Delta S) \ge \Delta E$  which in discrete form illustrates that price reductions should be carried out to the point where the increment to revenue equals the increment to cost. He elaborated his condition (1) by adding a return to new capital employed, (-i·C), and a return to risk-taking, (-R), to the necessary increase in revenue. Finally, he added a term to allow the firm to accept current losses, expecting as a result to gain higher profits in future years from the larger market share acquired in so doing. The discounted value of these additional estimated profits he added to

the left-hand side of the inequality as

$$\frac{G_2}{1-i} + \frac{G_3}{(1-i)^2} + \dots$$

As noted, he felt that the condition as stated was applicable to both monopolistic and competitive firms. 14

While still at Yale, Brown reviewed several books for the American Economic Review in the area of railroad economics, most notably a translation of C. Colson's <u>Railway Rates and Traffic.</u> 15 He also published a long article titled "The Competition of Transporation Companies" 16 which he incorporated into his 1916 text, Transportation Rates and Their Regulation. Despite his intention of writing a complete treatment of this subject, reviews of the book pointed out areas which were omitted or treated in insufficient detail. The reviews were, however, for the most part laudatory. J. M. Clark and Maxwell Ferguson recommended the book as a supplement to William Z. Ripley's longer text, Railroads, Rates and Regulation. J. M. Clark noted several new contributions to the field of study and had special praise for Brown's extensive treatment of freight discrimination. <sup>17</sup> Ferguson and an anonymous reviewer for the Political Science Quarterly found controversial Brown's free trade philosophy which, they claimed, permeated the work. Ferguson also noted Brown's adherence to the "cost-ofservice" principle and concluded:

In the opinion of the reviewer . . . the broad-minded analysis of rate discrimination, in the refreshing clearness with which the salient principles of rate making and rate regulation are set forth, and in the more even distribution of emphasis as between the "inner philosophy of rate regulation"

and the "mere record of past legislation and description of existing law," the author has produced a work which has much to commend it.  $^{\rm 18}$ 

In the following year, Brown included a condensed version of this book in his Principles of Commerce. 19

Brown's general approach to the subject of rate-making was to attempt to weigh the effects on the general economic welfare. Unjustifiably discriminatory rates were, in his view, analogous to protective tariffs in that they discouraged commerce and created economic incentives and disincentives which tended to reduce society's welfare.

In a 1933 review article, D. Philip Lockin distinguished three approaches in the literature of railroad-rate theory from the 1840s on.<sup>20</sup> The earliest view of Dupuit and others was that overhead costs best explained the differential pricing by railroads. In 1891, Frank Taussig challenged this view by arguing that railroad rates were primarily a case of joint cost and should be analyzed as such. <sup>21</sup> E. R. A. Seligman criticized Taussig's conclusion on the grounds that the existence of monopolistic conditions was the essential explanation for discriminatory pricing. <sup>22</sup> A. C. Pigou's Wealth and Welfare of 1912 rekindled the unresolved controversy, and he and Taussig carried on a debate in several issues of the Quarterly <u>Journal of Economics</u> on this subject.  $^{23}$  One of the points of contention was whether the costs of providing railway service to different customers should be considered to be joint or simply common costs. Taussig preferred to extend joint cost analysis to much of railroad rates while Pigou saw common costs as prevailing in general. Pigou also opined that the

element of monopoly needed to be present to explain discriminatory rates.

Brown commented early in <u>Transportation Rates and their Regulation</u> on this exchange in a footnote. <sup>24</sup> His view was that railroad rates were not perfectly analogous to the normal case of joint costs such as that of the production of beef and hides. A much closer analogy obtained when the case of back hauls was considered, and Brown saw this as a truer case of joint costs. He noted that as a railroad plant neared full utilization of its capacity, the complementary provision of services would become competitive. In his explanations of discrimination in rate-making, he utilized the overhead cost approach and found monopoly to be essential in explaining such discrimination, especially in the long run. Also in his general discussion of transportation costs, he utilized the term "sunk costs" which he was likely to have borrowed from Fisher's <u>Elementary Principles of Economics</u>. 25 J. M. Clark objected that Brown uncritically included the entire transportation investment in sunk costs and ignored the dynamic aspects of such investment. 26 However, as suggested above, he agreed that unregulated railroads would charge "what the traffic will bear" in the sense where the competing railroad would charge what the traffic will bear "without being diverted," and what the traffic will bear "without being destroyed" in the case of a monopoly. He did not in this text express a firm opinion on the best test of the reasonableness of rates and on what these rates should be based.

Brown was concerned in this text with the nature of competition in

railroad and water transportation as well as its limitation due to monopolistic tendencies throughout the industry. Some earlier writers on the subject had noted that competition in the railroad industry tended to be selective and opted to consider particular types of competition.  $^{27}$  Brown expanded on the usual classification by distinguishing: (1) competition of different shippers over the same route; (2) competition of routes; (3) competition of directions; (4) competition of location; and (5) competition directed against potential local self-sufficiency. (Earlier treatments had combined competition of directions and locations into the competition of and for markets.) Brown's first category applied only to water and motor vehicle transportation. In terms of the competition of routes, he diagramed cases where more roundabout routes may be economically defensible. He proposed that the long and short haul rule be arranged so that some level of economic waste be accepted in order to gain the stimulus of active competition. This might entail allowing slightly higher rates on intermediate traffic on the roundabout line to allow this line to remain in competition with the more advantageously situated line. The conditions where competition of directions could take place were shown by Brown to be more complex. He argued that where two or more lines led from a producing center in different directions to other markets, their rates could be competitive if, for example, there were other transportation lines capable of serving these markets from other areas. The additional lines could influence prices so as to make the original lines competitive in their rate-making. Competition of

locations existed where transportation lines compete in the sense that they attempt through offering low rates on traffic, to encourage the development of industries which utilize their services rather than the services of rivals in other locations. Closely related to this idea was Brown's "competition against potential, local self-sufficiency." The transportation line in this case would set rates so as to elicit traffic which would not otherwise be economical and in doing so mitigate against local self-sufficiency.

Brown saw railroads as being, with few exceptions, partial monopolies in the sense that the various types of competition mentioned above would not alter a railroad's dominance over intermediary traffic over its lines. In addition, the tendency toward collusive behavior among railroads contributed to their ability to set rates as they desired. He argued, however, that competition among railroads was not inevitably of the ruinous type unless the railroads were operating substantially below their capacities. He believed that the era of speculative railroad building was past and he thus maintained that legally enforceable rate agreements and legally recognized pooling would alleviate the discrimination in rates resulting from "cut-throat" competition. He argued that the Interstate Commerce Commission should sanction such open agreements in addition to setting maximum rates. Brown's views were somewhat unusual at that time, but they did reflect in part the earlier views of Arthur T. Hadley. 28

All of the forms of competition which Brown had considered could result in discrimination in pricing among places. He proceeded to

delineate the cases where the resulting discrimination was economically undesirable and where it was economically defensible. From the viewpoint of the general community welfare, he found economic waste when railroads discriminated in favor of competitive and against intermediate traffic. He reasoned that where rates were discriminatory, the average utilization of railroad plant capacity was not furthered. The discrimination over time would arbitrarily deprive certain areas of the benefits of their natural advantages with regard to economic development, while encouraging development of areas which possessed less economic potential. In a similar vein, he argued that, should the equally promising intermediate locations be disadvantaged by discriminatory rates, then transportation patterns would be distorted in an uneconomic fashion. He maintained that discrimination of this type resembled a protective tariff in its economic consequences. He also objected to discrimination for or against imported goods in the setting of railroad rates. In addition, the practice of state commissions of setting unduly low rates on intrastate traffic to encourage local production he found to be objectionable.

Brown next examined cases in which rate discrimination among places could be deemed economically defensible. He found discrimination to a limited degree against intermediate points on roundabout routes to be acceptable. The limitations would be that no rate be set below the additional cost involved for competitive or through traffic, and no greater for noncompetitive traffic than that which would insure a reasonable return on the capital required to carry the

traffic. He recognized that, in practice, such rate settings would be a complex matter and could only be approximated so as to leave the two lines in the same competitive conditions as had prevailed before requlation. Were the traffic on the direct line relatively light, then the company may be allowed to discriminate against intermediate traffic to maintain its competitive position. He also found justifiable low rates which favored points in competition with water routes as opposed to points connected only by rail lines. Discrimination in favor of traffic which is competitive with potential local self-sufficiency was also found to be desirable as long as goods could be delivered at less than the local cost of production and pay at least their marginal cost of transport. Brown argued that, under certain circumstances, discrimination in favor of goods transported for export could be advantageous. This was where net earnings to transportation industries rose as a result, and the gain to domestic producers offset the loss to consumers. Finally, the case of discrimination between opposite directions in the rates charged different goods was considered. This referred largely to the question of the pricing of back hauls, and he found discrimination here to be acceptable as it would lead to a greater utilization of transportation facilities. Brown's analysis of discrimination predated the emergence of air and truck transport as viable alternatives to rail and water transport. Although this would complicate questions of discrimination, his general principles would still have application. (Alfred E. Kahn noted that he drew heavily on Brown's examples and discussion in a section of The Economics of

<u>Regulation</u> on rate-making in the presence of competition.<sup>29</sup> Kahn also had praise for "his painstaking elaboration of the consistent economic principles for the guidance of regulatory policy."<sup>30</sup>)

Brown then summarized the development of rate regulation and examined the rulings of the Interstate Commerce Commission on what constituted "reasonable" rates. He emphasized the difficulties involved in determining rates due to the variety of railroad services and the extent to which joint costs prevail. The I. C. C. rulings took into account in their decisions comparisons of rates, cost of service, earnings and the efficiency of management. Brown concluded that the Commission tended to follow where possible the cost-of-service principle. He also noted that reasonable rates should be a reasonable return on the fair value of railroad property. As to whether a fair value was better represented by the original investment or the present physical value, he opined that the Commission was somewhat equivocal in its rulings but tended to favor the latter. Brown next examined representative cases where the Commission ruled on instances of discrimination among places, goods and shippers. He found occasion to criticize some rulings as being inconsistent with the principles he had elaborated earlier.

In his final chapter, Brown roundly criticized governmental interference and subsidization of transportation. He argued that navigational laws designed to develop a national merchant marine and exclude foreign vessels from coastal trade were economically unsound. With the possible exception of certain defense considerations, he objected to

subsidization of shipping in the form of harbor or river improvements at public expense. Even where it was deemed necessary for the government to spend to improve waterways, he argued that the localities clearly benefited should pay and, if possible, through user charges. He also objected to the "pork barrel" or "log-rolling" influences in governmental decisions which tended to prevail in the above actions as well as in the setting of protective tariffs. The subsidies for railroad building and in particular the land grants to railroads were similarly questioned. He argued that these policies were of dubious benefit in terms of economic development and represented to some degree an unsanctioned redistribution of wealth. He indicated that there was no way to determine whether these policies had led to an enlargement or shrinkage of national wealth as no means of comparison existed, but he maintained that, in terms of general principles, the policies did not appear to have been advisedly adopted. It may be noted here that Brown rarely discussed anti-trust policies. When he did, he appeared to accept the existing legislation and encourage its rigorous enforcement. In the thirties, he adamantly opposed the relaxation of the laws.

The Supreme Court decision of 1898 in <u>Smyth vs. Ames</u> provided a criterion by which to judge the reasonableness of rates set by the state commissions.  $^{31}$  The criterion proved not only to be very vague but also to be the subject of controversy until the <u>Hope Case</u> of 1944 reversed it.  $^{32}$  The Court had mentioned in its criteria that consideration be made for the "original cost of construction" and for the

"present as compared with the original cost of construction" along with several other factors. A rising general price level (especially during World War I and post-war era) sharpened the controversy as to whether "original costs" or "reproduction costs" should be the prime consideration in rate determination. The railroads then favored the use of reproduction costs while the regulatory commissions tended to favor the use of original costs. Justice Louis D. Brandeis in his dissent in the Southwestern Bell Telephone Case of 1923 attacked the Smyth vs. Ames decision as "legally and economically unsound." 33 He favored a prudent investment basis of earnings control and found the reproduction cost method of valuation to be the cause of great and continuing difficulties in rate determination. His view echoed that of several economists specializing in railroad and public utility economics. One of their number, I. Leo Sharfman, was criticized by Brown in 1922. Sharfman in his The American Railroad Problem: A Study in War and Reconstruction had advocated that an original cost basis be employed with the qualification that the original investment had been made prudently. Brown declared the issue "to be clearly joined" in a review of the book. 34 The reproduction cost approach which he favored was qualified as "the cost of bringing into existence a plant capable of performing the required service."35 Also he indicated that he favored policies which would, to the extent possible, make the returns to a quasi-monopoly conform to those which arise under competitive conditions. Most of his criticism of Sharfman's views was made more extensively in a later article.

This later article, titled "Railroad Valuation and Rate Regulation,"36 appeared after Frederic G. Dorety (then Vice-President and General Counsel of the Great Northern Railway) had contested Judge Brandeis's views in a <u>Harvard Law Review</u> article. 37 Dorety's article contained both legal and economic arguments for the continued consideration of reproduction costs. Brown gave no indication of having read this article and subsequent critics tended to group it with Brown's article and respond primarily to Brown. In his article, Brown noted that, just as the courts were beginning to emphasize the cost of duplicating a service, a number of economists had begun to insist that only the original cost or original investment be considered. He first criticized on grounds of fairness the original-cost doctrine, interpreted without qualification to be the original money cost. He argued that should the price level fall significantly, and if valuation is based on original costs, the returns to investors were in effect guaranteed relative to other investors at the expense of the consumers of the service. In the event of rising prices, he maintained that, with the reproduction cost standard, neither the public nor the investors taken as a whole would lose or gain in real terms. He did note that bondholders would lose to the benefit of the stockholders. Brown was unhappy with the high percentage of bond investment in railroads and utilities and suggested that measures to redress the balance would be beneficial. (He appeared to assume that railroad and/or utility costs would move coincidentally with the general price level and that lags in the adjustment of rates did not occur.)

Brown's greater concern was with the economic consequences on allocations which would result from original cost methods. Once again, with changes in the price level, traffic would tend to be unduly discouraged or encouraged. He maintained that when prices fell, rates based on original cost would remain relatively high and create a distortion in that they would not conform to the "rule" of charging only enough to cover the extra or additional cost incurred and thereby discourage traffic. On the other hand, with a significant inflation, the original costs method would result in rates lower than would yield a reasonable rate of return on the present cost of construction while unduly encouraging railroad traffic. 38 This could lead to traffic exceeding the capacity of the plant and force a rationing of service with further undesirable results. Also construction of new facilities at higher costs and the charging of higher rates would force an arbitrary discrimination among shippers or other consumers and ultimately result in the misallocation of industry and population.  $^{39}$ He applied the same reasoning to the case where price changes affected only the costs of construction and maintained that, in general, economic loss would result, were actual, past cost the basis of ratemaking.

