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**Taxation in classical theories of value, distribution and
accumulation**

Meyer, Douglas Scott, Ph.D.

The American University, 1990

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TAXATION IN CLASSICAL THEORIES OF VALUE,
DISTRIBUTION AND ACCUMULATION

by

Douglas Scott Meyer

submitted to the

Faculty of the College of Arts and Sciences

of The American University

in Partial Fulfillment of

The Requirements for the Degree

of

Doctor of Philosophy

in

Economics

Signatures of Committee:

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To Jacque and Robin

TAXATION IN CLASSICAL THEORIES OF VALUE,
DISTRIBUTION, AND ACCUMULATION

BY

Douglas Scott Meyer

ABSTRACT

Theories of taxation have played an important role in the development of classical theories of value, distribution and accumulation, yet this history has been largely neglected in the literature of the history of economic thought. The historical review presented here fills this gap in economic scholarship by providing a critical review of the major classical writings on taxation. As such, this study demonstrates that theories of taxation and the treatment of fiscal questions constitute crucial elements in the development of classical political economy.

The analysis of the role of taxation in theories of value, distribution and accumulation also contributes to the current debate among historians of economic thought over whether the ascendancy of neoclassical economics over classical political economy constituted scientific progress. The neoclassical view holds that classical theories of taxation constitute, at best, no more than an embryonic stage of modern neoclassical public finance, with little or

no relevance to modern capitalism. In contrast, this dissertation shows: First, that the classical approach to taxation represents a distinct theoretical tradition that is not part of a continuum leading to the development of current neoclassical orthodoxy. Second, that classical political economy is relevant to contemporary capitalism.

The critical analysis of the public finance writings of the mercantilists, Physiocrats, Adam Smith, David Ricardo, Karl Marx and Piero Sraffa reveals a direct relationship between the existing stage of capitalist economic development and the fiscal practices of the state. Such an analysis also shows that this relationship influenced the development of classical political economy. The classical analysis of taxation centers on the historically specific form of state extraction of economic surplus in the capitalist mode of production. The emphasis on the historical and political context of the development of the theory of taxation does not preclude, however, an analysis of the development of its internal logical structure. Scientific progress in the classical theory of taxation is shown to be tied fundamentally to analytical advancements in the theories of value, distribution, and accumulation.

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My debt to my wife, Jacqueline Simon, to whom I dedicate this dissertation, is incalculable. Over the past seven years she has sacrificed enormous amount of time, money, freedom, and intellectual energy in order to help me complete this dissertation. In the course of numerous readings of the manuscript, she has always managed to provide fresh suggestions and insightful criticism. In addition to her substantial intellectual contribution, I must mention the fact that Jacque made it possible for me to finish this dissertation during the first year of our son Robin's life, by being both a wonderful mother to him, and a strong source of financial and emotional support to us both.

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CHAPTER ONE

INTRODUCTION TO THE CLASSICAL THEORY OF TAXATION

Theories of taxation have played an important, but often neglected, role in the development of classical theories of value, distribution and accumulation. When theories of taxation have been addressed in the history of economic thought literature, the effort has not been thorough or systematic. The historical review presented here attempts to fill this gap in economic scholarship by providing a critical analysis of the major classical writings on taxation. This study will also demonstrate that theories of taxation and the treatment of fiscal questions constitute crucial elements in classical theories of value, distribution and accumulation.

In the course of pursuing these objectives, this dissertation attempts to contribute to the ongoing revival of classical political economy which followed the publication of Piero Sraffa's Production of Commodities by Means of Commodities.¹ Claims that Sraffa's book provides the theoretical foundation for the critique of neoclassical

¹ Piero Sraffa, Production of Commodities by Means of Commodities, (Cambridge: Cambridge University Press, 1960).

economics and the "rehabilitation" of classical political economy have elevated the debate over the proper interpretation of the intellectual heritage of economic doctrine to a position of crucial theoretical importance. The present study provides a reevaluation of classical theories of taxation in light of Sraffa's rehabilitation of the analytical core of classical political economy.²

The analysis of the role of taxation in theories of value, distribution, and accumulation also contributes to the current debate among historians of economic thought over whether the ascendancy of neoclassical economics over classical political economy constituted scientific progress. The neoclassical view holds that the classical theories of taxation are, at best, no more than an embryonic stage of modern neoclassical public finance, with little or no relevance to modern capitalism. In contrast, this dissertation will show; first, that the classical approach to taxation represents a distinct theoretical tradition that is not part of a continuum leading to the development of neoclassical orthodoxy, and second, that because steady scientific progress has occurred within political economy it remains applicable to contemporary fiscal questions.

² Both the Production of Commodities and his "Introduction" to David Ricardo's Principles of Political Economy and Taxation are considered to be crucial components of this effort. See Piero Sraffa, ed., The Works and Correspondence of David Ricardo, 10 vols. (Cambridge: Cambridge University Press, 1951), Vol. 1: xiii-lxii.

The only previous comprehensive analysis of the role of theories of taxation in the history of economic thought was provided by Edwin R.A. Seligman more than sixty years ago in The Shifting and Incidence of Taxation.³ Despite the inclusion of historical and institutional data, Seligman's efforts were narrowly defined. As the title indicates, the study fell within the neoclassical parameters of "tax incidence." The analysis is restricted to how taxation simultaneously affects relative prices and distribution; it does not examine the relationship between the development of public finance theory and the broader theories of value, distribution, and accumulation.

Throughout this historical review, I refer to the relevant contributions of prominent historians of economic thought. This secondary literature can be grouped into two schools of thought: Marxist political economy and neoclassical economics. The economists reviewed from the first tradition include Maurice Dobb, Ronald Meek, and I.I. Rubin, while the latter school's position is represented in the writings of Joseph Schumpeter, Mark Blaug, and Samuel Hollander.⁴ These scholars, as well as others, have

³ Edwin R.A. Seligman, The Shifting and Incidence of Taxation, 5th ed. (New York: Columbia University Press, 1927; reprint ed., New York: A.M. Kelly Publishers, 1969).

⁴ The major works of these economists include Maurice Dobb, Theories of Value and Distribution Since Adam Smith (Cambridge: Cambridge University Press, 1973); Ronald Meek, Studies in the Labor Theory of Value, 2nd. ed., (New York: Monthly Review Press, 1956); Isaac Ilych Rubin, A History of

addressed classical theories of public finance to varying degrees, but none has done so in a systematic fashion.

Classical Tradition Defined

This dissertation argues that the division of theories of taxation into classical and neoclassical paradigms is an appropriate and useful one. The term "paradigm" follows Thomas Kuhn's use of the concept, meaning a "network of commitments--conceptual, theoretical, and methodological."⁵ The use of the term to conceptualize the existence of two "coherent traditions" in the area of public finance is in no way intended to suggest that Kuhn's theory of scientific progress is directly applicable to economics.⁶

A sharp distinction exists between classical and neoclassical approaches as to the primary object of analysis and this difference determines their contrasting theoretical

Economic Thought, trans. by Donald Filtzer, (London: Ink Links, 1979); Mark Blaug, Economic Theory in Retrospect, 3rd ed., (Cambridge: Cambridge University Press, 1978); Samuel Hollander, The Economics of David Ricardo, Studies in Classical Political Economy; II, (London: Heinemann Books, 1979); and Joseph Schumpeter, History of Economic Analysis (New York: Oxford University Press, 1954).

⁵ Thomas Kuhn, The Structure of Scientific Revolutions, 2nd. ed. (Chicago: University of Chicago Press, 1970): 10.

⁶ It is not "necessary to embrace Kuhn's theory of scientific revolutions to find the concepts of a paradigm and of an intellectual revolution convenient description categories to apply in a review of the evolution of economic ideas which seeks to take into account the socio-historical context of their development." Phyllis Deane, The Evolution of Economic Ideas, (Cambridge: Cambridge University Press, 1978): xii.

and methodological approaches.⁷ The primary concern of classical political economy is the analysis of how fiscal policies influence the production, distribution and accumulation of economic surplus. The chief focus of the neoclassical approach, on the other hand, is with questions of how taxes affect (distort) the efficient allocation of given resources through relative price changes. The minimization of these distortions ("deadweight losses" or the "excess burden") is assumed to be equivalent to the maximization of individual and social welfare.

Classical political economy can be further distinguished from both mercantilist economic thought and neoclassical economics on the basis of its fundamental postulate that the origin of surplus (value) is in the sphere of production and not in exchange or circulation. The emphasis in classical political economy on the production of surplus reflects the belief that value, distribution, and accumulation cannot be explained adequately by an analysis restricted to the sphere of exchange (supply and demand analysis).

⁷ Vivian Walsh and Harvey Gram argue that the object of analysis for classical political economy is "the accumulation and allocation of surplus output;" while neoclassical analysis focuses on "the allocation of given resources among alternative uses." Classical and Neoclassical Theories of General Equilibrium: Historical Origins and Mathematical Structure, (Oxford: Oxford University Press, 1980): 3.

Economic surplus is defined in classical economics as the total produced output of society minus the portion required to reproduce that output. The latter represents the necessary inputs to production, and includes both the produced commodity inputs and the subsistence goods of the laborers in the production process. The surplus portion of output can be consumed without affecting the reproductive capacity of the system. The surplus also can be expended on increased inputs, thereby leading to expanded reproduction. The focus on economic surplus reflects the fundamental principle of classical economics that surplus represents both the potential source of accumulation and the fund from which tax revenue is derived. Taxable capacity is not defined in neoclassical analysis in relation to the concept of economic surplus, but within the context of individual optimizing decisions to allocate resources in response to the imposition of a given tax scheme.

Classical distribution theory is concerned with the distribution of economic surplus among economic classes, or within a specific social structure. Economic agents in the classical system are classified according to their social or class relationship to the production process, and not as individual "consumers" and "producers." Classical taxation and distribution theory has traditionally centered on the functional definition of social classes and the use of the economic surplus. David Ricardo, for example, followed his

famous statement that the principal problem in Political Economy is to determine the laws which regulate the distribution between the three major classes of society, with the statement, "the true doctrine of rent; without a knowledge of which, it is impossible to...trace satisfactorily the influence of taxation on different classes of the community."⁸ In neoclassical theory, the analysis of fiscal policies is restricted to how tax and expenditure schemes affect the optimization behavior of consumers and producers, given budget and tax constraints.

The post-tax distribution of surplus influences the rate of capital accumulation in the classical system. Both the composition and level of output, and the rate of accumulation, are determined by the decisions of capitalists either to spend productively or to consume unproductively. Within the classical framework, the explanation of how the existence of taxes affected the capitalists' decisions over the allocation of the surplus (which determines accumulation), is separate from the explanation of the effects of state economic policies on relative prices and the distribution of surplus between classes. Classical theories of taxation focus on the impact of state fiscal policies on reproduction. By contrast, the majority of

⁸ David Ricardo, On the Principles of Political Economy and Taxation, 1817, Piero Sraffa ed., Volume I of The Works and Correspondence of David Ricardo, (Cambridge: Cambridge University Press, 1951): 5.

neoclassical analyses are conducted within a comparative static framework.⁹ Within neoclassical theory, the effect of taxation on accumulation (savings) is determined solely through the effects of taxes on relative prices.

Historical and Theoretical Issues

The validity of making the distinction between classical and neoclassical economics depends, in part, upon the set of questions and problems examined by the historian of economic thought. A critical analysis of the writings of the major classical political economists reveals a distinct and coherent theoretical and methodological approach to questions of taxation. The general methodological premise of this dissertation is that the relationship between the classical theory of taxation and theories of value, distribution and accumulation can be understood only within the historical context in which they were written and applied. Therefore, particular attention will be paid to the links among the economic development of capitalism, the fiscal practices of the state, and the evolution of theories of taxation. Classical public finance theory is itself a

⁹ While recent extensions to "comparative dynamic" models have shifted the analysis of taxation to economic growth, these developments have not changed the fundamental nature of the neoclassical general equilibrium models employed. The analysis still focuses on the allocation (exchange) of given resources among alternative uses. The existence of a given tax scheme is assumed to affect the allocation of given commodities and factor services between present and future uses.

product of a specific historical, material environment. Theories of taxation will be shown to reflect changing economic conditions and attendant policy exigencies. Thus, the methodology employed is consistent with the philosophy of historical materialism.

In the classical theories of A.R.J. Turgot, Adam Smith, and Karl Marx, history was divided into periods based on how economic surplus was produced and extracted in society.¹⁰ While the existence of economic surplus pre-dates capitalism, classical political economy is primarily concerned with the analysis of the specific economic form of the surplus in the capitalist mode of production--namely, profit on capital advanced in production. Similarly, classical analyses of taxation center on the historically specific form of state extraction of surplus in the capitalist mode of production. Each stage of economic development corresponds to a particular form of surplus and historically specific form of taxation.

A complete explanation of the development of theory must include the analysis of the "context of discovery" of a science's theoretical concepts. To ignore the political context in which theories of taxation have been developed, as has been the case with most neoclassical historians,

¹⁰ For an excellent account of the similarities and differences between the classical economists' theories of history, see Ronald Meek, "Smith, Turgot and the 'four stages' theory," History of Political Economy 3, (1971): 9-27.

limits the explanation of those theories and their relevance and importance in today's economic environment.¹¹ The emphasis on the historical and political context of the development of classical theories of taxation does not preclude, however, an analysis of their internal logical structure. The classical economists explicitly considered the theory of taxation to be a crucial component in their general theories of value, distribution and accumulation. Thus, the historical analysis of successive theories of public finance highlights the scientific advancements in the classical theory of value. Classical discussions of the sources of tax revenue were linked to progressive attempts to theoretically integrate the material and value aspects of economic surplus. Classical theories of distribution and tax incidence were, in turn, constructed on the foundation of the labor theory of value. The post-tax share of economic surplus accruing to the capitalist class in the form of profit constituted the key determining factor in classical theories of capital accumulation and economic growth.

¹¹ By the opening decade of this century, Thorstein Veblen had recognized the limiting nature of neoclassical economics: "It is characteristic of the school that wherever an element of the cultural fabric, an institution or any institutional phenomenon, is involved in the facts with which the theory is occupied, such institutional facts are taken for granted, denied, or explained away." "The Limitations of Marginal Utility," Thorstein Veblen Journal of Political Economy, Vol. XVII, No. 9 November 1909, reprinted in The Place of Science in Modern Civilisation, (New York: The Viking Press, Inc., 1919): 233.

The logical structure of the classical theory of taxation is further illustrated through the construction of a Sraffian-type general equilibrium model of taxation. The origins of such an approach can be traced back to Francois Quesnay's Tableau Economique and Karl Marx's schemes of economic reproduction. The reconstruction of a classical model also highlights the theoretical, methodological, and ideological differences between it and neoclassical theory. The choice of exogenous (parameters) and endogenous variables which characterize each model, reveals crucial differences between the two approaches' inherent objectives, theories and methodologies. Maurice Dobb argued that the very selection of parameters and variables in a mathematical/economic model presupposes a concept of causation--a preconceived notion of the operation of the economy. "In choosing one structure in preference to another, the model-builder is not only providing a scaffolding or framework within which human thought can operate, but is laying the emphasis upon certain factors and relationships and excluding others or casting them into the shadows."¹²

Chapter Outline

Chapter Two of this study traces the origins of classical theories of taxation to England and France during the seventeenth and eighteenth centuries. During this

¹² Dobb, Theories, 7.

period of transition from feudalism to industrial capitalism, mercantile economic policies were directed toward facilitating international trade and consolidating state power. In contrast to the later classical economists, the mercantilists argued that increases in a nation's wealth were derived only from international trade, and therefore, only that form of economic surplus could be the source of tax revenue. Customs and excise taxes became the basic sources of state revenue during this period. Although the mercantilist writers lacked a conception of economic surplus created in production, their writings on taxation nevertheless directly influenced the development of classical public finance theory.¹³

Chapter Three traces the origins of French political economy and Physiocratic theories of taxation to the works of Pierre le Pesant Boisguillebert and Marshal Vauban.¹⁴

¹³ The major mercantilist writers discussed in this chapter include Thomas Mun, England's Treasure by Forraign Trade (Printed by J.G. for Thomas Clark, 1664; reprint ed., Fairfield, NJ: A.M. Kelley, 1986); Thomas Hobbes, Leviathan, (printed for Andrew Croke, London, 1651; reprinted ed., London: Pelican Books, 1968); Sir William Petty, The Economic Writings of Sir William Petty, ed. by Charles H. Hull (Cambridge: Cambridge University Press, 1899; reprint ed., Fairfield, NJ: A.M. Kelley, 1986); Francis Fauquier, An Essay on Ways and Means for Raising Money for the Support of the Present War, & c. (Printed for M. Cooper, 1756; reprint ed., Baltimore: The John Hopkins Press, 1915); and Sir James Steuart, An Inquiry into the Principles of Political Oeconomy, ed. by Andrew S. Skinner (Chicago: University of Chicago Press, 1966).

¹⁴ Pierre le Pesant Boisguillebert, Le Detail de la France, 1695-6, and Dissertation Sur La Nature Des Richesses, De L' Argent Et Des Tributs, 1707, and Marshal

Francois Quesnay and Marquis de Mirabeau successfully combined the practical and polemical writings of Boisquillebert and Vauban with the theoretical system of Richard Cantillon to produce the first classical system of political economy.¹⁵ While the mercantilists had argued that surplus was created in exchange, the Physiocrats argued that surplus was created in agricultural production. Because agricultural surplus was assumed to be the sole source of wealth and accumulation, it constituted the sole source of tax revenue. And because land rent was the unique form of surplus, all taxes were ultimately paid out of rent. Quesnay used his model of production and circulation to advocate a single direct tax on landed property.

Chapter Four argues that Adam Smith's theory of taxation was the product of the maturing industrial capitalist economy of England in the second half of the eighteenth century.¹⁶ Smith rejected both the mercantilist conception that surplus was generated in exchange and the

Vauban, Projet d'une dixme royale, 1707, reprinted in Economistes-Financiers Du XVIII Siecle, ed. by Eugene Daire, (Paris: Chez Guillaumin, Libraire, 1843).

¹⁵ Francois Quesnay, Tableau Economique, Marguerite Kuczynski and Ronald Meek ed., (New York: A.M. Kelley for the Royal Economic Society, 1972); Marquis de Mirabeau, Theorie de L'impot (Paris: 1760); and Richard Cantillon, Essai Sur La Nature Du Commerce En General, trans. by Henry Higgs, (New York: A.M. Kelley, 1964).

¹⁶ Adam Smith, An Inquiry into the Nature and Causes of the Wealth of Nations, 1776, Edwin Cannan ed., (Chicago: University of Chicago Press, 1976).

Physiocratic belief that the production of surplus was limited to agriculture. By identifying the generation of economic surplus with production in general, Smith laid the foundation for the classical theory of taxation and the focus on taxation of surplus in the form of capitalist profit. Contradictions in Smith's theory of value, however, prevented him from developing a logically coherent theory of how taxation affected distribution and accumulation.

In the "Preface" to his Principles of Political Economy and Taxation, David Ricardo argued that the correction of Smith's "original errors regarding value" was a necessary step in providing a "true doctrine of distribution" and a logical theory of taxation. The distribution of economic surplus among the three great classes of society (capitalists, landlords, and workers) was, for Ricardo, the principal problem of political economy. Ricardo's rejection of Smith's theory of tax incidence was a key element in his overall critique of Smith's theories of value, distribution and accumulation. Despite the fact that Ricardo devoted eleven chapters of the Principles to taxation, questions of fiscal policy have been largely absent from the debate over his proper place in the history of economic thought. A central claim of Chapter Five is that the analysis of Ricardo's theory of taxation informs the larger debate over his theories of value, distribution and capital accumulation.

Chapter Six reviews and evaluates the various attempts to revive and extend the classical theory of taxation in the years following the distintegration of Ricardian doctrine in the mid-nineteenth century. These efforts can be said to derive from the works of Karl Marx. The reproduction schemes developed by Marx in Volume II of Capital provide the analytical structures necessary to incorporate taxation into the corpus of his broader economic theories.¹⁷ The emphasis on Marx's reproduction schemes provides not only a backward linkage to the public finance writings of Francois Quesnay and the Physiocrats, but also a forward linkage to the writings of Piero Sraffa and the twentieth-century revival of classical political economy and taxation.

Recent efforts by orthodox Marxists and neo-Ricardians to reconstruct a theory of taxation along the lines suggested by Marx and Sraffa constitute a coherent beginning to the revival of the classical approach to public finance.¹⁸ Chapter Seven presents a summary of the major

¹⁷ Karl Marx, Capital, Volume II, 1884, (New York: Vintage Books, 1981).

¹⁸ J.S. Metcalfe and Ian Steedman, "Some Effects of Taxation in a Linear Model of Production," The Manchester School of Economics and Social Studies, 39, (September 1971): 171-85; John Eatwell, "A Simple Framework for the Analysis of Taxation, Distribution, and Effective Demand," in Growth, Profits and Property: Essays in the Revival of Political Economy, E.J. Nell, ed. (Cambridge: Cambridge University Press, 1980): 165-72; and Willie Semmler, "On the Classical Theory of Taxation: An Analysis of Tax Incidence in a Linear Production Model," Metroeconomica XXXV (February 1983): 129-46.

findings of this study and their applicability to
contemporary historical and theoretical fiscal issues.

CHAPTER TWO

PRECURSORS TO CLASSICAL THEORIES OF TAXATION

The origin and development of the analytical categories used by the classical economists to explain taxation can be traced to the writings of the mercantilists of the seventeenth and eighteenth centuries.¹ During this period of transition from feudalism to industrial capitalism, mercantile economic policies were directed toward facilitating international trade and consolidating state power. In contrast to the later classical economists, the mercantilists argued that increases in a nation's wealth were derived from positive international trade balances, and therefore, that form of economic surplus could be the only source of tax revenue. Customs and excise taxes became the basic sources of state revenue during this period.

Although the mercantilists lacked a clear conception of surplus as created in production, their writings on taxation

¹ A complete history of public finance theory would begin with Xenophon's On the Means of Improving the Revenues of the State of Athens (355 B.C.), the earliest known treatise on taxation. The impact of pre-mercantilist thought on the development of classical political economy, however, was minimal. Xenophon's work has been translated by J.S. Watson, and reprinted in Arthur Eli Monroe, ed., Early Economic Thought, (Cambridge: Harvard University Press, 1951): 31-49.

nevertheless directly influenced the later development of classical public finance theory. The major mercantilist writers discussed in this chapter include Thomas Hobbes, Thomas Mun, Sir William Petty, Francis Fauquier, John Locke, and Sir James Steuart. Many of the theoretical elements used by the classical economists to construct theories of value, distribution and accumulation were developed by the mercantilists in conjunction with their theories of taxation.

Transition from Feudalism to Capitalism

An overview of the transition from feudalism to capitalism in England and the concomitant transition from feudal forms of taxation to capitalist forms not only sheds light on the specific nature of taxation in capitalism, but also provides the starting point for the history of tax analysis. The defining characteristic of the feudal mode of production is the coerced "transference to...the lord of the labour of the peasant family which was surplus to that needed for the family's subsistence and economic reproduction. The surplus labour could be used directly on the lord's demesne (home farm of the manor), or its product could be transferred in the form of a rent or in money, from the family holding."² Produce from land was the primary source of wealth.

² Rodney Hilton, ed., The Transition from Feudalism to Capitalism, (London: Verso Press, 1978): 14.

In general, the early feudal monarchies raised revenue to support the Church, the living expenses of the court and the maintenance of their military apparatus. Seigniorial extraction occurred in the form of direct labor services performed, or dues paid in money or in-kind.³ The minimally provided "public goods" such as roads were funded by the medieval corvees. Goods requiring greater skill in their production were occasionally supported from funds raised through the guild system.⁴ But for the most part, given the near-subsistence condition of the early medieval feudal economies, which also lacked the widespread use of currency, the feudal state viewed the peasantry and the produce from land as the sole source of economic support.

A major shift in the political structure of Western Europe occurred in the early sixteenth century with the rise of strong "absolutist states." According to Perry Anderson, the absolutist state represented "an apparatus for the

³ "Nevertheless, peasants had to acquire money, either to buy manufactured commodities or to pay rent or tax. Even though they were able to provide their own subsistence, they still had to go to the market to sell their surplus produce and get a small money income...the bulk of their money income went to the landlord in rent or to the feudal state through taxation." Rodney Hilton, "Unjust Taxation and Popular Resistance," New Left Review, No. 180 (March/April 1990): 180.

⁴ "The guilds collected taxes from members to support construction and maintenance of public facilities--market buildings, town clocks, roads and bridges." Carolyn Webber and Aaron Wildavsky, A History of Taxation and Expenditure in the Western World, (New York: Simon and Schuster, 1986): 149.

protection of aristocratic property and privileges, yet at the same time the means whereby this protection was promoted could simultaneously ensure the basic interests of the nascent mercantile and manufacturing classes."⁵ The emergence of new forms of taxation, which differed from those of early feudalism and those that appeared later under mature capitalism, reflected the attempt by the state to reconcile these competing interests.

The power of the English Monarchy to raise revenue by taxation was limited not only by economic considerations, but also by the political structure of the state. The Magna Carta, written in 1215, established parliamentary limitations on the power of the Court to levy taxes. The nobility had a direct economic interest in preventing the expropriation of any part of the surplus extracted from the peasantry who worked their land holdings.⁶ Faced with these political and economic constraints, the English monarchy maintained itself throughout the fifteenth century on revenues garnered through traditional feudal means. Only in cases of military emergency were other forms of taxation

⁵ Perry Anderson, Lineages of the Absolutist State, (London: New Left Books, 1974; reprint ed., London: Verso, 1978): 40.

⁶ "The unitary Parliament which met in London did not achieve the degree of meticulous fiscal control nor the rights of regular convocation which later characterized some of the continental Estates systems. But they did secure a traditional negative limitation of royal legislative power, which was to become of great importance in the epoch of Absolutism." Ibid., 115.

adopted. These ad hoc, expedient, and temporary measures included the chartering of towns, expropriation of church property, debasement of currency, establishment of primitive forms of credit, and even the taxation of the newly emerging forms of mercantile wealth.⁷ The underdeveloped state of trade and continued noble opposition to these forms of taxation prevented their permanent institutionalization.

Under Henry VII, who suspended the English parliament from 1497 to 1509, the nobility lost much of its power to limit the fiscal practices of the monarch, and state revenues increased.⁸ In 1529, Henry VIII resummoned Parliament in order "to mobilize the landed class behind him in his dispute with the Papacy and the Empire, and to secure its endorsement of the political seizure of the Church by the State in England."⁹ The vast landed wealth of the Church was expropriated by the state, which greatly increased its financial and administrative power.

A distinguishing characteristic of English absolutism in this period was the lack of a substantial military apparatus. The absence of excessive military spending allowed the English monarch to exist and operate with tax

⁷ Webber and Wildavsky, 197.

⁸ "The royal demesne was greatly enlarged by resumption of lands, whose yield to the monarchy quadrupled during the reign; feudal incidents and custom duties were likewise maximally exploited." Anderson, 119.

⁹ Ibid., 120.

burdens well below those of France and the other nation-states. Anderson makes the case that it was this fact and the resulting shift in the balance of power between the feudal states that resulted in Henry VIII's failed military adventures in France in the 1540's. The resulting financial chaos had profound political implications for the English crown and its methods of raising revenue.¹⁰ Ultimately, this political and economic shift "allowed a gradual conversion of the aristocracy to commercial activities long before any comparable rural class in Europe."¹¹ When England seriously built its military back up in the late sixteenth century, it was in the area of naval power, which "was preeminently conducive to a commercial orientation."¹²

Even after the extinction of the Tudor line in 1603, the English Parliament continued to resist the king's right of taxation, and the "economic/bureaucratic apparatus" remained seriously under-funded. The state was often forced to revert to traditional feudal means of revenue.

¹⁰ "Military intervention on the continent was misconducted; its costs escalated greatly...to cover them, the State not only resorted to forced loans and debasement of the coinage, but also started to unload on the market the huge fund of agrarian property it had just acquired from the monasteries...The sale of Church estates by the monarchy multiplied as the war dragged on towards Henry's death. By the time peace was finally reached, the great bulk of this vast windfall was lost, and with it, the one great chance of English Absolutism to build up a firm economic base independent of parliamentary taxation." Ibid., 124-5.

¹¹ Ibid., 125-6.

¹² Ibid., 134.

Parliament's inability to raise the revenue necessary to support a strong army was a contributing factor to the Scottish invasion of 1640, which put an end to Charles I's rule. The power of the feudal monarch in England would never again be dominant. Only after 1640 did Parliament adopt a general system of excise taxes. This new ability to raise revenue proved instrumental to England's restoration as a major political and military power in the seventeenth and eighteenth centuries.¹³

The political demise of the English absolutist state reflected fundamental developments occurring in the English economy--the increasing strength of the commercialized gentry and the rise of merchant capitalism. The economic influence of the commercial class of merchants and landowners grew rapidly. England's exports during this period gradually shifted from raw materials (wool), to finished products (cloth).¹⁴ Imports, on the other hand, increasingly took the form of inputs of raw materials for these manufactures, extending for the first time beyond

¹³ "The late seventeenth and eighteenth centuries saw an astonishing transformation in British government... Britain was able to shoulder an ever-more ponderous burden of military commitments thanks to a radical increase in taxation, the development of public deficit finance on an unprecedented scale, and the growth of a sizable public administration devoted to organizing the fiscal and military activities of the state." John Brewer, The Sinews of Power: War, Money and the English State, 1688-1783, (New York: Alfred A. Knopf, 1989): xvii.

¹⁴ See I.I. Rubin, A History of Economic Thought, trans. by Donald Filtzer, (London: Ink Links, 1979): 29-30.

luxury goods and precious metals. Trade in manufactured goods stimulated the development of domestic industry and the transition of the work force from feudal social relations to a capitalist wage system.

The new class of commercial capitalists had the support of the new political state in England, and the policies toward trade, as well as taxation, reflected their interests. Economic policies were directed at assisting the early accumulation of capital: "In short, the Mercantile System was a system of State-regulated exploitation through trade which played a highly important role in the adolescence of capitalist industry: it was essentially the economic policy of an age of primitive accumulation."¹⁵ I.I. Rubin described the economic transition which occurred during this period as a change from a "monetary balance system" to a "balance of trade system."¹⁶ In the former, the objective of mercantilist policy was to maximize the inflow of gold and other precious metals, thus increasing the wealth of the nation. In the latter, more advanced policy, maximizing the trade surplus (without restrictions on the export of gold) was the goal.¹⁷

¹⁵ Maurice Dobb, Studies in the Development of Capitalism, 2nd. ed., (New York: International Publishers, 1963): 209.

¹⁶ Rubin, 27-34.

¹⁷ "The policies of the late mercantilist period, geared as they were to expanding foreign trade and to promoting the development of shipping and the export-

The growth of merchant wealth and the accumulation of the economic surplus derived from trade presented to the state a new fund for taxation. Unlike in the earlier feudal period, England now employed customs, excises and other taxes in an attempt to tap this new form of economic surplus.¹⁸ The transitional period in English taxation from its feudal form to one consistent with the capitalist mode of production can be defined as beginning with the imposition of general excise taxes in the 1640's and ending with William Pitt's imposition of the income tax in 1799.¹⁹ Throughout this period, the tax structure remained a mixture of feudal and mercantile forms--feudal types of taxes on the surplus in agriculture, and mercantile taxes on consumption and exchange--on the surplus as it appeared in trade and circulation.²⁰ Not until the eighteenth century came to a

oriented industries upon which that trade depended, corresponded to a higher level of merchant capitalist development than did the policies of mercantilism's first phase." Ibid., 33.

¹⁸ "Early-modern state officials did not invent consumption taxes, but they did impose them more intensively than states had ever done before. Throughout the early-modern period governments raised most of their revenue by taxing domestic and foreign trade." Webber and Wildavsky, 270.

¹⁹ See William Kennedy, English Taxation: 1640-1799: An Essay on Policy and Opinion, (London: Frank Cass & Co., 1964).

²⁰ "Only in England, where the democratic instincts maintained themselves somewhat more strongly...do we find continued opposition to the general excises and to local taxes on the necessaries of life. It was with the greatest difficulty that the excise system was introduced." Edwin

close had the English economy developed to such an extent that capitalist forms of income (profits and wages) appeared as obvious sources of revenue available to the state. Mercantilist writings on taxation can be understood only within this historical context.

Taxation and Mercantilist Economic Thought

In this transitional period, philosophers and merchants forged the beginnings of science and political economy. Assessments of the nature and importance of mercantilist writings in the history of economic thought vary widely. Although public finance questions played a major role in the theoretical writings of the mercantilists, their theories of taxation have been largely ignored by historians of economic thought. Such an analysis, however, helps to place mercantilist thought into its proper historical and theoretical perspective.

In one of the earliest systematic works on this subject, The Mercantile System, Gustav Schmoller referred to mercantilism as "nothing but state-making" and contended that it contributed little to economic science.²¹ Schmoller

Seligman, Essays in Taxation, 10th ed., (New York: Macmillan, 1931; reprint ed., New York: A.M. Kelley, 1969): 7-8.

²¹ "What was at stake was the creation of real political economies as unified organisms...Only he who thus conceives of mercantilism will understand it." Gustav Schmoller, The Mercantile System and its Historical Significance (1895), reprint ed. New York: Peter Smith, 1931): 50-1.

identified mercantilism with the rise of nation-states and the ever-widening authority of local and municipal economic and political institutions in Europe. The authority to tax and raise public revenue was a key element in this process.²² The widening basis of trade and industry necessitated territorial and, ultimately, national legislation on matters of taxation: "[T]he protracted struggles by which a system of direct and indirect territorial taxes was created belong chiefly to the period from the 15th to the 17th century."²³

For Schmoller, the process of establishing the territorial- and nation-wide right of taxation was equivalent to the political process of establishing the territorial and national political units themselves. Schmoller characterized this political process, and not the advancement of economic doctrines per se, as mercantilism.

The view that mercantilist thought contributed little to the development of economics was also shared by Joseph Schumpeter, who argued that the literature of the period was of a low level, serving only the interests of the writers

²² "Public finance served as the bond of union between political and economic life...it was a question of... unifying systems of finance and economy which should encompass the forces of millions and whole countries, and give unity to their social life." Ibid., 49.

²³ Ibid., 39-40.

themselves.²⁴ Similarly, Piero Mini characterizes these writings as a "chaotic mass of special pleadings, naive arguments, insight, facts, hypotheses, dogmas, prejudices, acute observations, and sheer guesses."²⁵

Other historians have adopted the perspective that if mercantilism lacked a concrete economic analysis, it nevertheless reflected a systematic social and political perspective. Eli Heckscher defined mercantilism as a "unifying system"--an overall conception of society during the historical period from the rise of merchant capitalism to the coming of laissez-faire, or a system of power.²⁶

Heckscher distinguished five characteristics of mercantilist thought: "[T]he desire for unification, the pursuit of power as an end, protectionism, a monetary theory linked with the balance of trade, and a conception of society."²⁷ But as Herbert Heaton, perhaps Heckscher's most severe critic, observed: "Mercantilism had six aspects, not five; the sixth was public (or royal) finance, and one might

²⁴ "Most of them were merely motivated programs for the industrial and commercial development of England...It is not always easy to tell from the uncouth writings of the less literate mercantilists what it was they had in mind." Joseph Schumpeter, History of Economic Analysis, (New York: Oxford University Press, 1954): 314.

²⁵ Piero Mini, Philosophy and Economics, (Gainesville: The University Presses of Florida, 1974): 36.

²⁶ Eli Heckscher, Mercantilism, two vols., trans. by Mendel Shapiro, (New York: Macmillan Co., 1935).

²⁷ Walter Minchinton, ed. Mercantilism: System or Expediency?, (Lexington: D.C. Heath and Co., 1969): x.

with great cogency maintain it was the most important of the lot."²⁸

The focus on this particular aspect of mercantilist thought provides a unifying theoretical element in this body of literature. For the first time, we get a systematic analysis of forces acting in the economy--an analysis of the relationship between the state and economic phenomena. Thus, mercantilism is distinguished from the classical school not on the basis of the role accorded to government, but rather on the basis of its singular principle that surplus was derived from trade (exchange). For the mercantilist writers, the surplus created from a positive balance of trade was the sole source of taxation, and their analytical methods were developed around this notion.

The mercantilist literature on practical questions of taxation and the proper role of government is vast and often anonymous.²⁹ While Francis Bacon wrote very little on economic policy, Thomas Hobbes' Leviathan contains a detailed discussion of the English excise tax and the proper role of the state.³⁰ For Hobbes, the sovereign had the

²⁸ Herbert Heaton, "Heckscher on Mercantilism," Journal of Political Economy, XLV, (1937): 48.

²⁹ See Edwin Seligman, The Shifting and Incidence of Taxation, 5th ed., (New York: Columbia University Press, 1927, reprint ed., New York: A.M. Kelly Publishers, 1969).

³⁰ Thomas Hobbes, Leviathan, or the Matter, Form, and Power of a Commonwealth Ecclesiastical and Civil, 1651, (New York: Bobbs-Merill, 1958).

right to power and the authority to tax in order to finance the necessary functions of the state. Because all subjects enjoyed the protection of the state, taxation should be universal: "To equall Justice appertaineth also the Equall imposition of Taxes; the Equality whereof dependeth not on the Equality of riches but on the Equality of the debt that every man oweth to the Common-wealth for his defence."³¹ The classical economists came to base their considerations of equity upon this benefit principle of taxation.

Thomas Mun's treatise, England's Treasure by Forraign Trade,³² "is generally looked upon as the classic of English mercantilism."³³ Mun believed that the duty of the merchant and writer was to serve the interests of the state and, indeed, the work represents a guide to the proper role of society's leaders during this era.³⁴ After setting out the basic principles of mercantilism in the first fifteen chapters, Mun devoted the second half of England's Treasure to questions of taxation and public finance.

³¹ Ibid., 386.

³² Thomas Mun, England's Treasure by Forraign Trade, (Printed by J.G. for Thomas Clark, 1664; reprint ed., Fairfield, NJ: A.M. Kelley, 1986).

³³ Schumpeter, 356.

³⁴ "[W]hen Mun...wrote his panegyric on the activities of the merchant, he was only expressing in extreme form a widely held sentiment." Eric Roll, A History of Economic Thought, 3rd ed., (Englewood Cliffs, N.J.: Prentice-Hall, 1953): 58.

Sir William Petty was one of the earliest English writers to provide a theoretical foundation to the study of practical economic questions. His first, and perhaps most important economic work, A Treatise of Taxes and Contributions, was written in 1662.³⁵ Petty's writings on taxation were developed further in Verbum Sipienti (1664) and Political Arithmetick (1676).

Influenced by the empirical philosophy of Bacon and Hobbes, Petty sought to bring a quantitative precision to the social sciences. Recognizing that controlled experiments in the social sciences were impossible, he developed a unique statistical method, which he referred to as "political arithmetick."³⁶ This method was designed, first and foremost, to be used as a guide to economic policy.³⁷

³⁵ Sir William Petty, A Treatise of Taxes and Contributions, 1162, reprinted in Economic Writings of Sir William Petty, Charles Hull, ed. (London, 1899, reprinted New York: A.M. Kelley, 1963).

³⁶ The principles of this new scientific method required analyzing questions "in Terms of Number, Weight, or Measure; to use only Arguments of Sense, and to consider only such Causes, as have visible Foundations in Nature; leaving those that depend upon the mutable Minds, Opinions, Appetites, and Passions of particular Men, to the Consideration of others." William Petty, Political Arithmetick, in Economic Writings, 244.

³⁷ Schumpeter credited Petty's follower Charles Davenant with the statement, "By Political Arithmetick we mean the art of reasoning by figures upon things relating to government." Schumpeter, 210.

With the appearance of John Locke's Some Considerations of the Consequences of the Lowering of Interest, and Raising the Value of Money in 1691, issues of broad philosophical importance were added to Petty's scientific approach and the more practical mercantilist writings on taxation.³⁸ Locke's extension of Hobbes's political liberalism and ideas of natural law had a major impact on classical political economy.³⁹ Locke viewed governmental regulation of economic affairs as "natural," and used the doctrine of natural right to justify private property and the enforcement power of the state. This also formed the basis for Locke's conception of equity and taxation.

Sir James Steuart's An Inquiry into the Principles of Political Oeconomy (1767), represents the first (and final) systematic exposition of the scientific elements of mercantilist thought. Steuart was concerned with the full range of economic policy issues confronting the emerging capitalist states. Steuart expressed his belief in the union between economic science and policy in the "Preface" to the Principles: "I present to the public this attempt

³⁸ John Locke, Some Considerations of the Consequences of the Lowering of Interest, and Raising the Value of Money, 1661, (London: printed for Thomas Tegg, 1823; reprint ed., Germany: Scientia Verlag Allen, 1963).

³⁹ "Locke's view...was the classical expression of bourgeois society's ideas of right as against feudal society, and moreover his philosophy served as the basis for all the ideas of the whole subsequent English political economy." Karl Marx, Theories of Surplus Value, Vol. I, (Moscow: Progress Publishers, 1963): 367.

towards reducing to principles, and forming into a regular science, the complicated interests of domestic policy."⁴⁰ This fundamental methodological principle linking policy and the science of economics was inherited by the later classical economists.

Trade Surplus and Taxable Capacity

The unifying element in mercantilist thought was the conception that economic surplus was derived from circulation and international exchange. The surplus created from positive trade balances represented the sole source of taxation, and the mercantilists' analytical methods and policy recommendations were developed around this notion. The mercantilists were unable, however, to build a consistent theory of value and taxation upon this conception of economic surplus.

Although Thomas Hobbes was the first mercantilist to discuss the economic effects of taxation, his writings are characterized by a general absence of "economic laws." Thomas Mun was much more successful in articulating the mercantilist conception of economic surplus.⁴¹ Mun viewed

⁴⁰ Sir James Steuart, An Inquiry into the Principles of Political Oeconomy: Being an Essay on the Science of Domestic Policy in Free Nations, 1767, reprint ed. by Andrew Skinner, Chicago: University of Chicago Press, 1966): 3.

⁴¹ "In England's Treasure...he does not speak any longer of wealth alone, nor does he confuse money and capital. He clearly distinguishes a portion of wealth, which generally takes the form of money, which must be employed as a stock, i.e. in such a way as to yield a

the wealth of a nation as being enriched by foreign trade:

The ordinary means therefore to increase our wealth and treasure is by Foreign Trade, wherein we must ever observe this rule; to sell more to strangers yearly than we consume of theirs in value...we have no other means to get Treasure but by Foreign trade...by making our commodities which are exported yearly to over ballance in value the foreign wares which we consume.⁴²

Wealth gained from a positive balance of trade represented economic surplus, or as he referred to it, an "overplus."⁴³ What distinguishes Mun from the earlier mercantilist pamphleteers is that he directly relates this conception of surplus to a theoretical limit on the amount the state could collect each year in tax revenue:

For although the revenue of a King should be very great, yet if the gain of the Kingdom be but small, this latter must ever give rule and proportion to that Treasure which may conveniently be laid up yearly, for if he should mass up more money than is gained by the overballance of his forraign trade, he shall not Fleece, but Flea his Subjects, and so with their ruin overthrow himself for want of future sheerings...So that a King who desires to lay up much money must endeavour by all good means to maintain and increase his foreign trade, because it is the sole way not only to lead him to his own ends, but also to enrich his Subjects to his farther benefit.⁴⁴

In a statement that clearly distinguishes him from the earlier bullionists, Mun argued that the King should not

surplus...Stock, Mun argues, is wisely employed in foreign trade when it secures a favorable balance; this is the only means of bringing treasure into England." Roll, 77-8.

⁴² Mun, 7, 19.

⁴³ Ibid., 7-8.

⁴⁴ Ibid., 92-3.

keep all of this surplus (overbalance) in the form of money, but hold part of it in necessary provisions of defense; "for although Treasure is said to be the sinews of the War, yet this is so because it doth provide, unite, and move the power of men, victuals, and munitions where and when the cause doth require; but if these things be wanting in due time, what shall we then do with our money?"⁴⁵ Mun did not carry the analysis of the possible advancement of economic surplus to production any further.

Sir William Petty also believed that society's wealth (surplus) differed from the existing stock of money: "Money is but the Fat of the Body-Politick, whereof too much doth as often hinder its Agility, as too little makes it sick."⁴⁶ Petty cautioned against attributing too much importance to money in questions of public finance: "Laying too great a stress on the matter of money [is one of] the causes of Error in this great Affair of Publick Levies."⁴⁷

In the Treatise, Petty regarded taxation solely as transferring money from individuals to the state with no impact on the surplus wealth of a country: "Taxes if they be presently expended upon our own Domestick Commodities, seem to me, to do little harm to the whole Body of the People, only they work a change in the Riches and Fortunes of

⁴⁵ Ibid., 95.

⁴⁶ Petty, Verbum Sepienti, 113.

⁴⁷ Ibid., 114.

particular men."⁴⁸ Petty returned to the question of whether taxation had an overall beneficial or detrimental effect in his Political Arithmetick:

If the Money or other Effects, levied from the People by way of Tax, were destroyed and annihilated; then 'tis clear, that such Levies would diminish the commonwealth: Or if the same were exported out of the Kingdom without any return at all, then the case would be also the same or worse: But if what is levied as aforesaid, be only transferred from one hand to another, then we are only to consider whether the said Money or Commodities, are taken from an improving hand, and given to an ill Husband, or vice versa.⁴⁹

This passage illustrates Petty's confusion over the nature of surplus and taxation. While Petty seemed to understand that a crucial issue was the effect of taxation on the allocation of capital (money) among different uses, he had only a rudimentary conception of productive and unproductive expenditure. Petty went on to argue that if money was taken from those who would have spent it on perishable commodities and given to those who would spend it on non-perishable commodities, then wealth would increase. Petty equated the wealth of the country with the existing stock of tangible commodities. By treating permanency as the measure of wealth, Petty could then consider gold and silver (money) as the "universal" forms of wealth. Petty lacked a notion of capital and how it could be directed into productive employment in order to produce future surplus.

⁴⁸ Petty, Treatise, 36.

⁴⁹ Petty, Arithmetick, 268.

Marx claimed that Petty was the first writer to raise the problem of surplus value in relation to the labor theory of value.⁵⁰ Petty clearly articulated an early version of the labor theory of value in the Treatise:

If a man can bring to London an ounce of Silver out of the Earth in Peru, in the same time that he can produce a bushel of Corn, then one is the natural price of the other; now if by reason of new and more easy Mines a man can get two ounces of Silver as easily as formerly he did one, then Corn will be as cheap at ten shillings the bushel, as it was before at five shillings caeteris paribus.⁵¹

Petty went on to analyze the component parts of value, which he considered to be wages and land rent. Rent was determined by deducting wages and the workers' costs of production, and was equivalent to the total surplus value in the economy. While Petty stated on many occasions that he believed that labor was the sole source of value, he at other times claimed a "natural Par between Land and Labour," an attempt to elevate land to the status of joint creator of wealth: "Labour is the Father and active principle of Wealth, as Lands are the Mother."⁵² Nowhere in Petty's writings, however, is this theory of value linked to his theory of economic surplus and taxable capacity.

⁵⁰ Marx referred to Petty as the "father of English political economy." Karl Marx, Contribution to the Critique of Political Economy, M. Dobb, ed., (New York: International Publishers, 1970): 53.

⁵¹ Petty, Treatise, 50-1.

⁵² Ibid., 68.

John Locke's conception of economic surplus was more complex than that of Petty's and the earlier mercantilists. For Locke, surplus was still derived from exchange, but it did not appear in the form of a trade surplus, but rather, in the form of rent and interest. The prices of land (rent) and money (interest) were determined in the sphere of circulation--by the operation of supply and demand. The supply and demand theory of the rate of interest formed the foundation of Locke's quantity theory of money. Low rates of interest would not raise prices because prices were determined by the amount of money in circulation. The existence of low rates of interest allowed for the high rate of capitalization of rent.

Through this mechanism, society's economic surplus was manifested only in the form of land rent, and represented the sole source of taxation. Whatever the form of taxation, landlords bore the burden: "[T]axes...for the most part terminate upon land...those taxes which seem least to affect land, will most surely of all other fall the rents."⁵³ The landholder could not shift the tax, for if he attempted to "lay it upon commodities" produced on the land, the inevitable result would be lower rents.⁵⁴

⁵³ Locke, 55.

⁵⁴ "[T]hough he pays not this tax immediately out of his own purse, yet his purse will find it by a greater want of money there, at the end of the year, than that comes to, with the lessening of his rents to boot." *Ibid.*, 55-6.

Sir James Steuart argued that the historical prerequisite for the development of trade and industry was the existence of a surplus in agriculture. Steuart believed that a post-agrarian exchange economy developed through three stages: infant, foreign, and inland trade. When Steuart analyzed taxation appropriate to a society characterized by foreign trade, his discussion was purely mercantilist. But when analyzing the principles applicable to a society dominated by inland trade, much of his discussion was classical in nature. In the latter, policies were to be directed at increasing the circulation of existing surplus in order to promote full employment. If Steuart lacked a clear formulation of how surplus was produced, extracted, and distributed in a capitalist society, he nonetheless made advances that greatly influenced classical political economy.⁵⁵

Steuart maintained that even in an "inland trade" society, the wealth of the nation could not be increased without running a positive trade surplus. Steuart never stated explicitly whether he believed that England had reached the stage of inland trade. If England were ever to reach such a stage, the ultimate policy goal of the statesman would be to re-establish foreign trade through the

⁵⁵ "Steuart does not share the illusion that the surplus-value which accrues to the individual capitalist from selling the commodity above its value is a creation of new wealth." Marx, Theories, I, 41.

use of taxes: "By a judicious imposition of taxes...he may, with this public fund, preserve in vigour every branch of industry...so as to re-establish the foreign trade of his own people."⁵⁶

Inconsistencies in Steuart's analysis of taxation can be traced to the contradictions inherent in his conception of economic surplus. His discussion of the potential sources of tax revenue contains a mixture of mercantilist, Physiocratic and classical notions of surplus:

Whatever exists for the use of man, so far as it is considered as a fund for taxation, may be classed under the following: I. the produce or fruits of the earth; 2. the produce of the industry of man; or 3. his personal service...Fruits cannot be obtained without the necessary labour of man and cattle. As this labour presupposes all the necessary consumption of maintenance, &c. the produce of the land must be understood, relatively to taxes, to be that part only of the fruits which remains after deducting an equivalent for all necessary expenses in making the earth produce them. The net produce alone of the earth is to be considered as a fund liable to taxation, and every contribution which bears not a just proportion to this quantity, is wrong imposed.⁵⁷

This Physiocratic notion of surplus and the source of taxation is inconsistent with his earlier mercantilist ideas that the trade surplus constituted the source and limit of taxation. Steuart added to the confusion by putting forth the notion that surplus created by workers/manufacturers also could be a source of tax revenue.

⁵⁶ Steuart, 276-7.

⁵⁷ Ibid., 676-7.

Steuart developed his theory of value (price) for a society which had sufficiently developed trade and industry in which demand played a crucial role. Steuart divided a commodity's price into two elements: its "real value" and the "profit upon alienation." The widespread occurrence of exchange or trade rendered these two components fixed and determinant. A commodity's "real value" was based on a crude labor theory of value, and consisted of three components: required labor time, workers' subsistence, and the value of material inputs.⁵⁸ Profit (surplus) was created by selling goods above their real value. Competition among both buyers and sellers regulated price and the size of profit. Thus, profit arose from the unequal exchange of goods for money. Steuart argued that taxes formed part of the real value (or cost) of commodities ("a necessary augmentation upon the intrinsic value of goods proceeds from taxes"⁵⁹), but did not carry the analysis of value and taxation any further.

The mercantilists were unable to develop an overall theory of value logically consistent with their theory of economic surplus. While later mercantilists began to see the source of value in production (either from labor or land), they continued to assert that surplus was derived from the international exchange of goods over and above

⁵⁸ Ibid., 159-61.

⁵⁹ Ibid., 199.

their cost of production. Despite the shortcomings of the mercantilist approach, the classical economists derived from it the idea that taxable capacity was dependent upon the conception of economic surplus. The theoretical problems created by the absence of a coherent theory of value became even more apparent when the mercantilists turned to questions of distribution and tax incidence.

Taxation and Theories of Distribution

Much of the mercantilist public finance literature was aimed at providing a theoretical justification for customs and excise taxes. These taxes were designed to tap the economic surplus which was assumed to be created in exchange. The mercantilists tied these discussions of taxes to their theories of equity and distribution. Mercantilist distribution theory was hampered by a lack of clear class distinctions among workers, manufacturers and landlords. Historically, wages and profits had yet to emerge as clear categories of capitalist income, and this is reflected in the early theories of tax incidence.

Thomas Hobbes was one of the earliest writers to comment on the general excise tax imposed in England in 1643. He favored the excise tax because he found it preferable that people met their financial obligation to the state through the imposition of taxes rather than through the traditional feudal means of a direct contribution of their labor. Hobbes also believed that a tax on consumption

was the most equitable method of taxing the nobility, the Church, and others who were exempt from many of the feudal forms of taxation:

[T]he equality of imposition consists rather in the equality of that which is consumed, than of the riches of the persons that consume the same...But when the impositions are laid upon those things which men consume, every man pays equally for what he uses.⁶⁰

Hobbes lacked a clear theoretical analysis of taxation and luxury consumption, as well as a notion of the ability of individuals to "shift" part, or all, of the excise tax.

Unlike Hobbes and the earlier pamphleteers and writers on taxation, Thomas Mun employed a simple economic analysis in his justification of excise taxes. Mun not only argued that rulers had the right to tax their subjects, but suggested that they were beneficial to the nation.⁶¹ In his defense of existing taxes, Mun advanced a conception of a subsistence theory of wages:

For as the food and payment of the poor is made dear by Excise, so doth the price of their labour rise in proportion; whereby the burden (if any be) is still upon the rich, who are either idle, or at least work not in this kind, yet have they the use and are the great consumers of the poor's labour: Neither do the

⁶⁰ Hobbes, 270-1.

⁶¹ "All [taxes] which seem to be a rabble of oppressions, serving to enrich those Princes which exact them, and to make the people poor and miserable which endure them; especially in those Countrys where these burdens are laid at heavy rates...But when all the circumstances and distinction of places are duly considered, they will be found not only necessary and therefore lawful to be used in some States, but also in divers respects very profitable to the Commonwealth." Mun, 83-4.

rich neglect in their several places and callings to advance their endeavors according to those times which do exhaust their means and revenues wherein if they should peradventure fail, and therefore be forced to abate their sinful excess and idle retainers; what is all this but happiness in a Commonwealth, when virtue, plenty and arts shall thus be advanced all together? Nor can it be truly said that a Kingdom is impoverished where the loss of the people is the gain of the King, from whom also such yearly Incomes have their annual issue to the benefit of his Subjects; except only that part of the treasure which is laid up for the public good; wherein likewise they who suffer have their safety, and therefore such contributions are both just and profitable.⁶²

Thus, for the first time in the history of political economy, the idea of a theoretically determinant subsistence wage is discussed. The later classical economists would base not only their theory of wages, but their theories of taxation and distribution, upon this conception. The burden of taxation could not be borne by workers because their wages were exogenously fixed at subsistence levels. Mun favored the excise because he believed it would be shifted to the employing producers in the form of higher wages, thus forcing them to restrict their expenditures.

Sir William Petty prefaced his discussion of the excise tax by outlining the rules for the proper administration of taxes. These rules included: (1) the Sovereign should collect no more than it needed; (2) taxes should be "proportionable unto all"; and (3) taxes should not be so great as to cause a general scarcity of money. The second

⁶² Ibid., 85.

rule stands as a precursor to centuries of debate over the proper principle of justice (equity) in taxation. Petty based his solution to the problem of what was the most advantageous form of taxation on both his principle of equity and his economic understanding of the "incidence" of the tax burden. After an extensive review of various tax proposals, Petty concluded that the general excise tax on consumption was the most consistent with his principle of equity.⁶³

Petty argued that the way in which tax revenue was spent had little impact on the ultimate effect of taxation: "[I]f all the money levied were thrown into the Sea, then the ultimate effect would only be, that every man must work a fifth part the harder, or retrench a fifth part of his consumptions."⁶⁴ Petty believed that taxation may induce people either to work more or to expend less, which implies that those subject to taxation were not at bare subsistence levels. Unlike Mun, Petty did not treat the supply of labor or wages as fixed or exogenous parameters.

Following Mun, John Locke argued that if it was assumed that workers existed at subsistence wage levels and excise taxes had the effect of raising commodity prices, then the imposition of such a tax necessitated an increase in the wages farmers had to pay agricultural laborers. Thus, the

⁶³ Ibid., 91.

⁶⁴ Petty, Treatise, 37.

"workers" would have less of a share of the surplus to pay to the landlords in rent, and excise taxes ultimately would be borne by the landlords:

[T]he merchant and broker neither will, nor can [bear tax]; for, if he pays...more for commodities than he did, he will sell them at a price proportionally raised. The poor labourer and handicraftsman cannot: for he just lives from hand to mouth already...either his wages must rise with the price of things, or else, not being able to maintain himself and family by his labour, he comes to the parish; and then the land bears the burthen a heavier way. If the labourer's wages be raised in proportion to the increased rates of things, the farmer who pays...more for wages, as well as all other things, whilst he sells his corn and wool, either at the same rate, or lower, at the market (since the tax laid upon it makes people less forward to buy) must either have his rent abated, or else break and run away in his landlord's debt; and so the yearly value of land is brought down. And who pays the tax at the year's end, but the landlord?⁶⁵

If the taxed commodities were for export or competed with imported goods, the landlords still would share the burden of the tax. For in order to compete, the prices received for the goods could not be increased: "Thus the price, which our native commodities yield to the first seller, is mightily abated, and so the yearly value of the land, which produces them, lessened too."⁶⁶ Locke concluded that since the landlords ultimately bore the burden of any tax, the government ought to consider taxing land directly:

The merchant (do what you can), will not bear it, the labourer cannot, and therefore the landholder

⁶⁵ Locke, 58-9.

⁶⁶ Ibid., 60.

must: and whether he were best to do it, by laying it directly where it will at last settle, or by letting it come to him by the sinking of his rents, which, when they are once fallen, every one knows are not easily raised again, let him consider.⁶⁷

Locke's point was to show that low rents could be attributed to taxation and other causes, and were not the function of high interest rates.⁶⁸ Thus, the analysis of taxation was employed by Locke as one further argument in the case against limitations on the rate of interest.

The importance of Francis Fauquier's Essay on Ways and Means does not so much depend upon the specific tax proposals made, as on his doctrine of the effects of taxes on wages and necessaries.⁶⁹ Having established the necessity of increased taxes, Fauquier reconstructed Mun's argument that workers could not bear the burden of taxation, for they shared none of the surplus output of society:

The Poor do not, never have, nor ever possibly can, pay any Tax whatever. A Man that has nothing can pay nothing, let Governments try what Expedients they please to force him to it. He that works for his Living, will, and must live by his Labour. This is universally true in all Countries, at all Times, and equally so, whether Provisions are dear or cheap.⁷⁰

⁶⁷ Ibid.

⁶⁸ Ibid., 61.

⁶⁹ Francis Fauquier, Essay on Ways and Means, 1756, Jacob Hollander, ed., (Baltimore: Lord Baltimore Press, 1915).

⁷⁰ Fauquier, 21-2.

Fauquier believed that excise taxes on the basic necessities consumed by workers would raise the prices of such goods, thereby necessitating an increase in wages: "If by Taxes, or Dearth, or any other Cause, the common Necessaries of Life become so dear, that a Laborer cannot live at the usual Wages; the Price of Labour must, and in Fact actually does rise in Proportion thereto at least, generally much more."⁷¹ While excise taxes raised the price of all goods, workers living at subsistence levels would be compensated in the form of higher wages, while those whose incomes exceeded subsistence (the rich consumer) would bear the burden of the tax through the higher prices paid on constant income levels:

If Taxes are laid on Labour merely, or on such Articles as the meanest Labourer must want to use, he will still live, and his Wages must be raised. If on the manufacturers, or Vendors of Goods, they will raise the Prices of the Commodities they respectively deal in, sufficient not only to pay the Tax, but to make them full amends for the Money they disbursed for the Payment of it...So that the whole Tax, and much more, is ultimately paid by the Consumer: that is, by the Man of Fortune who lives on his Income.⁷²

Fauquier believed that the fact that excises were not ultimately borne by the poor was not a sufficient reason to advocate their widespread imposition. He opposed the general excise tax not only because it was inconveniently attained, but also because it was conceived of as

⁷¹ Ibid.

⁷² Ibid., 22-3.

necessarily being general in order to raise sufficient revenue.

Like Mun, Fauquier did not have a theory of subsistence wages, but simply accepted subsistence levels of wages as an empirical and historical fact. Indeed, Fauquier believed that wages were not set at subsistence, but that the lower classes worked only up to the point where their subsistence needs were met.⁷³ Nor did Fauquier discuss a wage tax, which was historically specific to a later stage of capitalist development.

In the fifth and final book of the Principles, Sir James Steuart investigated the varying effects of specific taxes. Steuart divided all taxes into three basic classes: proportional, cumulative or arbitrary, and personal taxes.⁷⁴ Proportional taxes were those levied "upon alienation" such as excises and customs, and were paid by the buyers. Cumulative or arbitrary taxes were taxes levied upon possessions, such as land. Personal taxes were those imposed upon the population independently of income. Much of Steuart's theory of incidence and distribution was developed in his discussion of proportional taxes.

⁷³ "If the Price of Labour in any Country is so great, that the Poor, by working Part of the Week, can maintain himself and Family the whole Week; it is an Evil to that Country...For every Day's Loss of Labour, is an actual Loss to the Public. And any Laws which encourage this Idleness of the People, ought to be immediately repealed." Ibid., 22.

⁷⁴ Steuart, 673-4.

Steuart analyzed the distributive effects of taxation by posing the question of how taxes affected the "vibration of the balance of wealth between individuals." He advocated proportional taxes (excises) as the most rational and equitable form of taxation precisely because they were imposed directly upon circulation:

[T]he proper time of laying on taxes is at the time of circulation; because the imposition may then be always exactly proportioned to the sum circulating; consequently, to the faculties of the persons severally interested. In all excises, or taxes upon consumption, it is the money of the consumer which is taxed, in the instant of the payment; so that he against whom the balance is to turn, has the additional load to pay.⁷⁵

In a society dominated by inland trade, wealth accumulated unequally, which allowed for luxury consumption. In this case, the statesman could impose taxes on this excess consumption: "[W]hen foreign trade begins to bear a small proportion to domestic consumption, he may profit of luxury and draw a part of the wealth of the luxurious into the public treasure."⁷⁶

Steuart's analysis of excise taxes imposed on luxury consumption was hampered by a lack of a clear class distinction between laborers and manufacturers. Steuart believed that surplus created by workers/manufacturers was a source of tax revenue, and that only the produce above subsistence was the proper object of taxation: "The

⁷⁵ Ibid., 322.

⁷⁶ Ibid., 332.

maintenance of the workman, we shall call his physical-necessary. The value of the work, over and above an equivalent for these articles, is the only fund to be taxed with regard to the workman."⁷⁷

Steuart further argued that competition among those living at subsistence produced disastrous results by driving down the prices of their goods, thus lowering incomes below subsistence: "The physical necessary ought to be the reward of labour and industry...competition between workmen of the same profession, diminishes the profits upon their labour."⁷⁸ Thus, taxing necessities would be harmful: "Such impositions have still a worse effect, than those which fall upon growing wealth; they prevent the poor from being able to subsist themselves."⁷⁹ Steuart believed that the principles of taxation would be more easily understood if it were the case that manufacturers simply consumed their own physical product as subsistence:

[N]othing but what remained of fruits and work, not already consumed by the immediate producers, would come to market for the use of those who do not work; but who have an equivalent to give for it, out of the produce of past industry...then at the time of alienation a tax proportional to the value of the alienation might, with the greatest propriety, be imposed.⁸⁰

⁷⁷ Ibid.

⁷⁸ Ibid., 273-4.

⁷⁹ Ibid., 306.

⁸⁰ Ibid., 678.

While Steuart made no clear class distinction between laborers and manufacturers, he nevertheless argued that taxes levied on necessary goods (inputs) would have different distributional effects than those levied on luxury goods. The goal of a rational tax system was to direct wealth into the hands of "industrious members" of the state and away from non-working consumers:

[T]he intention of taxes...is to advance only the public good, by throwing a part of wealth of the rich into the hands of the industrious poor...that no necessary article of consumption should ever be taxed to an industrious person, but in such a way as to enable him to draw back the full amount of it, from those who consume his work.⁸¹

Steuart did distinguish between the economic effects of taxing goods which served as inputs to further production and those which were final consumption goods. He illustrated this principle by the case of a tax on leather and the resulting effects on a tanner and a shoemaker:

A tanner sells his leather to a shoemaker; the shoemaker in paying the tanner for his leather, pays the tanner's subsistence and profit, and the tax upon the leather. The man who buys the shoes for his own consumption, refunds all this to the shoemaker, together with his subsistence, profit, and the tax upon shoes; consequently, the price of shoes are raised, only by refunding the taxes paid by the industrious. But if the shoemaker's subsistence shall happen to include either tavern expenses, or his consumption on idle days, he will not draw these back; because other shoemakers who do not frequent the tavern, and who are not idle, will undersell him; he must therefore take his extraordinary expense out of his profits; and if

⁸¹ Ibid., 334-5.

his profit be not sufficient it must run in debt to the tavern-keeper.⁸²

In this extraordinary passage, Steuart established the principle that taxes upon inputs to production (expenses) and on necessaries would be shifted necessarily. If a person bought a commodity and paid the proportional tax, and then consumed it as a luxury, the tax would remain with that person. If the good was used as an input to further production, the person would recapture the tax upon sale of the commodity: "Whatever is brought to market is supposed to be surplus, as it may there be bought by the idle, as well as the industrious. The only difference is, that the first do not draw back the tax, and that the second do."⁸³ Competition among producers prevented them from passing on unnecessary expenses (and taxes) to the next purchaser. This followed directly from Steuart's principle of "profit upon alienation," in which the size of profit depended upon the degree of competition. Steuart opposed the imposition of "cumulative taxes" such as tithes, land-taxes, and window-taxes, because they could not be paid by people of the lower classes who earned little or no profit, nor could they be shifted.⁸⁴

82 Ibid., 682.

83 Ibid., 683.

84 Ibid., 685.

Because Steuart argued that proportional taxes raised prices, he was forced to address mercantilist objections that high prices would harm the nation's foreign trade.⁸⁵ He claimed that export prices were not determined by "the price of subsistence, which determines the standard of wages," but by "the rate of the market for labour and manufacturers."⁸⁶ In other words, if export prices were too high then it was due to a lack of competition, which was one of the primary determinants of a commodity's price, and not to the existence of excises and customs.

Steuart concluded that in response to higher input prices, manufacturers should lower their profits and luxury consumption; "if foreign trade suffer by the high prices of commodities in our markets, the vice does not proceed from our taxes, but from our domestic luxury, which swells demand at home."⁸⁷ Steuart also believed that high prices reduced idleness and thereby caused an augmentation of supply which, in turn, reduced domestic prices. If this failed ultimately to lower export prices, the government could always intervene by offering bounties on exportable goods.

⁸⁵ "How absurd, therefore, is it either to say, that all taxes fall ultimately upon land; or as others, for no better reason, pretend, that they fall upon trade. I say, that this class of taxes...never can fall either upon, or affect any person but the idle; that is to say, the not industrious consumer." Ibid., 683.

⁸⁶ Ibid., 691.

⁸⁷ Ibid., 693.

Bounties were beneficial to the economy because, like taxes, they increased the amount of wealth in circulation.⁸⁸

Steuart thus concluded that proportional taxes were the ideal form of taxation available to the state because they neither harmed foreign trade, nor industrious producers:

We have also seen how the amount of proportional taxes is ultimately taken from the superfluity of the rich, whom we have called the idle consumers: and how they are advanced by one set of the industrious, and refunded by another, until at last they fall upon those who cannot draw them back from any body...no objection can lie against proportional taxes, so far as they affect the industrious; because they draw them completely back: and that great objections lie against cumulative taxes, when they affect the industrious, because they cannot draw them back at all; and consequently, they may affect the physical-necessary of the contributor, in case no profit should remain to him upon his labor.⁸⁹

Taxation and the Theory of Employment

Unlike the later classical economists, the mercantilist writers lacked a coherent theory of accumulation and economic growth. Their primary focus remained on circulation and exchange and their discussions of taxation reflected this emphasis. While fiscal policies generally were assumed to have little influence on the growth of economic wealth, the mercantilists did attempt to explain how such policies affected aggregate demand and the employment of existing resources.

⁸⁸ Ibid., 403-4.

⁸⁹ Ibid., 704-5.

While Steuart was the first economist to provide a systematic theory of circulation, employment and taxation, many of the basic themes were present in the earlier mercantilists' writings. Mun, for example, argued that taxes had a beneficial effect on the economy by increasing the amount of wealth in circulation. Petty concluded Political Arithmetick with a statement on the benefits of taxation in an economy suffering from unemployment: "If the People of any Country, who have not already a full employment, should be enjoyned or Taxed to work upon such Commodities as are Imported from abroad; I say, that such a Tax, also doth improve the Commonwealth."⁹⁰ But it would be left to Steuart to take up the theme of the effects of taxation on an economy experiencing widespread unemployment.

For Steuart, the policy decision to extend or retract taxes on different commodities should be made on the basis of whether they affected the foreign circulation of money. If the nation was running a trade deficit, for example, taxes on the consumption of luxury imports could be imposed. Steuart remained unsure, however, whether the imposition of a tax would lower the consumption of the taxed commodity. If taxes were imposed on goods gradually, existing levels of consumption could be maintained (at a higher price level) by increasing the amount of money in circulation: "[A] statesman when he intends suddenly to augment the taxes of

⁹⁰ Petty, Arithmetick, 269.

his people, without interrupting their industry...should augment the circulating equivalent in proportion to the additional demand for it."⁹¹

As part of his general critique of the quantity theory of money, Steuart argued that the interest rate was determined not by the amount of money in circulation but by the relative competition among demanders and suppliers of loanable funds. Steuart proceeded to "shew how the loan upon interest is the means of throwing it again into circulation."⁹² As in other areas of economic policy, Steuart ascribed to the statesman an active role in regulating the rate of interest.⁹³

The critique of the quantity theory of money allowed Steuart to draw the conclusion that if taxes were properly administered and properly expended, then they would have an overall beneficial effect on the economy. In a passage not entirely consistent with his earlier statements on the sources of taxation, Steuart argued that the limit to taxation was equivalent to idle money balances: "On imposing proportional taxes, they cannot, at first, exceed that proportion of money which is found in the pockets of the consumers, over and above what they used to pay for what

⁹¹ Steuart, 614-5.

⁹² Ibid., 452.

⁹³ Ibid., 466.

they consumed."⁹⁴ In the situation where there were unused money balances, state expenditure would force wealth into circulation:

Taxes...may be considered as a saving out of every private fortune, in order to procure a public fund to be expended for the public benefit...The whole of such expenses is thrown into circulation, as much as if the rich proprietors had laid it out themselves upon articles entirely adapted to their own taste.⁹⁵

In a country no longer dependent on foreign trade it was the duty of the statesman to increase the amount of money in circulation to ensure full employment: "Another use of taxes...is to assist circulation...The public treasure, by receiving from the amount of taxes, a continual flux of money, may throw it out into the most proper channels, and thereby keep that industry alive, which formerly flourished, and depended upon the prosperity of foreign commerce only."⁹⁶

While the later classicals would argue that taxation had a negative effect on the economy because it took productive capital away from the private sector and was spent unproductively, Steuart believed that taxation had the potential of stimulating demand and increasing output. The active role of the statesman was again crucial for the smooth operation of the economy:

⁹⁴ Ibid., 715.

⁹⁵ Ibid., 709-10.

⁹⁶ Ibid., 337-8.

Every application of public money implies a want in the state; and every want supplied, implies an encouragement given to industry. In proportion, therefore, as taxes draw money into circulation, which otherwise would not have entered into it at that time, they encourage industry; not by taking the money from individuals, but by throwing it into the hands of the state, which spends it; and which thereby throws it directly into the hands of the industrious, or of the luxurious who employ them.⁹⁷

Although Steuart clearly understood that accumulation and economic growth would be retarded if existing capital was taxed, he lacked the theoretical framework to analyze the full implications of such taxation. Steuart did argue that taxes should be aimed at revenue and not at existing capital: "[Taxes] ought to impair the fruits and not the fund; the expenses of the person taxed, not the savings; the services, not the persons of those who do them."⁹⁸ Steuart went on to argue that the taxation of possessions ought to be avoided because it reduced profits and the accumulation of capital:

Merchants also ought not to be subjected to any tax upon their industry. They ought to be allowed to cumulate riches as fast as they can: because they employ them for the advancement of industry; and every deduction from their profits is a diminution upon this so useful a fund.⁹⁹

The question of the taxation of economic surplus which went toward accumulation versus the taxation of revenue

⁹⁷ Ibid., 724-5.

⁹⁸ Ibid., 674-5.

⁹⁹ Ibid., 687.

destined for luxury consumption became the central question for later political economists.

Conclusion

Mercantilist economic thought was a product of the transition from feudalism to industrial capitalism in seventeenth- and eighteenth-century England. The mercantilists argued that increases in wealth could be achieved only by maintaining positive trade balances. Customs and excise taxes were designed to tap this economic surplus, believed to be generated in the sphere of circulation and international exchange. While the policy prescriptions of the mercantilists would come under attack in France by the Physiocrats and in England by Adam Smith, the central role they accorded the theory of public finance in the science of economics would be maintained by all of the later classical economists.

Although the mercantilists emphasized international trade policy, their theories of economic surplus, distribution and employment were developed in conjunction with their theories of taxation. The classical economists rejected the mercantilist conception of surplus created in exchange, but nevertheless based their theories of taxation upon the analytical categories and methods developed by them. The taxable capacity of a nation continued to be defined in relation to the surplus generated by economic activity. While the mercantilist theory of surplus proved

to be an inadequate foundation on which to build a coherent theory of distribution and tax incidence, the classical economists continued to employ the mercantilist theory of subsistence wages, with all its implications for the incidence of wage and commodity taxes. The classical postulate that taxes on rent could not be shifted was also derived from Locke and the other mercantilists.

Without a class theory of distribution and a clear conception of capitalist profit, the mercantilists were unable to advance a theory of accumulation and economic growth. By contrast, how taxes and state expenditure affected the allocation of economic surplus between luxury consumption and capital accumulation became a central question for classical political economy.

CHAPTER THREE

FRANCOIS QUESNAY AND PHYSIOCRATIC THEORIES OF TAXATION

A comparative study of Petty's and Boisguillebert's writings and characters--apart from illuminating the social divergence between Britain and France at the close of the seventeenth century and the beginning of the eighteenth--would explain the origins of those national contrasts that exist between British and French political economy.¹

The "social divergence" between Britain and France during the seventeenth and eighteenth centuries reflected the two countries' distinct historical experiences with the transition from feudalism to capitalism. The transformation of the state and its fiscal practices from traditional feudal structures to regimes consistent with the newly emerging capitalist economic relations was an integral part of this transition. In England, the writings of Petty and the English mercantilists aimed to provide a theoretical justification for already existing (non-feudal) economic

¹ Karl Marx, Contribution to the Critique of Political Economy, Maurice Dobb, ed. (New York: International Publishers, 1970): 52.

relations and the accompanying fiscal practices. The objective of French economists and social reformers, on the other hand, was to construct an ideological critique of remaining feudal structures and establish capitalist social relations. Feudal relations in pre-revolutionary France proved tenacious, however, and the theories and policy prescriptions of Pierre le Pesant Boisguillebert and the French Physiocrats met with formidable resistance from the Church, landlords and nobility.

The writings of the Physiocrats were as much a reaction against feudal forms of taxation as they were against feudalism. The French economists called for a radical reform of existing tax schemes in order to adapt them to the newly emerging economic structure. Their policy proposals attacked the imposition of the medieval corvee and the feudal privileges which exempted the nobility, the Church and state officials from taxation.

Physiocracy also can be interpreted as a reaction against mercantilism and the attempt to emulate England's path to economic development. In eighteenth-century England, new forms of wealth appeared as riches in the hands of merchants and the commercial classes, while in France wealth continued to manifest itself principally in the form of agricultural surplus. While mercantilist policies were directed at increasing a nation's wealth through international trade and commercial activity, Physiocratic

policy proposals were designed to maximize the nation's agricultural wealth.

At the theoretical level, Physiocracy can be distinguished from mercantilism by its belief that economic surplus was created in agricultural production, as opposed to the sphere of circulation. For the Physiocrats, rent on landed property constituted the unique form of surplus. In mercantilist theories of public finance, the balance-of-trade surplus represented both the source of and the limit to taxation. In Physiocratic thought, it followed logically that the produit net represented the unique source of tax revenue. The entire Physiocratic system of political economy was built around this conception.

Fiscal Practices of the French State

Physiocratic theories of public finance can be understood only within the context of the historical economic and political conditions in seventeenth- and eighteenth-century France.² There is general agreement among economic scholars that Physiocracy represented an attempt to rationalize a program for the capitalist reform

² Unable to completely abstract from the historical and political influences acting upon the development of Physiocracy, even Mark Blaug was forced into the position of having to apologize to his readers for his "brief lapse into relativism" on this subject. Mark Blaug, Economic Theory in Retrospect, (Cambridge: Cambridge University Press, 1978): 25.

of French agriculture.³ The Physiocrats called for the elimination of peasant holdings and the feudal obligations to which the peasantry were subjected in order to establish capital-intensive farming and a wage-labor system.⁴

The historical interpretation of Physiocracy is complicated by their belief that the economic system could be reformed without altering the basic political structure of the French Absolutist State--a belief shattered by the French Revolution. Perry Anderson argued that Absolutism represented an historically specific form of the state, incompatible with developed capitalist social relations.⁵ From this perspective, the Physiocratic failure to achieve economic and fiscal reform can be traced to their contradictory support for a strong monarchy and capitalist economic development.

³ Perhaps the sole exception to this school of thought is Max Beer, who argued that Physiocracy represented "an attempt to rationalize medieval economic life." Max Beer, An Inquiry into Physiocracy, (New York: Russell & Russell, Inc., 1939).

⁴ "The main feature which distinguished French agriculture from that of England was the relative lack of enclosures and the consequent survival of very large numbers of small peasant proprietors, who, although they were normally subject to fairly heavy seigneurial dues, had the right to transfer their property...The privileged classes... besides possessing rights over peasant property which entitled them to receive their seigneurial dues and tithes, also owned directly a considerable proportion of the land." Ronald Meek, The Economics of Physiocracy, (Cambridge: Harvard University Press, 1963): 23.

⁵ Perry Anderson, Lineages of the Absolutist State, (London: New Left Books, 1974; reprint ed., London: Verso, 1978).