Brown turned next to an element in the valuation of railroad property—that of the value of land. Despite his own views on land value taxation, he indicated that the original cost method of valuation was an inappropriate way of denying the increments in land value to the owners of railroads and public utilities. He argued that such

a denial would tend to discourage the building of railroads as the potential buyers of land for other than railway use could receive increments to the value of other land. Brown's remedy, of course, was to tax all land values equally. He explained that where compensation of some form was to be provided for the loss of the unearned increment in land values, further economic distortion would be the result.

On more practical grounds, Brown conceded that for "short periods" regulatory commissions should properly rely on actual book costs.

However, if actual costs have widely diverged from the current costs of production, the latter must be given priority.

An important remaining question was how to treat depreciation and obsolescence in rate-making. Brown's view was that, all other things being the same, these factors should not be allowed to influence rates over the life of a plant. Thus, rates should be set so as to meet the repair and replacement costs plus a fair return for the life of the plant. A properly graduated depreciation fund would allow the rates to be invariant with respect to these costs. He noted as well that in the early period of low utilization of a plant, it may be appropriate, as patronage grows, to add these early losses to the cost of construction or duplication. <sup>40</sup>

Finally, he considered the special case of "weak" versus "strong" railroads wherein both roads connect the same terminals. He reasoned that if the "weak" road could not support itself by charging enough on intermediate traffic to maintain rates competitive with the "strong" road, then abandonment of the line should be considered. Rates set

in a manner to allow the "weak" road to survive would create a misallocation of resources. Even the consolidation of the two lines would not necessarily resolve the difficulty, as pricing schemes would either uneconomically favor the terminal or intermediary points or discriminate unfairly among shippers. If the "strong" railroad's advantage was due entirely to its control over the best location, and if it was not capable of carrying all traffic, then he conceded that the costs and valuation of the "weak" road should determine the rates, leaving the "strong" road with a return in excess of what it could otherwise earn. He felt that only taxation and not regulation was the proper means for the community to secure this economic rent. 41

James Bonbright wrote a review article on contemporary books dealing with valuation in a 1926 issue of the <u>Quarterly Journal of Economics</u>. 42 He mentioned Brown's article in two different contexts. He suggested that the current literature in favor of a simple actual cost base of rate control had ignored the problem of economic rent. 43 He noted that the low, actual cost rates on utilities or transportation services amidst greater land values and construction costs would not necessarily be of benefit to the community at large. Landowners may be able to increase the rent on properties served by the utilities or railroads and in doing so benefit disproportionately from the low rates. Although Brown did not use this approach, it accords with his view that regulation would only redistribute land value increments among certain groups and not benefit the public as a whole. Bonbright further noted that all of the books reviewed, including one by John

Bauer  $^{44}$  (the only one for which he had praise), failed to effectively answer the criticisms Brown made of the original cost basis of ratemaking.  $^{45}$ 

John Bauer responded to Bonbright's challenge within the year. 46
Bauer was at the time and continued for many years to be a distinguished specialist in this area, as also was Bonbright. 47 He had, unlike Brown, practical experience in working with regulatory commissions. Although he believed that the use of reproduction cost in regulation decisions would "destroy" regulation, he did not immediately assault Brown's economic rationale. He said:

I shall frankly state that except for the requirements of effective rate regulation and financial stability, I should agree with Brown that the reproduction cost basis would be more in harmony with general economic forces.  $^{48}$ 

He, therefore, focused on practical considerations and tried to demonstrate that Brown's objections, although in the main economically sound, were of little consequence in actuality.

Taking practical consideration into account, Bauer argued that reproduction cost was far too indefinite a base and the concept had led to endless controversy in the past. Not only was such a base difficult to measure as well as reach an agreement on how to measure, but it was continually changing as well. He pointed out that approximately seventy-five per cent of railroad expenses were in the form of operating costs and taxes which were calculated on an actual cost basis. The remainder, the return on investment, should have a definite basis to be calculated upon, and actual or original cost was the most expedient

choice. In addition, to obtain a desirable level of financial stability for railroads and public utilities, the original cost basis would be best suited. He noted in this regard that bond issuance was the major form of financing these institutions and that inflation would tend to incite speculation in railroad and utility stocks while a deflation would exert exceptional pressure on the vulnerable financial structures.

In his reply to Bauer, Brown noted that in emphasizing reproduction costs, the courts did so in part because of the perceived unreliability of actual cost figures and the accounting associated with them. Despite the inherent inexactness of reproduction cost estimates, he insisted that their economic importance was such that they could not be ignored when they markedly differed from actual cost figures. He further countered that the financial structure of railroads and utilities was not unique nor deserving of special guarantees. Should companies be forced into receivership, he believed that reorganization could be accomplished without undue harm to the interests of the public. 49

Turning to Brown's economic arguments, Bauer maintained that Brown had exaggerated the potential divergence between calculations of reproduction cost and original cost in several respects. Bauer questioned whether an actual cost basis would discourage investment in a period of rising prices. He argued that:

<sup>. . .</sup> the actual cost basis would provide all the capital economically needed to take care of a developing business but would not exercise any artificial influences in stimulating or retarding the flow of capital.  $^{50}$ 

His interpretation of the "artificial influences" was that the reproduction cost basis in an inflation would stimulate investment, assuming adjustment in rates was promptly made. In reply, Brown argued that such investment would be economically irrational and that the substitution effects resultant of the return to regulated industries falling relative to that of other industries was his real concern.

Bauer questioned the importance accorded to the expectations of buyers of railroad or utility stock with respect to not only a rising price level but also to increments in the value of land. In reply, Brown noted that they may indeed, in some cases, be of little importance but they remain as reasons for the present cost of the necessary plant to provide the service diverging from the original cost of the plant. Bauer also asked why should not the public deny to railroads and utilities the "unearned" increments to their land values given the conceded element of public interest in these businesses.

Bauer stressed that even the twenty-five per cent of the expenses of railroads corresponding to the return on investment would be the subject of gradual adjustment over time, and thus the small percentage of costs which are not reflected would be counter-balanced by the gains resulting from the ease of application and stability permitted by the original cost formula. He also questioned whether the construction of new facilities was, in the case of railroads and utilities, a reasonable possibility such as to create a conflict in rate structures between old and new plants. He emphasized in the case of utilities their local nature in that they have become, due to differing histories, each

a special case and the problem of comparing old to new properties is then nonexistent. Brown replied that construction of new trackage to accommodate increasing demand was not altogether an unlikelihood, and so his point stood. However, he recognized that increased competition of other types such as trucks and airplanes may reduce the need for new construction in the future. He also defended his use in his examples of large price changes. Bauer found such use too unrealistic and, even accepting them, the effects of the price changes would be reduced due to the structure of railroad costs. Brown maintained that the extreme conditions which would result in large price movements were recurrent in history and at the present in evidence in Europe and to a lesser extent in the United States. For there to be dramatic changes in the costs to the industry, he pointed to technological breakthroughs or inventions as sources for such changes. He concluded his reply to Bauer by insisting that valuation based on reproduction costs should continue to play a role in regulation despite the difficulties it presents in application. Where the book valuation is thought to have diverged significantly from present costs, then the book costs should be modified with index numbers of general and specific price changes and compared with the engineering estimates. The courts and the commissions could then utilize all this information to make their decisions. For Brown, the added difficulty should prove to result in a worthwhile economic dividend.<sup>51</sup>

In 1927, John Bauer was the chairman of an A. E. A. Round Table Conference on the problem of effective public utility regulation.  $^{52}$ 

Of the participants in the discussion, only Brown spoke in defense of the use of reproduction cost. As reported by Bauer, Brown reiterated his position that original cost pricing did not accord with the principle of seeking to make rates of public utiliites correspond to rates which would prevail under competitive conditions. He also disagreed with proposals which would tend to assure the financial stability of public utilities. All of the participants challenged Brown's points of view. Robert Hale accused Brown of tacitly assuming a greater mobility of capital than was practicable in the cases of utilities and railroads. 53 He was joined by Professor Ruggles in insisting that the public interest in utilities was sufficient to justify spreading the risk-taking in utility investments beyond the investors, to the community or to the general public. 54 Clarence E. McNeill brought up the question of the elasticity of the demand for utility services. According to his studies, the demand was "peculiarly" inelastic, thus the effects suggested by Brown would be of negligible importance. Finally James Bonbright, noting that Brown's actual proposal was to ascertain the present cost of the most economical plant that might be constructed, concluded that the financing of utilities would become "utterly unmanageable."  $^{55}$  It was agreed that in the next meeting the subject be discussed once more.

At this meeting a year later, Bonbright and Arthur Hadley presented the major papers and the comments by I. F. Sharfman and Brown were recorded as well.  $^{56}$  Hadley's paper dealt with the economic meaning of valuation, while Bonbright's compared the merits of reproduction

cost versus prudent investment approached on four different grounds. Bonbright stated that with respect to the criterion of efficiency, reproduction cost interpreted as the cost of providing the service with a new plant, did have advantages over original cost. However, he viewed the application of such a standard to be impossible. He also noted the adverse cyclical effects of original cost pricing as opposed to reproduction cost pricing, but he felt that this was of dubious importance. In his discussion of the concept of using reproduction cost as a means of attaining rates at competitive levels, he directly attacked Brown's and Dorety's argument that this was necessarily the correct approach to the problem of rate setting. He pointed out what he saw as the "fatal flaw" in Brown's reasoning, accepting for the sake of argument that the cost of reproducing the service was a practical rate base. He pointed out that reproduction cost pricing of services would not conform to the ideal of marginal cost pricing any more than would prudent investment pricing. He further stated:

Even Professor Brown, who is the leader in this type of defense, recognizes in a measure the dilemma in which he is placed. For while conceding that a price based simply on variable costs would come closest to meeting his ideal as a regulator of socially desirable traffic, he recognizes that the application of such a principle would be quite impossible on grounds of financial expediency. 57

Bonbright's solution was to allow railroads and utilities to charge rates which would, in many cases, be in excess of a fair profit on investment and invoke the recapture clause of the Transportation Act of 1920 to normalize profit taking.

In response, Brown admitted that reproduction cost prices would be

likely to vary from the ideal of long run marginal cost pricing. However, he maintained that on practical grounds, the better regulatory policy was to allow returns only as high as is necessary to earn a reasonable return on the current cost of plant construction. Where the plant capacity was only partially utilized, he argued that low (marginal cost) rates would ultimately retard economic development as a fuller utilization of capacity was achieved. He asked:

. . . how test, in the long run, the desirability of such (new) construction other than by charging rates high enough to yield a return thereon, and so judging whether there would be enough business at those rates to justify the construction?<sup>58</sup>

He also added to his earlier arguments against strict reliance on original cost by pointing out that when the obsolescence of a plant was accelerated, to insist that the public continue to pay on the basis of original cost was to impose on the public the rule of "dead hand."

American Bar Association<sup>59</sup> and in an article in the <u>Public Utilities</u>

Fortnightly.<sup>60</sup> On these occasions for the most part, he reiterated his early arguments. He did, however, emphasize that he thought that no formula could be devised to directly determine regulatory rates. He also noted that rates are changed only at intervals in the regulatory process and that the efficiency of management became a large factor in the firm's profitability. After 1930, he made no further comments on the issues other than in the various editions of his textbooks.

The question (as Brown left it at that juncture) was probably

carried by the proponents of the use of original cost as the rate base (or some variation of it). However, as Bonbright pointed out in a 1940 paper, it was largely on the grounds of administrative feasibility and better financial adaptation that writers in the area favored this approach.  $^{61}$  A final verdict on the purely economic merits of the two approaches remained, at least in part, unresolved. M. G. de Chazeau strongly challenged the application of either method to the determination of service charges as distinct from the determination of appropriate earnings. 62 Hotelling's advocacy of pure marginal cost pricing questioned the relevancy of the use of average cost pricing implicit in both the original and present cost approaches. 63 Brown's arguments as to the distortionary effects of original cost based pricing encounter the problem of the "second best." His premise that the attempt to set prices of public utility services at competitive levels would further economic efficiency is also brought into question as is the case for marginal cost pricing.

Brown's advocacy of the use of reproduction cost considerations in pricing decisions was not as successful as his attack on original cost usage. He was, however, able to raise significant economic questions in this area and emphasize the relevancy of current and future costs for long run pricing policies. In the difficult search for "general principles" to guide efficient regulatory practice, his was a positive contribution. This view of Brown's contributions is supported in the comments made in 1961 by James C. Bonbright.

Thirty years or more ago, the case for the replacement-cost principle . . . was developed with great skill, and with particular reference to railroad rates, by Professor Harry Gunnison Brown of the University of Missouri. Similar views have been expressed by later writers, but they have lacked both the incisiveness and the firmness of conviction that make Brown's earlier analysis a classic in the history of rate regulation.<sup>64</sup>

## Endnotes

- <sup>1</sup>See Gabriel Kolko, <u>Railroads</u> and <u>Regulation</u> 1877-1916 (Princeton: Princeton University Press, 1965).
- <sup>2</sup>Harry Gunnison Brown, "The Basis of Rate-Making as Affected by Competition Versus Combination of Railroads," <u>Yale Review</u> 16 (May 1907): 79-86.
- <sup>3</sup>Harry Gunnison Brown, "Some Phases of Railroad Combination," Unpublished dissertation, Yale University, 1909.
- <sup>4</sup>Melvin Cross and Robert B. Ekelund, "A. T. Hadley on Monopoly Theory and Railway Regulation: An American Contribution to Economic Analysis and Policy," <u>History of Political Economy</u> 12 (Summer 1980): 214-232.
- $^5\text{Harry Gunnison Brown, } \underline{\text{Transportation}}$  Rates and  $\underline{\text{Their}}$  Regulation (New York: The Macmillan Company, 1916).
- <sup>6</sup>Harry Gunnison Brown, "Railroad Valuation and Rate Regulation," Journal of Political Economy 33 (October 1925): 505-530.
- <sup>7</sup>Alfred E. Kahn, <u>The Economics of Regulation</u>: <u>Principles and Institutions</u> Vol. 1 (New York: John Wiley & Sons, 1970), p. 111.
  - <sup>8</sup>Brown, "The Basis of Rate-Making," pp. 79-86.
- The term, then common, refers to economies of scale or decreasing average total costs.  $^{9}$
- <sup>10</sup>Harry Gunnison Brown, "Competitive and Monopolistic Price Making," Quarterly Journal of Economics 22 (August 1908): 626-639.
  - <sup>11</sup>Brown, "The Basis of Rate-Making," p. 81.
  - <sup>12</sup>Cross and Ekelund, "A. T. Hadley," pp. 227-229.
- $^{13}$ The formal analysis of imperfect competition was not initiated until the thirties by Robinson, Chamberlin et al.
  - <sup>14</sup>Brown, "Competitive and Monopolistic," pp. 635-639.
- <sup>15</sup>Harry Gunnison Brown, Review of <u>Railroads</u>, <u>Rates and Traffic</u> by C. Colson, <u>American Economic Review</u> 5 (September 1915): 601-603.
- <sup>16</sup>Harry Gunnison Brown, "The Competition of Transportation Companies," <u>American Economic Review</u> 4 (December 1914): 771-792.