The fiscal practices of the French State in the seventeenth and eighteenth centuries remained tied to the legacy of a feudal economic and political system in which seigniorial extraction took the form of direct labour-services performed (corvees) and dues paid in-kind. Feudal privileges which exempted the nobility and the Church from taxation stood directly in the way of fiscal reform. While England achieved moderate success in taxing those social classes which controlled the economic surplus, the French State was unable to establish a rational system of taxation without alienating the social classes on which it was based. Revolutionizing the fiscal system without first changing the political structure proved to be an impossible task.

The origins of eighteenth-century French fiscal practices can be traced to the fifteenth-century formation of the French Absolutist State and France's involvement in the Hundred Years' War--a "war only won by abandoning the seigniorial ban system of knightly service...and creating a regular paid army."⁶ This army was financed by the first country-wide tax, the taille royale, imposed in 1439. Granting national taxing authority to the Crown had important consequences for the future economic and political development of France.⁷ French historian J.J. Clamageran

⁶ Ibid., 86.

⁷ "The changes wrought by Charles VII (1422-61) in French taxation constitute one of the decisive steps in the history of Western civilization." Martin Wolfe, The Fiscal

even defined the end of the Middle Ages by the imposition of this tax.⁸ The taille royale constituted the basic tax relied upon by the French Monarchy up until the Revolution.⁹ In principle, the taille could have represented a rational and equitable form of taxation, but as imposed within the traditional feudal system of privilege which characterized France, it was neither.¹⁰ Adam Smith believed that many of the economic and fiscal problems facing France could be directly attributed to their feudal forms of taxation.¹¹

System of Renaissance France, (New Haven: Yale University Press, 1972): 25.

⁸ J.J. Clamageran, Histoire de l'impôt en France, (Paris, 1867-76).

⁹ "Throughout the Renaissance, the tailles brought in between one-half and two-thirds of all the king's regular revenues." Wolfe, 304.

¹⁰ "The taille...was never paid by anyone who because of class status, regional privilege or personal influence could obtain exemption...In general, the taille was paid only by the poor, especially the peasants. Also to be considered as direct taxes, though paid in service rather than in money, were the corvees royales...Only peasants were subject to these corvees." Georges Lefebvre, The Coming of the French Revolution, (Princeton: Princeton University Press, 1967): 8-9.

¹¹ "In France, the funds destined for the reparation of the high roads are under the immediate direction of the executive power. Those funds consist, partly in a certain number of days labour which the country people are in most parts of Europe obliged to give to the reparation of the highways...In the progress of despotism the authority of the executive power gradually absorbs that of every other power in the state, and assumes to itself the management of every branch of revenue which is destined for any public purpose..." Adam Smith, An Inquiry into the Nature and Causes of The Wealth of Nations, Cannon ed., Vol. II, (Chicago: University of Chicago Press, 1776): 250-1.

The existence of widespread exemptions from the taille and the corvees reflected the fact that, despite having been granted the nominal right to impose national taxes, the fiscal power of the Crown remained limited. Because the Hundred Years' War was followed by more than a century of relative peace and economic prosperity, the weak fiscal structure developed in the mid-fifteenth century proved to be adequate in meeting the political and fiscal needs of the state throughout the sixteenth.¹²

By the end of the sixteenth century, the French Absolutist State had solidified itself both politically and economically. It emerged from the Religious Wars relatively unified under the first Bourbon, Henry IV. The establishment of a strong centralized state as both a political and fiscal entity set the stage for the nation's finance ministers to play crucial roles in France's economic development over the next two centuries. While the basic economic structure of France remained unaltered during the early years of the seventeenth century, two important fiscal changes were made under Sully. He imposed a wide range of new indirect taxes and altered the practice of selling

¹² "In the first half of the 16th century, Francis I and Henry II presided over a prosperous and multiplying realm... Fiscal revenues doubled between 1517 and the 1540's, but the tax-level at the end of Francis I's reign was not appreciably above that of Louis XI sixty years earlier...the direct fiscal yield as a proportion of national wealth thus actually fell." Anderson, 90.

government offices.¹³ The full effect of these administrative changes was not felt until after Louis XIII involved France in the Thirty Years War (1618-48). With the resulting financial pressure created by increased military spending, the state quickly abandoned fiscal restraint in imposing these new taxes and the selling of offices.

The new taxes proved to be inequitable, as well as extremely difficult to administer. The state was forced to "privatize" the collection of taxes through the system of "tax-farming."¹⁴ Boisguillebert and Marshal Vauban estimated that two out of every three livres collected by the tax-farmers ended up in the hands of the tax collectors themselves. Needless to say, this tax scheme proved to be inadequate in easing the financial crisis of the state. The situation was made worse because the state also was forced to turn to the tax-farmers for loans. While short-term funds were raised through the increased sale of offices and

¹³ "The most important institutional development of the reign was the introduction of the paulette in 1604: sale of offices in the state apparatus, which had existed for over a century, was stabilized by Paulet's device of rendering them inheritable, in exchange for payment of a small annual percentage on their purchase value--a measure designed not only to increase the income of the monarchy, but also to insulate the bureaucracy from magnate influence." Ibid., 94.

¹⁴ "There were two general reasons for the farming system: an administrative reason, in that the central government lacked the machinery for dealing with millions of individuals on small matters; and a financial reason, in that the government always hard-pressed for cash, obtained an immediate lump-sum from the farmers, leaving them the right to make a profit by collecting...the whole amount legally due." Lefebvre, 10.

the system of tax farming, such measures only exacerbated longer-term financial and political problems.¹⁵ This irrational and wasteful system of raising revenue remained with all of the Administrations up until the Revolution. The increased burden of taxation necessitated by war fell largely upon the peasantry and the urban poor. Despite widespread revolts against taxation, particularly in the 1630's, French Absolutism was never seriously threatened in the seventeenth century. When Louis XIV assumed leadership in 1661, Royal power was firmly established.

The only serious attempt to reform French fiscal practices during this period occurred under the leadership of Colbert, Louis XIV's minister of finance. In the early years of his administration, Colbert achieved stability in the management of royal finances by ending the further expansion of offices, curbing the tax-farmers, and lowering the taille. He thereby managed to increase revenue and reduce the debt: "The net revenues of the monarchy doubled from 1661 to 1671, and a budgetary surplus was regularly

¹⁵ "France became the classic land of sale of offices, as an ever-growing number of sinecures and prebends were created by the monarchy for revenue purposes...the monarchy had constantly to resort to forced loans at high interest rates from the syndicates of its own tax-farmers, who were themselves at the same time officers who had bought positions in the treasury section of the State apparatus. This vicious circle of financial improvisation inevitably maximized confusion and corruption. The multiplication of venal offices, in which a new noblesse de robe now became lodged, impeded any firm dynastic hold over major agencies of public justice and finance, and dispersed bureaucratic power both centrally and locally." Anderson, 95.

achieved."¹⁶ Colbert also pursued a vigorous program of mercantilist economic policies. As in England, companies were chartered, subsidies granted, and a protective tariff system imposed, all to support international trade and commercial activity.

Colbert's successes were rather short-lived, however, as economic and fiscal conditions deteriorated quickly over the last two decades of the seventeenth century. Many historians have argued that the failure of French mercantilism can be attributed to the remaining strength of feudal relations and the backward state of French agriculture.¹⁷ While these internal material conditions are crucial in explaining the failure of French mercantilism, several other factors played key roles. Anderson, for example, argues that it was the general mercantilist policy of external expansionism which led France to invade Holland in 1672, which in turn renewed the financial pressure on the state and once again led to rapid deterioration.¹⁸ The war

¹⁶ Ibid., 102-3.

¹⁷ "The strongest brake upon the growth of France's capitalist industry was not the constraining influence of mercantilist policy in and of itself, but the fact that its authors pursued it in a country of impoverished peasants while simultaneously preserving a seigniorial system and absolute monarchy...France's backward and decimated agriculture proved too narrow a base...for the growth of capitalist industry." Rubin, History of Economic Thought, (London: Ink Links, Ltd., 1979): 93.

¹⁸ "At home, Colbert's fiscal retrenchment had been permanently wrecked: sale of offices was multiplied once again, old taxes were increased, new taxes were invented,

with Holland was followed by the War of the League of Augsburg (1689-97), which not only rendered further fiscal reform impossible, but led to the further sale of offices and increases in direct and indirect taxation. The political power of the state was weakened and the opportunity for fiscal reform effectively lost.¹⁹

The writings of the Physiocrats coincided with the economic and military crises created by France's involvement in the Seven Years' War (1756-63). While the legitimacy of the French State depended partially upon its military strength, it never achieved sufficient political power or control over the aristocracy and nobility to finance this military adventure.²⁰ A final effort at reforming the fiscal practices of the state prior to the Revolution was

loans were floated, commercial subsidies were jettisoned. War was henceforward to dominate virtually every aspect of the reign." Anderson, 103-4.

¹⁹ "Louis XIV had left a State massively encumbered with debts...Successive attempts to levy new taxes, puncturing the fiscal immunity of the aristocracy, were resisted or sabotaged in the Parliaments and provincial Estates, by refusal to register edicts or presentation of indignant remonstrances. The objective contradictions of Absolutism here unfolded in their plainest form." Ibid., 109.

²⁰ "The difficulty of the Bourbon monarchy in levying direct taxes arose from a fundamental weakness in the absolutist structure, viz., that the government ruled without the express consent of influential groups within the country....The result was that most direct taxes were paid by persons lacking the status or influence to bargain with the king's officials, and that the king's government could never raise by direct taxes a revenue at all proportionate to the real wealth of the country, or to its legitimate needs." Lefebvre, 9-10.

made by Anne Robert Jacques Turgot. Turgot was appointed Controleur General des Finances in 1774, and immediately set out to reform the tax system along the lines which had been suggested by the Physiocrats.²¹ But his reforms aroused intense opposition from the nobility and tax farmers, and on May 12, 1776, Turgot was dismissed by Louis XVI.²² The final event which literally broke the French State, was their involvement in the American Revolutionary War.²³ Fiscal reform would not take place until after the events of the Great Revolution of 1789.²⁴

21 "Turgot sought to anticipate the measures of the French Revolution. By the edict of February 1776 he abolished the guilds. Similarly he annulled the road-making corvee des paysans. He tried to introduce the single tax on rent of land." Karl Marx, Theories of Surplus Value, Vol. I, (Moscow: Progress Publishers, 1963): 66.

22 "The hopes of the Physiocrats notwithstanding, the absolute monarchy and the landowning class proved incapable of carrying out any reform of society, and France rapidly proceeded towards the formidable events of the Great Revolution." Rubin, 104.

23 "Indeed, it was the costs of Bourbon intervention in the War of American Independence which forced on the ultimate fiscal crisis of French Absolutism at home...The aristocratic reaction against Absolutism therewith passed into the bourgeois revolution which overthrew it. Fittingly, the historical collapse of the French Absolutist State was tied directly to the inflexibility of its feudal formation. The fiscal crisis which detonated the revolution of 1789 was provoked by its juridical inability to tax the class which it represented. The very rigidity of the nexus between State and nobility ultimately precipitated their common downfall." Anderson, 111-2.

24 "The jurandes were finally abolished in 1789, and the corvees in 1791, while all internal duties or local tolls except the octroi were suppressed by the National Assembly in 1790." Henry Higgs, The Physiocrats, 1897, reprint ed., (New York: A.M. Kelley, 1968): 92.

Public Finance and French Political Economy

The origins of French political economy can be traced directly to this period of economic and fiscal chaos and the writings of Boisguillebert.²⁵ Boisguillebert entered public service by purchasing the post of lieutenant general in the judicial district of Rouen in 1689. He proceeded to criticize severely the existing systems of indirect taxation, tax-farming, and ironically, the sale of public offices; and proposed a major program of economic reform to Pontchartrain, Colbert's successor as finance minister under Louis XIV.

Central to his program was the reform of the tax system and the feudal relations of privilege it embodied. In contrast to the later Physiocrats who advocated tax reform on behalf of the emerging class of capitalist farmers, Boisguillebert directed his proposals at relieving the oppressive burden of taxes on the peasantry.²⁶ He was "chiefly preoccupied by the one theme, the wretched and pitiable straits to which the peasantry, tailleable et

²⁵ Pierre le Pesant Boisguillebert, Le Detail de la France, 1695-6, and Dissertation sur la Nature des Richesses, de L'Argent et des Tributes, 1707, in Economistes-Financiers Du XVIII Siecle, ed. by Eugene Daire, (Paris: Chez Guillaumin, Libraire, 1843).

²⁶ "Boisguillebert, although he was one of the intendants of Louis XIV, stood up for the interests of the oppressed classes with both great intellectual force and courage." Marx, Critique, 55.

corveable a merci, had been reduced."²⁷ Boisguillebert combined his critique of state economic policies with the theoretical conception that wealth originated in agricultural production and not in commercial and manufacturing activities.²⁸

The second major contributor to early French political economy was Seignior Marshal de Vauban. Vauban, who also was an official of the state, devised an elaborate program of reform of the French system of taxation in his Projet d'une dixme royale (1707).²⁹ Vauban argued that the oppressive taxes imposed upon the peasantry were the source of France's economic problems in the seventeenth century. Karl Marx argued that these taxes were particularly destructive because they were levied in an historical period

²⁷ Luigi Cossa, Introduction to the Study of Political Economy, (London: MacMillan and Co., 1893): 226.

²⁸ "Boisguillebert's first book (Detail de la France) begins with a sentence which was destined to form the main tenet of Physiocracy, namely, 'The wealth of every country is in proportion to the fertility of its soil'." Beer, 92.

²⁹ Marshal Vauban, Projet d'une dixme royale, 1707, in Economistes-Financiers Du XVIII Siecle, ed. by Eugene Daire, (Paris: Chez Guillaumin, Libraire, 1843). "This is one of the outstanding performances in the field of public finance, unsurpassed, before or after, in the neatness and cogency of the argument. The recommendation...was that the unwieldy and irrational welter of taxes that had grown up in an entirely unsystematic way should be scrapped...and be replaced by a general income tax that was to apply to all kinds of income, though at varying rates, of which the highest was to be 10 percent." Joseph Schumpeter, History of Economic Analysis (New York: Oxford University Press, 1954): 203-4.

in which capitalist commodity and monetary relations had not yet fully developed.³⁰

Extreme hostility to the proposals of Boisguillebert and Vauban on the part of tax-farmers, aristocracy and the nobility prevented them from ever being seriously considered by the French State. Despite the deterioration in the economy over the first half of the eighteenth century, no other major French theoretical or political analyses were produced during this period: "In France the two attempts to develop a theory of fiscal reform that were made by Boisguillebert and Vauban met with such little favor in court circles that a quietus was put on the discussion of the topic for more than a half a century."³¹

Not until the appearance of the major works of Francois Quesnay and the Physiocrats would theoretical expression again be given to the critique of French fiscal policies. Although Quesnay had already formulated many of the basic Physiocratic theoretical concepts and proposals by the time

³⁰ "When the production of commodities has attained a certain level and extent, the function of money as means of payment begins to spread out beyond the sphere of the circulation of commodities....The unspeakable misery of the French agricultural population under Louis XIV, a misery so eloquently denounced by Boisguillebert, Marshall Vauban and others, was due not only to the weight of the taxes but also to the conversion of taxes in kind into taxes in money." Karl Marx, Capital, Vol. I, (New York: Vintage Books, 1977): 238-9.

³¹ Edwin Seligman, The Shifting and Incidence of Taxation, 5th ed., (New York: Columbia University Press, 1927, reprint ed. New York: A.M. Kelley Publishers, 1969): 121.

he published his Encyclopedie articles in 1757,³² it was the appearance of his Tableau Economique which firmly established Physiocracy's place in the history of economic thought.³³ The Tableau was intended to provide theoretical and mathematical support to the proposals for fiscal reform, as well as to illustrate the effects of state policies on the economic surplus produced in agriculture.³⁴

The theoretical origins of the Tableau can be traced to Richard Cantillon and his Essai Sur La Nature Du Commerce En General (1734).³⁵ As William Stanley Jevons correctly observed, Cantillon added very little to the theory of taxation, but the debt owed to him by the Physiocrats was

³² Francois Quesnay, Corn, Men, and Taxation, re-published in Paris: Institut National d' Etudes Demographiques, 1958; trans. and reprinted in Ronald Meek, The Economics of Physiocracy (Cambridge: Harvard University Press, 1963): 72-107.

³³ Francois Quesnay, Tableau Economique, 1758-9, reproduced in Quesnay's Tableau Economique, Marguerite Kuczynski & Ronald Meek, ed., (New York: A.M. Kelley Publishers, 1972).

³⁴ "I have tried to construct a fundamental Tableau of the economic order for the purpose of displaying expenditure and products in a way which is easy to grasp, and for the purpose of forming a clear opinion about the organization and disorganization which the government can bring about." Quesnay, Letter to Mirabeau, 1758, translated from the original in the Archives Nationales (M. 784, no. 70), and reprinted in Meek, Physiocracy, 108.

³⁵ Richard Cantillon, Essai Sur La Nature Du Commerce En General (Paris: Chez Fletcher Gyles dans Holborn, 1734; reprint ed., New York: A.M. Kelley, 1964).

nevertheless enormous.³⁶ The remarkable achievement of the Tableau consisted of Quesnay's combining the political proposals for tax reform of Boisguillebert and Vauban, with the theoretical structure contained in Cantillon's Essai.

As Ronald Meek observed, the "story of the birth of Quesnay's Tableau Economique and its subsequent development has taken more than two centuries to unfold, and may not even yet have reached its conclusion."³⁷ Meek argued that the confusion surrounding the Tableau and its publication stems from three factors: that it was "a conceptual construct, or theoretical tool, rather than a specific 'picture' or 'table' whose origin can be precisely dated," it "had both a public and a private history," and that it "seems from the very beginning to have attracted historians who were accident-prone."³⁸

Historians of economic thought generally have failed to adequately appreciate Meek's observations. For, in fact, the three so-called "editions" of the Tableau Economique, as

³⁶ "The Essai is far more than a mere essay or even collection of disconnected essays like those of Hume. It is a systematic and connected treatise, going over in a concise manner nearly the whole field of economics, with the exception of taxation. It is thus, more than any other book I know, the first treatise on economics." W. Stanley Jevons, "Richard Cantillon and the Nationality of Political Economy," Contemporary Review, January 1881; reprinted in The Principles of Economics and Other Papers (New York: A.M. Kelley, 1965): 164-5.

³⁷ Kuczynski and Meek, Tableau Economique, ix.

³⁸ Ibid., ix-x.

well as Quesnay's later Rural Philosophy (1763), Analysis of the Arithmetical Formula of the Tableau Economique (1766), First Economic Problem (1766) and the Second Economic Problem (1766), all employed versions of the Tableau to depict an economy affected by various fiscal regimes.³⁹

Table I

USES OF THE "TABLEAU ECONOMIQUE"

Version	Quantitative Base	Tax Regime	Theoretical Depiction
Tableau Economique First Edition	400 m.	No Taxes	Ideal Economy
Tableau Economique Second Edition	600 m.	Direct Taxes	Ideal Taxes in Ideal Economy
Tableau Economique Third Edition	600 m.	Direct Taxes	Ideal Taxes in Ideal Economy
Rural Philosophy	965 m.	Indirect and Direct taxes	Effects of Tax Reform on Accumulation
Analysis	2,000 m.	Indirect and Direct Taxes	Effects of Tax Reform on Surplus
First and Second Economic Problems	3,000 m.	Indirect and Direct Taxes	Effects of Tax Reform on Distribution

³⁹ Francois Quesnay, Rural Philosophy, (Paris: Archives Nationales, M. 779, II, 315-30; extract reprinted in Meek, Physiocracy, 138-49); Analysis, in Journal de l'Agriculture, du Commerce et des Finances, June 1766, reprinted in Meek, Physiocracy, 150-67; First Economic Problem, in Journal de l'Agriculture, du Commerce et des Finances, August 1766, reprinted in Meek, Physiocracy, 168-85; Second Economic Problem, in Physiocratie, reprinted in Meek, Physiocracy, 186-202.

Each particular version of the Tableau was designed with a specific economic policy objective in mind. The first public presentation of Physiocratic doctrine actually came with the publication of Marquis de Mirabeau's Theorie de l'impot in 1760. The work explicitly developed the Physiocratic proposals for tax reform, and was "written with astonishing rapidity under the direct inspiration of Quesnay."⁴⁰ Predictably, the work received a very hostile reception: "The tax-farmers, whom Mirabeau had attacked very bitterly, were unwilling to let the matter pass, and Mirabeau was imprisoned in the chateau at Vincennes."⁴¹ With the help of Quesnay, Mirabeau was released a short time later, but for the next several years, both Quesnay and Mirabeau exercised considerable caution in expressing their views on economic reform.

The Physiocrats were very much aware of the social and political obstacles standing in the way of fiscal reform, but believed they could be accomplished without political revolution. Quesnay dismissed the failed reform proposals of Boisguillebert and Vauban as being primarily due to their lack of scientific foundation.⁴² The Physiocrats believed

⁴⁰ Meek, Physiocracy, 28.

⁴¹ Ibid., 29.

⁴² "But who would have dared to attempt such a reform at a time when no one had any conception of the economic administration of an agricultural kingdom? At that time it would have been considered as overthrowing the pillars of the building." Quesnay, "General Maxims for the Economic

the two key elements of their new science were the philosophy of natural law and the mathematical logic of the Tableau Economique. They set out to show that the philosophy of natural law could serve as a foundation for the construction of rational economic policy.

The most systematic expression of Physiocratic natural law philosophy can be found in Quesnay's "Observations sur le Droit Naturel des Hommes Reunis en Societe."⁴³ Enlightened with Physiocratic science, the monarch could act to bring economic practices into conformity with natural laws. Indeed, the Physiocrats believed that reform could be achieved only by an enlightened king. While the Physiocrats were strong advocates of laissez-faire, they did not believe society could be restructured along the lines of the "natural order" simply through the free operation of the marketplace. In fact, Quesnay justified the authority of the state to intervene into economic matters by the appeal to natural law.⁴⁴

Government of an Agricultural Kingdom," Physiocratie (Paris, I.N.E.D., II, 949-76; trans. by Meek, Physiocracy, 231-62): 262.

⁴³ Francois Quesnay, "Observations sur le Droit Naturel des Hommes Reunis en Societe," Journal de l' Agriculture, du Commerce et des Finances, September 1765, reprinted in Meek, Physiocracy, 43-56.

⁴⁴ "They are immutable and indisputable and the best laws possible; thus they are the foundation of the most perfect government, and the fundamental rule for all positive laws...Positive laws are authentic rules established by a sovereign authority for the purpose of settling the order of the administration of government,

Having "discovered" the natural laws of capitalism, the Physiocrats aimed to demonstrate that existing tax schemes, with their feudal privileges, violated these laws and prevented the economy from reproducing itself on the highest potential scale. Solving the economic problems facing France, therefore, required the reform of policies which prevented the establishment of "natural order."⁴⁵ Physiocratic proposals for a single tax on land rent were considered the only way to restructure the existing tax system into one consistent with emerging relations of capitalist production.

The Produit Net and the Impot Unique

The Physiocratic critique of mercantilist theory and policy focused on the latter's conception of surplus created in exchange. For the first time in the history of economic thought, the source of economic surplus was systematically located in the sphere of production. The shifting of the analysis from exchange to production marked the Physiocrats'

securing the defence of society, ensuring the regular observance of natural laws...regulating the personal rights of subjects...and deciding on questions of distributive justice." Ibid., 53-4.

⁴⁵ "Since for Quesnay the basis of the social order lay in the economic order, an understanding of the laws and regularities governing economic life appeared to be of primary necessity if the sickness of society was to be cured." Meek, Physiocracy, 18.

greatest achievement.⁴⁶ The fundamental premise that all wealth was created in agricultural production was derived from Boisguillebert and Cantillon. As early as his essay on Taxation, Quesnay argued that the surplus from agriculture represented not only the sole source of wealth, but also the sole source of tax revenue:

The annual wealth which constitutes the nation's revenue consists of the products which, after all expenses have been deducted, form the profits which are drawn from landed property...The profit or revenue which the proprietors draw from their landed property, then, constitutes the true wealth of the nation, the wealth of the sovereign, the wealth of his subjects, the wealth which provides for the state's needs, and consequently the wealth which pays the taxes levied to meet the expenditure which is necessary for the government and defence of the state.⁴⁷

Later in his "General Maxims for the Economic Government of an Agricultural Kingdom," Quesnay advanced the conception of surplus within the context of economic policy:

That the sovereign and the nation should never lose sight of the fact that the land is the unique source of wealth, and that it is agriculture which causes wealth to increase....That the government's economic policy should be concerned only with encouraging productive expenditure and trade in raw produce, and that it should refrain from interfering with sterile expenditure.⁴⁸

⁴⁶ "Since it is the great and specific contribution of the Physiocrats that they derive value and surplus-value not from circulation but from production, they necessarily begin, in contrast to the Monetary and Mercantile system, with that branch of production which can be thought of in complete separation from and independently of circulation, of exchange." Marx, Theories, I, 49.

⁴⁷ Quesnay, Taxation, 104.

⁴⁸ Quesnay, "General Maxims," 232-3.

Quesnay's reference to "sterile expenditure" was intended to include all manufacturing and commercial activities and their lack of surplus- and tax revenue-generating potential. Quesnay attacked directly the mercantilist policies of Colbert for attempting to promote these sectors of the economy.⁴⁹ The Physiocratic critique of existing economic wisdom centered on state policies which diverted economic surplus from the productive sector of the economy (agriculture) to unproductive (sterile) sectors. If the "net product" was not advanced to agriculture, there could be no further generation of surplus. Thus, the Physiocrats not only shifted the analysis of surplus from the sphere of exchange to agricultural production, but also were among the first economists to argue that the size of the surplus depended upon the quantity of output advanced in production. Government tax and expenditure policies should be aimed at maximizing the share of the surplus (capital) going to capitalist farmers, which would, in turn, be advanced in further production. Capital advances in agriculture generated the wealth necessary for the support

⁴⁹ "This minister, whose good intentions were so worthy of esteem but who was too much a prisoner of his ideas, tried to bring about the generation of wealth from the work of men's hands, to the detriment of the very source of wealth, and put the whole economic constitution of an agricultural nation out of gear...The revenue of the proprietors of landed property was useless sacrifice to a mercantile trade which could make no contribution to taxes." Ibid., 244-5.

of all members of society, including members of the state apparatus.⁵⁰

The Physiocrats attempted to develop a theory of productive and unproductive expenditure consistent with the analysis of economic surplus. Because only the agricultural sector was capable of producing a surplus, it logically followed that only the share of the output advanced (consumed) in agricultural production constituted productive expenditure. In Taxation, Quesnay integrated the conception of surplus and productive expenditure into his analysis of reproduction: "A nation subsists only through perpetual consumption and reproduction...thus sterile wealth, being simply wealth which is confined to consumption, is destroyed by consumption itself, and is unable, unless it is reproduced through other wealth, to perpetuate the existence of men and the successive existence of their wealth."⁵¹

Quesnay employed the term "consumption" much differently from the way it is used by modern neoclassicals and Keynesians. For Quesnay, the net product could be "consumed" as an advancement in agricultural production where it more than replaced itself, or as an advancement in manufacturing where it simply reproduced itself in the form

⁵⁰ "[A]s the net product of landed property is, so is the net product available for revenue, taxation, and the subsistence of the different classes of men in a nation." Ibid., 243.

⁵¹ Quesnay, Taxation, 105.

of a different use-value. The net product also could be consumed in a non-production activity where it "disappeared" from the process of circulation.

The emphasis in Physiocratic theory was not on "demand-side" considerations of consumption, but on the "supply-side" use of the net product. State expenditure was considered unproductive because the state was assumed not to be directly involved in agricultural production. In the Tableau, for example, state consumption was treated equivalently to the consumption of output by landlords. In General Maxim XXVI, however, Quesnay implied that public works could "facilitate" the production of wealth (surplus) if they were rationally financed from revenue gained at the expense of unproductive consumption.⁵² State expenditure could only be beneficial if it was financed by taxes imposed directly upon the net product. The Physiocrats believed that the greatest problem with the existing tax structure was that it reduced productive advances instead of "luxury" consumption. How taxes affected the allocation of surplus between capital investment and unproductive consumption

⁵² "One should consider in the same light the public works which facilitate the increase in wealth, such as the construction of canals, the putting into order of roads, rivers, etc., which can be carried out only as a result of the comfortable situation of tax-payers who are in a position to meet expenses without detrimentally affecting the annual reproduction of the nation's wealth. Otherwise works of such an extensive character, although very desirable, would as a result of ill-regulated taxes or continual corvees become ruinous enterprises." Quesnay, "General Maxims," 262.

would become a central question in classical political economy.

The degree to which the Physiocrats were able to integrate a theory of value with their theory of surplus is a topic of debate among historians of economic thought. In his recent study on The Economics of Francois Quesnay, Gianni Vaggi persuasively argued that the predominant interpretation that Physiocracy was limited to the analysis of material and physical aspects of commodity production is incorrect.⁵³ Within the Physiocratic analysis of production and circulation, the concepts of wealth, revenue, and taxes were in fact treated as value categories. Economic surplus was assumed to circulate and be distributed through a monetary system of market exchange.

Within the Physiocratic analysis of taxation, relative prices, or the exchangable value of commodities, were fixed and determined prior to the analysis of circulation and distribution. This was particularly true throughout the various editions of the Tableau Economique, where production was assumed to take place with heterogeneous manufactured and agricultural inputs, which exchanged on the basis of a fixed, exogenously determined ratio. While output consisted of these same heterogeneous commodities, the economic surplus consisted of one agricultural commodity.

⁵³ Gianni Vaggi, The Economics of Francois Quesnay (Durham: Duke University Press, 1987).

Marx claimed that as early as Boisguillebert, the focus on production allowed for the formulation of a theory of value: "Boisguillebert...reduces the exchange-value of commodities to labor-time, by determining the 'true value' according to the correct proportion in which the labour-time of the individual producers is divided between the different branches of industry, and declaring that free competition is the social process by which this correct proportion is established."⁵⁴

Quesnay's theory of value was based not on the productivity of labor per se, but upon the productivity of nature (land). Labor applied to the land produced a surplus, while labor applied to other activities produced no such windfall.⁵⁵ Quesnay's simple labor theory of value did not play an explicit role in the analysis of taxation contained in his Tableau Economique. Further analytical improvements in the classical theory of value were required before it could be successfully integrated with the theory of taxation.

⁵⁴ Marx, Critique, 54.

⁵⁵ "Agricultural work compensates for the costs involved, pays for the manual labour employed in cultivation, provides gains for the husbandmen, and, in addition, produces the revenue of landed property. Those who buy industrial goods pay the costs, the manual labour, and the gain accruing to the merchants; but these goods do not produce any revenue over and above this. Thus no increase of wealth occurs in the production of industrial goods, since the value of these goods increases only by the cost of the substance which workers consume." Quesnay, Corn, 72-3.

The 'Tableau Economique'

Quesnay's Tableau Economique represents the first theoretical system explicitly constructed to analyze the effects of taxation on the production, circulation and distribution of economic surplus.⁵⁶ The so-called First Edition of the Tableau is believed to have been written by Quesnay at the end of 1758, and contained a tableau and a set of twenty-two 'Remarks.' While Quesnay made quantitative changes and provided more detailed analyses in the later versions, this edition contains all of the basic characteristics of his model.

Quesnay divided expenditure into three separate categories, each associated with a distinct social class: "Productive Expenditure" represented the annual advances of the farmers--expenditure on seed, livestock, raw materials, and wage goods; "Sterile Expenditure" represented the annual advances of the manufacturing class; and "Expenditure of the Revenue" was the expenditure of the net product by landlords. The expenditure of the net product initiated the process of circulation depicted graphically in the Tableau. The "zigzag" illustrated the conditions required for the system to reproduce itself, in equivalent form, in the succeeding period.

⁵⁶ "Doctor Quesnay made a science out of political economy; he summarized it in his famous Tableau Economique." Karl Marx, The Poverty of Philosophy (New York: International Publishers, 1963): 103.

Table II

"TABLEAU ECONOMIQUE" (First Edition)

PRODUCTIVE EXPENDITURE		STERILE EXPENDITURE	
Annual Advances	EXPENDITURE OF THE REVENUE which is divided thus:	Annual Advances	
400 ^l produce net	400 ^l	200 ^l	
200 reproduce net	200	200	
100 reproduce net	100	100	
50 reproduce net	50	50	
25 reproduce net	25	25	
12 ^l 10 ^s reproduce net	12 ^l 10	12 10 ^s	
6 ^l 5 ^s reproduce net	6 ^l 5	6 ^l 5 ^s	
3 ^l 2 ^s 3 ^d reproduce net	3 ^l 2 ^s 6 ^d	3 ^l 2 ^s 6 ^d	
1 ^l 11 ^s 3 ^d reproduce net	1 ^l 11 ^s 3 ^d	1 ^l 11 ^s 3 ^d	
15 ^s 7 ^d reproduce net	15 ^s 7 ^d	15 ^s 7 ^d	
8 ^s reproduce net	8 ^s	8 ^s	
4 ^s reproduce net	4 ^s	4 ^s	
2 ^s reproduce net	2 ^s	2 ^s	
1 ^s reproduce net	1 ^s	1 ^s	

The tableau of the First Edition depicted an economy which produced a net product of 400 millions each year. The annual revenue was produced by means of 400 millions in advances from the productive class of farmers and 200 millions from the sterile class. Thus, the gross output of the system amounted to 1000 millions, 400 of which replaced the annual advances of the productive class, 200 of which replaced the advances of the unproductive class, while the remaining 400 represented the net product (or a rate of surplus of 100 percent on productive expenditure).

The technical coefficients of production are implicitly contained in the Tableau and remained constant throughout the analysis. The ratio of productive annual advances to sterile annual advances is assumed to be two-to-one. Assumptions regarding the ratio of original advances (fixed capital) to annual advances (circulating capital) are made but not numerically represented in the tableau.

Quesnay then turned to the circulation of the economic surplus generated from agricultural production. The net product (revenue) of 400 millions accrued to the one million landlords (proprietors) in the form of rent. The landlords were assumed to spend the entire amount of the net product (rent) in a specific pattern--one-half on products from the productive class and one-half on the products manufactured by the sterile class. In order for circulation to proceed smoothly, Quesnay made additional assumptions regarding

population size and the "wages" of farmers and manufacturers. There were three million heads of families employed, each of which earned on the average 200 livres (Quesnay's empirical estimate of subsistence). The full 600 millions were assumed to be consumed by both the productive and sterile workers over the production period.

At the beginning of the production process, the farmers had in their possession the necessary 400 millions in advances, the manufacturing class their 200 millions in advances, and the landlords their 400 millions in rent--the net product of the preceding period. The landlords spent one-half of their revenue (200 millions) on products from the productive class of farmers, and one-half (200 millions) on manufactured goods from the sterile class. This implied that an equivalent amount of money was exchanged for those commodities which then were consumed by the landlords, and thus disappeared from circulation. The class of farmers held on to the 100 millions received from the landlord class from the sale of commodities, and used the other 100 millions of cash to purchase 100 millions worth of advances (inputs) from the manufacturing class. They then advanced the 100 millions of sterile inputs, along with 200 millions of productive inputs, to the production process. This process regenerated the advances, plus a net product of 200 millions which accrued to the landlords in the form of monetary rent.

The landlords once again spent one-half of this revenue (100 millions) on goods from the productive class and one-half on manufactured goods from the sterile class. The farmers spent one-half (50 millions) on goods from the sterile class and, along with 100 millions of their own productive advances, advanced them in production. This production resulted in the generation of a net product of 100 millions, which again accrued to the landlords in the form of rent. The process was repeated once again until the numerical values were reduced to zero (in a geometrical progression). By summing up the values at each stage of the "zig zag," Quesnay concluded that the process had generated a total net product of 400 millions, with 400 millions worth of material advances distributed in the hands of the productive class, and 200 millions in the hands of the sterile class.

While this process is arithmetically consistent from the perspective of the landlord and productive classes, in that the monetary and commodity values are restored to their initial distributions, the same cannot be said of the sterile class. This class was assumed to produce manufactured goods both for landlord consumption and for advances in agricultural and manufacturing production. The tableau depicted the situation in which the sterile class received a monetary payment of one-half of the net product through the sale of manufactured goods to the landlords.

The sterile classes then entered the circulation process by selling manufactured goods to the farmers, and buying necessary food and raw materials. Quesnay concluded that at the ending distribution of commodities and money in the hands of the sterile class was such that the process could be repeated.

The flaw of the Tableau is that for the sterile class, the production process, the circulation of commodities, and the circulation of money do not all logically coincide. In the Third Edition, Quesnay attempted to correct the imbalances of money and commodities by assuming that, when necessary, the sterile class could transform commodities into money through international trade. Because Quesnay was concerned to show that the reproduction of the net product did not depend upon a surplus from trade, he did not explicitly show this set of transactions in the Tableau. Without the addition of exogenous transactions, the tableau does not, in fact, depict a continuous process of commodity and monetary circulation.⁵⁷ While historians have proposed various "solutions" to the problems of the Tableau, the analysis of taxation contained in the Tableau does not depend upon the logical treatment of sterile expenditure of the surplus.

⁵⁷ "The vast literature devoted by modern economists to physiocracy demonstrates conclusively that the Tableau does not work." Elizabeth Fox-Genovese, The Origins of Physiocracy, (Ithaca and London: Cornell University Press, 1976): 267.

In the diagrammatic presentation of the First Edition, Quesnay completely abstracted from taxation and the economic role of the state. In the margin of the sterile expenditure side of the tableau, however, Quesnay inserted an explanation of how taxation related to the system:

The taxes which ought to be included in this expenditure class are provided by the revenue and by reproductive expenditure class. They get lost in the latter class, except for those which are brought back to the reproductive class, where they are regenerated in the same way as the revenue which is distributed to this same class. But they are always levied to the detriment of the proprietor's revenue, or of the cultivator's advances, or of economy in consumption. In the two latter cases they are destructive, because they reduce reproduction in the same proportion. It is just the same with those which are transferred abroad without any return, or which are held back in the monetary fortunes of the tax-farmers who are responsible for their collection and expenditure.⁵⁸

Quesnay was attempting to make several different arguments regarding the treatment of taxation, but provided little explanation of how taxes actually could be treated within such a model. In the "Remarques" which followed the tableau, Quesnay claimed that if taxes did not affect the productive advances of the farmers, but were imposed directly on rent, they would not have negative economic consequences. Quesnay had not yet successfully integrated his proposals for tax reform with the theoretical structure of the Tableau. Subsequent versions of the Tableau can be

⁵⁸ Quesnay, Tableau Economique, in Kuczynski and Meek, Appendix A: The 'First Edition.'

interpreted to be successive attempts to incorporate policy proposals into his scientific analysis.

The Second Edition of the Tableau can be distinguished from the First Edition by the difference in the quantitative base of the model and by the expanded explanation of its functioning and policy implications. Quesnay increased the scale of the model from a net product base of 400 millions to 600 millions, while keeping the same assumptions regarding the technical coefficients of production. The base of the model was expanded to account for the existence of direct taxes on the net product: "If we add taxes to the 600 millions of revenue, and these taxes amounted to 200 millions, the annual advances would require to be at least 1200 millions, without taking into account the original advances necessary in the beginning to set the husbandmen up in their enterprises."⁵⁹ In order to produce 200 millions in additional net product to support the Crown, an additional 200 millions in productive advances and 100 millions in sterile advances, or a total of 1200 millions, were required.

While the numerical values of the tableau were increased to reflect the existence of taxation and state expenditure of the net product, this version of the Tableau did not explicitly treat taxes in its depiction of circulation and distribution. Quesnay simply amended the

⁵⁹ Ibid., Appendix B: The 'Second Edition.'

heading of the center column of the tableau to read "EXPENDITURE OF THE REVENUE after deduction of taxes, is divided between productive expenditure and sterile expenditure."

Table III
 "TABLEAU ECONOMIQUE" (Second Edition)

PRODUCTIVE EXPENDITURE relative to agriculture, etc.	EXPENDITURE OF THE REVENUE after deduction of taxes, is divided between productive and sterile expenditure	STERILE EXPENDITURE relative to industry, etc.
Annual advances required to produce a revenue of 600 ^l are 600 ^l	Annual revenue	Annual Advances for the works of sterile expenditure are
600 ^l produce net.....600 ^l	600 ^l	300 ^l
300 ^l reproduce net.....300 ^l	300 ^l	300 ^l
150 ^l reproduce net.....150 ^l	150 ^l	150 ^l
0...1...5.....0...1...5	

Quesnay also expanded the "Remarks" of the First Edition and presented them under the title "EXTRACT FROM THE ROYAL ECONOMIC MAXIMS OF M. DE SULLY." These Maxims make it clear that Quesnay intended the Second Edition to depict an ideal economic situation in which all of the appropriate fiscal reforms already had been implemented. Fiscal

policies were assumed to leave the reproduction of the system unaffected: "That the administration of finance, whether in the collection of taxes or in the expenditure of the Government, never brings about the formation of monetary fortunes, which steal a portion of the revenue away from circulation, distribution, and reproduction."⁶⁰ To achieve this ideal, it was required that all taxes be laid directly upon the net product and not on productive advances or on commodities.⁶¹ Quesnay described a less-than-ideal economy which was clearly intended to be eighteenth-century France:

Thus there was a deficit of three-quarters in the net product...The taxes were almost all laid on the farmers and on commodities, with the result that they fell upon costs, etc. And they yielded to the nation, judging from the tax of one-tenth, only about 400 millions of revenue. Productive expenditure was successively eaten away by taxation, to the detriment of reproduction.⁶²

Quesnay believed that the tax structure of the state was such that the burden of taxation fell on the advances of the farmers and not directly on the net product or revenue, thus production and reproduction had been damaged. Quesnay

⁶⁰ Ibid.

⁶¹ "That taxes are not destructive or disproportionate to the total of the nation's revenue...that they are laid directly on the revenue of the proprietors, and not on the produce, where they increase the costs of collection and operate to the detriment of trade; and, in addition, that they are not taken from the advances of the farmers of landed property, whose wealth ought to be very carefully safeguarded in order to meet the expenses of cultivation and to avoid the loss of revenue." Ibid.

⁶² Ibid.

concluded the Second Edition by commenting that for France to reach its economic potential, the ideal conditions would have to be met through major reform: "Without these conditions, an agriculture producing 100 percent, as we have assumed it to do in the Tableau and as it does in England, would be fictitious; but the principles displayed in the Tableau would be no less certain."⁶³

Quesnay's treatment of taxation in the Third Edition of the Tableau is only slightly more advanced than in the previous two. Quesnay elaborated on his treatment of taxation at the bottom of the tableau: "Thus the reproduction is 1500^l, including the revenue of 600^l which forms the base of the calculation, abstraction being made of the taxes deducted and of the advances which their annual reproduction entails, etc. See the Explanation on the following page."⁶⁴ Quesnay's "explanation" on the following page was drawn from the passage on taxes which appeared on the face of the tableaux of the first two Editions and the "General Maxims."

Quesnay also added a wealth of empirical data which was intended to draw a closer correlation of the theoretical principles of the Tableau to the potential of the French economy of the late eighteenth century. Quesnay attempted to determine if it was possible for France to achieve

⁶³ Ibid.

⁶⁴ Quesnay, "Third Edition," in Kuczynski and Meek.

production levels sufficient for the landlords still to receive 600 millions in post-tax, post-tithe rent, with interest being earned, and for the state and the Church to receive their taxes and tithes.⁶⁵

Quesnay concluded that it was possible for France to extend large-scale cultivation further than what was in existence at the time: "[T]he territory of France, given advances and markets, could produce as much as this and even a great deal more."⁶⁶

In the Third Edition, Quesnay assumed not only that all taxes were levied directly on the net product, but that the resulting tax revenue was spent by the state in the same proportion as landlords (one-half on goods from the productive sector, and one-half on manufactured goods from the sterile sector). This amounted to treating the state as an additional landlord and taxes simply as rent. Taxes were a payment of a share of the net product by the landlords to another "proprietor," with no resulting effect on circulation or reproduction. After calculating the levels of wealth France was capable of achieving upon economic and fiscal reform, Quesnay concluded the Third Edition with a warning that the state could quickly destroy wealth through irrational economic and fiscal policies.⁶⁷

⁶⁵ Ibid., v.

⁶⁶ Ibid., vij.

⁶⁷ Ibid., xj.

Because of difficulties in interpreting the Tableau, Quesnay published the "Analysis of the Arithmetical Formula of the Tableau Economique of the Distribution of Annual Expenditure in an Agricultural Nation" in 1766. While the article was intended only to provide further clarification to the Tableau, several theoretical points were developed further. For the first time, Quesnay explicitly treated the state as part of the class of proprietors.⁶⁸ Quesnay simplified the quantitative analysis, and the analysis of taxes and tithes as well. The net revenue was treated as inclusive of taxes and the "ideal" world of the Tableau, where all taxes were direct taxes on the net product, was maintained: "There is no other way of laying taxes which are capable of supplying as large a public revenue as this without causing any decline in the annual reproduction of the nation's wealth."⁶⁹

Quesnay was aware of the political opposition to eliminating indirect taxes, but believed that by direct appeal to the scientific logic of the Tableau, he could convince the landlords they were better off paying taxes

⁶⁸ "The class of proprietors includes the sovereign, the owners of land, and the tithe owners. This class subsists on the revenue or net product of cultivation, which is paid to it annually by the productive class, after the latter has first deducted, out of the reproduction which it causes to be annually regenerated, the wealth necessary for the reimbursement of its annual advances and for the maintenance of the wealth it employs in cultivation." Quesnay, "Analysis," in Meek, Physiocracy, 150.

⁶⁹ Ibid., 153.

directly out of the net product, rather than having indirect taxes imposed on other classes and commodities:

It is very much in the interests of the proprietors, the sovereign, and the nation as a whole that all taxes should be directly laid on the revenue of the land; for any other form of imposition would be contrary to the natural order, since it would fall on the taxes themselves. Everything in this world is subject to the laws of nature: men are endowed with the intelligence required to understand and observe them; but the great number of factors involved demands that they should be grouped together in comprehensive patterns, which form the foundation of a very far-reaching and self-evident science, whose study is indispensable if we are to avoid mistakes in policy.⁷⁰

In writing the Analysis, Quesnay seems to have been aware of the analytical difficulties of integrating tax reform with the mathematical presentation of the Tableau. Thus, in the Analysis, the complicated "zigzag" formula of the Tableau was replaced by a formula "aptly described as a 'Precis of the results of the distribution depicted in the Tableau'."⁷¹ The precis was employed by Quesnay in later attempts to analyze the harmful effects of indirect taxes on the French economy. Mathematically, the precis simply summed all of the transactions, replaced the zigzag with a single set of lines, and presented the equivalent totals at the bottom of the tableau.⁷²

⁷⁰ Ibid., 154.

⁷¹ Ronald Meek, "Problems of the 'Tableau Economique,'" in Physiocracy, 277.

⁷² Meek, "Formula of the Tableau Economique," 156-8.

Table IV

FORMULA OF THE "TABLEAU ECONOMIQUE"

Annual Advances of the Productive Class	Revenue for the Proprietors of the Land, the Sovereign, and the Tithe-owners	Advances of the Sterile Class
2 milliards	2 milliards	1 milliard
1 milliard		1 milliard
1 milliard		1 milliard
1 milliard		1 milliard
2 milliards		1 milliard
<u>5 milliards</u>	Total	<u>2 milliards</u>

In the "Comments" which followed the precis, Quesnay did not advance the analysis of taxes any further. The complete integration of proposals for tax reform and the theory of economic reproduction embodied in the Tableau came only with Quesnay's publication a year later of the First and Second Economic Problems.

In the First Economic Problem, Quesnay considered the positive economic effects of establishing free trade. As in earlier versions of the Tableau, the existing indirect taxes were abstracted from, or simply treated as direct taxes.⁷³

⁷³ "This part of the distribution would have required the inclusion of particular details and applications which I have not thought it expedient to deal with, in order that readers who are not well-informed about these matters should

The final numerical values calculated in the First Economic Problem constituted the basic data of the Second Economic Problem which was constructed "TO DETERMINE THE EFFECTS OF AN INDIRECT TAX" on an economy which had "until then been protected against all causes of deterioration."⁷⁴ After calculating the harmful effects of indirect taxes on the French economy, Quesnay compared the results to those which would have been achieved under a regime of direct taxes only. The focus was on the impact of taxes imposed on the advances of the productive classes: "Any action of the government which leads to an increase in these advances, or which on the contrary reduces them, increases or reduces the nation's wealth...These effects, whether good or bad, can be easily and exactly demonstrated in their full extent by a calculation based on the formula of the Tableau Economique."⁷⁵

Quesnay altered the original parametric values of the Tableau by increasing the "rate of return" on productive annual advances to a three-to-one ratio. The net product was thereby assumed to amount to 3,000 millions. Before analyzing the effects of alternative tax schemes, Quesnay again demonstrated (using these specific numerical values

not have their attention distracted by too great a number of items. Emphasis has been laid on the result." Quesnay, "First Economic Problem," 174.

⁷⁴ Quesnay, Second Economic Problem, 187.

⁷⁵ Ibid.

and the precis form of the Tableau) that if the state was treated as a proprietor and all taxes were imposed directly on the net product, there would be no effect on the reproduction of the system.⁷⁶

Quesnay illustrated this result by employing a tableau in which the center column was partitioned into two parts-- "Direct Taxes" and "Revenue of the Proprietors." Given a tax rate of two-sevenths, the share of the net product going to the state amounted to 800 millions.

By assuming the state spent this revenue on the products of the productive and sterile classes in the same proportion as the landlord class, Quesnay demonstrated that there were no effects on reproduction resulting from direct taxation. Quesnay anticipated the negative reaction of the landlords to a proposal to fund the government by means of direct, as opposed to indirect, taxes:

[T]he revenue of the Exchequer has been reduced to such a low level, and the proprietors have put forward so much opposition to its direct increase, that sovereigns have had recourse to indirect taxes of various kinds, which have extended further and further in the proportion that the nation's revenue has diminished as a result of the deterioration which is the inevitable consequence of these taxes themselves. The landed proprietors...gave their approval to these indirect taxes, by means of which they believed they could evade taxation, which ought to have been where it would have caused no decline in the annual reproduction and would not have required to be successively increased.⁷⁷

⁷⁶ Ibid., 190.

⁷⁷ Ibid., 190-2.

In order to prove this hypothesis, Quesnay used the tableau to calculate the effects of reducing direct taxes from two-sevenths of net product to one-tenth, and increasing the taxes "laid on persons and consumption" by 500 millions. Quesnay concluded that one-half of these indirect taxes would be lost to the state because they would be "swallowed up" by the costs of collection, by the profits of the tax farmers, and by illegal tax avoidance.⁷⁸ Thus, in the Second Economic Problem, Quesnay was able to combine his conception of the net product, the analytical structure of the Tableau Economique, and polemical arguments against indirect taxes.

Theory of Distribution and Incidence of Taxation

Quesnay was unable to completely integrate a theory of value into the material and monetary flows of the Tableau Economique, and as a result, his theories of distribution and tax incidence remained relatively undeveloped. The incidence of direct taxes, for example, was assumed to fall entirely on the landlords in the form of deductions from rent; no "shifting" of the tax took place. But in order to establish the claim that all taxes were ultimately borne by the net product, Quesnay had to derive a distributional theory of how indirect taxes were shifted.

In the "First Comment" to the Second Economic Problem, Quesnay discussed the impact of taxes imposed on the wages

⁷⁸ Ibid., 192-3.

of workers employed in agriculture. He believed these workers could not bear any of the tax burden: "Thus taxes laid on wage-earners, or on their expenditure, are self-evidently paid for in their entirety by those who pay their wages."⁷⁹ Workers could not increase their labor in response to the tax in order to restore post-tax levels of wage income, because employment was determined by the amount of capital advanced in production. Even if workers did increase their output, they would be unable to sell the additional product:

It would be useless to object that the class of wage-earners could itself pay these taxes by increasing its labour in order to increase its remuneration. For (1) in order to increase its goods, the class of wage-earners would require a greater amount of advances than it possesses; and (2) when the class of wage-earners increased its goods, it would not thereby increase its remuneration, since the total value of the wages which it is in a position to obtain is limited by the means, by the wealth, of those who are in a position to pay its wages.⁸⁰

Following the arguments of Thomas Mun and the mercantilists, Quesnay employed a simple "subsistence theory of wages" to argue that existing levels of workers' consumption could not be reduced by wage taxes. Because competition among workers drove the price of labor down to subsistence levels, workers could not bear any of the tax:

It would also be useless to object that the wage-earners, by restricting their consumption and

⁷⁹ Ibid.

⁸⁰ Ibid.

depriving themselves of enjoyments, could pay the taxes demanded of them, without their falling back again upon the first distributors of the expenditure...The level of wages, and consequently the enjoyments which the wage-earners can obtain for themselves, are fixed and reduced to a minimum by the extreme competition which exists between them... The result is that these first proprietors of renascent products, bound to the land through their possessions, will necessarily bear the whole burden of this destructive tax.⁸¹

Quesnay's analysis is not completely consistent. He wanted to argue that the "first distributors" ultimately paid the tax, but at the same time he attributed the poverty of the French peasantry to oppressive taxes:

If the wage-earners, whose enjoyments it is sought to restrict by means of the tax, are unable to emigrate in order to get back to their former level, they will become beggars or thieves--a kind of arbitrary and walking indirect tax, which is very burdensome to the first distributors of the expenditure...Thus, however things are arranged, the productive class, the proprietors of the land, and the taxes themselves, as first distributors of the expenditure, inevitably pay the whole of the indirect taxes which are laid on the men whose wages they provide, or on the produce and commodities which they consume; and they each contribute to them in proportion to the distribution of their expenditure.⁸²

The contradictions in Quesnay's analysis can be traced to confused class distinctions in his analysis of capitalist agriculture. Not only are wage-earners (metayers) and capitalist farmers not clearly distinguished, but the term "first distributors" was meant to apply, in different situations, to both agricultural entrepreneurs and

⁸¹ Ibid., 194.

⁸² Ibid.

landlords. The capitalist farmers only could bear a share of the tax burden under Quesnay's assumption that they earned a "superior wage."

The taxation of the advances of capitalist farmers is analyzed in material terms, even though they were levied monetarily. If the capitalist farmers were taxed, the short-run incidence fell on them and they simply advanced less to production. Precisely because little shifting of indirect taxes took place, Quesnay argued in favor of direct taxes on rent. Thus, the Physiocratic assumption that the net product bore the full burden of taxation was not consistently maintained.

The analysis of the taxation of subsistence wages of poor farmers employed by capitalist agricultural entrepreneurs was carried out also in physical terms. Capitalist farmers, as a result of the imposition of wage taxes, were forced to raise the wages of their employees, or equivalently, to pay the taxes themselves. Thus, wage taxes, as well as taxes on wage goods, were treated equivalently to any other increase in cost of production:

The assessment of taxes on labourers who live off their wages is strictly speaking nothing more than an assessment on their labour, which is paid by those who employ the workers, in the same way that an assessment on the horses which plough the land would really be nothing more than an assessment on the expenses of cultivation themselves. Thus an assessment on men rather than on the revenue would be borne by industrial and agricultural costs themselves...Taxes assessed on commodities should be regarded in the same way, for they would also be borne, in a way which involved an absolute loss, by

the revenue, by the tax receipts, and by the expenses of cultivation, and would entail enormous charges which it would be impossible to avoid in a large state.⁸³

Quesnay abstracted completely from theoretical questions of whether indirect taxes affected money wages or the nominal prices of commodities. Quesnay simply argued that indirect taxes did not increase the real cost (value) of labour or commodities.

In the "Third Comment" to the Second Economic Problem, Quesnay returned to the analysis of effects of indirect taxation upon the prices of commodity inputs. Quesnay was concerned to show that indirect taxes were borne by the productive class, even when accounting for price changes. He claimed that because the means of the purchasers were limited (by the share of the net product), prices could not be raised in the long-run, and indirect taxes would be borne by the farmers. If prices did rise in the short-run, the purchasers would be forced to reduce their consumption, which drove prices back down to their original levels. The result was that indirect taxes still were borne by the productive classes:

For the means of purchasers are limited: if the indirect tax does not increase the prices of the products to the purchaser-consumers, it is self-evident that it must be paid at the expense of the prices received in sales at first hand; whereas if the indirect tax does increase the prices to the purchaser-consumers, the latter are forced to reduce their consumption, and thenceforth the lack of a

⁸³ Quesnay, "General Maxims," 239.

market for the products forces their prices down; for the cultivator has either to sell at whatever the price happens to be or to give up cultivation for the market. In reality both cases are intermingled and counterbalance one another. But whether they are intermingled or occur separately, the result can never be anything but ruinous and fatal so far as the prices of products are concerned.⁸⁴

Because the Physiocrats largely restricted their analyses to the material aspects of production and distribution, they had difficulty integrating the theoretical formulation of wages, profits and rent, into their theory of tax incidence. Establishing that rent was the unique form of the surplus is not equivalent to demonstrating that all taxes were ultimately paid out of rent. Quesnay's case against indirect taxes was based upon the assertion that they were not paid out of rent, but rather, out of productive advances. Ultimately, Quesnay was unable to analyze how price changes could act to shift the tax burden away from where it was originally imposed. He was forced to argue that direct taxes were the ideal form of taxation because it was possible to maintain such taxes as a direct proportion of wealth.⁸⁵ It would be left up to Adam Smith and David Ricardo to firmly link the classical theory of distribution with the analysis of taxation.

⁸⁴ Quesnay, Second Economic Problem, 195.

⁸⁵ "A properly organized tax, i.e. a tax which does not degenerate into spoilation by reason of bad assessment, should be regarded as a portion of revenue taken out of the net product of...landed property." Quesnay, "General Maxims," 238.

Taxation and the Theory of Accumulation

In Rural Philosophy, Quesnay attempted to link the analysis of taxation and the logic of the Tableau, with a theory of capital accumulation.⁸⁶ Quesnay set out to analyze a "kingdom where agriculture is in a state of decline" due to restrictions on trade and indirect taxes. Unlike Mirabeau's earlier Theory of Taxation, Rural Philosophy made use of the mathematical logic of the Tableau in presenting proposals for tax reform. The mathematical exercise provided the numerical estimates of their effects on the net product and tax revenue.

Data first are presented for a society which had placed restrictions on trade and had imposed heavy tithes and indirect taxes. Thus, the first step was to recalculate the economic values after freedom of trade was established. The resulting numerical values then were used as parameters of the model: Advances were recalculated to be 550 millions, interest on advances, indirect taxes and corvees were 676 millions, and the revenue, together with tithes and direct taxes, amounted to 418 millions, for a total production of 1644 millions. The returns of the cultivators came to 1260, the tithes were 124, revenue of the landlords 172, and territorial (direct) taxes 88 millions.

⁸⁶ Francois Quesnay, Philosophie Rurale, (Amsterdam: Chez les Libraires Associes, 1763; trans. and reprinted in Meek, Physiocracy): 138-49. Although this work was published under Mirabeau's name in 1763, it is believed to have been written by Quesnay. See Meek, Ibid., 38.

The second step was to determine the effects of the elimination of indirect taxes on these values: "If indirect taxes, corvees, etc., were abolished, everything would in a few years return to the natural order of agricultural expenditure and products."⁸⁷ Quesnay calculated that such reforms would result in advances increasing to 965 millions, interest on advances to 482 millions, total revenue and territorial taxes to 786 millions and tithes to 179 millions--for a total of 2412 millions.

Quesnay did not explicitly derive these values, although it is fairly easy to do so given the basic mathematical logic of the Tableau. When the indirect taxes and corvees are abolished, an equivalent amount is added directly to the advances of the cultivators. The value of the indirect taxes and corvees is the total "compensation" of interest on advances and indirect taxes and corvees, less the interest on the advances--or 415 millions. Adding this figure to the 550 millions in advances produces the 965 millions figure.

Given the assumptions regarding the coefficients of production, all of Quesnay's figures including the net product and the direct taxes (given a constant 33 percent tax rate on the net product) can be determined. If all of the indirect taxes on the farmers' advances were eliminated, the sum of tax revenue going to the state, post-tax rent

⁸⁷ Quesnay, Rural Philosophy, in Meek, 140.

going to the landlords, and productive advances would increase.⁸⁸

A fundamental premise of Physiocratic thought was that the landlords received the entire net product and that farmers did not share in the net product in the form of profit. The question thus arose as to whether a reduction of indirect taxes increased the "income" of farmers and thus the amount of "capital" advanced in production, or increased the size of the net product accruing to landlords in the form of rent. Quesnay's response was that both advances and the net product (rent) increased as a result of the reduction in indirect taxes. The increase in post-tax income was distributed through the renegotiation of the land leases. Quesnay made the institutional assumption that the land leases expired proportionately over a period of nine years, and as each lease expired, an increase in rent was renegotiated so that the landlords ended up expropriating the entire increase. But up until the leases expired, the

⁸⁸ "Now two-thirds of the revenue, after tithes have been deducted, belong to the proprietor, and the other one-third to the sovereign. Thus the proprietors would have two-thirds of 786 millions, or 524 millions, instead of 172. The territorial taxes going to the sovereign would be 264 instead of 88...which would greatly exceed the amount yielded to the sovereign by the present tax, which is today raised almost completely by indirect and destructive assessments, and which falls back again two-fold, three-fold, four-fold, etc., on the revenue of the land. It has also been shown that what the sovereign loses on his share of the falling-off in the revenue of landed property greatly exceeds what he receives from the indirect taxes, which ruin the proprietors of the land." Ibid., 141.

farmers received the increase in "income" and advanced all of it as productive expenditure. When the leases were renegotiated, the farmers continued to receive a share sufficient to replace the increased levels of advances:

But this increase in revenue...would be returned in its entirety to the proprietors and the sovereign only by degrees in the course of nine years, during which all the leases of rented land would be successively renewed. For each farmer would profit, up to the termination of his lease, from the increase in the net product, and this gain would build up the wealth employed in cultivation proportionately. But each year there would be leases which terminated. Assuming that one-ninth of the leases were renewed each year, this would mean that in nine years one-half of the increase in the revenue would pass to the proprietors and the sovereign, and the farmers would benefit from the other half, some more and others less according to the different dates at which their leases expired.⁸⁹

The objective of these calculations was to model the economic growth resulting from the increases in capital advances. Quesnay incorporated his earlier treatment of original advances (fixed capital) into the analysis.

While total advances were assumed to grow $\frac{8}{9}$ of the initial increase in the net product the first year, $\frac{7}{9}$ the next year, and so on, not all of the increase was employed as annual advances (circulating capital). Quesnay assumed that the ratio of fixed to circulating capital was four-to-one, and remained the same after the change in tax policy. Therefore, the farmers invested $\frac{4}{5}$ of the increase in capital goods and the other $\frac{1}{5}$ in "wage goods." The

⁸⁹ Ibid., 141-2.

increase in the net product then was calculated to be equal to 100 percent of the increase in annual advances, less 1/7 which is assumed to go to tithes. It was thus possible to calculate each year's (and the sum total) increase in original advances, annual advances, net product, and landlords' revenue (which increased by 1/9 of the initial increase, plus the negotiated rent increases).

At the end of the nine-year period, there would be no further growth, and the economy would simply reproduce itself at the higher scale with the landlords sharing the entire net product: "Thus the object of the following calculation is to arrive at the total of the cumulative increase in the annual advances over the period of nine years, during which the farmers make a greater and greater profit each year out of the sum of 672 millions representing the first increase in gains."⁹⁰

Quesnay cautiously discussed the implications for economic growth of changing the terms of the landlord/farmer relationship. It followed logically from the analysis that a more favorable distribution of net product for farmers would result in a higher level of accumulation.⁹¹ Thus, the remarkable theoretical achievement of Rural Philosophy is

⁹⁰ Ibid., 142.

⁹¹ "[T]he cultivators are themselves proprietors, so that all the profits from cultivation are all the time continually used to increase the wealth employed in cultivation." Ibid., 147.

that, for the first time in the history of economics, the analyses of taxation, distribution, and the social relations between landlords and farmers all were combined to produce a theory of capital accumulation. Marx concluded that the Physiocrats were the first economists to develop a clear conception of capital in the process of economic reproduction.⁹² Marx's schemes of reproduction in Volume II of Capital were based on the works of Quesnay and the Physiocrats. In the Second Economic Problem, Quesnay discussed the effects of indirect taxes on the extent of the market and on employment:

One might, it is true, think at first sight that the expenditure of the indirect taxes maintains the market for the territory's products. But this would be to ignore the fact that the market for products is limited...the expenditure of the indirect taxes never returns what they have taken away from the price of the products, but merely resells it; that the market would not become smaller, and would be constituted in a more advantageous way, if there were no indirect taxes at all, because this kind of tax and its expenditure are not favorable to provincial trade or to the sale of the products which are ordinarily used by consumers of an inferior order, and also because a large part of the receipts from these taxes is accumulated and forms individual fortunes which abstract it from the circulation, which ought all to be returned to the cultivators to enable them to pay the revenue of the proprietors.⁹³

⁹² "The analysis of capital, within the bourgeois horizon, is essentially the work of the Physiocrats. It is this service that makes them the true fathers of modern political economy... the Physiocrats established the forms which capital assumes in circulation...and in general the connection between the process of circulation and the reproduction process of capital." Marx, Theories, I, 44.

⁹³ Quesnay, Second Economic Problem.

Quesnay intended this statement as a criticism of those "adding-up theories of value" which implied that indirect taxes, by adding to the price of commodities, increased the value and material wealth in circulation. For Quesnay, price increases did not increase the real wealth of the nation or the size of the market. Quesnay and the Physiocrats condemned indirect taxes because they reduced advances to production--its production or supply effect--not because of demand considerations. There is no evidence to support a "Keynesian" interpretation of Physiocratic tax proposals.⁹⁴ John Maynard Keynes traced the origins of his theory of effective demand to Sir James Steuart and the mercantilists, and not to the Physiocrats.⁹⁵ The Physiocrats condemned indirect taxes because they diverted surplus away from productive consumption and into unproductive consumption.⁹⁶

⁹⁴ "Quesnayian analysis of aggregate demand in the Tableau gave rise to several recommended policy measures: Hoarding should be discouraged and, if possible, eliminated entirely; and taxes should be levied on rent income, not commodity sales, because excise taxes would act as a 'leakage' in the circular flow and would reduce aggregate demand." Robert Eagly, The Structure of Classical Economic Theory, (New York: Oxford University Press, 1974): 33.

⁹⁵ J.M. Keynes, "Notes on Mercantilism, the Usury Laws, Stamped Money and Theories of Under-Consumption," in The General Theory (New York: Harcourt Brace Jovanovich, 1964): 333-71.

⁹⁶ In classical political economy, demand influences the allocation of capital to various sectors of the economy, but not the overall level of output. In Physiocratic analysis, however, the analysis is made more complicated by the particular treatment of productive and unproductive

In his "Fourth Comment" to the Second Economic Problem, Quesnay provided additional data on direct and indirect taxes required to calculate the effects of tax policy changes. His objective was to trace through "the other effects of the change which has occurred in the distribution of wealth as a result of the decline caused by the 500 millions of indirect taxes."⁹⁷ Both the net revenue of the landlords and the revenue going to the Crown were lower under the new tax scheme. Quesnay used a tableau to demonstrate that increasing indirect taxes further would only make matters worse.⁹⁸ Quesnay concluded with a plea to the landlords to accept the self-evident logic of the Physiocrats and the benefits of tax reform:

We may now ask the landed proprietors if it is not of the utmost importance to them to meet the whole of the direct taxes which determine and safeguard the state of their property, and not, as a result of a misunderstanding of their own interests, to induce sovereigns to have recourse for the state's needs to means which are as ruinous to the revenue of the proprietors, to the sovereigns themselves, and to the whole body of the nation, as indirect taxes.⁹⁹

expenditure. Because agriculture was the only productive sector of the economy, a change in demand by the landlords and the state did change the allocation of advances, and thus the total level of surplus output. This is not equivalent, however, to the argument that indirect taxes affected the overall level of consumption demand.

⁹⁷ Quesnay, Second Economic Problem, 198.

⁹⁸ "It would be useless for the sovereign to try to make up for such a falling-off in his revenue by increases in indirect taxes. These would serve only to increase the decline in his revenue and that of the nation." Ibid., 200.

⁹⁹ Ibid.

Conclusion

Physiocratic proposals for an impot unique were ridiculed almost immediately after they were suggested. For example, despite his friendship with A.R.J. Turgot, Voltaire condemned the inequity of exempting wealthy merchants and entrepreneurs from such a tax in his satire The Man of Forty Crowns. In the story, a wealthy financier comes across a poor farmer oppressed by the burden of taxation and justifies his tax-free status by appealing to Physiocratic theory:

"I," said he, "I contribute to the wants of the state? You are surely jesting, my friend. I have inherited from an uncle his fortune of eight millions, which he got at Cadiz and at Surat; I have not a foot of land: my estate lies in government contracts, and in the funds. I owe the state nothing. It is for you to give half of your substance,--you who are a proprietor of land. Do you not see, that if the minister of the revenue were to require anything of me in aid of our country, he would be a blockhead, that could not calculate? for every thing is the produce of land. Money and the paper currency are nothing but pledges of exchange. If, after having laid the sole tax, the tax that is to supply the place of all others, on those commodities, the government were to ask money of me; do you not see, that this would be asking the same thing twice over...Pay then thou, my friend, who enjoyest quietly the neat and clear revenue of forty crowns; serve thy country well, and come now and then to dine with my servants in livery.¹⁰⁰

At the heart of this criticism was a challenge to the concept that agricultural production was the sole source of

¹⁰⁰ Voltaire, "The Man of Forty Crowns," in The Works of Voltaire (Roslyn, New York: Walter J. Black, Inc, 1927): 315.

economic surplus. The Physiocrats' theoretical formulation of economic surplus, and the associated proposal for a single tax on land rent, which Adam Smith effectively criticized in The Wealth of Nations. By generalizing the production of surplus to all spheres of production, including manufacturing, Smith managed to provide a superior analysis of capitalism both in England and in France.

Although Physiocratic theories of taxation receded into the background after 1776, they continued to have a tremendous influence over the theoretical development of classical political economy. The later classical economists rejected the Physiocratic belief in the exclusive productivity of agriculture; nevertheless, they followed the Physiocrats in basing theories of taxation on the concept of surplus created in production.

The comprehensive review of the various Editions and uses of the Tableau Economique provided in this chapter reveals the important role that the theory of taxation played in Physiocratic thought. Their economic models of production, circulation, distribution and accumulation of economic surplus were developed in conjunction with proposals for fiscal reform. Quesnay's integration of analyses of taxation within a theoretical model of production was an original and significant achievement. The Tableau served not only as a model for Marx's reproduction schemes, but also for Piero Sraffa's "rehabilitation" of

classical political economy: "It is only in our own time, with a renewal of interest in certain of the basic theoretical and practical questions upon which the Physiocrats concentrated, that their full stature as economists is gradually being revealed."¹⁰¹

¹⁰¹ Meek, Physiocracy, 34.

CHAPTER FOUR

ADAM SMITH AND THE FOUNDING OF ENGLISH CLASSICAL POLITICAL ECONOMY

Adam Smith's critique of mercantilist and Physiocratic theories of public finance was foreshadowed in the works of his mentor David Hume. Hume's writings "levelled, with their ingenious and brilliant critique, the final blow to mercantilist ideas."¹ Hume's major economic writings were published on the eve of England's industrial revolution as a collection of essays entitled Political Discourses,² and represent "a major influence in the transition from mercantilist to classical economics."³

When Adam Smith published The Wealth of Nations, he was familiar with the majority of the French and English economics literature of his day.⁴ Assessments of the debt

¹ I.I. Rubin, A History of Economic Thought, 1929, trans. by Donald Filtzer, (London: Ink Links, 1979): 79.

² David Hume, Political Discourses, (London, Privately printed, 1752, reprinted in David Hume: Writings on Economics, Eugene Rotwein, ed., Madison: The University of Wisconsin Press, 1970).

³ Rotwein, Writings, xvi.

⁴ Adam Smith, An Inquiry into the Nature and Causes of the Wealth of Nations, 1776, E. Cannon ed., (Chicago: University of Chicago Press, 1976).

Smith owed to his predecessors vary: Some claim complete originality on Smith's part, while others charge him with outright plagiarism.⁵ Wesley Mitchell claimed that "what was new was the organization of a vast amount of knowledge" into a single treatise.⁶ But it was not just that he put together a systematic treatment of political economy (Sir James Steuart had already accomplished this), but that his system better captured the dynamics of the emerging industrial capitalist economy of England in the late eighteenth century.⁷ Smith's analysis centered on the production of surplus in general, rather than on exchange and circulation (the mercantilist error). Nor was the production of surplus restricted to agriculture (the Physiocratic error). Smith correctly identified profit as a distinct form of surplus in capitalism.

⁵ "The Scottish proverb that if one has gained a little it is often easy to gain much, but the difficulty is to gain a little, has been applied by Adam Smith to intellectual wealth as well, and with meticulous care he accordingly keeps the sources secret to which he is indebted for the little, which he turns indeed into much." Karl Marx, Contribution to the Critique of Political Economy, (New York: International Publishers, 1970): 167-8.

⁶ Wesley C. Mitchell, Types of Economic Theory, two vols., (New York: Kelley Publishers, 1967): 44.

⁷ "His doctrine can be properly understood only as reflection of a period of transition, whose problems essentially consisted in clearing the ground for industrial investment and expansion, which he identified with a sweeping away of obstructive and sectionally-protective regulation in the interest of quickened competition and widening markets." Maurice Dobb, Theories of Value and Distribution Since Adam Smith, (Cambridge: Cambridge University Press, 1973): 55-6.

Smith's critique of the mercantile system and Physiocracy involved both a critique of their theories of surplus, value, distribution and accumulation, and a critique of their theories of public finance. His positive contribution was in providing a revolutionary theory of economic surplus (value) which provided the foundation for a new theory of taxation. Smith's originality lay in his ability to employ many of the methods and concepts of both the mercantilists and the Physiocrats in analyzing taxation within a unique theoretical framework. Smith's feat was, in Marx's words, to turn the "little" he borrowed "indeed into much." On this basis, Smith can be seen as the true founder of classical political economy in England.

Historians of economic thought have underestimated the importance to Smith's theoretical writings of Book V of The Wealth of Nations, "Of the Revenue of the Sovereign or Commonwealth." The general absence of attention to questions of taxation has reinforced the erroneous belief that Smith lacked a developed theory of distribution. A central claim of this chapter is that because Smith's distribution theory was integral to his theory of tax incidence, an emphasis on Book V is necessary for an accurate portrayal of Smith's place in the history of economics. Smith's provision of a general theory of value and distribution as a foundation for economic policy proved to be a major advance in classical political economy.

Adam Smith and British Fiscal Policy

Throughout his life, Adam Smith involved himself both theoretically and practically with questions of public finance. After reading Smith's Theory of Moral Sentiments in 1764, Charles Townshend, then British Chancellor of the Exchequer, offered Smith the position of tutoring his stepson, the Duke of Buccleuch. Smith resigned his professorship at Glasgow and accepted the position. This decision allowed him the time and financial resources to travel to France where he came in contact with the Physiocrats. Smith returned to London in 1766 and "collaborated with Townshend on the 'budget statement' of 1767 for raising a revenue in America by duties on imports of glass, paint, and tea."⁸ This act led to the Boston Tea Party in the American colonies.⁹

In 1767, Smith returned to Kirkcaldy and spent the next nine years writing The Wealth of Nations. Two years after its publication, Smith accepted the post of Commissioner of his Majesty's Customs in Edinburgh, Scotland. Following John Rae, Mitchell suggested that this position was a reward for the practical assistance the book had provided to the

⁸ Mitchell, 134.

⁹ A decade later, Smith still believed that "[i]t is not contrary to justice that both Ireland and America should contribute towards the discharge of the public debt of Great Britain...The English colonists have never yet contributed any thing towards the defence of the mother country, or towards the support of its civil government." Smith, WN, ii, 483-5.

British government.¹⁰ E.G. West notes the apparent irony in Smith's acceptance of the post, "an employment which involved the collection of those customs and tariffs which he had worked so hard to condemn!"¹¹ But Smith generally supported the imposition of customs and excises in favor of mercantile prohibitions on trade, and in the wake of the war with the American colonies, even advocated the imposition of new taxes.¹²

The impact of Smith's theoretical writings on the British system of taxation is difficult to assess. E.G. West argues that the influence of The Wealth of Nations on

¹⁰ "This lucrative post was a very desirable one from Smith's viewpoint and seems to have been a direct reward to the author...for the benefits which Lord North, then chancellor of the exchequer as well as head of the ministry, obtained from reading The Wealth of Nations in preparing his budgets for the years 1777 and 1778. Lord North, by no means agreeing with Adam Smith's general views, had found certain technical suggestions on the matter of taxation which he took directly out of the book and incorporated in the budgets." Mitchell, 135-6.

¹¹ E.G. West, Adam Smith (New Rochelle, N.Y.: Arlington House, 1969): 187-8.

¹² "Besides a strict attention to Oeconomy, there appears to me to be three very obvious methods by which the public revenue can be increased without laying any new burthen upon the people. The first is a repeal of all bounties upon exportation...The second is a repeal of all prohibitions of importation...and the substitution of moderate and reasonable duties in the room of them...The third is a repeal of the prohibition of exporting wool and a substitute of a pretty high duty in the room of it." Adam Smith, "Letter to William Eden," (January 3, 1780), in The Correspondence of Adam Smith, Mossner and Ross, ed., (Oxford: Clarendon Press, 1977): 244-5.

government policies was enormous.¹³ On the other hand, William Kennedy claims that there was no real policy change connected to the book.¹⁴ Kennedy is probably closer to the truth, for the new taxes introduced by Lord North were never important sources of revenue for England in the later decades of the eighteenth century.

Perhaps the reason Smith's works played only a minor role in practical tax matters was that he did not believe major tax reform was necessary. After an empirical examination of the existing tax structure in Great Britain, Smith appeared to be satisfied with having provided the theoretical foundation for its support. In fact, Smith concluded The Wealth of Nations with the assessment that the British tax system was superior to those of its neighbors.¹⁵

¹³ "There were...clear signs of immediate influence upon parliamentary legislation. Lord North's budget of the following year (1777) introduced two new 'Smithian' taxes, one on man-servants and the other on property sold by auction. Both these taxes were advocated in The Wealth of Nations. Similarly, the budget of 1778 introduced the inhabited-house duty and the malt tax...The ideas for new taxes in The Wealth of Nations were discussed in the context improving the system of public finance as a whole...In the wartime emergency...Lord North eagerly seized upon these ideas (the new malt tax, inhabitant-tax, etc.) in the pursuit of increased total revenue." West, 166; 188.

¹⁴ William Kennedy, English Taxation 1640-1799: An Essay on Policy and Opinion, (London: Frank Cass & Co, 1964): 141-50.