- 17 John Maurice Clark, Review of <u>Transportation Rates and Their</u>
  Regulation, <u>Journal of Political Economy</u> 25 (February 1917): 208-209.
- 18 Maxwell Ferguson, Review of Transportation Rates and Their Regulation, American Economic Review 6 (September 1916): 633.
- $^{19}\mathrm{Harry}$  Gunnison Brown, Principles of Commerce (New York: The Macmillan Company, 1916), Part 3.
- 20D. Philip Locklin, "The Literature on Railway Rate Theory,"
  Quarterly Journal of Economics 47 (February 1933); 167-230.
- $^{21} Frank$  Taussig, "A Contribution to the Theory of Railway Rates,"  $\underline{\text{Quarterly Journal}}$  of  $\underline{\text{Economics}}$  5 (July 1891): 438-465.
- <sup>22</sup>E. R. A. Seligman, discussant in the <u>American Economic Association Publication</u> 6 (1891): 56, 58.
- $^{23}\text{A}.$  C. Pigou and Frank Taussig, "Railway Rates and Joint Costs,"  $\underline{\text{Ouarterly Journal of Economics}}$  27 (February, May and August, 1913):  $378-384,\ 535-538$  and 687-694.
  - <sup>24</sup>Brown, <u>Transportation</u> <u>Rates</u>, p. 9.
- <sup>25</sup>Irving Fisher, <u>Elementary Principles</u> of <u>Economics</u> (New York: The Macmillan Company, 1911), p. 297.
  - <sup>26</sup>Clark, review of <u>Transportation</u>, p. 209.
- <sup>27</sup>See William Z. Ripley, <u>Railroads</u>, <u>Rates and Regulation</u> (New York: Longmans, Green & Co., 1912), <u>Chap. 8</u>, pp. 264-296.
  - <sup>28</sup>Brown, <u>Transportation</u> <u>Rates</u>, pp. 47-49.
  - <sup>29</sup>Alfred E. Kahn, <u>The Economics</u> of <u>Regulation</u>, p. 166.
- $^{30}\mbox{Alfred E.}$  Kahn to author, 5 September, 1984. Personal files of Christopher Ryan, Iowa City, Ia.
  - <sup>31</sup>Smyth vs. Ames, 169 U. S. 466, 546-547 (1898).
- 32 Federal Power Commission vs. Hope Natural Gas Co., 320 U. S. 591, 601 (1944).
  - 33 Southwestern Bell Telephone 262 U.S. 276, 289-312 (1923).
- 34 Harry Gunnison Brown, "Sharfman's American Railroad Problem,"
  Quarterly Journal of Economics 36 (February 1922): 323-334.

- <sup>35</sup>Ibid., p. 321.
- 36 Harry Gunnison Brown, "Railroad Valuation and Rate Regulation," Journal of Political Economy 33 (October 1925): 505-530.
- $^{37}$ Frederic G. Dorety, "The Function of Reproduction Cost in Public Utility Valuation and Rate-making," <u>Harvard Law Review</u> 37 (December 1923): 173-200.
  - 38 Brown, "Railroad Valuation," p. 508.
  - <sup>39</sup>Ibid., p. 510.
  - <sup>40</sup>Ibid., p. 522.
  - <sup>41</sup>Ibid., pp. 529-530.
- 42 James Bonbright, "Progress and Poverty in Current Literature on Valuation," Quarterly Journal of Economics 40 (February 1926): 295-328.
  - <sup>43</sup>Ibid., p. 205, n. 8.
- $^{44}$  John Bauer, <u>Effective Regulation of Public Utilities</u> (New York: The Macmillan Company, 1925).
  - <sup>45</sup>Bonbright, "Progress and Poverty," p. 326.
- 46 John Bauer, "Rate Base for Effective and Non-Speculative Rail-road and Public Utility Regulation," <u>Journal of Political Economy</u> 34 (August 1926): 470-500.
- 47R. H. Coase described Bonbright in 1966 as not only an old master, but also, a new master in the field of public utility pricing in <a href="The-Economics of Regulation of Public Utilities">The Economics of Regulation of Public Utilities</a>. Conference at Northwestern University, 19-24 July 1966.
  - 48 Bauer, "Rate Base," p. 487.
- 49 Harry Gunnison Brown, "Railroad Valuation Again: A Reply," Journal of Political Economy 34 (August 1926): 500-508.
  - <sup>50</sup>Bauer, "Rate Base," p. 489.
  - <sup>51</sup>Brown, "Railroad Valuation Again," pp. 507-508.
- 52 John Bauer, Chairman of Round Table Conference, American Economic Review 17, Supplement (March 1927): 123-127.
  - <sup>53</sup>Ibid., p. 125.

- <sup>54</sup>Ibid., pp. 125-126.
- <sup>55</sup>Ibid., p. 126.
- 56 James Bonbright, "Railroad Valuation with Special Reference to the O'Fallon Decision," American Economic Review 18, Supplement (March 1928): 181-205.
- Arthur T. Hadley, "The Meaning of Valuation," American Economic Review 18, Supplement (March 1928): 173-180.
  - <sup>57</sup>Bonbright, "Railroad Valuation," p. 197.
- 58Harry Gunnison Brown, "Valuation of Public Utilities Discussion," American Economic Review 18, Supplement (March 1928): 213.
- 59Harry Gunnison Brown, "Economic Basis and Limits of Public Utility Regulation," Reports of the American Bar Association 53 (1928): 717-737.
- 60Harry Gunnison Brown, "Present Costs," <u>Public Utility Fortnight-ly</u> 3 (1929): 237-246.
- 61 James C. Bonbright, "Major Controversies as to the Criteria of Reasonable Public Utility Rates," <u>American Economic Review</u> 30 (February 1941): 382.
- <sup>62</sup>M. G. de Chazeau, "The Nature of the 'Rate Base' in the Regulation of Public Utilities," <u>Quarterly Journal of Economics</u> 51 (February 1937): 298-316.
- 63Harold Hotelling, "The General Welfare in Relation to Problems of Taxation and of Railway and Utility Rates," <u>Econometrica</u> 6 (July 1938): 242-269.
- $^{64} \text{James C. Bonbright, } \underline{\text{Principles of Public Utility Rates}}$  (New York: Columbia University Press, 1961), p. 226.

#### CHAPTER EIGHT. INTERNATIONAL TRADE AND FINANCE

In the area of international trade and finance, Brown published articles and texts early in his career. Two of the influences on his thinking with regard to the theory of international trade were William Graham Sumner and, to a lesser extent, Henry George. Although Sumner and George were decided opponents on the issue of the single tax, they were uncompromising advocates of free trade in the classical tradition of Smith, Ricardo, Mill et al. Whether Brown actually studied with Sumner at Yale is uncertain, as he never recorded that he had done so although E. W. Kemmerer, in a review of one of Brown's texts, mentioned that Brown had been Sumner's pupil. Brown at least shared Sumner's fondness for Thomas Buckley's The History of Civilization in England and quoted from it on occasion. He recommended George's Protection and Free Trade as a "very readable" exposition. In the area of foreign exchange, he drew heavily from the works of Franklin Escher and from Goschen.

Brown's <u>International Trade</u> and <u>Exchange</u> was published first in 1914 and subsequently republished in two volumes in 1920 and 1921 as <u>Foreign Exchange</u> and <u>International Trade</u>, respectively. 6 In 1916, he had combined condensed version of these books with a section on transportation costs which made up his <u>Principles of Commerce</u>. 7

Besides Kemmerer, Frank Taussig and Sumner Slichter reviewed his books.

Brown introduced his discussion in <u>Foreign Exchange</u> with chapters on the laws of money and the nature of bank credit along the lines of

Fisher's interpretation of the quantity theory. Taussig objected that such an introduction was not necessary. 8 In his analysis of foreign exchange, exchange rate determination and specie flows, the reviewers found him to be fundamentally sound but presenting no original contributions other than an emphasis on the possibilities resultant of trading countries having different standards of value.

For his <u>International</u> <u>Trade</u>, Brown was credited by Taussig for having presented the orthodox or "British School" view of trade theory with consistency and precision. Taussig himself was considered heir to this line of thought, but he found fault with Brown's methodology wherein he assumed that specie flow would take place quickly and have a rapid effect on prices. He did not doubt the conclusions of the orthodox theory but felt it was poorly adapted to the problems of real, day-to-day trading situations. Taussig also mentioned that he did not agree with the contemporary criticisms of German economists of the comparative advantage approach. A few years later Frank Graham attacked the comparative advantage rationale for free trade. 9 He specifically mentioned Brown's assertion (deduced from Mill's treatment) that the greater the variety of goods a country can offer for export, the better was its position in trade. 10 Graham argued that this was untrue and that the greater variety was more likely to result in less favorable terms of trade unless totally new goods accounted for the variety. Brown, however, had arqued that the statement was true only in general terms and that the greater variety of goods and services would simply imply a greater volume of trade, with all its attendant benefits.

Brown dedicated much of the text to the question of free trade, which he advocated withlittle or no concession to protectionists' arguments. As mentioned by Kemmerer and Taussig, this view was the traditional one but had been challenged by economists both here and abroad for several years. For example, in 1890 Simon Patten had based a case for protection on dynamic considerations not treated in the classical approach. Taussig commented that:

. . . there is more to be said on the workings of protective duties in detail, and on the conceivable advantages to be secured by them, than Professor Brown is ready to grant. The controversy between "Agarstaat" and "Industriestaat" is not to be dismissed so lightly as is done by Professor Brown; and the possible advantages from protection to young industries is underrated by him. 11

Brown found the effect of a protective tariff on national wealth to be negative. He argued that in the long run, the export trade would be restricted by the tariff barrier to importation. A misallocation of resources was another consequence. He maintained that the gain to the protected industries would be more than balanced by the loss to others in the country. He found improbable but conceivable that a tariff would allow an industry to attain economies of scale so as to allow it to compete internationally. He recognized (following Mill and others) a possible indirect gain from improved terms of trade but concluded that this would likely be only temporary, as normally alternative outlets for the exports of the trading partners would be found. Citing the example of Great Britain, he showed that countries with low tariff barriers could compete successfully with countries with high tariffs and not be forced to raise their own rates.

Brown went on to discuss the distributional consequences of protective tariffs. Taussig complained in his review that too much emphasis was given to the effects on the distribution of wealth and especially on the development of economic rent. 12 Brown argued that the general result of a tariff would be to indirectly cause interest rates to rise as the degree of specialization in production would fall and for wages to fall as well. He differentiated cases where protected and unprotected goods were produced under various cost conditions. Where both types of goods were produced under conditions of substantially constant costs, the rise in the price of the protected goods would exceed the proportionate increase in money wages and prices, thus resulting in a lower real wage rate. Where the protected goods were produced under increasing cost conditions while the unprotected goods were produced under constant cost conditions, the effect would be a gain for landholders smaller than the loss to wage earners. Brown found conceivable a case where wage earners gained at expense of landholders. This was where the protected goods' cost of production was constant and those of unprotected goods was increasing, and wage owners as consumers were chiefly buyers of unprotected goods. Here, once again, the losses to the landholders would exceed the gains to wage earners. He also argued that protection could benefit one area of the country at the expense of another and may also be conducive to the development of monopolies.

Brown next turned to the special arguments for protection. He dismissed many arguments as fallacious or in need of exceptional

circumstances to have any measure of validity. He felt that the current argument—then associated with Adolph Wagner 13—for the protection of agriculture in "older," crowded European countries, relied on the assumption that great restrictions would be placed upon trade in the future. Should trade prove to be no more restricted or more free, the country employing this policy would be greatly damaged as they would have failed to take advantage of their comparative advantage in manufacturing products. His objections to the infant—industry argument were primarily practical. He doubted especially that the political process could be relied upon to obtain the possible benefits of the strategy. He also argued that the benefits must somehow be compared to the losses to other less—favored industries before the strategy be adopted. He found the military or self—sufficiency arguments for protection to deserving of consideration, but subject to reasonable objections as well.

In a 1919 note to the <u>Quarterly Journal of Economics</u>, Brown criticized an argument made for protection by Thomas Nixon Carver in his <u>Principles of Political Economy</u>. <sup>14</sup> The note was titled somewhat caustically, "An Eminent Economist Confused." <sup>15</sup> Brown had earlier noted in his <u>Principles of Commerce</u> that Sidgwick, Edgeworth and Carver held the opinion that protection could, in certain circumstances, increase wages and increase national wealth by "drawing labor out of lines of increasing cost." <sup>16</sup> Brown objected to the argument first made by Carver in 1902 <sup>17</sup> that a move to freer trade could reduce national wealth. Carver had depicted a case where the removal of tariff barriers resulted in a

switch from more to less labor intensive cultivation. The displaced workers would find employment at lower wages and the total product would by assumption be lower with landowners enjoying higher rents. Brown maintained that in this case there were two possibilities for the displaced workers. If they had no preferable alternative to their line of work, they would be forced to accept wages low enough for the landlords to realize the same gain as would be forthcoming from the less labor intensive production. Assuming their productivity was unimpaired, the fall in wages would equal the rise in rent with no change in national wealth. If a preferable alternative was found by the workers, the landlord's rent would rise by more than the workers' wages fell. However, he conceded it possible that although the "values" generated in production would not fall, the "utilities" generated by it may. He hypothesized a case wherein the demand for a new product was largely by the wealthier classes as opposed to that of the old product. Brown's point here, and the key point of his article, was that protection in this hypothetical case was an inefficient means of obtaining the desired results and that taxation of large incomes -- in particular land income--was the preferable solution. Carver's rejoinder emphasized the different perspectives with regard to the question, international versus national. <sup>18</sup> He pointed out that the search for a preferred alternative may result in migration, and from the national standpoint a reduction in the national product. Brown's re-rejoinder pointed out that freer trade would increase per capita wealth of the hypothetical country except under highly unusual circumstances.

In the 1920s, Brown continued his interest in the international aspects of economics by reviewing books on the subject for the American Economic Review. He criticized John Henry William's explanation in his Argentine International Trade Under Inconvertible Paper Money for the rise in the gold premium. 19 He felt that William's treatment tended to underestimate the effect of an over-issue of paper money. Williams had found instances in which increases in the gold premium took place concurrently with decreases in the volume of paper money. Brown noted that lagged effects may have been at work and that other temporary considerations such as credit curtailment, business depression and falling prices in the rest of the world may have contributed to the rise in the premium. Still, the principal cause may well have been previous over-issues of paper money. He objected to the author's "inductive verification" that there was a strong correlation between a high premium on gold with increased exports and diminished imports.<sup>20</sup> Brown maintained that the rise of the premium on gold relative to domestic prices of exported goods was the key factor and not the rise in the premium as such.