¹⁵ "The French system of taxation seems, in every respect, inferior to the British....In the mode of collecting and in that of expending the public revenue; though in both there may be still room for improvement; Great Britain seems to be at least as oeconomical as any of her neighbors." Smith, WN, ii, 438; 485.

Ironically, it was Smith's theoretical accomplishment of clearly distinguishing the three major sources of income in a capitalist economy (wages, profit, and rent), which allowed for the consideration of William Pitt's income tax scheme of 1799. William Pitt was the Chancellor of the Exchequer following North's downfall in 1782, and unlike North, had complete faith in the doctrines of Adam Smith.¹⁶ In this early era of industrial expansion in which profits from manufacturing had become an apparent source revenue to the British State, Pitt was able to make use of Smith's writings on economic surplus. Thus, while Smith's "anti-income-tax position lent authority to the case against Pitt's income tax,"¹⁷ England still managed to impose the first system of general income taxes before the end of the century.

William Pitt also made use of Smith's writings to attack those forms of taxation more suitable to the mercantile era. Pitt decreased import duties on those commodities which were most open to the smuggling trade, a

¹⁶ "The author of a celebrated treatise on the Wealth of Nations, whose extensive knowledge of detail, and depth of philosophical research will, I believe, furnish the best solution to every question connected with the history of commerce, or with the systems of political economy." William Pitt, Cobbett's Parliamentary History of England, XXIX, 1792, 834; quoted in Mitchell, 156.

¹⁷ R.A. Musgrave, "Adam Smith on Public Finance and Distribution," in The Market and the State: Essays in Honor of Adam Smith, T. Wilson and A. Skinner, ed., (Oxford: Oxford University Press, 1976): 307.

problem to which Smith devoted considerable attention. Smith did not object to the use of customs per se, only to their excessive use in preventing trade. Smith claimed that by raising prices to such a great extent, high customs on luxury imports had effectively prevented their importation altogether. Smith favored the elimination of most customs and their replacement with a system of select excise taxes, such as Walpole's excise scheme on tobacco and wine. A decade after the publication of The Wealth of Nations, Smith's position remained unchanged.¹⁸ Ultimately, the theoretical accomplishment of Smith's writings on public finance in The Wealth of Nations, and not its practical impact, influenced the future development of classical political economy.¹⁹

Public Finance and the Writings of Adam Smith

The importance of Smith's writings on public finance to the development of political economy has been underestimated by historians of economic thought. Schumpeter, for example, considered Book V to be of historical interest only:

¹⁸ Adam Smith, Letter to Sir John Sinclair of Ulster, (January 30, 1786), in Correspondence, 327.

¹⁹ In contrast, Edwin Seligman wrote that "while Adam Smith gave a decided impulse to the study of fiscal problems on the continent, and thus initiated a movement which has resulted in the elaboration of the modern science of finance, his success in arousing a like interest in England was far less marked, although his influence on English fiscal practice was great." Edwin R.A. Seligman, Essays in Taxation, 10th ed., 1931, (New York: Kelley Publishers, 1969): 572.

The Wealth of Nations contained no really novel ideas and...it cannot rank with Newton's Principia or Darwin's Origin as an intellectual achievement ...There are five books. The fifth and longest--taking 28.6 percent of total space--is a nearly self-contained treatise on Public Finance and was to become and to remain the basis of all the nineteenth-century treatises on the subject...The length of the book is due to the masses of material it contains: its treatment of public expenditure, revenue, and debts is primarily historical. The theory is inadequate, and does not reach much below the surface.²⁰

Marxist historians also have tended to minimize the theoretical importance of Smith's writings on public finance: "Today these sections of Smith's work hold merely an historical interest; the first two books, on the other hand, were to form the basis for theoretical economy's future development."²¹ A primary objective of this chapter is to demonstrate that it is not possible to separate Smith's writings on taxation from his theories of value, distribution and accumulation, and that both aspects formed the basis for political economy's development. Like Sir James Steuart, Adam Smith believed that political economy was the science of the statesman, and identified it with the object of raising revenue to support the government:

Political oeconomy, considered as a branch of the science of a statesman or legislator, proposes two distinct objects: first, to provide a plentiful revenue or subsistence for the people, or more

²⁰ Joseph A. Schumpeter, History of Economic Analysis, (New York: Oxford University Press, 1954): 184-6. Also see Mark Blaug, Economic Theory in Retrospect, 3rd. ed., (Cambridge: Cambridge University Press, 1978): 61.

²¹ Rubin, 166.

properly to enable them to provide such a revenue or subsistence for themselves; and secondly, to supply the state or commonwealth with a revenue sufficient for the public services.²²

The link between public finance and the science of political economy in Smith can be traced to his earliest theoretical discussions. In the recently discovered "Anderson Notes" from Smith's Glasgow Lectures in the early 1750s, "Government" is listed as a major topic of discussion.²³ By 1755, Smith believed the basic functions of a civilized state consisted of maintaining peace, administering a system of justice, and imposing an equitable system of taxation.²⁴ It is clear from the complete notes of his 1762-3 Lectures at Glasgow that raising necessary governmental revenue without infringing on individual liberty had already become an important question in Smith's overall political economy.²⁵ In 1766, Smith used the notions of liberty, administrative ease, and ease of

²² Smith, WN, i, 449.

²³ See Ronald Meek, "New Light on Adam Smith's Glasgow Lectures on Jurisprudence," History of Political Economy, 8, 1976, 439-77.

²⁴ "Little else is requisite to carry a state to the highest degree of opulence from the lowest barbarism, but peace, easy taxes, and a tolerable administration of justice; all the rest being brought about by the natural course of things." Quoted in Dugald Stewart, Biographical Memoir of Adam Smith, (New York: A.M. Kelley, 1966): 67-8.

²⁵ Adam Smith, "Lectures on Justice, Police, Revenue and Arms, Report Dated 1762-3," in Lectures on Jurisprudence, R.L. Meek, D.D. Raphael, and P.G. Stein, ed., (Oxford: Oxford University Press, 1978).

payment as criteria for the judging of one type of tax over another.²⁶ By the time Smith wrote The Wealth of Nations a decade later, he had reformulated these criteria into his four famous maxims of taxation:

I. The subjects of every state ought to contribute towards the support of the government, as nearly as possible, in proportion to their respective abilities; that is, in proportion to the revenue which they respectively enjoy under the protection of the state...

II. The tax which each individual is bound to pay ought to be certain, and not arbitrary...

III. Every tax ought to be levied at the time, or in the manner, in which it is most likely to be convenient for the contributor to pay it...

IV. Every tax ought to be so contrived as both to take out and to keep out of the pockets of the people as little as possible, over and above what it brings into the public treasury of the state.²⁷

The fact that Smith received such notoriety for these canons is surprising, for they are not particularly original.²⁸ The attention that these maxims have received far exceeds the role they played in The Wealth of Nations, where taxes were judged primarily upon theoretical principles of value, distribution and accumulation, not on equity or justice criteria as in the Lectures on

²⁶ Ibid., 531-3.

²⁷ Smith, WN, ii, 350-1.

²⁸ Sir James Steuart "clearly set down much of the same taxation maxims for which Adam Smith was so famous. But he does not deserve any credit for this, of course, for his source was the same as Adam Smith's, namely Petty." E.R. Sen, The Economics of Sir James Steuart, (Cambridge: Harvard University Press, 1957): 128.

Jurisprudence. Perhaps one reason why this section of Book V has received undue attention by orthodox historians of economic thought is that it is relatively easy to (incorrectly) recast these maxims into neoclassical terms.²⁹ Only by going beyond Chapter II, Part II, "Of Taxes," where the maxims are discussed, however, can Smith's unique contribution to the classical theory of public finance be properly understood.

Before turning to questions of how best to raise revenue to support the state, Smith analyzed the necessity of raising tax revenue. Like other economic phenomenon, the necessary functions of the state were historically conditioned.³⁰ The first duty of the sovereign was to militarily protect society from foreign nations. Because Smith believed everyone benefited from national defense in proportion to the property they owned, he argued that it should be financed out of general revenues.³¹

Smith treated the administration of justice as the second necessary duty of the state. This expense was considered to be an historical function of the rise of

²⁹ "Before proceeding...let me speculate briefly on how Smith would have written an individual's utility function and how he would have approached the design of a social welfare function." Musgrave, 305.

³⁰ "[W]hen we say that one government is more expensive than another, it is the same as if we said that the one country is farther advanced in improvement than another." Smith, Lectures, 530-1.

³¹ Smith, WN, ii, 338-9.

private property in a commercial society. As in the case of national defense, Smith believed the administration of justice should be financed out of the general revenue raised from taxation: "The expense of the administration of justice too, may, no doubt, be considered as laid out for the benefit of the whole society. There is no impropriety, therefore, in its being defrayed by the general contribution of the whole society."³²

Smith's discussion of public institutions and public works, the third necessary expense of government, was his most original and forms the basis of the classical theory of public goods. Despite his general belief in the doctrine of laissez-faire, Smith argued that government intervention in the sphere of production was necessary. The state had to produce certain goods necessary for facilitating commerce because they would not be profitable to do so privately.³³ In general, public goods were best financed by tax revenue: "The expense of maintaining good roads and communications is, no doubt, beneficial to the whole society, and may, therefore, without any injustice be defrayed by the general contribution of the whole society."³⁴ The historical, technological, and social arguments applied by Smith to "public goods" were carried over to his discussion of the

³² Ibid.

³³ Ibid., 244-5.

³⁴ Ibid., 339.

provision of education. While it was not necessary to fund education out of general tax revenues, Smith believed it would be desirable to do so.³⁵ Thus, only after first establishing the necessary level of public expenditure did Smith turn his attention to the more general problem of raising tax revenue. Smith linked these discussions of taxation and state expenditure to the development of his theories of value, distribution and accumulation.

Smith's Theory of Value and Taxation

A quarter of a century before Adam Smith published his critique of mercantilism in Book IV of The Wealth of Nations, David Hume already had questioned the mercantilist belief that economic surplus came only at the expense of other nations. For Hume, a country could engage in international trade only if it had first produced an internal surplus. This economic surplus allowed a nation to purchase the goods produced by foreign laborers. In other words, surplus came not from unequal exchange, but from the labor of the domestic population.³⁶ This surplus

³⁵ Ibid., 301.

³⁶ "Everything in the world is purchased by labour; and our passions are the only causes of labour. When a nation abounds in manufactures and mechanic arts, the proprietors of land, as well as the farmers, study agriculture as a science, and redouble their industry and attention. The superfluity, which arises from their labour, is not lost; but is exchanged with manufactures for those commodities, which men's luxury now makes them covet." Hume, "Of Commerce," Discourses, 11.

(superfluity) constituted the sole source from which state revenue could be derived. By virtue of the physical surplus created by labor over and above subsistence, the state could extract the means to meet its expenditures: "[T]he increase in commodities...are a kind of storehouse of labour, which in the exigencies of state, may be turned to public service."³⁷

At the heart of Adam Smith's critique of mercantilist and Physiocratic thought was the rejection of their respective conceptions of surplus. While the Physiocrats had demonstrated that surplus arose in production and not in exchange, Smith's concern was to show that surplus arose "throughout industry, capitalist agriculture being only one special case of a capitalist industrial undertaking."³⁸ The fact that the opening chapters of The Wealth of Nations deal with the division of labor in manufacturing reflects this focus on production in general.

Smith recognized that if economic surplus was derived from production of heterogeneous commodities throughout the economy, it was necessary to develop a general theory of value. Smith opened his discussion of value by first distinguishing between the use-value and exchange-value of a

³⁷ Hume, "Of the Refinement in the Arts," Discourses, 23.

³⁸ Vivian Walsh and Harvey Gram, Classical and Neoclassical Theories of General Equilibrium, (Oxford: Oxford University Press, 1980): 48.

commodity.³⁹ His objective was to "investigate the principles which regulate the exchangeable value of commodities."⁴⁰ Smith proceeded by adopting Cantillon's distinction between "market price" and "intrinsic worth" (or for Smith, "natural price").⁴¹ The competitive forces of supply and demand acted to continually move the market price toward the natural price: "The natural price, therefore, is...the central price, to which the prices of all commodities are continually gravitating."⁴² Smith believed that natural forces in the economy could perform this function. The question of how economic forces determined natural prices assumed paramount importance in Smith's theory of value. Like all of the other classical economists, Smith was primarily concerned with the question of how taxes affected natural prices rather than with their influence on market prices.

Smith failed, however, to provide a consistent theory of value. Indeed, "Smith may be credited with three

³⁹ Smith, WN, i, 32.

⁴⁰ Ibid., 33.

⁴¹ "The actual price at which any commodity is commonly sold is called its market price. It may either be above, or below, or exactly the same with its natural price. The market price of every particular commodity is regulated by the proportion between the quantity which is actually brought to market, and the demand of those who are willing to pay the natural price of the commodity." Ibid., 63.

⁴² Ibid., 65.

different theories of value."⁴³ Smith appears initially to have adopted a labor theory of value approach to the problem of determining a commodity's natural or real price: "The real price of every thing, what every thing really costs to the man who wants to acquire it, is the toil and trouble of acquiring it...Labour becomes the real and money the nominal price of commodities."⁴⁴ Elsewhere, however, Smith argued that only in "that early and rude state of society which precedes both the accumulation of stock and the appropriation of land," did the labor theory of value hold true. As soon capital accumulation took place, "the value which the workmen add to the materials...resolves itself in this case into two parts, of which the one pays their wages, the other the profits of their employer upon the whole stock of materials and wages which he advanced."⁴⁵ Smith concluded that in this case, values were no longer solely determined by labor.⁴⁶

Ronald Meek argued that Smith's confusion on value stemmed from his failed attempt to maintain the prominent role accorded to labor as the source of value, while attempting to provide the proper measure of value: "According to his way of looking at it, a commodity acquired

⁴³ Schumpeter, 590.

⁴⁴ Smith, WN, i, 34.

⁴⁵ Ibid., 54.

⁴⁶ Ibid., 55.

value because, but not necessarily to the extent that, it was a product of social labour...The measure of value [for Smith] must be sought not in the conditions of production of the commodity, but rather in the conditions of its exchange."⁴⁷ Similarly, while Smith argued that surplus labor in the sphere of production constituted the source of taxation, he claimed that the measure of a nation's taxable capacity could be derived from the exchange-based revenues of rents, profits and wages: "Every tax must finally be paid from some one or other of those three different sorts of revenue."⁴⁸

Smith developed two "real measures" of exchange value: labor-embodied and labor-commanded. The former measured the quantity of labor expended on the production of a commodity, the latter "the quantity of labour which a given commodity can acquire or purchase through exchange." As Marx pointed out, the two measures coincide only under a system of "simple commodity production." In a capitalist economy characterized by the existence of profit on capital advanced, the labor-commanded measure of value will exceed the value measured in terms of labor embodied.

Smith's confusion over these two measures of value was due to his concern with the problem of capital accumulation.

⁴⁷ Ronald Meek, Studies in the Labour Theory of Value, 2nd ed., (New York: Monthly Review Press, 1956): 63.

⁴⁸ Smith, WN, ii, 350.

By employing the two measures, Smith believed he could trace the origin of surplus and its measure to labor.⁴⁹ Surplus was simply the difference between output measured in terms of labor-commanded and inputs measured by embodied labor. This surplus represented the primary source of capital accumulation. But as Ricardo later pointed out, labor could not perform the role as a "common factor" in the two measures.⁵⁰

Having argued to his own apparent satisfaction that labor in general was the source of surplus, Smith identified profit and rent as distinct forms of surplus in a capitalist economy. He then turned his attention to the measure of value, or to resolving a commodity's natural value into its three component parts: wages, profit and rent. A commodity's "natural price" was defined as being equal to

⁴⁹ "Smith believed, it was possible to reduce both input and output to a common factor ('labour') in such a way that a quantitative value-difference between them was revealed--a difference which could plausibly be regarded as a measure of the surplus or 'net revenue' yielded in the capitalist productive process. The quantity of labour which the national product would purchase or command (i.e., the value of that product) was generally greater than the quantity of labour required to produce it (i.e. than the cost of the product), and the difference between these two quantities of labour was measure of the amount of accumulation which it was possible for the community to carry out in the next period of production." Meek, Studies, 66.

⁵⁰ "This was to form the basis of Ricardo's criticism that he [Smith], apparently, confused the price of labour (in the sense of the wages paid) with the quantity of labour required to produce a given product, and that he accordingly fluctuated between a labour-commanded standard and labour-embodied." Dobb, 49.

the sum of the natural rates of wages, profit and rent, which in turn were defined as the "ordinary or average rate" of wages, profit, or rent prevailing in "the general circumstances of society." Smith equated the three component parts of price with the three distinct forms of income (revenue) in a capitalist economy. Following Piero Sraffa, Maurice Dobb characterized Smith's theory of price as "a summation (merely) of three primary components of price."⁵¹

Smith identified wages, profit, and rent as the three potential sources of tax revenue: "All taxes, and all the revenue which is founded upon them...are ultimately derived from some one or other of those three original sources of revenue, and are paid either immediately or mediately from the wages of labour, the profits of stock, or the rent of land."⁵²

Smith's use of this "adding-up" theory of value proved to be riddled with contradictions and inconsistencies. On the one hand, Smith appeared to operate "on the assumption that the constituents of the natural price could legitimately be regarded as independent determinations of value."⁵³ On the other hand, Smith was forced to treat one component as being dependent upon another. Smith required

⁵¹ Ibid., 46.

⁵² Smith, WN, i, 59.

⁵³ Meek, Studies, 71.

rent to be known before the determination of a commodity's total value, while at the same time, he treated rent as a derivative value. These logical problems with the theory of value prevented Smith from presenting a clear statement on the relationship between economic surplus and taxable capacity. The contradictions in Smith's value theory became even more readily apparent when he turned his attention to the theory of distribution and tax incidence.

Smith's Theory of Distribution and Tax Incidence

For David Hume, tax incidence ultimately was determined on the basis of the ability of each person to shift the tax to another: "Every man, to be sure, is desirous of pushing off from himself the burden of any tax, which is imposed, and of laying it upon others: But as every man has the same inclination, and is upon the defensive; no set of men can be supposed to prevail altogether in this contest."⁵⁴ By contrast, Adam Smith believed that the incidence of taxes could be determined by theoretical principles of value and distribution.

Historians of economic thought generally have assumed that the theory of distribution played a minor role in Smith's The Wealth of Nations: "Smith's theory of distribution, instead of being made one of the main subjects of the Book, is inserted in the middle of the chapter on

⁵⁴ Hume, "Of Taxes," Discourses, 87.

prices as a mere appendage or corollary of his doctrine of prices."⁵⁵ Following Edwin Cannan, Maurice Dobb reduced Smith's distribution theory to a few pages:

It is in no more than three pages at the conclusion of this chapter, after a lengthy historical digression on money and prices, that one finds the only treatment of that aspect of distribution to which Ricardo was to attach such great importance: namely the relation between the revenues (or incomes) of 'the three great, original, and constituent orders of every civilized society', and of these severally to 'the general interest of the society'.⁵⁶

Such evaluations reflect an erroneous interpretation of Smith. In fact, Smith devoted considerable attention to the theory of distribution in conjunction with his theories of taxation in Book V of The Wealth of Nations. Smith's writings on public finance represent an extension of his briefer writings on distribution contained in Book I.⁵⁷ It is precisely because the two are connected in classical political economy that Ricardo, whose chief concern was distribution, accorded such a primary role to taxation.

⁵⁵ Edwin Cannan, A History of the Theories of Production and Distribution, 3rd ed., (London: P.S. King & Son, 1924): 186.

⁵⁶ Dobb, 53-4.

⁵⁷ "Smith's exposition, marked as it is by many profound and suggestive ideas, is entirely dependent upon his theories of rent, profits and wages. As soon as we question the validity of his theory of rent, of his treatment of wages as based on the necessaries of life, or of his conception of ordinary profits, a large part of his doctrine of incidence falls to the ground." Edwin Seligman, The Shifting and Incidence of Taxation, 5th ed., (New York: Macmillan Company, 1927; reprint ed., New York: A.M. Kelley, 1969): 146.

Theory of Rent and the Incidence of Rent Taxes

In his effort to distinguish his tax theories from those of the Physiocrats, Smith began his analysis with taxes upon rent--the third component of price or revenue (income).⁵⁸ Smith thereby reversed the order of exposition of taxes on revenue from the order in which he had derived those revenues in Book I of The Wealth of Nations.

The contradictions in Smith's distribution theory are most apparent in his treatment of rent. After first defining rent as a "monopoly price," Smith then argued that rent was determined by the level of profit and wages: "Rent...enters into the composition of the price of commodities in a different way from wages and profit. High or low wages and profit are the causes of high or low price; high or low rent is the effect of it."⁵⁹ But on the very next page, Smith provided yet a third explanation of rent: "The rent of land not only varies with its fertility, whatever be its produce, but with its situation, whatever be its fertility."⁶⁰ Thus, Smith found the source of rent in three different places in the monopoly price of agricultural

⁵⁸ "All taxes, they [the Physiocrats] pretend, fall ultimately upon the rent of land...But without entering into the disagreeable discussion of the metaphysical arguments by which they support their very ingenious theory, it will sufficiently appear...what are the taxes which fall finally upon the rent of land, and what are those which fall finally upon some other fund. Smith, WN, ii, 355.

⁵⁹ Ibid., i, 163.

⁶⁰ Ibid., 164.

produce, the labor of agricultural workers, and the physical productivity of land.⁶¹ Given these contradictory definitions, rent could not play the role that Smith assigned to it in his theory of prices and distribution. For if rent is a differential price inversely related to profit, then it cannot logically be used in an "adding-up" theory of value and distribution.

Within the context of the analysis of the incidence of taxes, Smith generally treated rent as a monopoly price. He distinguished between rent as a pure monopoly price, and the return to landlords for improvements upon the land. Smith argued that a tax on rent should be levied only on the monopoly portion of rent, and not upon the return to the agricultural capitalist for improvements to the land. The latter was assumed to be equivalent to profit (the return for capital advanced) even though such "profits" were combined with the rent payment to the landlord. Smith opposed taxes on this portion on grounds that it would discourage capital from being allocated to this sector:

The discouragement which a...land-tax of this kind might give to the improvement of land, seems to be the most important objection which can be made to it. The landlord would certainly be less disposed to improve, when the sovereign, who contributed nothing to the expense, was to share in the profit of the improvement.⁶²

⁶¹ See Rubin, 200-1.

⁶² Smith, WN, ii, 358.

Thus, Smith favored taxes on pure rent because they did not adversely affect the allocation of capital (surplus) between industries. If land taxes were properly administered so as to fall only on rent, and not improvements, then they were consistent with his four maxims of taxation.

Taxes on agricultural produce were assumed to be identical to taxes on rent: "Taxes upon the produce of land are in reality taxes upon the rent; and although they may be originally advanced by the farmer, are finally paid by the landlord."⁶³ Like a land tax, the tax on the produce of land (upon the farmer) would be passed on to the landlord in the form of a lower rent payment. But because a tax upon the produce of land would not be levied in proportion to rent, Smith argued that it was unjust and would discourage agricultural production: "The tithe, as it is frequently a very unequal tax upon the rent, so it is always a great discouragement both to the improvements of the landlord and to the cultivation of the farmer."⁶⁴

Smith attempted to clarify further his distribution theory and the analysis of tax incidence by examining taxes upon house-rent. Like the rent going to landlords, Smith separated house rent payments into two components--building

⁶³ Ibid., 362.

⁶⁴ Ibid., 362-3.

rent and ground rent.⁶⁵ The effects of taxes on houses were analogous to those on land:

A tax upon house-rent...could not, for any considerable time at least, affect the building rent. If the builder did not get his reasonable profit, he would be obliged to quit the trade...Neither would such a tax fall altogether upon the ground rent; but it would divide itself in such a manner as to fall, partly upon the inhabitant of the house, and partly upon the owner of the ground...In what proportion this final payment would be divided between them, it is not perhaps very easy to ascertain.⁶⁶

The tax was presumed to force renters to look for cheaper housing, thus lowering the demand for houses in each price range. This had the effect of forcing the house owners to lower their rents in some proportion to the tax. Smith concluded that if the tenants were poor, the landlords would pay the tax; but if the tenants were rich, they would bear part of the tax burden.⁶⁷ Smith carries the analysis no further. Taxes on house rent were assumed to fall either on the landlord or the rich. In what proportion, we are not told. Smith severed the link between tenants and their economic status (class). Were the tenants that bore a burden of the tax rich landlords, rich capitalists, or rich

⁶⁵ "The building rent is the interest or profit of the capital expended in building the house...The building rent, or the ordinary profit of building, is, therefore, every where regulated by the ordinary interest of money...Whatever part of the whole rent of a house is over and above what is sufficient for affording this reasonable profit, naturally goes to the ground-rent." Ibid., 366.

⁶⁶ Ibid., 367.

⁶⁷ Ibid., 368.

laborers? This question assumed crucial importance to Ricardo in his search for a determinant theory of tax incidence. Smith simply concluded that taxes on pure ground rent (the monopoly price component) were identical to taxes on pure land rent, and therefore constituted an ideal form of taxation.

The analysis of Smith's chapters on rent taxes reveals that it was not the case that he lacked a developed theory of rent, but that it played an indeterminate role in his overall theory of distribution. Following Thomas Malthus, Ricardo later recognized that a logical theory of rent was necessary to maintain a consistent theory of distribution and tax incidence.

Theory of Capitalist Profit and Tax Incidence

Adam Smith considered profit as part of the product of labor appropriated by capitalists as a return for capital advanced. Despite his identification of profit as the major form of surplus in a capitalist economy, Smith failed to provide a theory of the determination of the general rate of profit. Smith believed competition would, in the long-run, drive the profit rate to zero. In his short-run analysis, Smith was concerned only with the mechanism of how profits came to be equalized across different industries. Smith divided profit into two separate components: "that which pays the interest, and which belongs to the owner of the stock; and that surplus part which is over and above what is

necessary for paying the interest."⁶⁸ In addition, wages were treated as part of the capital advanced and thus "earned" a profit as well. Given this conception, Smith proceeded to discuss taxes upon each component of profit.

Smith maintained that capitalists had to earn, after taxes, the existing rate of profit above the rate of interest paid to borrow money, or they would not invest: "The employer must have this compensation, otherwise he cannot, consistently with his own interest, continue the employment."⁶⁹ Smith assumed that if a tax was imposed on the stock of capital employed in agriculture, the agricultural capitalists would maintain their existing rate of profit by lowering their rent payments to the landlords, and therefore, "the final payment of the tax would fall upon the landlord."⁷⁰ On the other hand, if the tax was imposed upon capital employed in manufacturing, it was assumed that the capitalists could raise their prices so as to shift the tax to consumers: "If he employed it as a mercantile or manufacturing stock, he could raise the rate of his profit only by raising the price of his goods; in which case the final payment of the tax would fall altogether upon the consumers of those goods."⁷¹

⁶⁸ Ibid., 373-4.

⁶⁹ Ibid.

⁷⁰ Ibid.

⁷¹ Ibid.

These statements expose several contradictions which can be traced to Smith's theory of value and distribution. Rent did not enter into the price (or revenue) component of a commodity the same way as did profit. Imposing a profits tax on agricultural capital was assumed to raise the (pre-tax) profit rate and result in lower rent payments. Thus, the tax did not add to the total price of the commodity as would be implied by Smith's "adding-up" theory of value. By contrast, taxes on manufacturing capital were assumed to raise the profit rate in that sector as a result of increased commodity prices to consumers. Smith did not ask the fundamental question of whether these consumers were workers, landlords, or capitalists. Within Smith's own theoretical structure, the ultimate incidence of the tax depends upon the answer to this question. Thus, Smith lacked a determinant theory of the incidence of profit taxes, and was simply left to describe the mechanism by which such taxes affected the employment of capital across different industries.⁷²

In a manner similar to John Locke, Smith treated taxes on interest as being nearly equivalent to those on rent. When confronted with a tax, Smith assumed that industrialists could simply lower their interest payments to finance capitalists, rather than raise prices and the nominal rate of profit:

⁷² Ibid., 383.

If he did not raise the rate of his profit, he would be obliged to charge the whole tax upon that part of it which was allotted for the interest of money. He could afford less interest for whatever stock he borrowed, and the whole weight of the tax would in this case fall ultimately upon the interest of money...The interest of money seems at first sight a subject equally capable of being taxed directly as the rent of land.⁷³

Smith immediately cautioned, however, that there were "circumstances which render the interest of money a much less proper subject of direct taxation than the rent of land,"⁷⁴ the most important of which had to do with the fact that money capital was more "mobile" than land.⁷⁵ Smith believed that the mobility of capital was a factor in the ultimate incidence of a tax. Thus, after having first treated interest as "rent," Smith was forced to treat it equivalent to any other type of capital advanced where the capitalist had to earn a normal rate of return:

A tax, however, upon the profits of stock employed in any particular branch of trade, can never fall finally upon the dealers (who must in all ordinary cases have their reasonable profit...), but always upon the consumers, who must be obliged to pay in the price of the goods the tax which the dealer advances; and generally with some overcharge.⁷⁶

Smith concluded that a general tax upon profits could lower the real interest earned by money capitalists, while a tax on particular profits could never do so:

⁷³ Ibid., 374.

⁷⁴ Ibid.

⁷⁵ Ibid.

⁷⁶ Ibid., 379-80.

Taxes upon the profits of stock in particular employments can never affect the interest of money. Nobody will lend his money for less interest to those who exercise the taxed, than to those who exercise the untaxed employments. Taxes upon the revenue arising from stock in all employments, where the government attempts to levy them with any degree of exactness, will, in many cases, fall upon the interest of money.⁷⁷

Smith carried the analysis no further, and we are left only with another explanation of how the self-interested drive for profit resulted in a tax on a particular industry being shifted to restore an equalized rate across industries. While Smith appeared to have a general understanding that a tax on profits potentially could lower the general rate of interest and/or rent, he failed to conceptualize how such taxes could affect the general level of profit in the economy. Thus, the analysis of Smith's theory of the incidence of profit taxes again highlights the logical shortcomings of his theory of distribution. Not until the appearance of Ricardo's Principles of Political Economy and Taxation (1817), would questions of what determined the general level of profit in the economy be pursued.

Theory of Wages and the Incidence of Wage Taxes

In his examination of the economic effects of taxes upon wages--the third component of revenue--Smith failed to address the question of whether wage taxes or taxes on

⁷⁷ Ibid., 385.

necessities could affect the overall level of profit in the economy. Smith opened his discussion of wage taxes by reminding his readers of his earlier discussion of wages: "The wages of the inferior classes of workmen, I have endeavoured to show in the first book, are every where necessarily regulated by two different circumstances; the demand for labour, and the ordinary or average price of provisions."⁷⁸ Like his theories of profit and rent, Smith's wage theory contained inconsistencies which become immediately apparent from an analysis of his theory of wage tax incidence. Smith "enunciates partly a subsistence, or labour, theory and partly a cost of production theory."⁷⁹ Smith appears to have assumed that the "natural" level to which wages gravitated was subsistence. He took for granted the empirical observation that wages were at subsistence levels without developing a theory of why this was necessarily the case.

When Smith turned his attention to the economic effects of a wage tax, he assumed that wages were set at subsistence, and therefore, workers could not bear the burden of the tax. Since wages were treated as capital advanced by the employer, wage taxes were considered the same as any other cost of production, and equivalent to a tax on profits:

⁷⁸ Ibid., 392.

⁷⁹ Meek, Studies, 165.

A direct tax upon the wages of labour...would in reality be advanced by the person who immediately employed him. The rise which such a tax might occasion in the wages of manufacturing labour would be advanced by the master manufacturer, who would both be entitled and obliged to charge it, with a profit, upon the price of his goods. The final payment of this rise of wages, therefore, together with the additional profit of the master manufacturer, would fall upon the consumer.⁸⁰

This logic was obviously intended to apply only to the case of taxes on the wages in manufacturing. By contrast, a tax on the wages of agricultural workers was assumed to have identical effects as a direct tax on the capital advanced by agricultural capitalists:

The rise which such a tax might occasion in the wages of country labour would be advanced by the farmer, who, in order to maintain the same number of laborers as before, would be obliged to employ a greater capital...The final payment of this rise of wages...would in this case fall upon the landlord...A tax upon the wages of country labour does not raise the price of the rude produce of land in proportion to the tax, for the same reason that a tax upon the farmer's profit does not raise that price in that proportion.⁸¹

Smith concluded that taxes on agricultural workers were ultimately paid out of the revenue of landlords (rent), and taxes on manufacturing workers by consumers in the form of higher prices: "In all cases a direct tax upon the wages of labour must, in the long run, occasion both a greater reduction in the rent of land, and a greater rise in the

⁸⁰ Smith, WN, ii, 393.

⁸¹ Ibid., 393-4.

price of manufactured goods."⁸² Smith again failed to follow-up this statement by asking which class the "consumers" of manufactured goods were from, or what is essentially the same question, from which form of revenue was the wage tax paid? In other words, we are left with an indeterminant theory of the incidence of wage taxes.

After dealing with taxes imposed directly upon wages, Smith turned his attention to commodity taxes, which he believed fell "indifferently upon every different species of revenue."⁸³ These taxes were not assessed directly upon revenue, but were still paid "from whatever revenue the contributors may possess; from the rent of their land, from the profits of their stock, or from the wages of their labour."⁸⁴

Smith drew a distinction between necessary and luxury commodities, basing his definitions on both biological and social considerations.⁸⁵ Smith went on to argue that wages were regulated partly by "the average price of the necessary

82 Ibid.

83 Ibid., 396.

84 Ibid.

85 "By necessaries I understand, not only the commodities which are indispensably necessary for the support of life, but whatever the custom of the country renders it indecent for creditable people, even of the lowest order, to be without...All other things I call luxuries." Ibid., 399-400.

articles of subsistence."⁸⁶ By implication, wages were assumed to be independent of the price of luxury goods. Anything that raised the prices of necessary commodities, such as taxes, necessitated a rise in nominal wage rates. Thus, a tax on necessaries produced identical effects as a direct tax on wages:

Whatever raises this average price must necessarily raise those wages, so that the laborer may still be able to purchase the quantity of those necessary articles which the state of the demand for labour, whether increasing, stationary, or declining, requires that he should have...Such a tax must, therefore, occasion a rise in the wages of labour proportionable to this rise of price.⁸⁷

Maintaining complete logical symmetry with his earlier analysis of a wage tax, Smith retraced the effects of taxes on the necessary goods consumed by both agricultural and manufacturing workers: "Taxes upon necessaries, so far as they affect the labouring poor, are finally paid, partly by landlords in the diminished rent of their lands, and partly by rich consumers, whether landlords or others, in the advanced price of manufactured goods."⁸⁸ After a detailed empirical discussion of the major taxes on necessaries (salt, leather, soap, and candles) in existence in England at the time, Smith concluded that the nominal wages of the laboring poor had increased as a result of their imposition.

⁸⁶ Ibid.

⁸⁷ Ibid.

⁸⁸ Ibid., 402.

Smith did not draw the conclusion, however, that such taxes should therefore be opposed.⁸⁹

Smith went on to incorporate "long-run" considerations into his analysis of taxes on necessities by adopting Sir James Steuart's population theory:

Any rise in the average price of necessities, unless it is compensated by a proportionable rise in the wages of labour, must necessarily diminish more or less the ability of the poor to bring up numerous families, and consequently to supply the demand for useful labour; whatever may be the state of that demand, whether increasing, stationary, or declining; or such as requires an increasing, stationary, or declining population.⁹⁰

This passage has been incorrectly interpreted by modern neoclassicals to mean that Smith's analysis was consistent with a theory of incidence based upon labor supply elasticities.⁹¹ In his determination of "natural prices," Smith treated the supply of labor as a fixed parameter, determined over the long run by population growth. In his theory of wages, and wage and commodity taxes, labor supply is not a variable or a function of price (wage). Short-run reductions in labor supply did not set in motion the operation of shifting the tax on necessities away from laborers. Necessary rises in nominal wages shifted the tax.

⁸⁹ Ibid., 404.

⁹⁰ Ibid., 402.

⁹¹ See, for example, Alan Peacock, "The Treatment of the Principles of Public Finance in 'The Wealth of Nations'," in Essays on Adam Smith, (Oxford: Clarendon Press, 1976): 563.

Unlike taxes upon necessities, taxes on luxury goods were assumed to have no affect on prices other than upon the taxed commodity itself. Since workers did not consume luxuries, and their wages therefore were not regulated by the price of luxuries, taxes on such goods had no impact on their wages. In his discussion of the differences between taxes on necessities and those on luxuries, Smith contradicted himself:

Taxes upon necessities, by raising the wages of labour, necessarily tend to raise the price of all manufactures, and consequently to diminish the extent of their sale and consumption. Taxes upon luxuries are finally paid by the consumers of the commodities taxed, without any retribution...The advanced price of such manufacturers as are real necessities of life, and are destined for the consumption of the poor...must be compensated to the poor by a farther advancement of their wages.⁹²

After having first defined necessities as those goods required for the maintenance of a minimal standard of living, Smith implied in the early part of this passage that the poor were forced to consume less of these goods than implied by this standard. This not only contradicted his earlier statements on wage taxes and taxes on necessities, but also the concluding sentence of the paragraph.

Smith's confusion perhaps can be attributed to a hesitancy to set wages equal to subsistence. Smith seemed to believe that not all workers were poor and would, therefore, consume fewer necessities if their prices rose as

⁹² Smith, WN, ii, 402 (emphasis added).

a result of a commodity tax. Only if workers were living at subsistence levels would a tax induce a systematic rise in nominal wages. But the final sentence of the above-quoted passage also implies that even poor workers were consumers of luxury goods. In this case, taxes upon luxuries would raise not wages, but the prices of those goods taxed, thereby discouraging their consumption:

The high price of such commodities does not necessarily diminish the ability of the inferior ranks of people to bring up families. Upon the sober and industrious poor, taxes upon such commodities act as sumptuary laws, and dispose them either to moderate, or to refrain altogether from the use of superfluities which they can no longer afford. Their ability to bring up families, in consequence of this forced frugality, instead of being diminished, is frequently, perhaps, increased by the tax.⁹³

Smith failed to clearly associate the consumption of necessities with the class of wage laborers and that of luxuries with rich landlords. This allowed him to introduce into his theory of tax incidence the notion that the demand for commodities was a function of their prices. This left him open to the claim that the origin of neoclassical incidence theory can be found in The Wealth of Nations.

Smith's comment that "taxes upon necessities consequently diminish their sale and consumption," has also been cited by neoclassicals to support the interpretation that Smith treated labor supply as a variable--a function of

⁹³ Ibid., 401.

price changes induced by a tax.⁹⁴ But, nowhere in Smith can such a description of a neoclassical labor supply mechanism be found. Thus, while Smith's discussion of the demand-side effects of taxes is confined to a few paragraphs, it allows Mark Blaug to state that the "closing section of Book V, chapter 2, 'Taxes upon Consumable Commodities,' is rich with implicit suggestions about the demand-elasticities of different types of goods."⁹⁵

The logical inconsistencies contained in Smith's theory of distribution and tax incidence can be traced back to the problems inherent in his "adding-up" theory of value. Ricardo's fundamental objection to Smith's theory of value was that it could not serve as the foundation of an adequate theory of distribution. The final Book of The Wealth of Nations nevertheless represents an attempt by Smith to apply the principles of distribution to real problems in political economy. Ricardo accepted Smith's theoretical premise that distribution and tax theory were inseparable, and thereby accorded a primary role to the latter in the title and body of his Principles of Political Economy and Taxation.