In his <u>The Principles of International Trade</u>, Huntley M. Sinclair challenged the orthodox view which, under the gold standard, relied upon gold flows to bring about adjustments for trade imbalances.

Sinclair maintained that "the adjustment would come in wages rather than through the influence of gold on prices." Brown's reply, in his review, was that this was too extreme a position, as would be also to assume that adjustment could only take place until the gold flow had

been completed. He argued it was not the gold flow per se but the decrease in the demand for domestic goods or the increase in the demand for foreign goods which would lower domestic prices. He maintained that the question was essentially a monetary one. While Sinclair had found the quantity theory to be too simple a device in international finance, Brown defended its usefulness. He recognized the post-war changes in international finance, such as the sterilization of gold by some countries, but he felt that the theory needed only to be further elaborated to account for these complications.

Finally, Brown reviewed Frank Taussig's <u>International Trade</u> in 1928.<sup>23</sup> Taussig's treatment, as Brown noted, conformed to the classical or orthodox approach. Taussig, a recognized authority in the field, extrapolated on the theory into new areas. Although Brown concluded with a whole-hearted recommendation of the work, he found objectionable Taussig's treatment of rent as a cost of production. He thought that Taussig's presentation slighted the importance of land as price-determining factor and argued that rent was of equal importance in price determination. He cited the works of Jevons and Davenport in support of his view that the economic loss from the imposition of a tariff was the same whether labor, capital or land was diverted from its most effective use.

After 1930, Brown published sparsely in the field of international trade and finance. What little he did publish was primarily on international monetary policy. <sup>24</sup> Likewise, in his correspondence with Irving Fisher and James Harvey Rogers he was concerned with price

stability, recovery from the depression and the monetary standard. His views in these areas were presented in Chapter Four.

In summary, Brown demonstrated, as Taussig noted, a mastery of orthodox trade theory, but he did not make original contributions to the theory. He was an unyielding advocate and defender of free trade. Arguments made against free trade in Brown's early career would act as a catalyst for advances made in trade theory, both strengthening and weakening the case for free trade. He defended the importance of the quantity theory of money as a key to the development of a more incisive view of international monetary relations. Without doubt, he would have supported the renaissance of the monetary approach to the balance of payments and exchange rates. He showed awareness that the theories of trade and finance had not reached their "final approximization" but felt that they stood "as a constant reproach to those who, through uneconomic interference with international trade, would line their pockets at the common expense."

## Endnotes

- <sup>1</sup>E. W. Kemmerer, Review of <u>International Trade and Exchange by</u>
  Harry Gunnison Brown, <u>American Economic Review</u> 5 (Juen 1915): 354-356.
- <sup>2</sup>Henry Thomas Buckle, <u>The History of Civilization in England</u> (New York: Appleton, 1894).
- <sup>3</sup>Henry George, <u>Protection and Free Trade</u> (New York: Henry George, 1891).
- <sup>4</sup>Franklin Escher, <u>Elements of Foreign Exchange</u> (New York: The Banking Publishing Company, 1911).
- <sup>5</sup>George J. Goschen, <u>The Theory of Foreign Exchange</u> (London: Effingham Wilson, 1896).
- <sup>6</sup>Harry Gunnison Brown, <u>International Trade and Exchange</u>: <u>A Study in the Mechanisms and Advantages of Commerce</u> (New York: The Macmillan Company, 1914).

Harry Gunnison Brown, <u>International Trade</u>: <u>A Study in the Economic Advantages of Commerce</u> (New York: The Macmillan Company, 1921).

Harry Gunnison Brown, <u>Foreign Exchange</u>: A <u>Study in the Exchange</u> Mechanism of Commerce (New York: The Macmillan Company, 1920).

- <sup>7</sup>Harry Gunnison Brown, <u>Principles of Commerce</u> (New York: The Macmillan Company, 1916).
- <sup>8</sup>Frank Taussig, review of <u>International Trade</u> and <u>Exchange</u> by Harry Gunnison Brown, <u>Journal of Political Economy</u> 23 (June 1915): 621-623.
- <sup>9</sup>Frank Graham, "International Values Re-Examined," <u>Quarterly</u> <u>Journal of Economics</u> 38 (November, 1923-24): 54-86.
  - <sup>10</sup>Brown, <u>Principles of Commerce</u>, pp. 26-29.
  - <sup>11</sup>Taussig, Review of <u>International</u> <u>Trade</u>, p. 622.
  - <sup>12</sup>Ibid.
- 13Adolph Wagner, Agar- und Industreistaat (Jena: Gustav Fischel, 1901).
- <sup>14</sup>Thomas Nixon Carver, <u>Principles</u> of <u>Political</u> <u>Economy</u> (Boston: Ginn and Company, 1919).

- Harry Gunnison Brown, "An Eminent Economist Confused," <u>Quarterly</u> <u>Journal of Economics</u> 33 (May 1919): 567-570.
  - <sup>16</sup>Brown, <u>Principles of Commerce</u>, p. 107.
- $^{17}$  Thomas Nixon Carver, "Some Theoretical Possibilities of a Protective Tariff," <u>Publications of the American Economics Association</u>, Series 3, 3 (1902): 167-182.
- 18Thomas Nixon Carver, Rejoinder, <u>Quarterly Journal of Economics</u> 33 (May 1919): 570-571.
- 19 Harry Gunnison Brown, Review of <u>Argentine International Trade Under Inconvertible Paper Money</u> by John Henry Williams, <u>American Economic Review</u> 11 (June 1921): 308-313.
  - <sup>20</sup>Ibid., pp. 311-312.
- $\frac{21}{\text{Harry Gunnison Brown, Review of }}{\frac{\text{Trade}}{92-94}} \frac{\text{The Principles of International}}{\frac{\text{Economic Review}}{92-94}} \frac{13}{\text{(March 1923):}}$ 
  - <sup>22</sup>Ibid., p. 93.
- 23Harry Gunnison Brown, Review of <u>International Trade</u> by Frank W. Taussig, American <u>Economic Review</u> 18 (December 1928): 706-713.
- 24 Harry Gunnison Brown, "Currency Devaluation and International Trade," American Journal of Economics and Sociology (January 1945): 227-237.
  - <sup>25</sup>Brown, Review of <u>The Principles</u>, p. 94.

#### CHAPTER NINE. CONTRIBUTIONS AS AN EDUCATOR

Harry Gunnison Brown's contributions as an educator are worthy of separate consideration. Beginning with an instructorship at Yale in 1909, he taught on a full-time basis for fifty-one years until retiring in 1960 at the age of eighty. Even in retirement he gave guest lectures at the University of Missouri and elsewhere. While at Missouri, he carried a full load of classes while serving as departmental head for twenty-one years and as acting dean of the School of Business and Public Administration for six years. He evidently preferred to not take leaves; he kept his summers free for writing and relaxation. All this points to an exceptional dedication to the first requirement of his profession. Further evidence of his dedication and achievements in education may be found in the comments of his former students and colleagues. Also, in addition to his textbooks, Brown wrote several articles on teaching which reveal his approach to the instruction of economics.

Pinkney Walker, an ex-colleague of Brown's at Missouri, stated that "Dr. Brown was first and <u>foremost</u> a teacher." Walker went on to expound on the qualities that made him an extraordinary lecturer. He reported that Brown was an "excellent speaker," "a masterful logician" and "a most effective and skillful debator." To these qualities Walker added that Brown exhibited "an unbounded enthusiasm and a deep concern for and dedication to improve 'the common welfare'."

Walker's views find support in statements made by Brown's former

students. Alfred Kahn referred to Brown as a superb lecturer. Lester Chandler, who studied and worked with Brown for four years, declared him to be a superb logician. 4 Joel Dirlam commented that he was an excellent debator "who welcomed challenge to his position." Paul Junk referred to him as a master of the Socratic method in the classroom. Junk also noted that Brown would make use of parables, real world examples and rhetorical questions to make his points clearer. 6 Walker and others attest that he was not content that students acquire technical competence alone in economic analysis, but that they develop as well a philosophical framework in which economic thought is integrated into broader systems of thought. Walker and Chandler both noted that he believed that a more widespread understanding of economic principles could contribute to the advance of society and that he attempted to inculcate this spirit in his students from the introductory to the graduate levels of study. That Brown sought to give to students a basis on which to appraise economic institutions and proposals for economic reform is similarly attested to. Finally, Walker declared Brown to be "far and away the best teacher I have ever known," and it is reported that this sentiment had been expressed by many others.7

Brown wrote a series of articles on the teaching of economics in the late forties. One was titled "Objectives and Methods in Teaching the 'Principles' of Economics." In it, he listed economic fallacies to which students were likely to have been exposed. He recommended that special attention be given to their refutation. He saw the study

of economics as, in part, training in applied logic. He felt that students should be shown "the usefulness of deductive reasoning from broad generalizations." $^9$  However, he did favor inductive verification of theories where possible. Quantitative expression of relationships, he maintained, would strengthen students' understanding and retention of concepts. Yet, he found unfair and unnecessary the use of calculus or complicated algebraic expressions or complicated graphs. For beginning students in most areas, he deemed arithmetic and simple algebra to be sufficient. Brown defended economic theory against the charge of inexactness by comparing the "given conditions" of the physicist to that of the economist, arguing that the methods of each were equally useful. He recommended that considerable class time be used for the examination of carefully chosen, illustrative examples following a discussion of the theoretical concepts involved. He further suggested that one to two class periods be given over to the answering of questions and the altering of the example to bring out its further ramifications until most, if not all, of the students demonstrate an understanding of the concepts. In this process, he suggested that hints be given to the class that the example might prove to be examination material.

Brown opposed the trend toward chiefly descriptive introductory courses which were burdened with definitions. He had found that the "facts" and definitions were soon likely to be forgotten and emphasis on them would divert a student from gaining a basic understanding of the cause and effect relationships in economics. However, social and political elements, where relevant, should be pointed out.

Brown encouraged student-teacher dialogue in the Socratic tradition. He maintained as a principle that no instructor should claim by his or any other authority the right to judge wrong any student's (well-intentioned) objections. If in dialogue the student's question could not be satisfied, then it is the instructor's duty to either recognize his own error or his deficiency in presentation.

As noted previously, Brown thought that courses in economics should not stop with the mastery of economic principles but should extend to the relationship of these principles to the welfare of society. He was aware that such an attempt could introduce subjective analysis which in turn could easily become warped or biased. He warned:

Nor is there any intention to suggest that the teacher should become a preacher or exhorter, even for so good an end as the general welfare. If the house, the playground, the school, the church, etc., have not given to the student any spark of altruism or any spirit of idealism, it is not likely that a college course in economics will do so."10

However, he felt that without exhortation the teacher could introduce such topics as exploitation or parasitism in our system. Brown used such discussions to introduce his advocacy of land value taxation, free trade and regulation or the elimination of monopolies. He was able to do this in an even-handed manner by welcoming objections to his views or, if necessary, he introduced such objections himself. This may be seen in the reactions of his students. Their comments on Brown indicate that they were not always completely swayed by his arguments. Even his son, Phillips, wrote that he was not convinced in the case of land value taxation that a separate assessment of land and improvements

could be accomplished without great difficulty. <sup>11</sup> However, these same comments indicate that Brown was successful in eliciting a sympathetic understanding from his students of the principles of land value taxation, e.g., Brown ended this article on teaching in an optimistic fashion.

The idealistic economist . . . must believe that his science contains the words—at any rate some of the essential words—of social salvation. Only so can his work continue to be inspired by the zest of anticipated usefulness.  $^{12}$ 

An early publication, The Principles of Commerce (1916), was the nucleus of Brown's general textbook, Economic Science and the Common Welfare, which was first published in 1923. This text was revised five times and superceded in 1942 by The Basic Principles of Economics which went through three editions. The 1946 edition was supplemented with a companion volume, A Postscript and Questions. The number of revisions and editions would indicate that sales were at least adequate. Reviews of the text over the years found it, with few exceptions, to be praiseworthy. 13

As with his other writing, reviewers were impressed with Brown's lucid style and his conciseness. The Basic Principles of Economics grew to over five hundred pages in length, but, as one reviewer pointed out, competing texts of similar coverage frequently contained in excess of eight hundred pages. His text made very little use of graphs, charts or diagrams; thus his writing style carried the burden of a clear exposition of relationships. The organization of the text would not be familiar to most readers of contemporary texts in economics.

In two parts, the text dealt first with price determination, the price level and trade, and second with the distribution of the product. In this second part, chapters on the determination of utility, cost and value were indicative of Brown's early neoclassical approach. His organization was not drawn directly from that of other writers, although some influence of Fisher's Elementary Principles of Economics (1911), Taussig's Principles of Economics (1911) and Davenport's Economics of Enterprise (1913) may be discerned. As noted in Chapter Four, Brown did not accept Keynesian analysis and the later editions of his text did not directly mention this development. He dedicated a substantial portion of the text to questions of land value taxation; some reviewers found this to be excessive while others found that it added interest to the reading. Also, controversial in his text was his implicit support for birth control. Later, reviewers tended to find the text somewhat outdated, especially in that it was not as encyclopedic as the post-war textbooks.

Brown's political philosophy permeated the text. He lost no opportunity to make application of economic analysis to questions of public policy. In his preface he stated:

I have attempted here to present a sort of philosophy or defense of the price system ("capitalism"),--not a defense of it as it is but an explanation of and defense of it as it might be.  $^{15}$ 

In a preliminary essay titled "Prejudice Versus Science," he addressed the problem of bias in economic thinking from special or class interests or political affiliation. <sup>16</sup> He felt that these

prejudices, in addition to ignorance and special bargaining, could lead a democracy to policies which were unwise with regard to the general economic welfare. Although he found democracy deficient as a system in which to make economic decisions on the public level, he noted that the safeguards embodied in it made it superior to alternative systems. He found the growing influence of trained citizens to be a positive trend if their training emphasized what he called "disinterested inquiry." He asked rhetorically:

Why should we be so tremendously ashamed of an unimportant break in etiquette such as carrying to the mouth with a fork food supposed to be carried by the hand, or appearance at a formal social function without the prescribed formal clothing, and be so little ashamed of a prejudice which controls our thinking? How is it that we look askance at the person whose pronunciation is provincial or whose sentences are ungrammatical yet fail to visit with disapproval the person whose emotions or class affiliations twist his reasoning processes out of all semblance of logical thinking?<sup>17</sup>

Brown counselled disinterested inquiry or a rigorous application of the scientific method coupled with concern for the common welfare for his students and readers.