⁹⁴ "With wages at the subsistence level, a decline in the net wage below this level calls forth a decrease in labor supply, with the gross wage rising until the net wage is returned to the old level. As a result, the return to other factors is reduced and this being the case, they might as well be taxed in the first place." Musgrave, Ibid., p. 307. Also see Samuel Hollander, The Economics of Adam Smith, (Toronto: University of Toronto Press, 1979): 178.

⁹⁵ Blaug, 61.

Public Finance and Capital Accumulation

Having identified profit as a distinct form of income in a capitalist economy, Smith equated it with surplus output and the source of capital accumulation. For Smith, the key to accumulation was whether capital was allocated to production or "consumed" unproductively. In turn, Smith directed his discussion of public finance to questions of whether tax policies diverted "capital stock from what would otherwise be the most productive uses, thus making the growth of the economy less than it could have been."⁹⁶ Smith's primary concern was with how fiscal policies affected the allocation of economic surplus across the productive sectors of the economy, and not with how taxes affected the optimal allocation of given resources through relative price changes.

Despite his general belief in the doctrine of laissez faire, Smith argued that state intervention in the sphere of production was necessary. At first glance, this would appear to contradict his theory of productive and unproductive labor developed in Book I of The Wealth of Nations. There, wealth could be expanded only by either increasing the number of productive workers or increasing their productivity, with the latter being a function of the division of labor. There were two aspects to Smith's

⁹⁶ Walsh and Gram, 54.

definition of productive labor: First, productive labor had to produce a profit (surplus) for the capitalist, and second, such labor had to produce a tangible, vendable commodity. By contrast, unproductive labor was that labor paid for out of the revenue of the landlord or capitalist. Such expenditure was considered unproductive consumption, as opposed to productive expenditure, because it did not lead to further production of profit.

Smith argued that only labor exchanged against capital which produced a material good and upon sale produced a profit, was productive.⁹⁷ Because government labor did not exchange directly with private capital to directly produce a profit, Smith believed it unproductive, even though it often produced the physical inputs for future private production.

Smith also believed that taxes acted to shift a share of the surplus to government, where it could not produce profits or lead to the further division of labor or growth. Taxes paid by capitalists represented lost capital advanced: "They are all more or less unthrifty taxes that increase the revenue of the sovereign, which seldom maintains any but unproductive laborers; at the expense of the capital of the people, which maintains none but productive."⁹⁸

⁹⁷ Marx later criticized Smith for confusing the material aspect of production with the social. For Marx, productive labor was any wage labor employed in the production of surplus value.

⁹⁸ Smith, WN, ii, 391.

While Smith outlined the shifting of capital out of specific industries after the imposition of a tax to insure an equal rate of profit, he did not address the question of whether profit taxes could lower the general profit rate. As a result, Smith failed to draw out the implications of his theory of taxation for his theory of capital accumulation. This omission again can be traced to the logical inconsistencies in his "adding-up" theory of value and distribution. Since Smith left unanswered the question of whether the "rich consumers" of taxed manufactured commodities were capitalists, landlords, or laborers, he could not pursue the question of whether such a tax affected capital accumulation. It would be left to Ricardo, who believed he had corrected Smith's errors regarding value, to fully develop the classical theory of how taxation affected the accumulation of capital (economic surplus).

Conclusion

Adam Smith incorporated many of the issues relating to public finance which had originally been raised by the mercantilists and Physiocrats into a theoretical system that explained and reflected the emerging industrial capitalist economy of late eighteenth-century England. By identifying profit as a distinct form of economic surplus in a capitalist economy, Smith's writings provided the intellectual foundation for the introduction of the system of income taxes in England at the end of the eighteenth

century. Like the mercantilists and Physiocrats, Smith believed that political economy was the science of advising governments on how best to raise revenue to support necessary state expenditures.

Smith developed his theory of income distribution in conjunction with his writings on income taxes and other public finance questions. Smith's theory of distribution and tax incidence has received little attention in the history of economic thought literature, largely because it was riddled with logical contradictions. Although Smith was unable to solve the problems inherent in his "adding-up" theory of value, he did succeed in framing the classical questions of taxation, value, distribution and accumulation. After tracing the problems in Smith back to his "original errors regarding value," Ricardo, in turn, advanced the mature classical theory of taxation and distribution.

CHAPTER FIVE

DAVID RICARDO AND EARLY NINETEENTH-CENTURY POLITICAL ECONOMY AND TAXATION

It is easy enough to understand why the orthodox school shied away from the promising start which Ricardo had made in finding a theory of distribution applicable to a capitalist economy, but how were they able to keep going so long up a blind alley?

Marshall took it upon himself to defend Ricardo against the imputation of dangerous thoughts.¹

David Ricardo's "promising start" toward a theory of distribution and taxation has been either misinterpreted or ignored by historians of economic thought, perhaps because of its "dangerous" implications for economic policy. Since the appearance of Alfred Marshall's Principles of Economics, orthodox economists have "defended" Ricardo's theory of

¹ Joan Robinson, "Marginal Productivity," The Indian Economic Review, (April 1967), reprinted in Collected Economic Papers, IV, (New York: Humanities Press, 1973): 129-38; and Economic Philosophy, (London: C.A. Watts & Co., 1962): 33.

taxation by recasting it in neoclassical terms.² Marshall argued that there was little in Ricardo that differed from the entire line of theoretical development from Adam Smith to the marginalists. He dismissed Ricardo's hostility towards Smith's theory of taxation and distribution as simple carelessness and lack of scholarly precision in exposition.³ Marshall asserted that the inconsistencies in Ricardo's theory of taxation could be corrected by the addition of his own distinction between "short-run" and "long-run" periods.⁴

Marshall's interpretation of Ricardo's theories of value, distribution, and taxation has been revived recently by Samuel Hollander.⁵ Hollander's reinterpretation

² Alfred Marshall, Principles of Economics, 8th ed., 1920, (London: MacMillan and Co., 1946).

³ "Much has been said about the excellence of Ricardo's thought and the imperfections of his expression of it... Similar remarks apply to his treatment of...the incidence of taxes in agriculture. He is especially careless in his criticisms of Adam Smith." Ibid., 833.

⁴ "Ricardo's reasonings on all these questions [of taxation] are rather difficult to follow: because he often gives no hint when he ceases to deal with results which are "immediate," and belong to a "short period" relatively to the growth of population; and passes to those which are "ultimate," and belong to a "long period" in which the labour value of raw produce would have time materially to affect the numbers of the people and therefore the demand for raw produce. When such interpreting clauses are supplied, very few of his reasonings will be found invalid." Ibid., 834.

⁵ "It turns out that there is less of a distinction between this corpus of doctrine [Ricardian theory] and subsequent (neoclassical) doctrine than is sometimes believed. In short, Marshall's conviction that his

represents a critical response to Piero Sraffa's "Introduction" to Ricardo's Principles of Political Economy and Taxation.⁶ Sraffa argued that the classical economics of Ricardo embody a clear break from Adam Smith and are incommensurate with modern neoclassical economics.

The Marshall-Hollander interpretation of Ricardo has been rejected not only by Marxist historians of political economy,⁷ but by many neoclassicals as well.⁸ The latter group follows in the tradition of Joseph Schumpeter, who argued that while there was a clear break between the classical economics of Ricardo and neoclassical economics, the former represented a "detour" on the way to the scientific development of supply-and-demand analysis.⁹ For

economics was in the Ricardian line seems to be borne out." Samuel Hollander, The Economics of David Ricardo, (Toronto: University of Toronto Press, 1979): xi.

⁶ Piero Sraffa, "Introduction," The Works and Correspondence of David Ricardo, Vol. I, On The Principles of Political Economy and Taxation, 1817, (Cambridge: Cambridge University Press, 1951): xiii-lxii.

⁷ See Maurice Dobb, Theories of Value Since Adam Smith, (Cambridge: Cambridge University Press, 1973): 65-95; and Ronald Meek, Studies in the Labour Theory of Value, (New York: Monthly Review Press, 1956): 82-120.

⁸ "In reacting to Sraffian and Marxian simplifications of Ricardo, Hollander has simply gone overboard in the opposite direction and turned Ricardo into a peculiarly anaemic forerunner of Marshall and Walras." Mark Blaug, "What Ricardo Said and What Ricardo Meant," in The Legacy of Ricardo, G.A. Caravale, ed., (Oxford: Basil Blackwell, 1985): 8-9.

⁹ "Ricardo was completely blind to the nature, and the logical place in economic theory, of the supply-and-demand apparatus and that he took it to represent a theory of value

Schumpeter, Ricardo's greatest error was the faulty application of his theoretical principles to practical policy issues such as taxation.¹⁰ The debate over the proper interpretation of Ricardo hinges upon the interpretation of his conception of value and distribution and its role in his overall theoretical structure. A central claim of this chapter is that an analysis of Ricardo's writings on public finance can shed invaluable light on this debate: Ricardo's writings on taxation form an integral part of his general theoretical system. Ricardo's rejection of Smith's theory of taxation was a crucial component of his fundamental rejection of his "adding-up theory of value" and its associated theory of income distribution. Ricardo's theories are incompatible with neoclassical price, distribution and public finance theories.

Ricardo and Early Nineteenth-Century England

The fifty-year period between the publication of The Wealth of Nations and Ricardo's death can be identified as

distinct from and opposed to his own." Joseph A. Schumpeter, History of Economic Analysis, (New York: Oxford University Press, 1954): 601.

¹⁰ "The habit of applying results of this character to the solution of practical problems we shall call the Ricardian Vice...if a defective engine meets with success, that advance might easily prove to be a detour. And let me state...a detour Ricardian analysis was." Ibid., 473-4.

the period of England's industrial revolution.¹¹ Ricardo correctly perceived that the rapid increase in the economic surplus resulting from the rise of the factory system accrued to capitalists in the form of profit. Given his belief that profits constituted the source of accumulation, Ricardo's primary concern was with the distribution of surplus between capitalists and landlords.¹²

Karl Marx argued that England's industrial revolution placed the emerging class of capitalists in conflict with the landowners. From this perspective, Ricardo's theories of value and distribution can be viewed as a reflection of the struggle between these two classes.¹³ Similarly, Ricardo's writings on taxation can be understood only in

11 "Industrial capitalism could begin its victorious progress only after the factory, with its extensive application of machinery and steam engines, had supplanted the manual labour of the manufactory. This transition from manufactory to factory took place during England's industrial revolution; embracing the latter quarter of the 18th century and the first quarter of the nineteenth. This is precisely the lapse of time that separates Ricardo's activity from that of Smith." I.I. Rubin, A History of Economic Thought, (London: Ink Links Ltd., 1979): 221.

12 "To determine the laws which regulate this distribution, is the principle problem of Political Economy." Ricardo, Principles, 5.

13 "His theoretical system, for all its abstractness and apparent separation from the real economic conditions of his day, was in fact closely tied to them. Its two central components--the theory of value and the theory of distribution--both reflect the economic conditions of early 19th-century England...The struggle between the landowners and the bourgeoisie caused Ricardo to think in terms of an irreconcilable conflict of interests between these two classes." Rubin, 229.

relation to the historically specific class conflict between landlords and capitalists.

The relationship between the fiscal practices of the British State during the period of England's industrial revolution and Ricardo's writings on public finance is somewhat paradoxical. On the one hand, Ricardo wrote more extensively on questions of taxation than any other classical economist, devoting more than half of his Principles of Political Economy and Taxation to the analysis of their economic effects. On the other hand, because Ricardo was primarily concerned with theoretical principles, his Principles contained little detailed discussion of existing tax schemes, or even the tax proposals considered by the British Parliament while he was a member. In Ricardo on Taxation, Carl Shoup argued that Ricardo's writings on taxation were carried out in complete abstraction from the existing tax system of his day.¹⁴ Mark Blaug and D.P. O'Brien have repeated this assessment.¹⁵

¹⁴ Carl Shoup, "Ricardo and the British Tax System of his Day," Ricardo on Taxation, (New York: Columbia University Press, 1960): 204-38.

¹⁵ "Ricardo's analysis of taxation is very little connected with the actual taxes prevailing in his time." Mark Blaug, "Ricardo and the Problem of Public Policy," in Economic History and the History of Economics, (New York: New York University Press, 1986): 118; "Ricardo...wrote more or less divorced from the tax system of his day." D.P. O'Brien, The Classical Economists (Oxford: Clarendon Press, 1975): 244.

The degree to which Ricardo abstracted from contemporary fiscal questions has been greatly exaggerated, for Ricardo was very concerned with existing fiscal practices, and expressed his opinions on practical tax policies throughout his career. In his earliest published works, "The Price of Gold," The High Price of Bullion, and "Three Letters to the Morning Chronicle on the Bullion Report," Ricardo entered the debates over currency questions occasioned by the fiscal and monetary problems stemming from England's participation in the Napoleonic Wars.¹⁶ The enormous national debt accumulated during this period had forced William Pitt to impose the income tax in 1799. Although Ricardo favored extreme tax measures to reduce the national debt, he joined the majority of the classical economists of the time in opposing the income tax. Instead, Ricardo favored a one-time surcharge on capital.¹⁷ While a period of relative peace allowed for the abolition of the income tax in 1816, it was reimposed by Robert Peel in 1842.

In his early writings on monetary theory, Ricardo argued that currency depreciation required increases in the

¹⁶ David Ricardo, "The Price of Gold," Morning Chronicle, August 29, 1809, reprinted in Works, III, 15-46; The High Price of Bullion (London: printed for John Murray, 1810-11, reprinted in Works, III, 48-127); and "Three Letters to the Morning Chronicle on the Bullion Report, 1810, reprinted in Works, III, 131-53.

¹⁷ "Ricardo advocated a capital levy for the retirement of the debt within a period of two or three years." Leo Rogin, The Meaning and Validity of Economic Theory, (New York: Books for Libraries Press, 1956): 142.

nominal levels of government loans and taxes.¹⁸ In his "Reply to Bosanquet," Ricardo took up the interrelated questions of whether the increases in British taxes since the beginning of the war in 1793 had required an increase in the amount of money in circulation, and whether these tax increases could have been the sole cause of the increase in prices experienced by England in the nineteenth century.¹⁹

It is clear from Ricardo's mature writings that he believed his theoretical principles of taxation were relevant to Britain's contemporary economic situation and policy debates. He argued that if England repealed the corn laws it would have the economic capacity to increase taxation to pay off its national debt.²⁰ Because England's private production of surplus had been growing faster than the level of taxation, Ricardo was optimistic about the nation's ability to "afford" high levels of taxation.²¹

¹⁸ "The loans and taxes being paid in a depreciated medium, and prices being affected in exact proportion to the depreciation, larger loans and larger taxes are requisite than what there would be, if the circulating medium were restored to its standard value." Ricardo, Letters, III, 138.

¹⁹ Ricardo, "Reply to Bosanquet's Practical Observations on the Report of the Bullion Committee," (London: printed for John Murray, 1811; reprinted in Works, III, 155-256).

²⁰ "Mr. Malthus does not satisfy me--I am persuaded he is wrong...I firmly believe that if corn fell from 80 to 60/- the ability of the people to pay taxes would be increased instead of diminished." Ricardo, Letter to McCulloch, (December 4, 1816), in Works, VII, 104.

²¹ Ricardo, Principles, 151-2.

Ricardo's Political Economy and Taxation

The importance of the theory of taxation to Ricardo's political economy is made most explicit in his Principles of Political Economy and Taxation. In addition to a share of the title, Ricardo devoted fourteen full chapters to the discussion of taxation. In a 1819 letter to Hutches Trower, Ricardo even claimed that the analysis of taxation constituted the central objective of political economy:

Political Economy, when the simple principles of it are once understood, is only useful, as it directs Governments to right measures in taxation...the necessity which the state has for money...imposes on it the obligation to raise taxes, and thus the most perfect knowledge of the science is required.²²

It is somewhat surprising that Marx found Ricardo's writings on taxation in the Principles to be largely unimportant to his analysis of value and distribution.²³ Because of this cool reception, and the subsequent absence of a general treatment of fiscal questions in Capital, Marxist historians of political economy have generally ignored Ricardo's analysis of taxation.²⁴ Marxists have not

²² Ricardo, Letter to Trower (12 Nov. 1819), Works, VIII, 132-3.

²³ "The whole work consists of 32 chapters...Of this, 14 chapters deal with taxes, thus dealing only with the application of the theoretical principles...The Ricardian theory is therefore contained exclusively in the first six chapters of the work." Karl Marx, Theories of Surplus-Value, II, (Moscow: Progress Publishers, 1963): 166-7.

²⁴ "Those chapters towards the end of The Principles of Political Economy and Taxation...while they do not add anything substantial to Ricardo's theory, which is fully

been alone in minimizing the importance of Ricardo's chapters on public finance to the evaluation of his overall theories.²⁵ One exception is Wesley Mitchell, who considered Ricardo's Principles an "assembly of mechanically disconnected parts," but nevertheless recognized the important role his tax writings played in his overall theory.²⁶

In 1799, the same year that William Pitt imposed the first general income tax in British history, Ricardo picked up a copy of Smith's The Wealth of Nations, and became interested in political economy.²⁷ Sraffa claimed that Ricardo's interest in the study of science actually began two years earlier "by the example and instigation of a

stated in the first five or six chapters, they add something at least by way of dotting i's and crossing t's." Maurice Dobb, "Ricardo and Adam Smith," Essays on Adam Smith, A.S. Skinner and T. Wilson ed., (Oxford: Clarendon Press, 1975): 331.

²⁵ "Taxation with him became a minor part of general economic theory." Edwin Seligman, Essays in Taxation, (New York: Kelley Publishers, 1969): 572. Mark Blaug devoted no more than a page and half of his popular textbook to Ricardo's theory of taxation. Mark Blaug, Economic Theory in Retrospect, 3rd ed., (Cambridge: Cambridge University Press, 1978).

²⁶ "Ricardo's discussion of the incidence of certain taxes is perhaps the most remarkable part of all his speculations." Wesley Mitchell, Types of Economic Theory, I, (New York: Kelley Publishers, 1967): 309.

²⁷ Sraffa, Works, X, 35.

friend with whom he was then very intimate."²⁸ While the exact identity of this friend is unknown, Sraffa suggested that it was likely William Frennd, the author of several pamphlets on taxation.²⁹ Given this early influence, it should not be surprising that Ricardo chose taxation as the forum to express his general economic principles.

There is general agreement among historians of political economy that Ricardo's 1809-11 contributions to the Morning Chronicle were theoretically consistent with Smith's The Wealth of Nations.³⁰ The interpretation of Ricardo's writings from his "Reply to Bosanquet" to the First Edition of the Principles has, however, become an important part of the debate between Hollander and the Sraffians over Ricardo's proper place in the history of economic thought. A review of his writings on taxation during this period can shed light on this controversy.

In his "Reply to Bosanquet," Ricardo responded to Bosanquet's claim that an increase in taxation required a

²⁸ Moses Ricardo, "A Memoir of David Ricardo," 1824, Works, X, pp. 3-13; and Sraffa, "Note on the Authorship of the Memoir," Ibid., 14-15.

²⁹ Frennd's writings include The Principles of Taxation (1799), The Principles of Taxation, or, Contribution According to Means (1804); and The National Debt in its True Colours (1817).

³⁰ "Ricardo still accepts without question Adam Smith's doctrine that a rise in wages will lead to a rise in prices, just as he still accepts Smith's view that profits are lowered by the competition of capitals." Ronald Meek, Studies in the Labor Theory of Value, (New York: Monthly Review Press, 1956): 88.

corresponding increase in the amount of money in circulation. Ricardo asserted that only an increase in the real value of production necessitated such an increase. Using empirical data, Ricardo compared the quantity of notes in circulation with taxes over the fifteen-year period from 1793 to 1808 and concluded "that considerable additions may be made to the taxes of a country without a corresponding increase in its circulating medium."³¹ Ricardo rejected Bosanquet's assertion solely on the basis of the lack of correspondence with empirical evidence.

Ricardo accepted Bosanquet's claim that British duties on the corn trade had resulted in a general rise in prices, but questioned the premise that all tax increases were bound to result in a general price rise.³² Ricardo argued that if all taxes resulted in a general price rise, then it followed that the entire tax burden would be borne by the holders of government bonds (stockholders). Ricardo not only believed this to be empirically false, but argued that if all taxes were shifted in the form of higher prices, the classical conception that government consumption came at the expense of some private class of expenditure would be violated:

This I do not consider very correct doctrine...Wars would, on such a principle, never impoverish, and

³¹ Ricardo, Bosanquet, III, 238.

³² "But is it a self-evident proposition...as Mr. Bosanquet lays it down, an axiom of political economy, that the effect of taxation is to raise the prices of commodities in the full amount of the taxes levied?" Ibid., 240.

the sources of taxation could never be exhausted ...neither the income tax, the assessed taxes, nor many others...affect the prices of commodities... fairly imposed, [they] would leave every member of the community in the same relative situation in which [they] found him...But if the tax should in its operation be unequal, if it should fall particularly heavy on one class of trade, the profits of that trade would be diminished below the general level of mercantile profits, and those engaged in it would either desert it for one more profitable, or they would raise the price of the commodities in which they dealt, so as to bring it to produce the same rate of profits as other trades.³³

Ricardo's statement that such taxes would not alter the relative situation of each member of society was borrowed directly from Smith. In contrast to income taxes, Ricardo argued that general commodity taxes would have the effect of raising prices.³⁴ This also was a proposition directly associated with Smith. Even if some taxes did increase the prices of commodities, it did not "necessarily...follow that more money will be requisite to circulate them."³⁵ In attempting to justify this claim, Ricardo argued that state expenditure would be offset by a diminution in private expenditure: "In proportion as the taxes are great, must the expenses of the people diminish."³⁶ Because an equivalent amount of expenditure occurred before and after the tax, the

³³ Ibid., 240-1.

³⁴ Ibid., 241-2.

³⁵ Ibid., 242-3.

³⁶ Ibid.

necessary quantity of money in circulation did not change.³⁷ Thus, Ricardo accepted Smith's argument that the price increases of taxed commodities would ultimately fall on the consumers of the products of labor. Ricardo gave no indication that by raising the level of wages such taxes could lower the general rate of profit. His critique was directed only at Bosanquet and not yet at Smith.

Ricardo's theoretical argument as to why some taxes raised prices and others did not was unconvincing. Ricardo lacked the theoretical apparatus to trace through the effects of different forms of taxation on the level of income going to each class. Nevertheless, Ricardo believed he had effectively demonstrated that not all taxes raised prices, and because the amount of money in circulation was determined by the value of commodities, it was not correct to tie increases in the demand for money in circulation to increases in the total amount of taxes levied.

Hollander refers to this discussion to support his claim that as early as 1811, Ricardo had developed the

³⁷ "It would make no real difference to these consumers if they had at once paid the amount of such a tax into the exchequer, or it had gone through the circuitous channel which it would then take...Whatever the government expended would cause a diminished expenditure in the people to the same amount: the same amount of commodities would be circulated, and the same money would be adequate to their circulation." Ibid.

necessary theoretical elements for a new theory of profit.³⁸ Thus, it is incorrect to argue, as did Sraffa, that the corn law debates provided the stimulus for an alternative theory of profit. According to Hollander, Ricardo had begun to formulate his new theory solely on the basis of his monetary analysis and theory of prices.³⁹ But Hollander has read too much into Ricardo's critique of Bosanquet's use of Smith's analysis. There is no evidence to suggest that Ricardo had yet rejected any of Smith's basic propositions regarding distribution and taxation.

Ricardo's objective was much more limited--to show that it was impossible to explain empirically the general rise in prices in England during this period by changes in taxation. In Notes on Bentham's 'Sur Les Prix', Ricardo's only other published work from this period, he repeated his "Smithian" belief that taxes on basic commodities would raise the general level of prices: "It may be doubted whether any

³⁸ "[T]he constituent elements entering into Ricardo's position were available from a very early date (from 1811) and could logically have been brought together in 1813 to form a new (though incompletely formulated) theory of profit...the relevance for his own approach to profits of the monetary argument used in 1813 to counter the principle of 'competition of capitals' was apparently not self-evident..." Hollander, 118.

³⁹ "An increase in the money supply is thus essential for a (permanent) rise of general prices, except, Ricardo again asserted, where taxation is responsible for higher prices...Ricardo's insistence upon an increase in the money supply to assure a permanently higher level of prices is inconsistent with a subscription to the Smithian proposition that a money-wage increase or an increase in profits will be passed on to consumers." Ibid., 111.

circumstances can raise prices generally but taxation, or a diminution in the real value of the precious metals in consequence of increased abundance."⁴⁰

Sraffa argued that Ricardo had not developed an alternative to Smith's "competition of capitals" theory of profits until February 1814, in his lost paper on "the profits of capital."⁴¹ After the corn law debates prompted a series of pamphlets on rent by Robert Torrens, Sir Edward West, and Thomas Malthus, Ricardo was then able to incorporate these new theories into an already existing theory of profit to form an alternative theory of value and distribution.⁴² Ricardo immediately recognized the implications of the theory of rent for the analysis of taxation. After reading Malthus' essay, Ricardo wrote back expressing his intention to present a different opinion on taxation:

There are some parts of the essay with which I cannot agree...I...shall attempt to shew that the effects of a tax and of rent are very different as regards importation. It may be economical to grow corn if its price is raised merely by taxation, as by importing it a part of the tax would be wholly lost to the country importing. No such consideration should influence us with regards to rent being lost...I differ too...as to the effects of taxation on the growth of produce. You appear to me not quite consistent in admitting as you unequivocally do that the last portion of land

⁴⁰ Ricardo, Notes on Bentham's 'Sur Les Prix', (1810-11), in Works, III, 328.

⁴¹ Sraffa, "Note on 'Essay on Profits'," Works, IV, 3.

⁴² Ibid., 4.

cultivated, yields nothing more than the profits of stock,--no rent, and yet to maintain that taxes on necessaries or on raw produce fall on the landlord and not on the consumer.⁴³

Ricardo quickly went to work on his Essay on the Influence of a Low Price of Corn on the Profits of Stock, which appeared just eighteen days later.⁴⁴ In the Essay, Ricardo expressed his debt to Malthus and repeated his recognition of the implications of the theory of rent for the analysis of taxation:

I have...endeavoured to elucidate the principles which Mr. Malthus has so ably laid down...in his "Inquiry into the Nature and Progress of Rent;" a work abounding in original ideas,--which are useful not only as they regard rent, but as connected with the question of taxation; perhaps the most difficult and intricate of all the subjects on which Political Economy treats.⁴⁵

Despite these statements which are indicative of the importance Ricardo placed on the theory of taxation, the subject was barely treated in the Essay. Only in a footnote near the end of the Essay did Ricardo address the issue of taxes:

I by no means agree with Adam Smith, or with Mr. Malthus, respecting the effects of taxation on the necessaries of life....Adam Smith thought that such taxes fell exclusively on the landholder; Mr. Malthus thinks they are divided between the

⁴³ Ricardo, Letter to Malthus (Feb. 6, 1815), VI, 172-3.

⁴⁴ Ricardo, Essay on the Influence of a Low Price of Corn on the Profits of Stock (London: printed for John Murray, 1815, reprinted in Works, IV, 1-41.

⁴⁵ Ibid., 15n.

landholder and consumer. It appears to me that they are paid wholly by the consumer.⁴⁶

Implicit in this statement is Ricardo's acceptance of the subsistence theory of wages and the belief that taxes could not be borne by the working class. Ricardo also appears to have realized that taxes on necessaries could not be borne by the landlords because no rent was paid on the marginal piece of land. Ricardo stopped short, however, of explicitly discussing the class composition of "consumers" and analyzing the ultimate distribution of the tax burden. Not until his Principles, did he develop a theoretical analysis of how capitalist "consumers" could bear the tax burden in the form of lower profits.

Perhaps the reason why Ricardo did not treat taxation comprehensively in the Essay is that he realized an analysis in material terms had little theoretical or political validity. Without an adequate theory of value, the new theory of rent provided limited potential for the advancement of the political economy of taxation. Despite this fact, Ricardo understood the implications of the new theory for the critique of existing theories of tax incidence. Just one month after the publication of the Essay, Ricardo wrote to Malthus:

"[D]oes not the same principle apply to the indirect taxes that raise the price of labour?" I think not because a tax on corn will raise the price of corn twice, once on account of the tax and an second time

⁴⁶ Ibid., 34.

on account of the rise of wages, but as this second rise is common to all things in which labour enters and will be corrected by a new value of money, it will not be of long duration. The indirect taxes which only raise the wages of labour produce I think the same effects as the second rise in the price of corn.⁴⁷

Hollander cites this statement to support his contention that Ricardo used his earlier monetary arguments to explain the relationship between money-wage rates and the profit rate, and that "the corn-model was of little significance to him."⁴⁸ Although Ricardo did refer to "a new value of money," it is difficult to interpret the above passage as implying that Ricardo did not attribute much importance to the corn model of the Essay. The statement does seem to imply that almost immediately after he had written the Essay, Ricardo understood that the "logical basis" of the analysis (in terms of physical corn quantities and the corresponding simplification of wages consisting entirely of corn) was unsuited to the analysis of taxation and distribution.

Following Sraffa, Piero Garegnani argues that correspondence from this period implies that Ricardo was already looking to integrate his theory of profits with a

⁴⁷ Ricardo, Letter to Malthus (March 27, 1815), Works, VI, 206.

⁴⁸ Hollander, 177-8.

theory of value.⁴⁹ Only with the adoption of a general theory of value, was it "possible for Ricardo to demonstrate the determination of the rate of profit in society as a whole instead of through the microcosm of one special branch of production."⁵⁰ The theory of value allowed Ricardo to "abandon the simplification that wages consist only of corn and to treat wages as composed of a variety of products."⁵¹ By replacing corn with labor as the measure of both inputs and outputs, the rate of profit then could be determined by "the ratio of the total labour of the country to the labour required to produce the necessaries for that labour."⁵² The productivity of labor on the no-rent parcel of land determined the general rate of profit. Thus, Ricardo became increasingly aware of the necessity of rejecting Smith's position that tax induced rises in corn prices would result in a general rise in all prices.⁵³

Ricardo set out to write his Principles late in 1815, and by October of the following year he had completed a

⁴⁹ Piero Garegnani, "On Hollander's Interpretation of Ricardo's Early Theory of Profits," Cambridge Journal of Economics, vol. 6, no. 1, March 1982, 65-77.

⁵⁰ Sraffa, "Introduction," xxxii.

⁵¹ Ibid.

⁵² Ibid.

⁵³ "[Ricardo] groped towards a more general form of his theory; since the supposed general rise of prices obscured the simple relation of the rise of wages to the fall of profits." Ibid., xxxiii.

draft of the first seven "theoretical" chapters. Ricardo sent a copy of these chapters to James Mill announcing his intention to next "consider the subject of taxation."⁵⁴ It was in this correspondence that Ricardo first mentioned the "curious effect which the rise of wages produces on the prices of those commodities which are chiefly obtained by the aid of machinery and fixed capital."⁵⁵ It appears that Ricardo now understood that, contrary to Smith, a tax on wages would not lead to a general rise in prices, but a rise in some prices and "curious" fall in others.⁵⁶

Upon receiving the manuscript, Mill wrote back to Ricardo encouraging him to proceed.⁵⁷ Mill did not have to wait long, for Ricardo wrote the chapters on taxation with remarkable speed. On November 17, 1816 Ricardo sent the second part of the manuscript to him:

⁵⁴ Ricardo, Letter to James Mill, (October 14, 1816), Works, VII, 82-4.

⁵⁵ Ibid., 82.

⁵⁶ "I have been beyond measure puzzled to find out the law of price. I found...that my former opinion could not be correct and I was full a fortnight pondering on my difficulty before I knew how to solve it. During that time I could not proceed or I should have made greater progress. I shall now consider the subject of taxation that I may have a consistent theory in the first instance on paper." Ibid., 83-4.

⁵⁷ "This is exactly the proper mode of proceeding...I am happy to hear you are upon taxation; and shall be curious to see what comes forth, as soon as it is done. That is a point closely connected with some of the most abstruse principles of the science." James Mill, Letter to Ricardo, (October 25, 1816), Works, VII, 86.

On the subject of taxation you will perceive that I have altered, I hope corrected, some of the views which I had heretofore taken...It is my intention to read Adam Smith once more, to take notes of all passages which very much favor, or are directly opposed to my peculiar opinions, and shall afterwards submit to you the propriety of inserting them in the proper places of my MS.⁵⁸

Three days later, Ricardo again wrote to Mill, "anxious to correct an error," and expressed his intention to amend the manuscript. Ricardo was concerned that he had not correctly applied the theory of rent to the analysis of taxation:

I had great difficulty to reconcile to my mind, what appeared to me true in argument, that a tax on the profits of stock, either by sinking the money rent of the landlord, leaving the prices of commodities as before; or by raising the prices of commodities, leaving money rent as before; would really affect the landlord...I discovered that I had overlooked an important fact...This subject is now very clear in my mind.⁵⁹

Ricardo again wrote to Mill on December 2, 1816, expressing his belief that the logical problems in Smith's analysis were derived from his treatment of value: "In reading Adam Smith, again, I find many opinions to question, all I believe founded on his original error respecting value. He is particularly faulty in chapter on bounties."⁶⁰ Two weeks later, Mill wrote back to express his approval and

⁵⁸ Ricardo, Letter to Mill (17 Nov. 1816), Works, VII, 88.

⁵⁹ Ricardo, Letter to Mill, (20 Nov. 1816), VII, 90-2.

⁶⁰ Ricardo, Letter to Mill, (December 2, 1816), Ibid., 100.

belief that Ricardo's analysis of taxation was far superior to Smith's.⁶¹ By the end of February 1917, the printing of the First Edition of Ricardo's Principles had begun.

There is a very close correspondence between the early "theoretical" chapters and the later chapters on taxation which is reflected in the arrangement of the Principles:

Table V

RICARDO'S PRINCIPLES

Ch. I. On Value	Ch. VIII. On Taxation
	Ch. IX. Taxes on Raw Produce
Ch. II. On Rent	Ch. X. Taxes on Rent
	Ch. XI. Tithes
	Ch. XII. Land-Tax
Ch. III. On the Rent of Mines	Ch. XIII. Taxes on Gold
Ch. IV. On Natural and Market Price	Ch. XXX. On the Influence of Demand and Supply on Prices
Ch. V. On Wages	Ch. XVI. Taxes on Wages
Ch. VI. On Profits	Ch. XV. Taxes on Profits
Ch. VII. On Foreign Trade	Ch. XXII. Bounties on Exportation and Prohibitions of Importation

⁶¹ "I have now gone over your inquiry into the subject of Taxation, with the same care as the former part of the work. I have also the pleasure to tell you that I am equally well satisfied. Now for the first time is the real operation of taxes explained; for this was a part of his subject on which Adam Smith was superficial, and added not a great deal to the knowledge of the world. Your doctrines are original, and profound, for it was by no means an easy matter to get down to them; and I have no hesitation whatsoever in saying that they are fully and completely made out. I embrace every one of them; and am ready to defend them against all the world." Mill, Letter to Ricardo, (December 16, 1816), Ibid., 106.

Surplus-Value and Taxable Capacity

Like Adam Smith, the origins of Ricardo's conception of economic surplus can be traced to the Physiocrats.⁶² But whereas Smith had failed to integrate logically the analysis of material surplus with the labor theory of value, Ricardo was able to significantly advance this line of analysis.⁶³ For Marx, Ricardo's greatest advancement over the earlier classical economists consisted of the provision of a clear (class) distinction between rent and profit as different forms of surplus-value.⁶⁴

Ricardo applied this notion of surplus to his analysis of taxation throughout his formal writings and correspondence. In the "Advertisement to the Third Edition" of the Principles, for example, Ricardo clarified his conception of surplus and taxable capacity:

⁶² "[Ricardo] came very close to concluding (although this was not said explicitly) that profit and rent were two species of Physiocratic produit net." Dobb, Theories, 71.

⁶³ "Ricardo was adopting a clearly labor-value approach to the characterization of surplus." Vivian Walsh and Harvey Gram, Classical and Neoclassical Theories of General Equilibrium, (Oxford: Oxford University Press, 1980): 96.

⁶⁴ "But when Ricardo says that profits and rents form this surplus and are consequently the only wealth, in spite of his difference from the Physiocrats, he agrees with them in thinking that only the net product, the product in which the surplus-value exists, forms the national wealth; although he has a better understanding of the nature of this surplus. For him, too, it is only the part of the revenue which is in excess of wages. What distinguishes him from the Economists is not his explanation of the net product, but his explanation of wages, under which category the Economists wrongly also include profits." Marx, Theories, I, 223.

I have in the last chapter endeavoured to place a stronger point of view than before, the doctrine of the ability of a country to pay additional money taxes...the ability to pay taxes, depends, not on the gross money value of the mass of commodities, nor on the net money value of the revenues of capitalists and landlords, but on the money value of each man's revenue, compared to the money value of the commodities which he usually consumes.⁶⁵

In the final chapter of the Principles, Ricardo stressed the distinction between gross and net revenue: "It is of importance to distinguish clearly between gross revenue and net revenue, for it is from the net revenue of a society that all taxes must be paid."⁶⁶ Surplus-value was defined as the difference between the value of output and the value of inputs. Earlier in Chapter XXVI, "On Gross and Net Revenue," Ricardo explicitly tied the net income conception of taxable capacity to his critique of Smith's emphasis on gross, rather than net revenue: "It must...be obvious, that the power of paying taxes, is in proportion to the net, and not in proportion to the gross revenue."⁶⁷

For Ricardo, economic surplus in the form of profit and rent constituted the source of tax revenue: "The whole produce of the land and labour of every country is divided into three portions: of these, one portion is devoted to wages, another to profits, and the other to rent. It is

⁶⁵ Ricardo, Principles, 8.

⁶⁶ Ibid., 421.

⁶⁷ Ibid., 349.

from the two last portions only, that any deductions can be made for taxes."⁶⁸ In Chapter VIII, "On Taxes," Ricardo argued that taxes were derived either at the expense of profits and accumulation, or from consumption: "Taxes are a portion of the produce of the land and labour of a country, placed at the disposal of the government; and are always ultimately paid, either from the capital, or from the revenue of the country."⁶⁹

Ricardo opened Chapter I, "On Value," with a discussion of Smith's distinction between use value and exchange value. He observed that a commodity's exchange value could not be measured by utility, asserting instead that "commodities derive their exchangeable value from two sources: from their scarcity, and from the quantity of labour required to obtain them."⁷⁰ Ricardo was primarily concerned with those reproducible commodities whose values were determined by the quantity of labor embodied in their production, and not with those whose values were determined by scarcity.

Ricardo's objective was to re-establish Smith's abandoned labor theory of value as appropriate to the analysis of capitalism. For Ricardo, the accumulation of capital did not render the labor theory of value obsolete; commodities still exchanged on the basis of the quantity of

⁶⁸ Ibid., 347-8.

⁶⁹ Ibid., 150.

⁷⁰ Ibid., 11-12.

labor required for their production.⁷¹ Only after developing a logical theory of value did Ricardo turn his attention to distribution and, ultimately, to questions of public finance. Ricardo developed his "fundamental theorem of distribution"--that wages and profits were inversely related--in conjunction with his rejection of Smith's "adding-up theory of value."

Ricardo set out to demonstrate that variations in relative values resulting from differences in capital intensity and durability would not alter his distribution theorem or his attempt to measure changes in distribution. Ricardo recognized that given different compositions of capitals across industries, changes in distribution would alter the relative values of commodities, but nevertheless claimed that the inverse wage-profit relationship continued to hold.⁷² Ricardo recognized that there were "exceptions" to this law of value, but he found no way out of this muddle other than to argue that labor-embodied constituted the most important quantitative factor in the determination of a commodity's value.

Ricardo also faced the question of how to determine whether the change in the relative value of two commodities

⁷¹ Ibid., 24.

⁷² "The degree of alteration in the relative value of goods, on account of a rise or fall of labour, would depend on the proportion which the fixed capital bore to the whole capital employed....There can be no rise in the value of labour without a fall of profits." Ibid., 35.

was due to a change in the value of one of them, the other, or both. This led Ricardo to search for an "invariable measure of value." Although Ricardo explicitly acknowledged that no real commodity could be the invariable measure of value, he nonetheless assumed that gold could play this role. His purpose in doing so was to counter the arguments of Smith, who had claimed that a rise in wages resulted in a general rise in prices.⁷³

For Ricardo, the value of gold, like other commodities, was determined by the labor time embodied in its production. In addition to playing the role of the invariable measure of value, gold, as the medium of exchange, also served to link the theory of value with his monetary theory. While the real value of gold was assumed to be constant, this did not prevent Ricardo from discussing the effects of changes in the money supply (gold) on the general level of prices, while at the same time maintaining that the real cost

⁷³ "Adam Smith, and all the writers who have followed him, have...maintained that a rise in the price of labour would be uniformly followed by a rise in the price of all commodities. I hope I have succeeded in showing, that there are no grounds for such an opinion, and that only those commodities would rise which had less fixed capital employed upon them than the medium in which price was estimated, and that all those which had more, would positively fall in price when wages rose. On the contrary, if wages fell, those commodities only would fall, which had a less proportion of fixed capital employed on them, than the medium in which price was estimated; all those which had more, would positively rise in price." Ibid., 46.

(embodied labor) of producing gold had not changed.⁷⁴ Distinguishing between these real and monetary effects is the key to the proper interpretation of Ricardo's theory of value, distribution and taxation.

In Chapter XIII, "Taxes on Gold," Ricardo linked together his theory of value, the role of gold as the invariable measure of value, his monetary theory, and his analysis of taxation. His objective was to demonstrate again that taxes could not raise the general level of prices as had been argued by Smith. Because gold was not produced in nineteenth-century England, it is obvious that Ricardo's discussion was not directed at any practical application. He analyzed the effects of such a tax only because "gold" played such a special role in his theory of value and distribution.

In Chapter IX, "Taxes on Raw Produce," Ricardo was explicitly concerned with the relationship between the theory of taxation and the labor theory of value. Ricardo opened the chapter by restating the axiom that the price of "corn" was determined by the cost of production (labor) on the no-rent parcel of land. The proposition that rent did not enter into the price of commodity inputs allowed Ricardo

⁷⁴ "In stating the principles which regulate exchangeable value and price, we should carefully distinguish between those variations which belong to the commodity itself, and those which are occasioned by a variation in the medium in which value is estimated, or price expressed." Ibid., 48.

to logically trace out his new theory of pricing and taxation.

Smith had argued that a tax on produce would be shifted to landlords in the form of a reduction in rent. While Ricardo accepted Smith's premise that the capitalist farmer needed to earn the going rate of profit in order to continue in the trade, he did not conclude that such a tax would come out of rent, but that it would be paid by the consumers of the taxed produce in the form of higher prices. Since there was no rent component in the price of agricultural output, it was logically impossible for either taxes on farmers, or on the necessary goods of workers, to be borne by the landlord class. Taxes on raw produce simply raised the cost of production, and thereby came out of the share of economic surplus accruing to capitalists: "In proportion as raw produce entered into the composition of other commodities, would their value also be raised, unless the tax were counterbalanced by other causes. They would in fact be indirectly taxed, and their value would rise in proportion to the tax."⁷⁵

In Chapter XIII, "Taxes on Gold" and Chapter XIV, "Taxes on Houses," Ricardo considered the speed at which market prices adjusted to tax changes in order to conform to

⁷⁵ Ibid., 159.

their natural prices.⁷⁶ As would be expected from such an analysis, Ricardo's logic consisted of a mixture of supply and demand considerations. The greater the demand for a commodity, the easier it would be to reallocate capital so as to conform to the post-tax rate of profit. Ricardo contrasted the speed of adjustment following a tax levied on corn (a high demand commodity) with that of gold and houses. The period in which the tax burden would be borne by the producers of gold and houses would be relatively lengthy.⁷⁷

Mark Blaug and other neoclassical historians have pointed to these passages in the Principles to support their claim that Ricardo emphasized time in his theory of taxation in a fashion similar to the neoclassical analysis of prices: "Chapters 13 and 14 provide an interesting discussion of the movement in the price of a taxed commodity toward its equilibrium level: the adjustment takes longer, the more durable the commodity in question, the more inelastic its

⁷⁶ "The rise in the price of commodities, in consequence of taxation or of difficulty of production, will in all cases ultimately ensue; but the duration of the interval, before the market price will conform to the natural price, must depend on the nature of the commodity, and on the facility with which it can be reduced in quantity." Ibid., 191.

⁷⁷ "If the mines which supply us with gold were in this country, and if gold were taxed, it could not rise in relative value to other things, till its quantity were reduced...The tax would fall upon him, whose property consisted of money, and would continue to do so till its quantity were reduced in proportion to the increased cost of its production caused by the tax." Ibid., 192-3.

supply, and the more elastic the demand."⁷⁸ It is important to stress, however, that Ricardo was concerned here with the process by which market prices conformed to their natural "equilibrium" values. This process of market adjustment following the imposition of a tax did not determine relative values.

In Chapter XXX, "On the Influence of Demand and Supply on Prices," Ricardo emphasized the distinction made in Chapter IV, "On the Natural and Market Price," between a commodity's natural and market price, and explicitly linked his discussion to the analysis of taxation. Ricardo argued that a commodity's market price would deviate from its natural price, but would gravitate around the latter by forces of supply and demand.⁷⁹ Deviations from natural equilibrium prices and the consequent action of supply and demand created the forces acting to allocate capital so as to equalize the rate of profit across industries.⁸⁰ Competition acted on market prices in such a way as to lead

⁷⁸ Blaug, Retrospect, 139.

⁷⁹ "In making labour the foundation of the value of commodities...we must not be supposed to deny the accidental and temporary deviations of the actual or market price of commodities from this, their primary and natural price." Ricardo, Principles, 88.

⁸⁰ "It is only in consequence of such variations, that capital is apportioned precisely, in the requisite abundance and no more, to the production of the different commodities which happen to be in demand. This restless desire on the part of all employers of stock, to quit a less profitable for a more advantageous business, has a strong tendency to equalize the rate of profits of all." Ibid.

them to gravitate toward their natural prices.⁸¹ "It is the cost of production which must ultimately regulate the price of commodities, and not, as has been often said, the proportion between supply and demand."⁸² Ricardo pointed to Buchanan's analysis of wage taxes as an erroneous example of the use of the principles of supply and demand:

The opinion that the price of commodities depends solely on the proportion of supply and demand, or demand to supply, has become almost an axiom in political economy, and has been the source of much error in that science. It is this opinion which has made Mr. Buchanan maintain that wages are not influenced by a rise or fall in the price of provisions, but solely by the demand and supply of labour; and that a tax on the wages of labour would not raise wages; because it would not alter the proportion of the demand of labourers to the supply.⁸³

The theory of natural values, and not the discussion of market prices, served as the foundation of Ricardo's theory of distribution and tax incidence.

Taxation and Distribution

In the "Preface" to the Principles, Ricardo argued that the objective of political economy was to determine the laws which regulated the distribution of economic surplus among the major social classes. For Ricardo, the new theory of rent was central to providing not only an alternative to Smith's "adding-up theory of value," but to an alternative

⁸¹ Ibid., 91-2.

⁸² Ibid., 382.

⁸³ Ibid.

theory of distribution and tax incidence as well: "In 1815, Mr Malthus...[and Edward West]...presented to the world... the true doctrine of rent; without a knowledge of which, it is impossible to understand the effect of the progress of wealth on profits and wages, or to trace satisfactorily the influence of taxation on different classes of the community."⁸⁴ Thus, Ricardo began his theory of distribution and taxation with a discussion of rent and taxes on rent.

Taxes on Raw Produce and Rent

Ricardo opened Chapter II, "On Rent," with the statement: "It remains however to be considered, whether the appropriation of land, and the consequent creation of rent, will occasion any variation in the relative value of commodities, independently of the quantity of labour necessary to production."⁸⁵ He asserted that the laws which determine rent were to be distinguished from the laws which determined profit and interest.

In Ricardo's system, the share of economic surplus going to the landlords was determined by the differential quality of land cultivated. No rent was paid on the marginal parcel of land. As society progressed and more land was taken into cultivation, the marginal piece of land

⁸⁴ Ibid., 5-6.

⁸⁵ Ibid., 67.

became less productive and, thus, more labor was required to produce an equivalent amount of raw produce. With more labor embodied in its production, the value of raw produce would rise: "Corn is not high because a rent is paid, but a rent is paid because corn is high."⁸⁶ Since value was determined by the productivity of labor on the rent-free parcel of land, it logically followed that rent did not play a role in the determination of value. Ricardo concluded that Smith's theory in which value was determined by the sum of the components of wages, profits and rent, was therefore incorrect.⁸⁷

Chapter X, "Taxes on Rent," represents a straightforward extension of the theory of rent developed in Chapter II. Ricardo argued that a rent tax could not be shifted to other classes and was completely borne by the landlords:

A tax on rent would affect rent only; it would fall wholly on landlords, and could not be shifted to any class of consumers. The landlord could not raise his rent, because he would leave unaltered the difference between the produce obtained from the

⁸⁶ Ibid., 74.

⁸⁷ "Adam Smith, therefore, cannot be correct in supposing that the original rule which regulated the exchangeable value of commodities, namely, the comparative quantity of labour by which they were produced, can be at all altered by the appropriation of land and the payment of rent. Raw materials enters into the composition of most commodities, but the value of the raw material, as well as corn, is regulated by the productiveness of the portion of capital last employed on the land, and paying no rent; and therefore rent is not a component part of the price of commodities." Ibid., 77-8.

least productive land in cultivation, and that obtained from land of every other quality...A tax on rent would not discourage the cultivation of fresh land, for such land pays no rent, and would be untaxed.⁸⁸

Neoclassical historians such as Mark Blaug have equated Ricardo's fundamental point that taxes on rent could not be shifted to consumers because rent was not a component part of price, with the neoclassical incidence theory based on the elasticity of factor supply: "Chapter 10 develops the theory that a tax on rent cannot be shifted simply because it is a tax on a product in fixed supply. It is only by varying the supply that the incidence of a tax is made to fall on the buyer."⁸⁹ But Ricardo's theory of tax incidence is not based upon variable factor supplies. Ricardo went on to argue, for example, that wage taxes would always be shifted even though labor was a fixed parameter in his theoretical system.

Ricardo distinguished between pure rent and the profits of landlords acting as capitalists by dividing the portion of income going to landlords under the name of rent into real rent and the return on capital stock advanced. While the state did not make such a distinction, Ricardo believed it was necessary to do so theoretically because the economic effects of taxes on each portion would be different.⁹⁰

⁸⁸ Ibid., 173.

⁸⁹ Blaug, Retrospect, 139.

⁹⁰ Ricardo, Principles, 173-4.

The taxation of that portion of income going to "landlords" as profit on their stock advanced in agriculture was treated as a tax on profits in a single sector of the economy.⁹¹ Although Ricardo accepted Smith's theory of the taxation of pure rent, and in general promoted the interests of the capitalists against those of the landlords, he stopped short of advocating a disproportionate tax on this form of economic surplus.⁹² Ricardo's position can be explained by his overriding concern for the institution of private property.⁹³

⁹¹ Ibid., 175.

⁹² "Adam Smith considers ground rents as peculiarly fit subjects for taxation...It must be admitted that the effects of these taxes would be such as Adam Smith has described; but it would surely be very unjust, to tax exclusively the revenue of any particular class of a community." Ibid., 204.

⁹³ Marx later argued that even though it would be in the direct interests of the capitalist class to impose heavy taxes on landlords, there were institutional reasons why this would not take place: "Assuming the capitalist mode of production, then the capitalist is not only a necessary functionary, but the dominating functionary in production. The landowner, on the other hand, is quite superfluous in this mode of production. Its only requirement is that land should not be common property, that it should confront the working class as a condition of production, not belonging to it, and the purpose is completely fulfilled if it becomes state property, i.e. if the state draws the rent....The radical bourgeois (with an eye moreover to the suppression of all other taxes) therefore goes forward theoretically to a refutation of the private ownership of land, which, in the form of state property, he would like to turn into the common property of the bourgeois class, of capital. But in practice he lacks the courage, since an attack on one form of property - a form of the private ownership of a condition of labour - might cast considerable doubts on the other form." Marx, Theories, II, 44-5.

The chapter on taxes on rent was followed by a brief chapter on tithes--taxes on agriculture, payable to the Church. Ricardo abstracted from institutional considerations and was concerned only to illustrate how such taxes differed in their effects from taxes on raw produce and rent. Like taxes on raw produce, tithes were assumed to raise agricultural prices. They differed from land-rent taxes, however, in that they affected all agricultural land including the rent-free parcel.⁹⁴

In Chapter XII, "Land-Tax," Ricardo argued that if a land-tax was imposed on the basis of rent received by landlords, then it was, in effect, a tax on rent. But if it was assessed on all land in use, its economic effect was equivalent to a tax on raw produce:

A LAND-TAX, levied in proportion to the rent of land, and varying with every variation of rent, is in effect a tax on rent; and as such a tax will not apply to that land which yields no rent, nor to the produce of that capital which is employed on the land with a view to profit merely, and which never pays rent, it will not in any way affect the price of raw produce, but will fall wholly on the landlords. In no respect would such a tax differ from a tax on rent. But if a land-tax be imposed on all cultivated land, however moderate it may be, it

⁹⁴ "Tithes are a tax on the gross produce of the land, and, like taxes on raw produce, fall wholly on the consumer. They differ from a tax on rent, inasmuch as they affect land which such a tax would not reach; and raise the price of raw produce, which that tax would not alter. Lands of the worst quality, as well as of the best, pay tithes, and exactly in proportion to the quantity of produce obtained from them; tithes are therefore an equal tax....The only difference between tithes and taxes on raw produce, is, that one is a variable money tax, the other a fixed money tax." Ricardo, Principles, 176.

will be a tax on produce, and will therefore raise the price of produce.⁹⁵

Adam Smith had argued that land-taxes, whether on rent or strictly on land in cultivation, would fall on landlord rent and that the landlord would be indifferent as to the two types of taxes. Ricardo, on the other hand, argued that the ultimate effect of each form of taxation differed, and traced Smith's errors to his faulty theory of rent.⁹⁶ Landlords would bear the burden of land-taxes and taxes on raw produce only in proportion as they were consumers of such produce. The remaining share would be borne by the capitalists insofar as they were consumers, and in lower profits resulting from higher wages. Thus, capitalists bore a double burden from such taxes, while landlords received a partial exemption.

Taxes on Wages and Necessary Commodities

Ricardo's theory of wages and wage taxes has been subject to considerable controversy in the history of economic thought. Sraffa argued that wages were treated as

⁹⁵ Ibid., 181.

⁹⁶ "From the peculiar view which Adam Smith took of rent, from his not having observed that much capital is expended in every country, on the land for which no rent is paid, he concluded that all taxes on the land, whether they were laid on the land itself in the form of land-tax or tithes, or on the farmer, were all invariably paid by the landlord, and that he was in all cases the real contributor. ...For the reasons which have been already given, I cannot have the least doubt but that they would raise the price of produce, and consequently that Adam Smith has taken an incorrect view of this important question." Ibid., 183-4.

an exogeneously determined parameter in Ricardo's theoretical structure, and that there existed no functional relationship between changes in wages and population. This conclusion has been challenged by many neoclassicals who argue that wages were treated as a variable determined by endogenous forces of supply and demand. Hollander, for example, argues that Ricardo treated wages as exogeneously determined and equal to subsistence only in the stationary state.⁹⁷ The "fixed-wage" interpretation has been challenged also by Carlo Casarosa, who asserted not only that wages were determined endogeneously by supply and demand, but that prices, distributional variables, and the rate of accumulation all were determined simultaneously in Ricardo's system.⁹⁸

An analysis of Ricardo's writings on the taxation of wages and wage goods sheds light on the larger debates

⁹⁷ "The subsistence wage rate characterizes the stationary state alone and is nothing more than the precise counterpart of the minimum acceptable profit rate: both the wage and profit rates exceed their respective minima in a growing economy." Hollander, *Ibid.*, 12.

⁹⁸ "[I]n Ricardo the evolution of the wage rate over time is determined by the contemporaneous working of the population mechanism and of the process of capital accumulation, so that there is no reason why the wage rate should converge towards the natural level unless capital is stationary...the wage rate, the rate of profit and the rates of growth of population and capital are simultaneously determined by the interplay between the distributive variables, population growth and the accumulation of capital." Carlo Casarosa, "The 'New View' of the Ricardian Theory of Distribution and Economic Growth," in Giovanni A. Caravale, ed., The Legacy of Ricardo, (Oxford: Basil Blackwell, 1985): 45-6.

surrounding his wage theory. A review of Ricardo's writings on taxation demonstrates that post-tax wage rates were not endogenously determined in manner similar to neoclassical incidence analysis. Some neoclassicals have conceded that the wage rate was exogenously determined in Ricardo's analysis of taxation, but that the same can not be said of his general theory of wages. Mark Blaug, for example, argues that Ricardo's "iron law of wages" was adhered to in the chapters on taxation even if not in Chapter V, "On Wages."⁹⁹

This interpretation follows Wesley Mitchell, who argued that Ricardo maintained the law of wages more closely in the tax chapters than he did in the early chapters of the Principles out of mathematical necessity.¹⁰⁰ It will be argued, however, that there is no fundamental difference between Ricardo's treatment of wages in Chapter V and the later chapters on taxation. Wages were treated as a fixed, exogenously determined parameter throughout the Principles.

By claiming that workers were the primary consumers of corn, Ricardo tied his analysis of taxes on raw produce to

⁹⁹ "In the tax chapters of the Principles, in which Ricardo argues that a tax on wages is always passed on to profits via the wages-population mechanism, there is simply no question that real wages are conceived as fixed at a subsistence level. But in Chapter 5 "On Wages", wages are treated as a variable and are permitted to stand above the "natural price" of labour for long periods of time." Mark Blaug, "Ricardo and the Problem of Public Policy," 121.

¹⁰⁰ Mitchell, I, 321-3.

his theory of wages. Having accepted Malthus' theory of population, Ricardo proceeded by a simple application of the "iron law of wages." He believed that neither taxes on raw produce nor monetary phenomena could affect the supply of produce or population size:

Neither a fall in the value of money, nor a tax on raw produce, though each will raise the price, will necessarily interfere with the quantity of raw produce; or with the number of people, who are both able to purchase, and willing to consume it...labour is a commodity which cannot be increased and diminished at pleasure...A tax on corn does not necessarily diminish the demand compared with the supply of labour; why then should it diminish the portion paid to the labourer?¹⁰¹

Workers could not bear a burden of a tax on raw produce or on any other necessary commodity even if the prices of those commodities increased as a result:

A tax, however, on raw produce, and on the necessaries of the labourer, would have another effect--it would raise wages....This class is never able to bear any considerable proportion of taxation; and, consequently, if they had to pay...in addition for wheat and in some smaller proportion for other necessaries, they would not be able to subsist on the same wages as before, and to keep up the race of labourers. Wages would inevitably and necessarily rise; and in proportion as they rose, profits would fall.¹⁰²

Ricardo treated the "natural wage rate" as a fixed parameter in his theoretical structure. Wages had to increase as a result of the tax because of the rise in the price of subsistence goods. In contrast to Smith, Ricardo

¹⁰¹ Ricardo, Principles, 165-6.

¹⁰² Ibid., 159.

proceeded by arguing that rising wages would led to lower profits, not to a general increase in prices (although relative prices could change).

Ricardo opened Chapter V, "On Wages," by reminding his readers that the distinction between market and natural prices was meant to apply to wages: "Labour, like all other things which are purchased and sold, and which may be increased or diminished in quantity, has its natural and its market price."¹⁰³ Ricardo defined the natural price of labor in terms of subsistence: "The natural price of labour is that price which is necessary to enable the labourers, one with another, to subsist and to perpetuate their race, without either increase or diminution."¹⁰⁴ In other words, the natural wage rate, was determined by the cost of necessaries.¹⁰⁵

As was the case for other commodities, the market price of labor (wages) had a tendency to "conform" to its natural

103 Ibid., 93.

104 Ibid.

105 "The power of the labourer to support himself, and the family which may be necessary to keep up the number of labourers, does not depend on the quantity of money which he may receive for wages, but on the quantity of food, necessaries, and conveniences become essential to him from habit, which that money will purchase. The natural price of labour, therefore, depends on the price of the food, necessaries, and conveniences required for the support of the labourer and his family. With a rise in the price of food and necessaries, the natural price of the labour will rise; with the fall in their price, the natural price of labour will fall." Ibid.

price through the operation of supply and demand and the Malthusian principle of population.¹⁰⁶ Ricardo did acknowledge that in a growing economy, the market rate of wages could be maintained above the natural rate for an indefinite period of time. Ricardo made it clear, however, that any permanent rise in the wage rate depended entirely on a rise in the natural wage rate resulting from an increase in the cost of subsistence goods.

Ricardo was pessimistic about the long-run prospects for the working class. He assumed that population growth would exceed capital accumulation, thus driving wages down to their natural levels.¹⁰⁷ As society advanced, the natural wage rate also would rise due to the increasing difficulty of production. The ultimate result would be rising money wages with real wages continually forced down to their minimum subsistence levels. Thus, by extending the margin of cultivation to less productive parcels of land, both rents and money wages increased. This resulted in an increased share of the surplus going to landlords at the

¹⁰⁶ "The market price of labour is the price which is really paid for it, from the natural operation of the proportion of the supply to the demand; labour is dear when it is scarce, and cheap when it is plentiful. However much the market price of labour may deviate from its natural price, it has, like commodities, a tendency to conform to it." Ibid., 94.

¹⁰⁷ Ibid., 101-2.

expense of capitalists.¹⁰⁸ In Chapter XVI, "Taxes on Wages," Ricardo linked the analysis of taxation to his fundamental postulate that wages and profits were inversely related: "Taxes on wages will raise wages, and therefore will diminish the rate of profits of stock."¹⁰⁹ While the ultimate incidence of a wage tax was similar to a tax on necessaries, taxes on necessaries would raise prices but a wage tax would lower profits, leaving prices unchanged: "The only difference between a tax on necessaries, and a tax on wages is, that the former will necessarily be accompanied by a rise in the price of necessaries, but the latter will not; towards a tax on wages...neither the stockholder, the landlord, nor any other class but the employers of labour will contribute. A tax on wages is wholly a tax on profits."¹¹⁰

Despite the fundamental theoretical break with Adam Smith expressed in this passage, Ricardo spent the next several pages defending him against the criticisms of

¹⁰⁸ "The rise in the money value of rent is accompanied by an increased share of the produce; not only is landlord's money rent greater, but his corn rent also; he will have more corn, and each defined measure of that corn will exchange for a greater quantity of all other goods which have not been raised in value. The fate of the labourer will be less happy; he will receive more money wages, it is true, but his corn wages will be reduced; and not only his command of corn, but his general condition will be deteriorated, by his finding it more difficult to maintain the market rate of wages above their natural rate." Ibid.

¹⁰⁹ Ibid., 215.

¹¹⁰ Ibid.

Buchanan.¹¹¹ Ricardo reacted critically to Buchanan's assertion that wages were determined solely by the supply and demand for workers and the conclusion that wage taxes would have no effect on actual wages: "First, he denies that the money wages of labour are regulated by the price of provisions; and secondly, he denies that a tax on the wages of labour would raise the price of labour."¹¹²

Ricardo argued that neither natural wage rates nor the prices of provisions were determined by the forces of supply and demand. Commodity prices were high as a result of the high difficulty of production (expressed in high labor requirements). Thus, Ricardo argued that the appropriate analysis of taxation had to focus on the effects of taxes on a commodity's natural price, and criticized Buchanan for his focus on market prices:

Because a high price of provisions is sometimes occasioned by a deficient supply, Mr. Buchanan assumes it as certain indication of deficient supply. He attributes to one cause exclusively, that which may arise from many...The natural price of commodities, which always ultimately governs their market price, depends on the facility of production; but the quantity produced is not in proportion to that facility...Not only is high price compatible with an increased supply, but it rarely fails to accompany it.¹¹³

¹¹¹ "In this argument of Mr. Buchanan, there appears to me to be great mixture of truth and error." Ibid., 217.

¹¹² Ibid., 216.

¹¹³ Ibid., 271-8.

For Ricardo, taxes affected the natural prices of necessary commodities in a fashion similar to other changes in the cost of production: "If, then, in consequence of taxation, or of difficulty of production, the price of provisions be raised, and the quantity be not diminished, the money wages of labour will rise."¹¹⁴

Ricardo acknowledged that if capital did not immediately adjust following a tax-induced change in the structure of demand, then the prices of the taxed commodities would not immediately rise by the amount of the tax. Ricardo's primary concern, however, was with the stronger claim that taxes on wages would not affect the market rate of wages through alterations in the demand for labor. Ricardo assumed that the government employed workers with the tax revenue, and that therefore, total labor demand did not change.¹¹⁵ Given a constant level of demand (and supply), the market wage rate remained unaffected. Ricardo conceded that if the state spent the tax revenue outside of the country then the demand for labor would be diminished, but made it clear that if taxes acted to diminish labor demand, they did so by diminishing the quantity of accumulated capital and not by altering wages:

¹¹⁴ Ibid.

¹¹⁵ "Mr. Buchanan forgets that the fund raised by the tax, is employed by Government in maintaining labourers, unproductive indeed, but still labourers." Ibid., 220.

Taxes then, generally, as far as they impair the real capital of the country, diminish the demand for labour, and therefore it is a probable, but not a necessary, nor a peculiar consequence of a tax on wages, that though wages would rise, they would not rise by a sum precisely equal to the tax.¹¹⁶

Mark Blaug claims that this statement implies that Ricardo conceded that a wage tax could, by diminishing the demand for labor, lower real wages.¹¹⁷ While it is possible to draw such a conclusion from this isolated statement, Ricardo's qualification is not logically consistent with the overall theory presented in this chapter, namely, that workers could not bear any burden of taxation.

Ricardo's analysis of wage taxes was equivalent to Smith's only insofar as the tax was assumed to raise the price of the taxed commodity for consumers. Ricardo broke with Smith, however, when he observed that this fact was not sufficient to determine the distribution of the tax burden:

Adam Smith...has fully allowed that the effect of a tax on wages, would be to raise wages by a sum at least equal to the tax, and would be finally, if not immediately, paid by the employer of labour. Thus far we fully agree...we essentially differ in our view of the subsequent operation of such a tax.¹¹⁸

Adam Smith had argued that a wage tax would be paid for by farmers and, thus, ultimately out of rent paid to the

¹¹⁶ Ibid., 222.

¹¹⁷ "The thesis of chapter 9, that real wages cannot be taxed, is revised in chapter 16, 'Taxes on Wages.' Tax revenues spent by the government raised the demand for labor and hence money wages. Money wages rise by less than the tax, and therefore real wages fall." Blaug, Retrospect, 140.

¹¹⁸ Ricardo, Principles, 222.

landlords and by the "consumers" of manufactured commodities. Ricardo observed that if Smith's logic was accepted, manufacturers would benefit from wage taxes because they would be able to raise their prices by the amount of the tax, plus a profit on the amount advanced in taxes. Furthermore, unless the landlords consumed all of the manufactured commodities, it would be impossible for them to bear the entire tax. Given the assumption that workers could not bear any of the tax, Ricardo observed that Smith's theory implied that it was impossible for the sum of the tax burden to be borne by the three classes of society:

But if the labourers pay no part of the tax, and yet manufactured commodities rise in price, wages must rise, not only to compensate them for the tax, but for the increased price of manufactured necessaries, which, as far as it affects agricultural labour, will be a new cause for the fall of rent; and, as far as it affects manufacturing labour, for a further rise in the price of goods. This rise in the price of goods will again operate on wages, and the action and re-action first of wages on goods, and then of goods on wages, will be extended without any assignable limits. The arguments by which this theory is supported, lead to such absurd conclusions, that it may at once be seen that the principle is wholly indefensible.¹¹⁹

Ricardo again traced the flaw in Smith's logic back to his original error regarding rent: "The error of Adam Smith proceeds in the first place from supposing, that all taxes paid by the farmer must necessarily fall on the landlord, in the shape of a deduction from rent."¹²⁰ After repeating his

¹¹⁹ Ibid., 224-5.

¹²⁰ Ibid.

proposition that the price of raw produce was governed by capital employed on the rent-free parcel of land and therefore taxes could not come out of rent, Ricardo concluded that "either no remuneration will be made to the farmer for a tax on wages, or if made, it must be made by an addition to the price of raw produce."¹²¹ It was impossible, therefore, for the tax to be paid if the farmers and capitalists were able to raise the prices of the goods they sold to each other: "Any tax which shall have the effect of raising wages, will be paid by a diminution of profits, and, therefore...a tax on wages is in fact a tax on profits."¹²²

Throughout much of his discussion of taxation, Ricardo abstracted from the implications of the "exceptions" to his law of value. He did acknowledge that a tax on wages would, by raising money wages, affect the prices of commodities differently depending on the differing composition of labor and capital used in their production.¹²³ Thus, there is no evidence to support the argument made by Hollander that the

¹²¹ Ibid.

¹²² Ibid., 226.

¹²³ "Taxation can never be so equally applied, as to operate in the same proportion on the value of all commodities, and still to preserve them at the same relative value." Ibid., 239.

fixed exogenously determined wage assumption was not reconfirmed by the analysis of wage taxes.¹²⁴

Taxes on Profits

While Adam Smith had been concerned only with the forces which acted to equalize the rate of profit across industries, Ricardo's primary concern was with the factors which determined the level of profit in the economy: "[I]t remains for us to consider what is the cause of the permanent variations in the rate of profit, and the consequent permanent alterations in the rate of interest."¹²⁵ After "eliminating" rent, Ricardo divided the value of commodities into two portions: the profits of stock and the wages of labor. Ricardo again emphasized his central premise that anything (including taxation) which raised the general level of wages would necessarily cause profits to fall.

Ricardo's earlier analysis in which "corn" was assumed to be the only commodity consumed by the working class was broadened in the Principles to include all necessary commodities.¹²⁶ Ricardo again acknowledged that the market

¹²⁴ Hollander, 12-3.

¹²⁵ Ricardo, Principles, 110.

¹²⁶ "The effects produced on profits would have been the same, or nearly the same, if there had been any rise in the price of those other necessaries, besides food, on which the wages of labour are expended...whatever increases wages, necessarily reduces profits...for nothing can affect profits but a rise in wages; silks and velvets are not consumed by

price of a commodity could temporarily exceed its natural price. The rate of profit for the producers of that commodity would exceed the general rate of profit. In this situation, capital would adjust to restore an equalized rate of profit across industries.¹²⁷ Ricardo concluded Chapter VI, "On Profits," with the claim that the inverse relationship between wages and profits held true regardless of the nominal effects created by changes in the value of money: "[A] rise of wages would not raise the price of commodities, but would invariably lower profits; and secondly, that if the prices of all commodities could be raised, still the effect on profits would be the same; and that in fact the value of the medium only in which prices and profits are estimated would be lowered."¹²⁸

In Chapter XV, "Taxes on Profits," Ricardo repeated his earlier assertion that taxes on luxuries ultimately would be borne by the "consumers" of those commodities, while taxes on necessaries ultimately would come out of profits:

TAXES on those commodities, which are generally denominated luxuries, fall on those only who make use of them...But taxes on necessaries do not affect the consumers of necessaries, in proportion to the quantity that may be consumed by them, but often in a much higher proportion...Whatever raises the wages of labour, lowers the profits of stock; therefore

the labourer, and therefore cannot raise wages." Ibid., 118.

¹²⁷ "It is through the inequality of profits, that capital is moved from one employment to another." Ibid., 119.

¹²⁸ Ibid., 127.

every tax on any commodity consumed by the labourer, has a tendency to lower the rate of profits.¹²⁹

Ricardo assumed that taxes on necessaries could not fall on the working class, for a tax levied solely on the profits of producers of necessaries would, like any other partial profits tax, result in a rise in the prices of those taxed commodities. Individual capitalists would move their capital out of the industry if they were not able to raise their prices to earn the general rate of profit. Ricardo's primary focus was not on partial profits taxes, but on general taxes in proportion to the profits of all trades, where "every commodity would be raised in price."¹³⁰ At first glance, this statement would appear to contradict his earlier attack on Smith's position that such taxes would raise the general level of prices. But at this point, Ricardo raised the crucial question: In terms of what did prices rise? Ricardo set out to demonstrate that they could not rise in terms of value, even if nominal prices rose.

Ricardo addressed the problem by treating the monetary medium (gold) as a commodity whose value was determined by the quantity of labor required for its production, and proceeded by simultaneously examining two distinct cases. In the first case, the profits of the producer of money (gold) were assumed to be taxed along with the profits of

¹²⁹ Ibid., 205.

¹³⁰ Ibid.

all other trades. The resulting nominal changes in the value of money would have no effect on the relative values of commodities:

But if the mine, which supplied us with the standard of our money, were in this country, and the profits of the miner were in this country, and the profits of the miner were also taxed, the price of no commodity would rise, each man would give an equal proportion of his income, and every thing would be as before.¹³¹

This statement implies that capitalists contributed taxes in proportion to their profits. This result was then compared to the case in which the money commodity was not taxed. Ricardo's example was complicated by his attempt to integrate the material and value components into his theory of tax incidence:

If money be not taxed, and therefore be permitted to preserve its value, whilst every thing else is taxed, and is raised in value, the hatter, the farmer, and clothier, each employing the same capitals, and obtaining the same profits, will pay the same amount of tax. If the tax be 100, the hats, the cloth, and the corn, will each be increased in value 100. If the hatter gains by his hats 1100, instead of 1000, he will pay 100 to Government for the tax; and therefore will still have 1000 to lay out on goods for his own consumption. But as the cloth, corn, and all other commodities, will be raised in price from the same cause, he will not obtain more for his 1000 than he before obtained for 910, and thus will he contribute by his diminished expenditure to the exigencies of the State; he will, by the payment of the tax, have placed a portion of the produce of the land and labour of the country at the disposal of Government, instead of using that portion himself. If instead of expending his 1000, he adds it to his capital, he will find in the rise of wages, and in the increased cost of the raw material and machinery, that his

¹³¹ Ibid., 205-6.

saving of 1000 does not amount to more than a saving of 910 amounted to before.¹³²

In this passage, Ricardo revealed exactly what he meant by his critical question concerning tax-induced higher prices. He did not deny that nominal prices would rise following the imposition of a profits tax, but believed that they could not rise in terms of the measure of value (gold). If all real prices (values) did rise, as Smith had argued, no class would ever bear the burden of the tax. In other words, the prices received by capitalists for their goods could not rise in terms of gold (or labor) even though they might rise in a nominal monetary sense. Ricardo returned to the case where the money commodity was taxed and demonstrated that although nominal (money) prices and profits would remain constant, they would fall in real terms following the imposition of a tax.

Ricardo recognized that if the various exceptions to his law of value were taken into account in the case of untaxed gold, then as wages rose and profits fell, the distributional changes resulting from a profit tax would not be uniform. If the ratio of fixed to circulating capital was not uniform across industries, then a tax on profits would alter the relative prices of commodities:
"[C]onsequently a tax upon income, whilst money continued unaltered in value, would alter the relative prices and

¹³² Ibid.

value of commodities."¹³³ Although Ricardo was clearly aware that England did not possess any gold or silver mines and therefore could never impose taxes on the profits of this industry, he nonetheless understood the theoretical and practical nature of his argument. By arguing that an alteration in the value of money would not have an equal effect on all commodity prices, Ricardo believed it was possible to explain why the Bank-restriction in England during the early nineteenth century had not affected all prices equally.¹³⁴

Thus it is incorrect to argue, as does Hollander, that Ricardo abstracted from the exceptions to his law of value in his theoretical and practical writings on taxation.¹³⁵ Hollander is forced into this erroneous position by his desire to demonstrate that Ricardo's theory of distribution and incidence stood independently of his theory of value.

¹³³ Ibid., 208.

¹³⁴ "[I]n a country where prices are artificially raised by taxation, the abundance of money from an influx, or the exportation and consequent scarcity of it from foreign demand, will not operate in the same proportion on the prices of all commodities....Will not this principle account for the different effects, which it was remarked were produced on the prices of commodities, from the altered value of money during the Bank-restriction?" Ibid., 208-9.

¹³⁵ "Despite his preoccupation in the first chapter of the Principles with disturbances to the price structure upon a wage increase, it is a striking fact that Ricardo proceeded in the remainder of his work by avoiding the complication entirely. The knot was cut by the simple expedient of assuming identical factor proportions across the board." Hollander, 202.

In the case of taxes being imposed on all profits except those of capitalist farmers, Ricardo argued that the money prices of all commodities except raw produce would rise. The farmers would continue to sell their produce at the same prices as before the tax, and therefore would receive the same income. In other words, farmers would bear a burden of the tax only insofar as they were consumers of the non-agricultural taxed commodities. Rent would be unaffected and the tax would be borne only by landlords in proportion to their consumption of the taxed goods:

The landlord, too, would have the same corn, and the same money-rent as before, if all commodities rose in price, and money remained at the same value; and he would have the same corn, but a less money-rent, if all commodities remained at the same price: so that in either case, though his income were not directly taxed, he would indirectly contribute towards the money raised.¹³⁶

Ricardo compared the above case to the one where a profits tax was levied on all industries including agriculture. If the farmers' profits were taxed, then raw produce prices would rise in order to leave them with an equivalent post-tax money revenue. But because the farmers had to pay more money for all commodities consumed, their real post-tax income fell. Ricardo's discussion is somewhat contradictory, for he initially argues that landlords would benefit from a tax on the profits of their tenants:

His landlord, however, would be differently situated, he would be benefited by the tax on his

¹³⁶ Ricardo, Principles, 210.

tenant's profits, as he would be compensated for the additional price at which he would purchase his manufactured commodities, if they rose in price; and he would have the same money revenue, if in consequence of a rise in the value of money, commodities sold at their former price.¹³⁷

This passage is followed by a reference to the earlier distinction between the gross and net produce from land in which he had argued that a "tax on the profits of the farmer, is not a tax proportioned to the gross produce of the land, but to its net produce, after the payment of rent, wages, and all other charges."¹³⁸ Thus, while gross output of raw produce (and rent) varied with the fertility of the land, the rate of profit remained constant. Ricardo maintained that all farmers would earn the same rate of profit and therefore be taxed alike. He concluded that if corn prices and all other commodities rose, then money rents would rise in the same proportion: "A tax on the profits of stock always leaves corn rent unaltered, and therefore money rent varies with the price of corn."¹³⁹ If the value of money remained unaltered, landlords' money rents would rise. The landlords would have to pay more for their commodities and, consequently, "the landlord loses as much by the increased money price of the goods and corn on which his

¹³⁷ Ibid., 210-11.

¹³⁸ Ibid.

¹³⁹ Ibid., 211-2.

rent is expended, as he gains by the rise of his rent."¹⁴⁰

If the value of money increased as well, then after a tax on profits, the prices of all commodities would fall to their former levels and rents would be the same as before: "The landlord would receive the same money rent, and would obtain all the commodities on which it was expended at their former price; so that under all circumstances he would continue untaxed."¹⁴¹ Only if this statement is taken to mean that taxes on profits did not lower rents is it consistent with his earlier claim that landlords would bear a burden of the tax only as "consumers" of taxed commodities. Ricardo may have had in mind the strong case in which landlords were consumers of produced manufactured commodities only; if only farmers' profits were taxed, landlords would avoid bearing a share of the burden.