Many of Brown's students achieved prominence in the field of economics or in related areas. Other than those already mentioned above, Karl Bopp, <sup>18</sup> August Maffry, <sup>19</sup> Carl McGuire, <sup>20</sup> L. Pao Cheng <sup>21</sup> and Beryl Sprinkel <sup>22</sup> were at one time his students. Both of Brown's sons, Richmond and Phillips, studied economics under him at Missouri and Phillips teaches economics at Southeastern Missouri State. Brown's nephew, Milton Peers Brown, is a member of the faculty of the Harvard Business School. Bopp commented in an essay written in honor of Elmer

Wood, a long-time colleague and friend of Brown, on the environment he found at Missouri which was one of intellectual ferment stimulated by D. R. Scott, Brown, J. H. Rogers and Myron Watkins. At the University of Missouri, an annual memorial lecture is given in Brown's honor by Professor Walter L. Johnson in the Econ 51 class Brown taught for so many years.

The true extent of Brown's legacy as an educator is, of course, impossible to measure. Beyond the thousands who heard him in class-rooms and read his texts, several thousand more heard him speak (gratis) to commercial, social and academic groups. Brown amply demonstrated the enthusiasm for economic education and reform which he wished to instill in his readers and listeners.

# Endnotes

<sup>1</sup>"In Memorium," Memorial Service for Harry Gunnison Brown, March 23, 1975, Personal Files of Christopher Ryan, Iowa City, Ia.

<sup>2</sup>Ibid.

<sup>3</sup>Alfred Kahn, letter to the author, 5 September 1984. Personal files of Christopher Ryan, Iowa City, Ia.

4Lester Chandler to Paul Junk, 17 December 1978, in <u>Selected Articles by Harry Gunnison Brown</u> ed. Paul Junk (New York: Robert Schalkenbach Foundation, 1980), p. xv.

 $^5\mathrm{Joel}$  Dirlam, letter to author, 2 December. Personal files of Christopher Ryan, Iowa City, Ia.

6<sub>Ibid</sub>.

Walker, "In Memorium," p. 2.

<sup>8</sup>Harry Gunnison Brown, "Objectives and Methods in Teaching the 'Principles' of Economics," <u>American Journal of Economics and Sociology</u> 3 (October 1945): 93-109.

Harry Gunnison Brown, "A Teaching Approach to the Incidence of Taxation of Capital," <u>American Journal of Economics and Sociology</u> 4 (April 1946): 389-401.

Harry Gunnison Brown, "Rent Theory as a Teaching Problem on the Undergraduate Level," <u>American Journal of Economics and Sociology</u> 4 (April 1946): 389-401.

Harry Gunnison Brown, "Economic Fallacies and Economic Teaching," American Journal of Economics and Sociology 7 (January 1949): 177-180.

<sup>9</sup>Brown, "Objectives and Methods," p. 95.

<sup>10</sup>Ibid., p. 107.

 $^{11}$ Phillips Brown to author, 15 December 1981. Personal files of Christopher Ryan, Iowa City, Ia.

<sup>12</sup>Brown, "Objectives and Methods," p. 110.

 $^{13}\mathrm{Reviews}$  of Brown's books are listed in the bibliography.

14 George Sause, "Economic Principles and Economic Analysis," American Journal of Economics and Sociology 17 (April 1958): 333.

- $^{15}$ Harry Gunnison Brown, <u>Basic Principles of Economics</u> (Columbia, Mo.: Lucas Brothers, 1942), p. vii.
  - <sup>16</sup>Ibid., pp. 3-8.
  - <sup>17</sup>Ibid., p. 7.
- $^{18}\mbox{Karl}$  Bopp was for many years the President of the Federal Reserve Bank of Philadelphia.
- $^{19}\mathrm{August}$  Maffry was a widely-known economist, banker and financial consultant.
  - $^{20}\mathrm{Carl}$  McGuire is professor emeritus at the University of Colorado.
  - $^{21}\mathrm{L}$ . Pao Cheng is a professor of finance at Simon Fraser University.
- $$^{22}$\mbox{Beryl Sprinkel}$  was the Undersecretary for Monetary Affairs at the Department of the Treasury.
- <sup>23</sup>Karl Bopp, in <u>Essays in Monetary Theory</u>, Pinkney Walker ed. (Columbia, Mo.: University of Missouri Press, 1965), p. 5.

#### CHAPTER TEN. CONCLUSION

A broader view of Harry Gunnison Brown's thought on political economy must include a consideration of his general philosophical and political views. In addition, his position with respect to Marxist, Institutionalist and Georgist thought are of interest. The effect of Brown's near heretical views regarding land taxation on his professional reputation will be examined as well and a summary reconsideration of his work and place in economic thought will be presented.

As Lester Chandler has noted, Brown would be considered today a "conservative," yet he was very much a "liberal" in the nineteenth-century sense of the term. Like many economists of the early twentieth century, Brown championed causes for economic and social reform. Land value taxation, which became his primary interest, is not easily classified as either liberal or conservative. He saw the political and economic system as flawed, but amenable to improvement. He used the term "economic democracy" in his early writing to denote the goal which should be sought. He ascribed to a "limited" faith in democracy to attain an "economic system fundamentally expedient and just." Brown had trust in the functioning of competitive markets in which proper regulation of natural monopolies and elimination of other monopolies were carried out. Yet, he found the resulting distribution of income unjust due to the allowance of a return to the site value of land.

Brown was not specific on the philosophical origins of his views.

He once stated that "more or less utilitarian grounds" were the basis of his belief that income should be classified as earned and unearned. He quoted Herbert Spencer:

Briefly, then, the universal basis of cooperation is the proportioning of benefits received to services rendered. $^3$ 

Brown rejected the Marxian claim that interest was unearned or a surplus. He straightforwardly argued that capital's existence was due to abstinence or savings and that therefore the interest return was earned just as was the return to labor. Thus, for Brown the act of saving was potentially a service deserving of a fair return. He furthermore based his rejection of socialism on what he saw to be a necessarily coercive allocation of work or vocation.

Brown was familiar with economists whose thought was later to be labeled "institutionalist." He was a colleague of Thorstein Veblen for a year, yet he made only scattered references to him and later was said to respond to questions about Veblen with a wry smile. In one letter he recommended Veblen's Theory of the Leisure Class to an inquiring student as his best work. John Commons once wrote Brown asking assistance for his presentation of arguments for a progressive land tax in the state of Wisconsin. Horace M. Gray of the University of Illinois linked Brown to economists like Commons "who kept alive the spirit of democratic liberalism against the advancing tide of privileged, subsidized, monopoly capitalism." However, when institutionalist economists tended to dismiss formal economic theory as a key guide to the understanding of an economy, Brown was sharply

critical.

Although Brown came to be Henry George's most prominent academic proponent, he was also a critic of George. He clearly rejected George's "all-devouring rent thesis" and was critical of his interest and population theories. He found in George's interest theory an invalid distinction between "mechanical" versus "biological" capital which led George to an erroneous, productivity-of-nature explanation for interest. Brown found George's refutation of Malthusianism to be unconvincing and was himself an advocate of birth control. Also, he felt that George's theory of business depressions was "hopelessly on the wrong track." Despite these substantive differences with George on economic theory, Brown gave almost complete support to George's general proposal for tax reform and its ethical underpinning. Brown, of course, did not attempt to emphasize the "singleness" of the tax nor did he form his ethical arguments in natural rights terms as did George. Yet, he considered George's errors to be dwarfed by his contributions to political and economic thought. He mentioned not only George's single tax proposal but also his contributions to the theory of marginal productivity and his defense of free trade principles. He presented his criticisms of George only when he felt that his "errors" distracted from the fundamental message. Accordingly, these criticisms were presented only in Georgist publications. Brown found no inconsistency in transplanting the single tax idea into neoclassical theory as he interpreted it.

Brown's open advocacy of land value taxation did not make him a

pariah in the profession. He quickly attained his full professorship at Missouri and expressed in a letter his satisfaction with his position. He never reported any infringement of his right to express his opinions. He did, however, state in several articles (without mentioning names or institutions) that he had heard of cases where professors or graduate students were "razzed" for expressing an interest in land value taxation or advised--for their own good--not to pursue such an interest. 10 Paul Douglas, noted by Brown to favor land value taxation, never emphasized his position in professional journals. 11 In another instance, Russel Bauder, a former student of Brown's and a graduate of the University of Wisconsin, wrote of his apprehensions about his application to teach at another university due to his past association with Brown.  $^{12}$  He reported that he had been advised by John Commons, who expressed his high regard for Brown, to defend the professor should his interviewers raise the subject. When Bauder did so, he felt that he was not well-received and was not offered the position he sought.

Although Brown received several honors in his career, he was never nominated for the presidency of the American Economics Association. Given the extensive nature of his contributions by the late thirties, it is a question of some interest that he was not considered for this honor. An exchange of letters with Frank Knight in 1939 provides some insight into this matter. Brown wrote Knight on departmental matters but enclosed a copy of a letter he had sent to the members of the nominating committee of the association. In it he had proposed the candidacy of John Ise of the University of Kansas. In Knight's reply

he said:

The first thought that comes to mind is the name of another man who ought to be recognized in this connection, before too long, a man whom I have felt for years did not seem to get recognition in accord with his merits by the profession generally, and that is the man to whom this letter is addressed.  $^{13}$ 

Knight further stated that he would mention Brown as a possible candidate in his letter of support for Ise. Brown replied that he did not wish to be so mentioned for three reasons. First, he did not want his candidacy to rival that of Ise's, and second, he did not wish to be burdened with the responsibilities of the office, given his priorities. Thirdly, he related that he had recently failed to be elected to one of the two vice-president posts of the Association and was asked to fill a temporary position on the executive committee, normally an elective position. He stated:

It seems unlikely that I could be elected to any position in the Association despite the support of good friends like yourself. I am not unhappy about this, whatever may be the honor and distinction involved, because I am really more interested in persuading others of the logical justification for views I hold, than I am in filling any office and the more so if the filling of an office would interfere in any way with my other purposes. 14

Despite Brown's well-intentioned reservations, he would have accepted the presidency of the Association for the particular reason that he was most likely to have been denied it. The tradition of the presidential address presented those chosen with a unique opportunity to express their views. Brown would have utilized no small part of the address to state the case for land value taxation, and the nominating committee was likely to have made this a consideration of importance.

Brown's credentials, however evaluated, were comparable to those of many who served as president. Eccentricity as a criterion for denying the office to someone had not prevented the nomination of such economists as Irving Fisher (1918), Thorstein Veblen (declined), H. J. Davenport (1920) and the later presidency of Frank Knight (1950). Brown's occasionally caustic criticisms of other economists may have prompted disfavor, yet in 1939 Jacob Viner, a harsh critic, was selected. The denial of this honor was also not likely to be attributed to his personality; he is reported to have been out-going, courteous and friendly as evinced in one case in his friendship with Knight (an adamant opponent of land value taxation) as well as with many other colleagues. Although several scholars of distinction were never chosen to be president of the Association, one may reasonably entertain the suspicion that Brown's views prevented him from attaining this esteemed position.

On Brown's economic thought, Alfred Kahn wrote:

. . . what impressed me more about his economic thinking was its coherence, its thorough internal consistency and its apparent sufficiency. . .  $1^{5}$ 

#### He added:

. . . it is an admirable system of economic thinking and Brown expounded it with grace, intellectual incisiveness and persistence.  $^{16}$ 

Although Dr. Kahn served only one year with Brown as a teaching assistant, his comments on Brown are particularly insightful.

The neoclassical approach which Brown adopted was not a precisely delimited model. He disliked the term neoclassical as he felt it

signified too great a departure from classical thinking. Although he made no signal, original contribution to the theory, his skill in its application allowed him to make many important contributions in several areas of thought. The consistent purpose in his writing was to make economic theory applicable to the perennial problems of a capitalistic economy. His studies of tax incidence are only one example of his efforts. In them, he strove to refine existing theory to form a sounder basis for tax policy decisions. Likewise directed was his careful and detailed work on finding principles for efficient regulatory practices. As a monetarist, he demonstrated flexibility and imagination quite outside the usual caricature of pre-Keynesian monetary thought. His free trade advocacy was rooted in a concern for economic efficiency and growth.

Brown's espousal of land value taxation was consistent with his theoretical position in economics. As more economists tended to merge land and capital and make more difficult his advocacy, he moved to justify the separation of land and capital on theoretical grounds. He saw economic rent as the marginal product of land in the neoclassical manner, yet also as a surplus over interest and wages in the classical fashion. The return to land was an absolute amount "measured and determined by the surplus over production on the extensive margin." Brown differed with Fisher's views on capital and interest, arguing that the value of capital was in large part determined by its cost of production or reproduction. Thus, the situation value of land having no cost of production was determined through the capitalization of

expected future rent at some previously determined rate of interest.

He supported land value taxation as a tax which would not result in the distortion of market prices and was in accord with distributive justice.

Also, greater taxation of land values should reduce the taxation of labor effort and investment, and thus further economic efficiency and growth.

One may question the sufficiency and lack of specificity of the form of the neoclassical approach which Brown employed. However, he often pointed to the need for further elaboration and refinement of the theory and consistently worked to this end himself.

Statements by M. Slade Kendrick in his <u>Public Finance</u> demonstrate an open-mindedness which Brown felt was all too lacking in the profession. Kendrick commented:

From Henry George in the latter part of the nineteenth century, to Professor H. G. Brown, brilliant economic theorist of our day, the single tax has not lacked advocates whose views command respect. The clear logic with which the case for the single tax is presented, warmed by the fires of conviction, is ample reason for an examination of the issues. <sup>18</sup>

Despite the personal compliment, Brown would not have been pleased with Kendrick's subsequent rejection of the single tax. Kendrick's consideration of the "single tax" as opposed to the more general arguments for "land value taxation" tended to bias somewhat his examination. However, his fair and objective presentation of the arguments is due in large part to Brown's influence.

Robert Heilbroner commented that upon Henry George's death his reputation "went straight into the underworld of economics."  $^{19}$ 

Whether Heilbroner's assessment of the place of George's thought is correct or not, the reputation of Harry Gunnison Brown appears to have suffered as a result of his persistent espousal of George's cause. This in addition to his monetarist views may explain the present-day neglect of his contributions as an economist. Such reasons should not, however, justify a continued neglect of so prominent a figure in the development of economic thought in the first half of this century.

# Endnotes

- <sup>1</sup>Lester Chandler, in <u>Selected Articles</u> by <u>Harry Gunnison Brown</u>, Paul Junk ed. (New York: Robert Schalkenbach Foundation, 1980), p. xv.
- Harry Gunnison Brown, <u>The Taxation of Unearned Incomes</u> (Columbia, Mo.: Lucas Brothers, 1925), p. 49.
- Herbert Spencer, quoted by Harry Gunnison Brown in <u>The Basic</u> <u>Principles of Economics</u> (Columbia, Mo.: Lucas Brothers, 1942), p. 220.
- <sup>4</sup>Interview with Pinkney Walker, Columbia, Missouri, December 1983.
- <sup>5</sup>Harry Gunnison Brown to Mr. Lung Chung, 22 October 1928, Joint Collectin University of Missouri Western Historical Manuscript Collection, Columbia, Mo.
- <sup>6</sup>Harry Gunnison Brown to John Commons, 10 June 1926, Joint Collection University of Missouri Western Historical Manuscript Collection, Columbia, Mo.
- 7Horace M. Gray to Weld Carter, 2 April 1975, in <u>Selected Articles</u> by <u>Harry Gunnison Brown</u>, Paul Junk ed. (New York: Robert Schalkenbach Foundation, 1980), p. xiv.
- <sup>8</sup>Harry Gunnison Brown to Walter Verity, 29 November 1930, Joint Collection University of Missouri Western Historical Manuscript Collection, Columbia, Missouri.
- <sup>9</sup>Harry Gunnison Brown to John H. Sherman, 13 October 1927, Joint Collection University of Missouri Western Historical Manuscript Collection, Columbia, Mo.
- 10 Harry Gunnison Brown, "Academic Freedom and the Defense of Capitalism," American Journal of Economics and Sociology 15 (January 1956): 178-179.
- $^{11}\text{Harry}$  Gunnison Brown, Significant Paragraphs from Henry George's Progress and Poverty (New York: Doubleday, Doran & Company, 1928), p. 80.
- $^{12}$ Russel Bauder to Harry Gunnison Brown, 18 February 1930. Joint Collection University of Missouri Western Historical Manuscript Collection, Columbia, Mo.
- <sup>13</sup>Frank Knight to Harry Gunnison Brown, 29 April 1939. Joint Collection, University of Missouri Western Historical Manuscript Collection, Columbia, Mo.

- $^{14}\mathrm{Harry}$  Gunnison Brown to Frank Knight, 2 May 1939, Joint Collection University of Missouri Western Historical Manuscript Collection, Columbia, Mo.
- $^{15}\mbox{Alfred Kahn, letter to author, 5 September 1984. Personal files of Christopher Ryan, Iowa City, Ia.$ 
  - 16 Ibid.
- $^{17}$ Harry Gunnison Brown, <u>Basic Principles of Economics</u> (Columbia, Mo.: Lucas Brothers, 1942), p. 427.
- $^{18}\text{M.}$  Slade Kendrick, <u>Public Finance</u> (Boston: Houghton Mifflin Co., 1951), p. 233.
- $^{19} \text{Robert Heilbroner, } \underline{\text{The}}$  Worldly Philosophers (New York: Simon and Schuster, 1961), p. 163.

## SELECTED BIBLIOGRAPHY

Primary Sources (The Books, Articles and Letters of

## Harry Gunnison Brown)

- Brown, Harry Gunnison. "The Basis of Rate-Making as Affected by Compeition Versus Combination of Railroads." Yale Review 16 (May 1907): 79-86.
- Brown, Harry Gunnison. "Competitive and Monopolistic Price Making."

  Quarterly Journal of Economics 22 (August 1908): 626-639.
- Brown, Harry Gunnison. "Some Phases of Railroad Combination." Ph.D. dissertation, Yale University, 1909.
- Brown, Harry Gunnison. "A Problem in Deferred Payments and the Tabular Standard." Quarterly Journal of Economics 23 (August 1909): 714-718.
- Brown, Harry Gunnison. "Typical Commercial Crises Versus a Money Panic." Yale Review 19 (August 1910): 168-176.
- Brown, Harry Gunnison. "Commercial Banking and the Rate of Interest."

  <u>Quarterly Journal of Economics</u> 24 (August 1910): 743-749.
- Brown, Harry Gunnison. "The Marginal Productivity Versus the Impatience Theory of Interest." Quarterly Journal of Economics 23 (August 1913): 630-650.
- Brown, Harry Gunnison. <u>International Trade and Exchange: A Study in Advantages of Commerce.</u> New York: Macmillan
- Brown, Harry Gunnison. "The Discount Versus the Cost of Production Theory of Capital Valuation." American Economic Review 4 (June 1914): 340-349.
- Brown, Harry Gunnison. "The Competition of Transportation Companies." American Economic Review 4 (December 1914): 771-792.
- Brown, Harry Gunnison. Review of <u>Railroads</u>, <u>Rates and Traffic</u>, by C. Colson in <u>American Economic Review</u> 5 (September 1915): 601-603.
- Brown, Harry Gunnison. <u>Principles of Commerce</u>. New York: Macmillan Company, 1916.

- Brown, Harry Gunnison. <u>Transportation Rates and Their Regulation</u>. New York: Macmillan Company, 1916.
- Brown, Harry Gunnison. The Theory of Earned and Unearned Incomes. Columbia, Mo.: Missouri Book Company, 1918.
- Brown, Harry Gunnison. "An Eminent Economist Confused." Quarterly Journal of Economics 33 (May 1919): 567-570.
- Brown, Harry Gunnison. <u>Foreign Exchange: A Study in the Exchange</u>
  <u>Mechanism of Commerce.</u> New York: Macmillan Company, 1920.
- Brown, Harry Gunnison. <u>International Trade</u>: <u>A Study in the Economic Advantages of Commerce</u>. New York: Macmillan Company, 1921.
- Brown, Harry Gunnison. Review of Argentine International Trade Under Inconvertible Paper Money, by John Henry Williams, in American Economic Review 11 (June 1921): 308-313.
- Brown, Harry Gunnison. "The Incidence of Compulsory Insurance of Workmen." Journal of Political Economy 30 (February 1922): 67-77.
- Brown, Harry Gunnison. "Sharfman's American Railroad Problem."

  Quarterly Journal of Economics 36 (February 1922): 323-334.
- Brown, Harry Gunnison. Review of <u>The Principles of International Trade</u>, by Huntley M. Sinclair, American Economic Review 13 (March 1923):
- Brown, Harry Gunnison. <u>The Economics of Taxation</u>. New York: Henry Holt & Company, 1924.
- Brown, Harry Gunnison. "The Single Tax Complex of Some Contemporary Economists." <u>Journal of Political Economy</u> 32 (April 1924): 164-190.
- Brown, Harry Gunnison. The <u>Taxation of Unearned Incomes</u>. Columbia, Mo.: Lucas Brothers, 1925.
- Brown, Harry Gunnison. "Railroad Valuation and Rate Regulation." Journal of Political Economy 33 (October 1925): 505-530.
- Brown, Harry Gunnison. "Land Speculation and Land Value Taxation." Journal of Political Economy 35 (June 1927): 390-402.
- Brown, Harry Gunnison. Letter to John Commons, 10 June 1926, Joint Collection University of Missouri Western Historical Manuscript Collection, Columbia, Mo.

- Brown, Harry Gunnison. "Railroad Valuation Again: A Reply." <u>Journal</u> of <u>Political Economy</u> 34 (August 1926): 500-508.
- Brown, Harry Gunnison. <u>Significant Paragraphs from Henry George's</u>
  Progress and Poverty. New York: Doubleday, Doran & Company, 1928.
- Brown, Harry Gunnison. "Economic Basis and Limits of Public Utility Regulation." Reports of the American Bar Association 53 (1928): 717-737.
- Brown, Harry Gunnison. "Valuation of Public Utilities Discussion."

  <u>American Economic Review</u> 18, Supplement (March 1928): 211-216.
- Brown, Harry Gunnison. Letter to Lung Chung, 22 October 1928, Joint Collection University of Missouri Western Historical Manuscript Collection, Columbia, Mo.
- Brown, Harry Gunnison. Review of <u>International Trade</u>, by Frank Taussig, <u>American Economic Review</u> 18 (December 1928): 706-713.
- Brown, Harry Gunnison. "Present Costs." <u>Public Utilities Fortnightly</u> 3 (1929): 237-246.
- Brown, Harry Gunnison. "Capital Valuation and the 'Psychological School'." <u>American Economic Review</u> 19 (September 1929): 357-362.
- Brown, Harry Gunnison. Letter to John H. Sherman, 13 October 1927, Joint Collection University of Missouri Western Historical Manuscript Collection, Columbia, Mo.
- Brown, Harry Gunnison. "Land, Capital and Opportunity Cost: A Reply."
  American Economic Review 20 (June 1930): 248-251.
- Brown, Harry Gunnison. Letter to James Harvey Rogers, 4 October 1930, Rogers Papers, Yale University Library, New Haven, Conn.
- Brown, Harry Gunnison. Letter to Walter Verity, 29 November 1930, Joint Collection University of Missouri Western Historical Manuscript Collection, Columbia, Mo.
- Brown, Harry Gunnison. <u>Economic Science and the Common Welfare</u>. Columbia, Mo.: Lucas Brothers, 1931.
- Brown, Harry Gunnison. "Opportunity Cost: Marshall's Criticism of Jevons." American Economic Review 21 (September 1931): 498-500.
- Brown, Harry Gunnison. <u>Economic Basis of Tax Reform</u>. Columbia, Mo.: Lucas Brothers, 1932.
- Brown, Harry Gunnison. Letter to James Harvey Rogers, May 1932, Rogers Papers, Yale University Library, New Haven, Conn.

- Brown, Harry Gunnison. "Nonsense and Sense in Dealing with the Depression." <u>Beta Gamma Sigma Exchange</u> (Spring 1933): 97-107.
- Brown, Harry Gunnison. Letter to James Harvey Rogers, 23 November 1933, Rogers Papers, Yale University Library, New Haven, Conn.
- Brown, Harry Gunnison. Letter to the Committee for the Nation, 14 December 1933, Rogers Papers, Yale University Library, New Haven, Conn.
- Brown, Harry Gunnison. "A Defense of the Single Tax Principle." Annals of the American Academy of Political and Social Sciences 183 (January 1936): 63-69.
- Brown, Harry Gunnison. Letter to Irving Fisher, 6 February 1937, Fisher Papers, Yale University Library, New Haven, Conn.
- Brown, Harry Gunnison. "The Incidence of a General Output or a General Sales Tax." <u>Journal of Political Economy</u> 47 (April 1939): 254-262.
- Brown, Harry Gunnison. Letter to Frank Knight, 2 May 1939, Joint Collection University of Missouri Western Historical Manuscript Collection, Columbia, Mo.
- Brown, Harry Gunnison. Letter to Richard Musgrave, 28 November 1939, Joint Collection University of Missouri Western Historical Manuscript Collection, Columbia, Mo.
- Brown, Harry Gunnison. "Objections to the 100% Reserve Plan." American Economic Review 30 (June 1940): 309-314.
- Brown, Harry Gunnison. Letter to Lester Chandler, 4 October 1940, Joint Collection University of Missouri Western Historical Manuscript Collection, Columbia, Mo.
- Brown, Harry Gunnison. "The System of Free Enterprise and its Caricature." American Journal of Economics and Sociology 1 (October 1941): 87-98.
- Brown, Harry Gunnison. "Economic Rent: In What Sense a Surplus?" American Economic Review 31 (December 1941): 833-835.
- Brown, Harry Gunnison. <u>Basic Principles of Economics</u>. Columbia, Mo.: Lucas Brothers, 1942.
- Brown, Harry Gunnison. "Fiscal Policy and War-Time Price Control."

  <u>American Journal of Economics and Sociology</u> 2 (October 1942):

  1-14.

- Brown, Harry Gunnison. "Anticipation of Increment and the 'Unlearned Decrement' in Land Values." <u>American Journal of Economics and Sociology</u> 2 (April 1943): 343-357.
- Brown, Harry Gunnison. "Subsidies and War-Time Price Control." American Journal of Economics and Sociology 3 (July 1943): 453-457.
- Brown, Harry Gunnison. "The Danger in the Mounting National Debt."  $\frac{\text{American Journal of Economics and Sociology}}{1-14}$  3 (October 1943):
- Brown, Harry Gunnison. "Currency Devaluation and International Trade."

  American Journal of Economics and Sociology 4 (January 1945):
  227-237.
- Brown, Harry Gunnison. "Objective and Methods in Teaching the 'Principles' of Economics." American Journal of Economics and Sociology 4 (October 1945): 93-109.
- Brown, Harry Gunnison. "A Teaching Approach to the Incidence of Taxation of Capital." American Journal of Economics and Sociology 5 (January 1946): 231-245.
- Brown, Harry Gunnison. "Rent Theory as a Teaching Problem on the Undergraduate Level." <u>American Journal of Economics and Sociology</u> 5 (April 1946): 389-401.
- Brown, Harry Gunnison. "Two Decades of Decadence in Economic Theorizing." American Journal of Economics and Sociology 7 (January 1948): 145-172.
- Brown, Harry Gunnison. "Economic Fallacies and Economic Teaching."

  American Journal of Economics and Sociology 8 (January 1949):

  177-180.
- Brown, Harry Gunnison. "The Challenge of Australian Tax Policy."

  American Journal of Economics and Sociology 8 (July 1949): 377-400.
- Brown, Harry Gunnison. "The Size of the National Debt." American Journal of Economics and Sociology 11 (October 1951): 55-60.
- Brown, Harry Gunnison. "Cost of Production, Price Control and Subsiides: An Economic Nightmare." <u>American Economic Review</u> 42 (March 1952): 126-134.
- Brown, Harry Gunnison. "Academic Freedom and the Defense of Capitalism." American Journal of Economics and Sociology 15 (January 1956): 172-182.

- Brown, Harry Gunnison. "Foundations, Professors and 'Economic Education'." American Journal of Economics and Sociology 17 (January 1958): 148-152.
- Brown, Harry Gunnison. "The Keynes-Hansen 'Demand for Labor' Notion."

  American Journal of Economics and Sociology 18 (January 1959):
  149-156.
- Brown, Harry Gunnison. "Monetary and Fiscal Counter-Depression Policy."

  <u>American Journal of Economics and Sociology</u> 18 (July 1959): 337351.
- Brown, Harry Gunnison. "An Oversight in the Dominant Theory of Interest." <u>American Journal of Economics and Sociology</u> 21 (April 1962): 203-207.
- Brown, Harry Gunnison. <u>The Economics of Taxation</u>. Chicago: University of Chicago Press, reprint, 1979.
- Brown, Harry Gunnison. <u>Selected Articles by Harry Gunnison Brown</u>: <u>The Case for Land Value Taxation</u>. Preface by Paul Junk. New York: Robert Shalkenbach Foundation, 1980.
- Brown, Harry Gunnison and Brown, Elizabeth Read. "Obstacles to Adoption of Land Value Taxation." American Journal of Economics and Sociology 27 (October 1968): 387-392.
- Brown, Harry Gunnison. Assistant in <u>The Purchasing Power of Money</u> by Irving Fisher, New York: Macmillan Company, 1911.
- Brown, Harry Gunnison, ed. with Harold Buttenheim, Philip Cornick and Glenn Hoover. <u>Land-Value Taxation Around the World</u>. New York: Robert Schalkenbach Foundation, 1955.

## Secondary Sources

- Adams, H. C. The <u>Science of Finance</u>. New York: Henry Holt & Company, 1898.
- Adams, Thomas S. "Tax Exemption Through Tax Capitalization: A Fiscal Fallacy." American Economic Review 6 (June 1916): 271-287.
- American Economic Review 29 (December 1939): 913-914. Obituary for James Harvey Rogers.
- Andelson, Robert V., ed. <u>Critics of Henry George</u>. Rutherford: Fairleigh Dickinson University Press, 1979.

- Arvidsson, Guy. "On the Reasons for a Rate of Interest." <u>International</u> <u>Economic Papers</u> 6 (1956): 22-33.
- Bauder, Russel. Letter to Harry Gunnison Brown, 18 February 1930, Joint Collection University of Missouri Western Historical Manuscript Collection, Columbia, Mo.
- Bauer, John. <u>Effective</u> <u>Rate</u> <u>Regulation of Public</u> <u>Utilities</u>. New York: Macmillan Company, 1925.
- Bauer, John. "Rate Base for Effective and Non-Speculative Railroad and Public Utility Regulation." <u>Journal of Political Economy</u> 34 (August 1926): 470-500.
- Bauer, John. Chairman of Round Table Conference. "The Problem of Effective Utility Regulation." <u>American Economic Review</u> 17, Supplement (March 1927): 123-127.
- Bickerdike, C. F. "The Principle of Land Value Taxation." Economic Journal 22 (1912): 1-15.
- Bird, Richard M. "A National Tax on the Unimproved Value of Land: The Australian Experience 1910-1952." <u>National Tax Journal</u> 13 (December 1960): 386-392.
- Bishop, Ward. Review of <u>The Economic Basis of Tax Reform</u>, by Harry Gunnison Brown. <u>American Economic Review</u> 23 (December 1933): 761-763.
- Boehm-Bawerk, Eugen. <u>Capital and Interest</u>. 3 vols. South Holland, Ill.: Libertarian Press, 1959.
- Boehm-Bawerk, Eugen. The Positive Theory of Capital. New York: G. E. Stechert & Co., 1923.
- Bonbright, James. "Progress and Poverty in Current Literature on Valuation." Quarterly Journal of Economics 40 (February 1926): 295-328.
- Bonbright, James. "Railroad Valuation with Special Reference to the O'Fallon Decision." American Economic Review 18, Supplement (March 1928): 181-205.
- Bonbright, James C. "Major Controversies as to the Criteria of Reasonable Public Utility Rates." <u>American Economic Review</u> 30 (February 1941): 379-389.
- Bonbright, James C. <u>Principles of Public Utility Rates</u>. New York: Columbia University Press, 1961.

- Bopp, Karl. <u>Essays in Monetary Policy in Honor of Elmer Wood</u>. Edited by Pinkney Walker. Columbia, No.: University of Missouri Press, 1965.
- Boulding, Kenneth. Letter to author 6 October 1984. Personal files of Christopher Ryan, Iowa City, Ia.
- Bowen, Howard. Letter to Harry Gunnison Borwn, 19 May 1939, Joint Collection University of Missouri Western Historical Manuscript Collection, Columbia, Mo.
- Breckenfeld, Gurney. "Higher Taxes that Promote Development." Fortune 108 (18 August 1983): 68-71.
- Brittain, J. A. "The Incidence of Social Security Payroll Taxes."

  American Economic Review 61 (March 1971): 110-125.
- Brown, Elizabeth Read. "How College Textbooks Treat Land Value Taxation." <u>American Journal of Economics and Sociology</u> 20 (January 1961): 147-167.
- Brown, Phillips Hamlin. Letter to author, 15 December 1981. Personal files of Christopher Ryan, Iowa City, Ia.
- Buckle, Henry Thomas. The History of Civilization in England. New York: Appleton, 1894.
- Calvo, Guillermo A., Kotlikoff, Laurence J., and Rodriguez, Carlos Alfredo. "The Incidence of a Tax on Pure Rent: A New (?) Reason for an Old Answer." Journal of Political Economy 87 (August 1979): 254-262.
- Cannan, Edwin. A <u>History of the Theories of Production and Distribution in English Political Economy 1776-1848</u>. London: Rivington, 1894: reprint ed., New York: Augustus Kelly, 1967.
- Cannan, Edwin. "The Proposed Relief of Buildings from Local Rates." <u>Economic Journal</u> 17 (1907): 36-46.
- Cannan, Edwin. A Review of Economic Theory. London: P. S. King and Son, 1930; reprint ed., New York: Augustus Kelly, 1964.
- Cannan, Edwin. "Land and Capital." <u>American Economic Review</u> 20 (March 1930): 78-79.
- Carlton, Frank T. "The Rent Concept, Narrowed and Broadened." Quarter-ly Journal of Economics 22 (November 1907/8): 48-61.

- Carver, Thomas Nixon. "Some Theoretical Possibilities of a Protective Tariff." <u>Publications of the American Economics Association</u>, Series 3, 3 (1902): 167-182.
- Carver, Thomas Nixon. <u>Essays in Social Justice</u>. Cambridge: Harvard Harvard University Press, 1915.
- Carver, Thomas Nixon. <u>Principles of Political Economy</u>. Boston: Ginn and Company, 1919.
- Carver, Thomas Nixon. "Rejoinder." Quarterly Journal of Economics 33 (May 1919): 570-571.
- Cassel, Gustav. Testimony before the Banking and Currency Committee of the House of Representatives, May 1928.
- Cassel, Gustav. The Theory of Social Economy. New York: Harcourt, Brace and Company, 1932.
- Chandler, Lester. Letter to Paul Junk, 17 December 1978 in <u>Selected Articles by Harry Gunnison Brown</u>, preface by Paul Junk, <u>New York</u>: Robert Schalkenbach Foundation, 1980, p. xv.
- de Chazeau, M. G. "The Nature of the 'Rate Base' in the Regulation of Public Utilities." Quarterly Journal of Economics 51 (February 1937): 298-316.
- Cirillo, Renato. "Leon Walras and Social Justice." American Journal of Economics and Sociology 43 (January 1984): 53-60.
- Clark, John Bates. "The Ethics of Land Tenure." <u>International Journal of Ethics</u> 1 (October 1890): 62-79.
- Clark, John Bates. The Distribution of Wealth. New York: Macmillan Company, 1889.
- Clark, John Maurice, Review of <u>Transportation Rates and Their Regulation</u>, by Harry Gunnison Brown. <u>Journal of Political Economy</u> 25, February 1917, pp. 208-209.
- Coase, R. H. The Economics of Regulation of Public Utilities, Conference at Northwestern University, 19-24 July 1966.
- Commons, John. Review of <u>The Economics of Distribution</u>, by John Hobson.

  Annals of the American Academy of Political and Social Sciences

  16 (July 1900): 133-137.
- Commons, John. "A Progressive Tax on Land Values." <u>Political Science</u> Quarterly 38 (March 1922); 41-68.

- Commons, John. <u>Institutional Economics</u>. New York: Macmillan and Company, 1934.
- Cross, Melvin, and Ekelund, Robert B. "A. T. Hadley on Monopoly Theory and Railroad Regulation: An American Contribution to Economic Analysis and Policy." <u>History of Political Economy</u> 12 (Summer 1980): 214-232.
- Davenport, Herbert J. <u>Value and Distribution</u>. Chicago: University of Chicago Press, 1908.
- Davenport, Herbert J. "The Extent and Significance of the Unearned Increment." Publications of the American Economic Association 11 (1911): 322-331.
- Davenport, Herbert J. "Social Productivity versus Private Acquisition."

  <u>Quarterly Journal of Economics</u> 25 (November 1910): 96-118.
- Davenport, Herbert J. "Fetter's Principles." Jurnal of Political Economy 24 (1916): 344-362.
- Davenport, Herbert J. "Theoretical Issues in the Single Tax." American Economic Review 7 (March 1917): 1-30.
- Davenport, Herbert J. "The War Tax Paradox." <u>American Economic Review</u> 9 (March 1919): 34-36.
- Dirlam, Joel B. Letter to Harry Gunnison, 29 April 1939, Joint Collection University of Missouri Western Historical Manuscript Collection, Columbia, Mo.
- Dirlam, Joel B. Letter to author, 2 December 1984. Personal files of Christopher Ryan, Iowa City, Ia.
- Dorety, Frederic G. "The Function of Reproduction Cost in Public Utility Valuation and Rate-Making." <u>Harvard Law Review</u> 37 (December 1923): 173-200.
- Dorfman, Joseph. <u>The Economic Mind in American Civilization</u>. New York: Viking Press, 1959.
- Dorn, James A. "Introduction: A Historical Perspective on the Importance of Stable Money." <u>Cato Journal</u> 3 (Spring 1983): 1-8.
- Due, John R. The Theory of Incidence of Sales Taxation. Morningside Heights, N.Y.: King Crown Press, 1942.
- Due, John R. "Towards a General Theory of Sales Tax Incidence." Quarterly Journal of Economics 68 (May 1953): 253-266.

- Edgeworth, F. Y. "The Pure Theory of Taxation." <u>Economic Journal</u> 70 (June 1897): 226-238.
- Edgeworth, F. Y. <u>Collected Papers Relating to Political Economy</u>. 2 vols. New York: Burt Franklin, 1925.
- Edwards, Mary. "Site Value Taxation in Australia: Where Land is Taxed More and Improvements Less, Average Housing Value and Stock are Higher." American Journal of Economics and Sociology 43 (October 1984): 481-495.
- Ely, Richard T. "Landed Property as an Economic Concept and as a Field of Research." <u>American Economic Review</u> 7, Supplement (March 1917): 18-33.
- Ely, Richard T. "Land Income." <u>Political Science Quarterly</u> 43 (September 1928): 408-427.
- Ely, Richard T., Adams, Thomas S., Lorenz, Max O., and Young, Allyn.

  <u>Outlines of Economics</u>. 5th ed. New York: Macmillan and Company,

  1930.
- Escher, Franklin. <u>Elements of Foreign Exchange</u>. New York: The Banking Publishing Company, 1911.
- Federal Power Commission vs. Hope Natural Gas Co., 320 U. S. 591, 601 (1944).
- Fairchild, Fred Rogers. <u>Essentials of Economics</u>. New York: American Book Company, 1923.
- Fairchild, Fred Rogers. Review of <u>The Economics of Taxation</u>, by Harry Gunnison Brown. American Economic Review 16 (June 1926): 343-344.
- Feldstein, Martin. "The Surprising Incidence of a Tax on Pure Rent: A New Answer to an Old Question." <u>Journal of Political Economy</u> 85 (April 1977): 349-360.
- Ferguson, Maxwell. Review of <u>Transportation</u> Rates and <u>Their Regulation</u> A. E. R. 6 (September 1916): 632-633.
- Fetter, Frank A. "Recent Discussion of the Capital Concept." Quarterly Journal of Economics 15 (November 1900): 1-45.
- Fetter, Frank A. "The Passing of the Old Rent Concept." Quarterly Journal of Economics 15 (May 1901): 416-455.
- Fetter, Frank A. <u>The Principles of Economics</u>. New York: The Century Co., 1904.

- Fetter, Frank A. "The Relations Between Rent and Interest." <u>Publications of the American Economics Association</u> 5, Series 3 (February 1904): 176-240.
- Fetter, Frank A. "Interest Theories, Old and New." <u>American Economic</u> Review 4 (March 1914): 68-92.
- Fetter, Frank A. "Capitalization Versus Productivity Rejoiner." American Economic Review 4 (December 1914): 856-859.
- Fine, Ben. "The Historical Approach to Rent and Price Theory Reconsidered." Australian Economic Papers 22 (June 1983): 137-143.
- Fisher, Irving. The Nature of Capital and Income. New York: Macmillan Company, 1907.
- Fisher, Irving. The Rate of Interest. New York: Macmillan Company, 1907.
- Fisher, Irving. <u>Elementary Principles of Economics.</u> New York: Macmillan Company, 1911.
- Fisher, Irving. The Purchasing Power of Money. New York: Macmillan Company, 1911.
- Fisher, Irvin. "The Impatience Theory of Interest." Scientia 9 (1911): 380-401.
- Fisher, Irving. "The Impatience Theory of Interest." American Economic Review 3 (September 1913): 610-618.
- Fisher, Irving. <u>Stabilizing the Dollar</u>. New York: Macmillan Company, 1920.
- Fisher, Irving. Letter to Harry Gunnison Brown, 10 May 1928, Joint Collection University of Missouri Western Historical Manuscript Collection, Columbia, Mo.
- Fisher, Irving. The Theory of Interest. New York: Macmillan and Company, 1930; reprint ed., New York: Augustus Kelly, 1965.
- Fisher, Irving. <u>Booms and Depressions</u>. New York: Adelphi Company, 1932.
- Fisher, Irving. 100% Money. New York: Adelphi Company, 1935.
- Fraser, L. M. <u>Economic Thought and Language</u>. London: A. & C. Black, 1937.

- Friedman, Milton. Letter to author, 6 October 1984. Personal files of Christopher Ryan, Iowa City, Ia.
- Geiger, George R. <u>The Theory of the Land Question</u>. New York: Macmillan Company, 1936.
- George, Henry. <u>Protection and Free Trade</u>. New York: Henry George, 1891.
- Goschen, George J. <u>The Theory of Foreign Exchange</u>. London: Effingham Wilson, 1896.
- Graham, Frank. "International Values Re-Examined." Quarterly Journal of Economics 38 (November 1923-24): 54-86.
- Graham, Frank. "100 Per Cent Reserves: Comment." American Economic Review 31 (June 1941): 338-340.
- Gray, Horace M. Letter to Weld Carter, 2 April 1975, in <u>Selected Articles</u> by <u>Harry Gunnison Brown</u>, preface by Paul Junk. New York:
  Robert Schalkenbach Foundation, 1980.
- Haberler, Gottfried. "Irving Fisher's Theory of Interest." Quarterly Journal of Economics 45 (May 1931): 499-526.
- Hadley, Arthur T. "The Meaning of Valuation." American Economic Review 18, Supplement (March 1928): 173-180.
- Harberger, Arnold. Quoted on back cover of the reprint of <u>The Economics</u> of <u>Taxation</u>, by Harry Gunnison Brown. Chicago: University of Chicago Press, 1979.
- Harberger, Arnold. Letter to author, 15 October 1984. Personal files of Christopher Ryan, Iowa City, Ia.
- Harris, C. Lowell. "Rothbard's Anarcho-Capitalist Critique." In Critics of Henry George. Edited by Robert V. Andelson. Rotherford: Fairleigh Dickinson University Press, 1979.
- Hart, A. G. "The Chicago Plan for Banking Reform." Review of Economic Studies 2 (1934-1935): 104-117.
- Hausman, Daniel. <u>Capital</u>, <u>Profits</u> and <u>Prices</u>. New York: Columbia University Press, 1981.
- Heilbroner, Robert. The Worldly Philosophers. New York: Simon Schuster, 1961.

- Hewett, William W. "Capital Value Once More." <u>American Economic Review</u> 19 (December 1929): 646-648.
- Holland, Daniel, ed. <u>The Assessment of Land Value</u>. Madison: University of Wisconsin Press, 1969.
- Hotelling, Harold. "The General Welfare in Relation to the Problems of Taxation and Railway and Utility Rates." <u>Econometrica</u> 6 (July 1938): 242-269.
- Humphrey, Thomas M. "Role of Non-Chicago Economists in the Evolution of the Quantity Theory in America 1930-1950." <u>Southern Economic Journal</u> 38 (July 1971): 12-19.
- Hutt, W. W. The Keynesian Episode. Indianapolis: Liberty Press, 1979.
- "In Memorium," Memorial Service for Harry Gunnison Brown. Personal files of Christopher Ryan, Iowa City, Ia., March 23, 1975.
- Jenkins, H. P. B. "Excise Tax Shifting and Incidence: A Money Flows Approach." <u>Journal of Political Economy</u> 62 (April 1955): 125-149.
- Johnson, Alvin S. "Rent in Modern Economic Theory." <u>Publications of the American Economic Association</u> 3, Series 3 (February 1902): 873-1007.
- Johnson, Alvin S. "The Case Against the Single Tax." Atlantic Monthly 113 (January 1914): 27-37.
- Jones, R. A. "Which Price Index for Escalating Debts?" Economic Inquiry 18 (April 1980): 221-232.
- Junk, Paul. Preface to <u>The Selected Articles of Harry Gunnison Brown</u>. New York: Robert Schalkenbach Foundation, 1980.
- Kahn, Alfred E. <u>The Economics of Regulation</u>: <u>Principles and Institutions</u>. 2 vols. New York: John Wiley & Sons, 1970.
- Kahn, Alfred E. Letter to author, 5 September 1984. Personal files of Christopher Ryan, Iowa City, Ia.
- Kaldor, Nicolas. Essays on Value and Distribution. Glencoe, Ill.: The Free Press of Glencoe Illinois, 1960.
- Kemmerer, E. W. Review of <u>International Trade and Exchange</u>, by Harry Gunnison Brown. <u>American Economic Review</u> 5 (June 1915): 354-356.

- Kendrick, M. Slade. <u>Public Finance</u>. Boston: Houghton Mifflin Co., 1951.
- Keynes, John Maynard. The General Theory of Employment, Interest and Money. New York: Harcourt, Brace & Co., 1936.
- Kindleberger, Charles. <u>Manias</u>, <u>Panics and Depressions</u>. New York: Basic Books, 1978.
- King, W. I. The Wealth and Income of the People of the United States. New York: Macmillan Company, 1915.
- King, W. I. "Earned and Unearned Income." <u>Annals of the American Academy of Political and Social Sciences</u> 95 (May 1921): 251-259.
- King, W. I. "The Single-Tax Complex Analyzed." <u>Journal of Political</u> Economy 32 (October 1924): 604-612.
- Knight, Frank. Review of <u>The Economics of Taxation</u> by Harry Gunnison Brown. <u>National Municipal Review</u> 14 (April 1925): 377-378.
- Knight, Frank. Review of <u>The Taxation of Unearned Incomes</u> by Harry <u>Gunnison Brown</u>. National Municipal Review 14 (April 1925): 378.
- Knight, Frank. Review of <u>The Philosophy of Henry George</u> by George Geiger. <u>Journal of Political Economy</u> 41 (October 1933): 687-690.
- Knight, Frank. Letter to Harry Gunnison Brown, 29 April 1939, Joint Collection University of Missouri Western Historical Manuscript Collection, Columbia, Mo.
- Knight, Frank. "The Fallacies in the Single Tax." The Freeman 3 (August 1953): 809-811.
- Knight, Frank. On the <u>History and Method of Economics</u>: <u>Selected Articles</u>. Chicago: University of Chicago Press, 1956.
- Kolko, Gabriel. <u>Railroads and Regulation 1877-1916</u>. Princeton: Princeton University Press, 1965.
- Lee, Susan Previant and Passel, Peter. A New Economic View of American History. New York: W. W. Norton & Co., 1979.
- Lissner, Will. "In Memorium: H. G. Brown 1880-1975." American <u>Journal</u> of Economics and Sociology 34 (July 1975): 246-248.
- Lissner, Will. "Pennsylvania's New Optional Graded Tax Law." American Journal of Economics and Sociology 20 (October 1951): 41-43.

- Locklin, D. Philip. "The Literature on Railway Rate Theory." Quarterly Journal of Economics 47 (February 1933): 167-230.
- Loucks, William N. "The Unearned Increment in Land Values and Its Social Implications." Annals of the American Academy of Political and Social Sciences 148 (March 1930): 67-81.
- Marshall, Alfred. "On Rent." Economic Journal 3 (1893): 74-90.
- Marshall, Alfred. <u>Principles of Economics</u>. 8th ed. New York: Macmillan and Company, 1907.
- Mieszkowski, Peter. "Tax Incidence Theory: The Effects of Taxes on the Distribution of Income." <u>Journal of Economic Literature</u> 7 (1969): 1103-1124.
- Mieszkowski, Peter. "The Property Tax: An Excise or Profits Tax?" Journal of Public Economics 1 (April 1972): 73-96.
- Mill, John Stuart. <u>Principles of Political Economy</u>. London: Longmans, Green and Company, 1909.
- Millis, H. A. Review of <u>Principles of Political Economy</u>, by Frank Fetter. Quarterly Journal of Economics 30 (May 1916): 559-565.
- Musgrave, Richard. Letter to Harry Gunnison Brown, 21 November 1939, Joint Collection University of Missouri Western Historical Manuscript Collection, Columbia, Mo.
- Musgrave, Richard. "On Incidence." <u>Journal of Political Economy</u> 61 (August 1953): 306-323.
- Musgrave, Richard. <u>The Theory of Public Finance</u>. New York: McGraw-Hill, 1959.
- The National Cyclopedia of American Biography 58, Clifton, New Jersey: James T. White and Company, 1979, pp. 43-44.
- Netzer, Dick. Letter to Harry Gunnison Brown, 11 February 1969, Elizabeth Read Brown, Columbia, Mo.
- Nicholson, J. Shield. "Address to the Economic and Statistics Section of the British Association." <u>Journal of Political Economy</u> (December 1893): 119-132.
- Obituary for James Harvey Rogers. <u>American Economic Review</u> 29 (December 1939): 913-914.
- Ogilvie, F. W. "Marshall on Rent." <u>Economic Journal</u> 40 (March 1930): 1-24.

- Pareto, Vilfredo. <u>Manual of Political Economy</u>. New York: Augustus Kelly, 1971.
- Parrish, John. "The Rise of Economics as an Academic Discipline: The Formative Years to 1900." Southern Economic Journal 34 (July 1967): 1-17.
- Patten, Simon Nelson. "Another View of the Ethics of Land Tenure."

  <u>International Journal of Ethics</u> 1 (April 1891): 357-360.
- Patten, Simon. Theory of Prosperity. New York: Macmillan and Company, 1902.
- Pigou, A. C. "Railways Rates and Joint Costs" with F. W. Taussig.

  Quarterly Journal of Economics 27 (May and August 1913): 535-588,
  687-694.
- Price, L. L. Review of <u>The Unseen Foundations of Society</u> by the Duke of Argyll. Economic Journal 3 (1893): 264-271.
- Ripley, William Z. <u>Railroads</u>, <u>Rates and Regulation</u>. New York: Longmans, Green & Co., 1912.
- Robinson, James Harvey. The Mind in the Making. New York: Harpers, 1921.
- Rogers, James Harvey. America Weighs Her Gold. New Haven: Yale University Press, 1931.
- Rogers, James Harvey. Letter to Harry Gunnison Brown, 21 May 1932, Rogers Papers, Yale University Library, New Haven, Conn.
- Rogers, James Harvey. Letter to Harry Gunnison Brown, 27 November 1933, Rogers Papers, Yale University Library, New Haven, Conn.
- Rolph, Earl R. "A Proposed Revision of Excise-Tax Theory." <u>Journal</u> of Political Economy 60 (April 1952): 102-117.
- Rolph, Earl R. and Break, George. <u>Public Finance</u>. New York: The Ronald Press, 1961.
- Rothbard, Murray. <u>Power and Markets</u>. Menlo Park, Calif.: Institute for Humane Studies, 1970.
- Samuelson, Paul. <u>Ten Economic Studies in the Tradition of Irving Fisher</u>. New York: John Wiley & Sons, 1967.
- Santayana, George. <u>Life of Reason</u>. New York: C. Scribner's Sons, 1905.

- Sause, George. "Economic Principles and Economic Analysis." American Journal of Economics and Sociology 17 (April 1958): 33-36.
- Seager, Henry. Review of <u>The Distribution of Wealth</u>, by John Bates Clark. <u>Annals of the American Academy of Political and Social Sciences</u> 16 (September 1900): 121-127.
- Seager, Henry. "The Impatience Theory of Interest." American Economic Review 2 (December 1912): 834-851.
- Seager, Henry. "Comment on the Impatience Theory of Interest." American Economic Review 3 (September 1913): 618-619.
- Seager, Henry. <u>Labor and Other Economic Essays</u>. New York: Harper & Brothers, 1931.
- Seligman, E. R. A. Discussant in <u>Publications</u> of the <u>American Economic Associations</u> 6 (1891): 56-58.
- Seligman, E. R. A. "The Shifting and Incidence of Taxation." <u>Publications</u> of the American Economic Association 7 (March and May 1892): 7-191.
- Seligman, E. R. A. "Recent Tax Reforms Abroad I." <u>Political Science</u> Quarterly 27 (March 1912): 454-469.
- Seligman, E. R. A. <u>Essays in Taxation</u>. 10th ed. New York: Macmillan Company, 1925.
- Seligman, E. R. A. <u>Principles of Economics</u>. New York: Longman, Green and Company, 1926.
- Simon, Herbert A. "The Incidence of a Tax on Urban Real Property."

  Quarterly Journal of Economics 57 (May 1943): 416-429.
- Simons, Henry C. Review of <u>The Economics</u> of <u>Taxation</u>, by Harry Gunnison Brown. <u>Journal of Political Economy</u> 34 (February 1926): 134-136.
- Simons, Henry C. "Rules Versus Authorities in Monetary Policy." Journal of Political Economy 44 (February 1936): 1-30.
- Skouras, Athanassios. "Land and Taxation as Issues in Economic Theory."

  <u>American Journal of Economics and Sociology</u> 39 (October 1980):

  373-382.
- Smyth vs. Ames. 169 U. S. 466, 546-547 (1898).
- Sprinkel, Beryl W. Letter to author, 16 December 1981. Personal files of Christopher Ryan, Iowa City, Ia.

- Souter, R. W. "Land, Capital and Opportunity Cost." American Economic Review 22 (June 1932): 203-207.
- Southwestern Bell Telephone. 262 U. S. 276, 289-312 (1923).
- Stevens, Frank Fletcher. A <u>History of the University of Missouri</u>. Columbia, Mo.: University of Missouri Press, 1962.
- Stigler, George J. <u>Production and Distribution Theories</u>. New York: Agathon Press, 1968.
- [Sumner, William Graham]. Review of <u>Progress and Poverty</u>, by Henry George. Scribner's Monthly 22 (June 1881): 312-313.
- Taussig, Frank. "A Contribution to the Theory of Railway Rates."

  Quarterly Journal of Economics 5 (July 1891): 438-465.
- Taussig, Frank. "Railway Rates and Joint Costs Once More." Quarterly Journal of Economics 27 (February 1913): 378-384.
- Taussig, Frank. Review of <u>International Trade and Exchange</u> by Harry Gunnison Brown. <u>Journal of Political Economy</u> 23 (June 1915): 621-623.
- Taussig, Frank. <u>Principles of Economics</u>. 2 vols., 3rd ed. New York: Macmillan Company, 1926.
- Trevelyn, Charles. "Land Value Taxation and the Use of Land." Economic Journal 17 (1907): 30-35.
- Turner, John Roscoe. <u>The Ricardian Rent Theory in Early American</u>
  <u>Economics</u>. New York: New York University Press, 1921.
- Tuttle, Charles. "Clark's <u>Distribution of Wealth</u>." Yale <u>Review</u> 11 (August 1902): 179-187.
- Viner, Jacob. "Textbooks in Government Finance." <u>Journal of Political</u> <u>Economy</u> 30 (April 1922): 241-256.
- Von Mering, Otto. <u>The Shifting and Incidence of Taxation</u>. Philadelphia: Blakiston Co., 1942.
- Wagner, Adolph. Agar- und Industreistaat. Jena: Gustav Fischel, 1901.
- Walker, Francis Amasa. <u>Land and Its Rent.</u> Boston: Little, Brown, & Co., 1883.
- Walker, Francis Amasa. <u>Political Economy</u>. New York: Henry Holt & Co., 1888.

- Walker, Pinkney. Preface to "Essays in Honor of Harry Gunnison Brown, Ph.D., L.H.D.; On the Occasion of His Retirement from the University of Missouri." American Journal of Economics and Sociology 11 (April 1952): 227-228.
- Walker, Pinkney. Interview with Pinkney Walker, Columbia, Mo., December, 1983.
- Walsh, Correa. The Measurement of General Exchange-Value. New York: Macmillan and Company, 1901.
- Warburton, Clark. "Economic Terminology: Factors of Production and Distributive Shares." <u>American Economic Review</u> 18 (March 1928): 65-74.
- Warburton, Clark. "Monetary Velocity and Monetary Policy." Review of Economics and Statistics 30 (November 1948): 304-314.
- Warburton, Clark. "Bank Reserves and Business Fluxuations." <u>Journal of the American Statistical Association</u> 3 (December 1948): 542-
- Wedgewood, Joseph. "The Principle of Land Value Taxation." <u>Economic</u> <u>Journal</u> 22 (1912): 388-397.
- Wicksell, Knut. "Der Bankzins als Regulator der Warenpreise." <u>Jahrbücher für National Ökonomie und Statistic</u> 13 (February 1897): 228-243.
- Wicksell, Knut. <u>Lectures on Political Economy</u>. Vol. 1. New York: Macmillan and Company, 1934; reprint ed., New York: Augustus Kelly, 1967.
- Wicksell, Knut. "A New Principle of Just Taxation." In <u>Classics in the Theory of Public Finance</u>, Richard Musgrave and Alan Peacock eds. London: Macmillan and Company, 1958.
- Yeager, Leland. "The Keynesian Diversion." Western Economic Journal 11 (June 1973): 150-163.
- Young, Arthur Nichols. The <u>Single Tax Movement in the United States</u>. Princeton: Princeton University Press, 1916.

## ACKNOWLEDGMENTS

The author is particularly grateful to Elizabeth Read Brown for her gracious assistance in the accomplishment of this project. The University of Missouri library staff was helpful in providing vital information on my topic. I would also like to thank the many economists who responded to my inquiries about Dr. Brown.

The patience and support of my major professor, Dudley Luckett, and the members of my committee deserve special acknowledgment.

Finally, I would like to give special thanks to my wife, Helen, for forbearance and encouragement.