Ricardo also was forced to conclude that if the profits of all manufacturers except gold producers were taxed, then all prices would rise. Ricardo felt uneasy about this conclusion, and qualified it: "But as money, or the standard of money, is a commodity imported from abroad, the prices of all goods could not rise; for such an effect could not take place without an additional quantity of money, which could not be obtained in exchange for dear goods."¹⁴² But in a

140 Ibid.

141 Ibid.

142 Ibid., 213.

footnote, Ricardo reversed himself: "On further consideration, I doubt whether any more money would be required to circulate the same quantity of commodities, if their prices be raised by taxation, and not by difficulty of production."¹⁴³ Ricardo appeared to be unsure as to whether the conclusion that the general level of nominal prices rose from taxation was consistent with his theory of value and the particular treatment of the commodity gold as the monetary unit of analysis. Ricardo concluded the chapter, however, with a statement implying that he believed the conclusions were completely consistent with the theory of value and distribution derived in the earlier chapters:

It appears to me absolutely certain, that a well regulated tax on profits, would ultimately restore commodities both of home and foreign manufacture, to the same money price which they bore before the tax was imposed...As taxes on raw produce, tithes, taxes on wages, and on the necessaries of the labourer, will, by raising wages, lower profits."¹⁴⁴

Thus, Ricardo believed that the existence of taxes did not alter the fundamental laws which regulated the distribution of surplus among laborers, landlords and capitalists. Indeed, Ricardo's laws of wages, rent and profit provided the foundation for a theory of tax incidence that was logically superior to Adam Smith's.

143 Ibid., 213n.

144 Ibid., 214.

Taxation and Accumulation

Although Ricardo was able to provide a theory of the forces which influenced the level of profit, he lacked a determinant theory of the rate of economic surplus in the economy. Ricardo's scattered comments on taxation and capital accumulation were linked to his theory of distribution. Since Ricardo treated wages as a necessary input to the production process, it logically followed that economic surplus appeared only in the form of rent and profit.

Ricardo linked his functional theory of distribution and tax incidence with a theory of economic growth by assuming that landlords would spend their share of the surplus (rent) unproductively, and capitalists would devote their share to capital accumulation. Thus, the rate of capital accumulation depended on the distribution of surplus between landlords and capitalists. Ricardo's theory of taxation was developed out of a concern with how various taxes affected the distribution between these two classes. In other words, what concerned him was not the particular form of taxation imposed, but the ultimate effect on capital accumulation: "I cannot but think that, unless it presses unequally on that class which accumulates and saves, it will be of little importance whether the taxes be levied on profits, on agriculture, or on manufactured commodities."¹⁴⁵

¹⁴⁵ Ibid., 168.

Taxes could only affect the working class through the lowering of profits, which in turn had the potential of lowering the rate of capital accumulation and thus employment.

Ricardo simplified his analysis of public finance and accumulation by assuming that all of the funds going to the state were consumed unproductively. Thus, it was whether taxes were paid out of capitalist profit or out of landlord revenue destined for unproductive expenditure, which determined their ultimate effect on accumulation:

Capital may therefore be increased by an increased production, or by a diminished unproductive consumption. If the consumption of the government, when increased by the levy of additional taxes, be met either by an increased production, or by a diminished consumption on the part of the people, the taxes will fall upon revenue, and the national capital will remain unimpaired; but if there be no increased production or diminished unproductive consumption on the part of the people, the taxes will necessarily fall on capital, that is to say, they will impair the fund allotted to productive consumption.¹⁴⁶

If tax revenue came out of capital advanced to production and not out of unproductive expenditure, reproduction could not continue to occur at a constant or increasing scale. Ricardo believed that all taxes ultimately came at the expense of capital accumulation:

There are no taxes which have not a tendency to lessen the power to accumulate. All taxes must either fall on capital or revenue...if they fall on revenue, they must either lessen accumulation, or force the contributors to save the amount of the

¹⁴⁶ Ibid., 150-1.

tax, by making a corresponding diminution of their former unproductive consumption of the necessaries and luxuries of life.¹⁴⁷

It is unclear from Ricardo's discussion how taxes paid out of revenue could affect the rate of accumulation and growth. Ricardo seems to imply that the tax burden could be borne by workers through a reduced consumption of necessaries. He did not pursue the theoretical implications of this statement any further, and simply concluded with the observation that while taxes had the effect of transferring labor from productive to unproductive uses, they had not been carried so far as to actually reduce the capital stock of England.¹⁴⁸ It would not be until the appearance of Marx's Capital that the issue of capital accumulation would assume center stage in classical political economy.

Conclusion

Ricardo developed his theory of taxation in conjunction with his general theories of value, distribution and

¹⁴⁷ Ibid., 152.

¹⁴⁸ "A portion of the labour of the country which was before at the disposal of the contributor to the tax, is placed at the disposal of the State, and cannot therefore be employed productively. This portion may become so large, that sufficient surplus produce may not be left to stimulate the exertions of those who usually augment by their savings the capital of the State. Taxation has happily never yet in any free country been carried so far as constantly from year to year to diminish its capital. Such a state of taxation could not be long endured; or if endured, it would be constantly absorbing so much of the annual produce of the country as to occasion the most extensive scene of misery, famine, and depopulation." Ibid., 185.

accumulation. The centrality of the role of public finance theory in Ricardo's political economy is reflected by the amount of space devoted to taxation in his Principles and other economic writings. For Ricardo, political economy was useful only in so far as it directed governments to "right measures in taxation." Despite this fact, Ricardo's theory of taxation has generally been ignored by historians of economic thought. The analysis of Ricardo's extensive writings on taxation presented in this chapter lends support for the Marxian/Sraffian interpretation of Ricardo's place in the history of economic thought. In contrast to interpretations of Ricardo offered by Marshall and Hollander, Ricardo's public finance theories are shown here to be incommensurate with neoclassical price theory and the marginal productivity theory of distribution.

In his Principles, Ricardo demonstrated that the correction of Adam Smith's "original errors regarding value" was a necessary step in advancing a logically consistent theory of distribution and tax incidence. Ricardo's criticisms of Smith's theory of taxation reflect his overall rejection of the latter's theory of value and distribution. Only after rejecting Smith's adding-up theory of value and "competition of capitals" theory of profit could Ricardo derive a theory of incidence in which taxes could act to lower the general rate of profit.

Ricardo's theory of wages has been a focal point in the current debates in the history of economic thought literature. The textual evidence from Ricardo's work on taxation supports the interpretation that he treated wages as an exogenously determined parameter, rather than an endogenous variable determined by the forces of supply and demand. The latter approach is consistent with the "adding-up" theory of value of Smith and neoclassical economics.

The problem of how taxes affected the relative distributive shares of economic surplus accruing to capitalists in the form of profit and landlords in the form of rent formed a crucial element in Ricardo's theory of accumulation. Ricardo linked his functional theory of distribution and tax incidence with his theory of economic growth by assuming that capitalists devoted all of their profits to capital accumulation, while landlords devoted their entire rent share to luxury consumption. The issue of whether tax revenue comes at the expense of productive capitalist investment or luxury consumption remains an important question in classical political economy.

CHAPTER SIX

KARL MARX, PIERO SRAFFA AND THE REVIVAL OF THE CLASSICAL APPROACH TO THEORIES OF TAXATION

This chapter focuses on the various attempts to revive and extend the classical theory of taxation in years following the disintegration of Ricardian doctrine in the mid-nineteenth century. In both theory and method, each of these efforts can be said to derive from the works of Karl Marx. Marx never put forth any explicit or systematic theory of taxation; his references to the subject were scattered throughout his ubiquitous empirical and historical digressions, and in his critical comments on other economists' writings on public finance. Yet despite the seemingly incidental nature of Marx's treatment, it is possible to derive from it a coherent Marxist theory of taxation. This is accomplished by situating his comments in the context of his theories of history, value, distribution and accumulation.

The reproduction schemes developed by Marx in Volume II of Capital provide the analytical structures necessary to incorporate taxation into the corpus of his broader economic

theories.¹ The emphasis on Marx's reproduction schemes provides not only a backward linkage to the public finance writings of Francois Quesnay and the Physiocrats, but also a forward linkage to the writings of Piero Sraffa and the twentieth-century revival of classical political economy and theories of taxation.²

The implications of the writings of Marx and Sraffa for the revival of the classical theory of public finance generally have gone unacknowledged by modern political economists. Most Marxist theories of the state, for example, have focused on the state's social control functions and the role of expenditure, rather than on the generation of tax revenue and its effect on economic reproduction. The latter, however, is crucial to any economic or historical materialist theory of state economic policy.

In addition to the primary works of Marx and Sraffa, this chapter reviews the small body of literature on the theory of taxation by orthodox Marxists and neo-Ricardians. (Michal Kalecki and the works of the post-Keynesian school

¹ Karl Marx, Capital, Volume II, 1884, (New York: Vintage Books, 1981).

² Piero Sraffa, ed., The Works and Correspondence of David Ricardo, 10 vols., (Cambridge: Cambridge University Press, 1951); and Production of Commodities by Means of Commodities, (Cambridge: Cambridge University Press, 1960). Both of these works are considered here to be crucial elements in the modern revival of classical political economy.

will not be addressed in this study.³) Although these modern efforts are limited and preliminary in nature, they nevertheless constitute a coherent beginning to the revival of the classical approach to public finance.

Taxation and Historical Materialism

The public finance writings of the classical economists have been shown in earlier chapters to be integrally linked to the historical development of capitalism and the corresponding tax regimes and fiscal policies in existence at the time they were advanced. As such, Marx's theory of historical materialism has constituted the methodological foundation for the analysis of classical theories of taxation, value, distribution and accumulation.

The method of historical materialism allowed Marx to present an analysis of how structures of taxation differed between modes of production, and between the various stages of development within capitalism. From this perspective, Marx was able to present an explanation of the theoretical and ideological development of classical public finance theory as well.

³ See Michal Kalecki, "A Theory of Commodity, Income, and Capital Taxation," Economic Journal, (September 1937): 444-50; Nicholas Kaldor, "Alternative Theories of Distribution," Review of Economic Studies, 23, (1955): 83-100; John Eatwell, "On the Proposed Reform of Corporation Tax," Bulletin of the Oxford University Institute of Economics and Statistics, 33, (November 1971): 267-74; and A. Asimakopulos and J.B. Burbidge, "The Short-Period Incidence of Taxation," Economic Journal, (June 1974): 267-89.

In the opening sentence of A Contribution to the Critique of Political Economy, Marx revealed his methodological approach to the study of capitalism: "I examine the system of bourgeois economy in the following order: capital, landed property, wage-labour; the State, foreign trade, world market. The economic conditions of existence of the three great classes into which modern bourgeois society is divided are analyzed under the first three headings; the interconnection of the other three headings is self-evident."⁴ On the following page, Marx commented that the relationship between the economy and the fiscal practices of the state "originate in the material conditions of life."⁵

A century of debate over Marx's theory of historical materialism and the theory of the state reflects the fact that the "interconnections" between these categories is anything but "self-evident." It would be possible to conclude from reading only the Communist Manifesto that Marx and Engels viewed taxes and other fiscal actions of the state as simply part of the apparatus for "managing the common affairs of the whole bourgeoisie."⁶ It is clear from

⁴ Karl Marx, A Contribution to the Critique of Political Economy, 1859, Maurice Dobb, ed., (New York: International Publishers, 1970): 19.

⁵ Ibid., 20.

⁶ Karl Marx and Frederick Engels, Manifesto of the Communist Party, 1848, (Peking: Foreign Languages Press, 1972): 33.

his later writings, however, that Marx did not conceive of the state as a purely functional instrument of the ruling class; rather, he saw its actions and policies as influenced by the existing state of conflict between capitalists and workers. At any particular historical point in time, the tax structure reflects the struggle between these classes.⁷ As Ralph Miliband points out, a divergence of interests within the capitalist class also exists over the structure and incidence of taxes which prevents the state from acting simply as a reflection of the "unified" interests of capital.⁸

Marx did not confine the terms of the class struggle over state economic policy to the "political superstructure" of society. Instead, taxation and state expenditure were treated as economic categories to be analyzed within the sphere of production. Although the dominant mode of

⁷ James O'Connor captures Marx's perspective in the following statement: "The volume and composition of government expenditures and the distribution of the tax burden...reflect and are structurally determined by social and economic conflicts between classes and groups." James O'Connor, The Fiscal Crisis of the State, (New York: St. Martin's Press, 1973): 2.

⁸ "The state, for instance, needs revenue; and it cannot obtain all the revenue it needs from the subordinate classes. It must levy taxes upon capital and capitalists, and thereby drain off some of the surplus which accrues to them: hence the constant lamentations of businessmen, large and small, about the state's taxation policies, and their complaints that the state, in blind bureaucratic and greedy bungling, is forever undermining private enterprise." Ralph Miliband, Class Power & State Power, (London: Verso and New Left Books, 1983): 72.

production set the parameters for the structure and operation of the system of taxation, the actual financing of the state depended upon the specific set of historical and empirical circumstances at the time particular fiscal policies are imposed. Marx illustrated this method of analysis in Volume III of Capital:

The specific economic form, in which unpaid surplus-labour is pumped out of direct producers, determines the relationship of rulers and ruled, as it grows directly out of production itself and, in turn, reacts upon it as a determining element. ...It is always the direct relationship of the owners of the conditions of production to the direct producers--a relation always naturally corresponding to a definite stage in the development of the methods of labour and thereby its social productivity--which reveals the innermost secret, the hidden basis of the entire social structure, and with it the political form of the relation of sovereignty and dependence, in short, the corresponding specific form of the state. This does not prevent the same economic basis...due to innumerable different empirical circumstances, natural environment, racial relations, external historical influences, etc., from showing infinite variations and gradations in appearance, which can be ascertained only by analysis of the empirically given circumstances.⁹

This statement appears in the middle of lengthy discussion in which Marx compared taxes on rent under a system of private ownership of land with the Asiatic system of feudalism where the state owned the land, and thus acted as landlord. Under this mode of production, no distinction existed between taxes and ground-rent: "Should the direct producers not be confronted by a private landowner, but

⁹ Karl Marx, Capital, Volume III, 1894, (New York: International Publishers, 1967): 791.

rather, as in Asia, under direct subordination to a state which stands over them as their landlord and simultaneously as sovereign, then rent and taxes coincide, or rather, there exists no tax which differs from this form of ground-rent."¹⁰

In Volume I of Capital, Marx argued that the capitalist system of taxation was dependent not only upon the level of commodity production, but also upon the associated development of the monetary system. Attempts by non-capitalist states to levy monetary taxes in earlier historical periods, before money had become the "universal material of contracts," had produced disastrous economic consequences:

Rent, taxes and so on are transformed from payments in kind to payments in money. The great extent to which this transformation is conditioned by the total shape of the process of production is shown for example by the twice-repeated failure of the Roman Empire to levy all contributions in money. The unspeakable misery of the French agricultural population under Louis XIV...was due not only to the weight of the taxes but also to the conversion of taxes in kind into taxes in money.¹¹

Marx also argued that the systems of national debt and credit had been important instruments in the process of primitive accumulation, and tied them to national systems of taxation: "[T]he raising of taxation caused by the accumulation of debts contracted one after another compels

¹⁰ Ibid.

¹¹ Karl Marx, Capital, Volume I, 1867, (New York: Vintage Books, 1977): 238-9.

the government always to have recourse to new loans for new extraordinary expenses."¹² For Marx, the structure of the tax system was not primarily determined by the financial methods available for raising revenue, but rather by the level of development of the relations of production. Public debt and taxes were the "offshoots of the period of manufacture [which] swell to gigantic proportions during the period of infancy of large-scale industry."¹³

For Marx, taxes and state expenditure were not absolute and eternal economic categories, but historical ones in the same way as were surplus-value, profit, rent and wages. Central to any Marxist theory of taxation is the concept of class conflict and power; that conflict over taxes is a form of class struggle. The parameters of that struggle are determined by the material or economic form of production. Alterations in the methods of state financing can not change the capitalist relations of production: "No modification of the form of taxation can produce any important change in the relations of labour and capital."¹⁴

¹² Ibid., 921.

¹³ Ibid., 922.

¹⁴ Karl Marx, "Instructions for the Delegates of the Provisional General Council. The Different Questions," The International Courier, London, February 20, 1867; reprinted in Marx Engels Collected Works, Volume 20, (New York: International Publishers, 1984): 192

Public Finance and Marxist Political Economy

Given the revolutionary intent of Marx's economic writings, his observations on taxation and state expenditure did not play the same theoretical and ideological role as did the writings of the earlier classical economists.¹⁵ Marx's writings had little or no impact on reversing the declining role of political economists in the policy affairs of the state and the role of taxation in economic theory.¹⁶ In fact, throughout the latter part of the nineteenth and early twentieth century, existing systems of public finance were justified ideologically and administered by direct appeal to Adam Smith's maxims of taxation.

The debate among historians of economic thought over the relationship between Marx and classical political economy has intensified since the appearance of Sraffa's Commodities in 1960. Eric Roll's mid-century assessment that "Marx is now generally regarded as an economist who

¹⁵ "In the domain of Political Economy, free scientific inquiry meets not merely the same enemies as in all other domains. The peculiar nature of the material it deals with, summons as foes into the field of battle the most violent, mean and malignant passions of the human breast, the Furies of private interests." Karl Marx, "Preface to the First German Edition," Capital, Vol. I, (New York: International Publishers, 1967): 10.

¹⁶ "Marx's economic theory did not attract attention and come in for professional criticism before the next period, when a critical Marx literature developed." Joseph Schumpeter, History of Economic Analysis, (New York: Oxford University Press, 1954): 651n.

worked in the classical tradition,"¹⁷ is no longer accepted uncritically. Although Sraffa himself never elaborated on the relationship between his writings and those of Marx, he did suggest that he was adopting the classical method employed by both Ricardo and Marx.¹⁸ Maurice Dobb, who collaborated with Sraffa on his Works and Correspondence of David Ricardo, asserted that Sraffa's findings further confirmed the close analytical relationship between the two economists.¹⁹

Orthodox Marxists have rejected this interpretation and have chosen instead to emphasize Marx's critical comments on Ricardo. These historians of economic thought have tended to focus on the theory of value, claiming that Marx's theory of surplus-value is incommensurate with Ricardo's labor-embodied theory.²⁰ Marx's reformulation of the conception

¹⁷ Eric Roll, History of Economic Thought, 3rd ed., (Englewood Cliffs, N.J.: Prentice-Hall, 1953): 251.

¹⁸ Sraffa, "Appendix D: References to the Literature," Commodities, 95.

¹⁹ "[Marx] was in a direct line of descent from Ricardo, and that his understanding and interpretation of Ricardian doctrine has been substantially borne out, and certainly not weakened, by the new material embodied in Piero Sraffa's edition of Ricardo's Works and Correspondence." Maurice Dobb, Theories of Value Since Adam Smith, (Cambridge: Cambridge University Press, 1973): 142-3.

²⁰ "Marx's concept of value differs from Ricardo's even though the labour theory of value is often thought of as being associated with a Ricardo-Marx duo. For Ricardo, the concept of value is ahistorically defined by the labour-time embodied in commodities." Ben Fine, Theories of the Capitalist Economy, (New York: Holmes & Meier Publishers, 1982): 55.

of value did allow him to address the various "exceptions" Ricardo made to the labor theory of value. The nineteenth-century critics of Ricardo had focused on these theoretical problems in order to undermine the foundation of classical political economy. But it was Marx's treatment of surplus-value and the associated economic categories as historical concepts that represents his most fundamental departure from Ricardo.²¹

The perceived relationship between Marx and classical political economy obviously depends not only upon the interpretation of Marx, but also on the assessment of Ricardo's place in the history of economics. Historians who interpret Ricardo as falling into a tradition distinct from modern neoclassical economics generally minimize the differences between the two. Mark Blaug argues that the "method of reasoning [in Ricardo's Principles and Marx's Capital] is the same, and the entire analysis is steeped in Ricardian assumptions."²² By contrast, those historians who attempt to force Ricardo into a neoclassical mold tend to stress the differences between Ricardo and Marx. Samuel

²¹ "It is...self-evident that a theory which views modern capitalist production as a mere passing stage in the economic history of mankind, must make use of terms different from those habitual to writers who look upon that form of production as imperishable and final." Frederick Engels, "Preface to the English Edition," Capital, I, November 1886, 111.

²² Mark Blaug, Economic Theory in Retrospect, 3rd ed., (Cambridge: Cambridge University Press, 1978): 279.

Hollander, for example, approvingly cites Marshall's attempt to "sever all links between Marx and Ricardo."²³

Despite the differences in their respective theories of value, Marx's and Ricardo's analytical treatments of the source of taxes and their incidence were very similar.²⁴ Thus, the focus on their respective writings on public finance lends support to those historians of economic thought who argue that both Ricardo and Marx fall within one unified classical tradition. This is essentially the position adopted by Willie Semmler in his attempt to reconstruct a classical theory of taxation.²⁵ Semmler employs a Sraffian-type linear production model to present a Ricardian-Marxist analysis of taxation. Thus, Sraffa's model provides an analytical framework to determine the effects of taxes on prices, wages and profits, which is theoretically consistent with classical political economy.

²³ Samuel Hollander, The Economics of David Ricardo, (London: Heinemann Educational Books, 1979): 317n.

²⁴ By contrast, Nicholas Kaldor drew a sharp distinction between Marxist thought and classical economics in his study of alternative theories of distribution and taxation. See Nicholas Kaldor, "Alternative Theories of Distribution," Review of Economics Studies, Vol. XXIII, no. 2, 1955-56.

²⁵ "Ricardo and Marx do not differ significantly in their general statements on taxation--although we can see many modifications in Marx--we think that the following analysis, although more oriented toward Ricardo's method, represents to a great extent Marx's position also." Willie Semmler, "On the Classical Theory of Taxation. An Analysis of Tax Incidence in a Linear Production Model," Metroeconomica, Vol. XXXV, (February 1983): 130.

Taxation and the Theory of Surplus-Value

Classical political economy can be distinguished from neoclassical thought by its surplus approach to the theory of value. Classical political economy locates value, and by extension the source of tax revenue, in the sphere of production; neoclassical or supply and demand theories view value as synonymous with prices, and view taxes as deriving from circulation and exchange.

The problem faced by all of the classical economists was to integrate logically the conception of a material surplus generated in production with their theories of value. After praising Quesnay and the Tableau Economique in Volume II of Capital, Marx acknowledged the complexity of the problem: "The difficulty does not lie in analyzing the value of the social product itself. It arises when the value components of the social product are compared with its material components."²⁶

For Marx, the production, distribution and accumulation of economic surplus could not be explained independently of the theory of value: "[T]he labour theory was in fact evolved precisely in order to explain the manifest existence of surplus value in the real world."²⁷ Marx linked the theory of surplus-value to his materialist conception of

²⁶ Marx, Capital, II, 506.

²⁷ Ronald Meek, Studies in the Labor Theory of Value, 2nd ed., (New York: Monthly Review Press, 1956): 126.

history by defining each "mode of production" by the manner in which economic surplus was produced and extracted. Marx's "law of value" was meant to apply only to the capitalist mode of production--the system of wage labor in which labor-power itself had become a commodity.²⁸

Marx began his economic analysis in Volume I of Capital with a discussion of the determinants of a commodity's value. The value of a commodity was determined in production by the socially necessary labor-time embodied in its production.²⁹ Value was determined prior to the formation of exchange-values (prices) and was not derived from them. Marx stressed that value was created in production, independently of exchange: "Circulation, or the exchange of commodities, creates no value."³⁰

Nor could the existence of surplus-value in the form of profit be explained by commodities being sold above their values: "The formation of surplus-value, and therefore the transformation of money into capital, can consequently be explained neither by assuming that commodities are sold above their value, nor by assuming that they are bought at

²⁸ See John Weeks, Capital and Exploitation, (Princeton, N.J.: Princeton University Press, 1981).

²⁹ "Socially necessary labour-time is the labour-time required to produce any use-value under the conditions of production normal for a given society and with the average degree of skill and intensity of labour prevalent in that society." Marx, Capital, I, 129.

³⁰ Ibid., 226.

less than their value."³¹ Marx criticized economists who attempted to explain surplus-value (profit) as deriving from exchange for abstracting from the very essence of capitalism--the system of wage labor.³² In a similar fashion, neoclassical theorists can be criticized for their theory that tax revenue has its origin in a nominal rise in prices resulting from the imposition of a tax.

The law of surplus-value also was employed to explain the process by which surplus produced in the capitalist mode of production manifested itself in the form of capitalist profit. Capitalists derived surplus-value from the difference between the value of capital advanced and the value of the produced commodities.³³ Marx gave this tautology explanatory significance by analyzing the constituent elements of capital--by drawing the distinction between labor and labor-power.³⁴ Labor-power is the

³¹ Ibid., 263.

³² "The consistent upholders of the mistaken theory that surplus-value has its origin in a nominal rise of prices or in the privilege which the seller has of selling too dear assume therefore that there exists a class of buyers who do not sell, i.e., a class of consumers who do not produce." Ibid., 264.

³³ "The surplus-value generated in the production process by C, the capital advanced, i.e. the valorization of the value of the capital C, presents itself to us first as the amount by which the value of the product exceeds the value of its constituent elements." Ibid., 320.

³⁴ "Marx's distinction between labour and labour power enabled him to show how, with no unfair exchange, labour power could be sold at its value and surplus value arise in production." Susan Himmelweit, "Surplus Value," in A

"capacity to do useful work which adds value to commodities ...that workers sell to capitalists for a money wage," while labor is "the actual exercise of human productive powers to alter the use value of, and add value to, commodities."³⁵

The capital advanced in production included the value of constant capital, the means of production which transfers value during the production process; and the value of variable capital, the value of the workers' labor-power. The value of labor-power is determined by the value of the commodities required for its reproduction.

The difference between the value added to commodities by laborers and the value capitalists pay for their labor-power Marx defined as surplus-value. Thus, labor-power is the unique commodity because it alone can create value. The separation of workers from the means of production is the historical precondition for capitalists to have the power to force wage-laborers to work longer than is required to produce their means of subsistence. Marx defined the rate of surplus-value as the ratio of surplus-value produced over the value of variable capital advanced in production (s/v). Expressed in terms of labor-time, (s) represents that portion of the working period that the laborer works for the capitalist, and (v) that part the worker produces the value

Dictionary of Marxist Thought, Tom Bottomore, ed., (Cambridge: Harvard University Press, 1983): 473.

³⁵ Duncan Foley, "Labour Power," in A Dictionary of Marxist Thought, 265.

of commodities required for his/her own reproduction.³⁶ The rate of exploitation is distinct from the rate of profit, which is equal to surplus-value over the total value of constant and variable capital advanced in production.

Surplus-value represents the unique source of tax revenue available to the capitalist state. The share of surplus-value accruing to the state in the form of tax revenue is not derived from the augmentation of prices resulting from the imposition of taxes. A Marxist theory of taxation must explain the origin of taxes under a system of production in which commodities are bought and sold at their values (abstracting, of course, from the necessary deviation of prices from their values due to differing organic compositions of capital). For Marx, taxes did not affect the quantity of surplus-value generated in production, only the distribution of that surplus-value between capitalists and the state. In his criticism of J.R. McCulloch's defense of Ricardo, Marx argued that taxes did not affect the relationship between surplus-value and the value of labor-power:

MacCulloch...says that a rise in surplus-value which is not accompanied by a fall in the value of labor-power can occur as a result of the abolition of taxes formerly payable by the capitalist. But the abolition of such taxes makes no change whatever in the quantity of surplus-value extorted by the

³⁶ "The rate of surplus-value is therefore an exact expression for the degree of exploitation of labour-power by capital, or of the worker by the capitalist." Marx, Capital, I, 326.

capitalist at first hand from the worker. It only alters the proportion in which that surplus-value is divided between the capitalist himself and third persons. It therefore produces no change whatsoever in the relation between surplus-value and the value of labour-power.³⁷

In his discarded chapter to Volume I of Capital, "Results of the Immediate Process of Production,"³⁸ Marx discussed the theoretical relationships between taxation and surplus-value, prices, unproductive labor and state expenditure. Marx argued that even though state expenditure was unproductive, the labor of some types of state workers was connected to the production process and therefore was included in the price of the produced commodity. In this situation, taxes, or "the price for government services," appeared to enter the circuit of private productive capital. Marx, however, rejected such a formulation of taxes and state expenditure:

But taxes belong to the faux frais de production and as far as capitalist production is concerned they are utterly adventitious and anything but a necessary, intrinsic phenomenon resulting from it. If, for example, all indirect taxes are converted into direct ones, the taxes will be paid now as before, but they will cease to be capital investment and will instead be the disbursement of revenue. The fact that this metamorphosis is possible shows its superficial, external and incidental nature as far as it touches the capitalist process of production.³⁹

³⁷ Ibid., 658n.

³⁸ Karl Marx, "Appendix: Results of the Immediate Process of Production," Capital, I, 948-1084.

³⁹ Ibid., 1043.

Although indirect taxes were treated as part of the capital advanced in production, they did not exchange against productive labor in the circuit of capital, and therefore, did not affect the production of surplus-value. Thus, Marx concluded that all taxes should simply be treated as if they were deducted directly from the surplus-value already realized by private capitalists.

Marx did not pursue this discussion any further in Volume I, and simply assumed that the false prices of production created by taxes did not alter the operation of the law of value. Marx's dismissal of taxes as superficial, external, and incidental to the capitalist process of production is unsatisfactory. Marx believed that when he had demonstrated that taxes could not create surplus-value, he had thereby shown that they could not interfere with the law of value or distribution. As Ricardo had demonstrated earlier, taxes did affect relative prices and the distribution of surplus between classes. Similarly, Sraffa demonstrated that changes in distribution (and taxes) will alter relative prices of basic commodities.

Ernest Mandel has suggested that Marx originally intended this chapter to be "a summary of Volume I and...a bridge between Volumes 1 and 2,"⁴⁰ an assessment which certainly applies to Marx's discussion of taxes and unproductive labor. For in order to treat taxation and

⁴⁰ Ernest Mandel, ed., Capital, I, 944.

state expenditure systematically, Marx had to develop further the distinction between the production and circulation of surplus-value. Marx set out to accomplish this task in his analysis of the circuits of capital and the reproduction schemes of Volume II.

Marx distinguished between simple reproduction and expanded reproduction in the final section of Volume II. Simple reproduction did not refer to a system in which no economic surplus is produced, but rather to one in which all of the produced surplus was consumed unproductively (exchanged against revenue as opposed to capital) by the "collective capitalist." All of the constant capital used up in production is identically replaced, and workers are assumed to spend all of their wages on consumption goods.

By contrast, expanded reproduction refers to a system where accumulation occurs, where part or all of the surplus-value is used to purchase additional capital in order to increase the scale of production in the next period. Although Marx made it clear in Volume III that technological change was integrally connected to the process of accumulation, he abstracted from such changes throughout Volume II. The analysis in Volume II is carried out at the aggregate level for the economy as a whole. Marx divided the total production process into two major departments:

I. Means of production: commodities that possess a form in which they enter productive consumption, or at least can enter this.

II. Means of consumption: commodities that possess a form in which they enter the individual consumption of the capitalist and working classes.⁴¹

The means of consumption in turn were divided into necessary wage goods and luxuries. The capital advanced in each of the two departments included constant and variable capital. Along with surplus-value, these components account for the total value produced in the economy.⁴² Adopting the notation employed by Paul Sweezy, Marx's scheme of simple reproduction can be presented in simple mathematical form.⁴³ Total production is represented by the following equations:

$$\text{I. } C_1 + V_1 + S_1 = Y_1$$

$$\text{II. } C_2 + V_2 + S_2 = Y_2 ,$$

where C_1 and C_2 represent the value of constant capital; V_1 and V_2 the variable capital; S_1 and S_2 the surplus-value; and Y_1 and Y_2 the product output of Departments I and II respectively. The conditions of simple reproduction consist of the requirements that total constant capital ($C_1 + C_2$)

⁴¹ Marx, Capital, II, 471.

⁴² "The value of the total annual product created in each of these two departments with the aid of this capital breaks down into a component that represents the constant capital c consumed in its production, only its value being transferred to the product, and the portion of value that is added by the overall annual labour. This last breaks down again into the replacement of the variable capital v advanced and the excess over it that forms the surplus-value s . Just as with the value of any individual commodity, so that the total annual product of each department also breaks down into $c + v + s$." Ibid., 472.

⁴³ Paul M. Sweezy, The Theory of Capitalist Development, (New York: Modern Reader Paperbacks, 1942).

used up be equal to the output of Department 1 ($C_1 + V_1 + S_1$); and the total consumption of both capitalists and workers ($V_1 + S_1 + V_2 + S_2$) be equal to the output of Department II ($C_2 + V_2 + S_2$). As Marx pointed out, these two requirements can be reduced to a single equation, namely, $(C_2 = V_1 + S_1)$.⁴⁴

In the final chapter of Volume II, Marx turned his attention to accumulation and reproduction on an expanded scale. He again assumed that workers spent all of their wages on consumption goods. For there to be expanded reproduction, capitalists must devote a share of the economic surplus to the purchase of additional means of production and labor-power (beyond the mere replacement of constant and variable capital used up in the current period). Marx believed that the drive and necessity to accumulate was the motivating factor of capitalist behavior, and this scheme thus represented a more realistic depiction of capitalism.⁴⁵

⁴⁴ "The result of all this is that, in the case of simple reproduction, the value components $v + s$ of the commodity capital in department one (and therefore a corresponding proportionate part of department I's total commodity product) must be equal to the constant capital Ic similarly precipitated out by department II as a proportionate part of its total commodity product; in other words, $I(v+s) = Ic$." Marx, Capital, II, 478.

⁴⁵ "[I]t was presupposed in our presentation of simple reproduction that the entire surplus-value in departments I and II was spent as revenue, and another portion transformed into capital. Only with this precondition does real accumulation take place. But the idea that accumulation is achieved at the expense of consumption--considered in this

Marx's scheme of expanded reproduction can be represented by the following two equations:

$$\text{I. } C_1 + V_1 + S_{c1} + S_{\alpha c1} + S_{av1} + S_{ac1} = Y_1$$

$$\text{II. } C_2 + V_2 + S_{c2} + S_{\alpha c2} + S_{av2} + S_{ac2} = Y_2 ,$$

where S_{c1} and S_{c2} represent capitalist consumption equal to that of the current production period; $S_{\alpha c1}$ and $S_{\alpha c2}$ the increased consumption by capitalists; S_{av1} and S_{av2} the additional variable capital advanced in the succeeding production period; and S_{ac1} and S_{ac2} the addition to constant capital.

Following Marx, Sweezy derives the equilibrium condition for expanded reproduction by "equating all of the items which represent a demand for constant capital to the total output of constant capital, and all the items which represent a demand for consumption goods to the total output of consumption goods."⁴⁶ The resulting two equations are reduced to a single one representing the equilibrium condition of expanded reproduction:

$$C_2 + S_{ac2} = V_1 + S_{c1} + S_{\alpha c1} + S_{av1}$$

Stated in non-mathematical terms, the equilibrium condition requires that the augmented constant capital in Department 2, be equal to the augmented variable capital in

general way--is an illusion that contradicts the essence of capitalist production, in as much as it assumes that the purpose and driving motive of this is consumption, and not the grabbing of surplus-value and its capitalization, i.e. accumulation." *Ibid.*, 579.

⁴⁶ Sweezy, 164.

Department 1 plus the total consumption of Department 1 capitalists.

Taxes and state expenditure can easily be incorporated into this analytical structure of the production and circulation of surplus-value. Other than to remind his readers that taxes and state consumption came at the expense of surplus-value, Marx himself provides very little guidance. He simply asserts that the value of capital which is channeled through tax collectors could "be omitted in considering the fundamental form" of reproduction.⁴⁷ After the production process was completed and surplus-value realized by capitalists, a share of that surplus-value was assumed to be transferred to the state through the system of taxation where it was consumed unproductively and thereby eliminated from circulation.

As shall be discussed below in the section on tax incidence, Marx's assumption that total surplus-value exists initially in the hands of industrial capitalists is not consistently maintained in his discussion of indirect taxes. In fact, because Marx abstracted from prices in Volume II, his ability to treat taxation within the reproduction schemes was seriously diminished. Despite the theoretical limitations of Marx's schemes, they can be used to address many of the fundamental classical questions by extending them to include taxes and state expenditure and recasting

⁴⁷ Marx, Capital, II, 533.

them into matrix algebra notation. The matrix notation employed by Vivian Walsh and Harvey Gram is adopted here.⁴⁸

The basic classical/Marxian concepts of economic surplus and taxation are illustrated through the construction of a simple one-sector general equilibrium model. The parameter representing the technology coefficient for producing the single commodity is written as A_{ij} , where A_{ij} signifies the quantity of input i required to produce one unit of output j . The "viability condition" of this single commodity system is simply:

$$Y_w - A_{ww}Y_w \geq 0 \quad \text{or} \quad 1 - A_{ww} \geq 0 ,$$

where Y_w is the total output of the commodity (w), and $A_{ww}Y_w$ measures the input of (w) required in the production of Y_w units of (w). A capacity to generate a material surplus is a prerequisite for the existence and maintenance of the state and other social institutions outside the sphere of production. If the state does not produce the commodity, then taxes and state consumption must be limited to the surplus produced in the private sector in order for the economic system to be maintained. With the introduction of taxes and the state, the viability condition becomes:

$$Y_w - A_{ww}Y_w - t_w Y_w \geq 0 \quad \text{or} \quad 1 - A_{ww} - t_w \geq 0 ,$$

where t_w is the tax on the commodity output. For the system to be reproduced, the tax must be less than or equal to the

⁴⁸ See Vivian Walsh and Harvey Gram, Classical and Neoclassical Theories of General Equilibrium, (New York: Oxford University Press, 1980): 102-15.

rate of surplus output. If the tax exceeds surplus output, the capital stock is being depleted, and output in the following period will therefore be reduced.

For accumulation to occur, a share of the economic surplus formerly devoted to private and state consumption under simple reproduction must be allocated to increasing inputs into production. The trade-off between accumulation and consumption of surplus can be treated formally by introducing into the equation the rate of accumulation (g), and a fraction of gross output consumed (δ). Assuming that the state consumes all of its tax revenue, then the fraction of output consumed by the state can be represented as (t). Total gross output consumed is equal to (t), plus that fraction of output consumed privately (δw). Thus, the above equation becomes the following:

$$A_{ww}Y_w \leq Y_w - \delta w Y_w - t Y_w = (1 - \delta w - t) Y_w$$

Economic growth can be explicitly considered by converting this inequality into an equality. Multiplying the left-hand side of the equation (the stock of inputs) by the rate of growth (g), and adding the result to the stock itself, the equation becomes:

$$A_{ww}Y_w + (g)(A_{ww}Y_w) = Y_w - \delta w Y_w - t Y_w$$

or

$$A_{ww}Y_w(1 + g) = (1 - \delta w - t) Y_w$$

or

$$A_{ww}Y_w(1 + R) = Y_w, \text{ where } (1 + R) = \frac{(1 + g)}{(1 - \delta w - t)}$$

The rate of growth is thus equal to the following ratio:

$$g = (1 + R)(1 - \delta w - t)$$

The term R is equal to the rate of economic surplus, or the ratio of net output of commodity (w) to the stock of (w). It also represents the maximum rate of growth, and is independent of the allocation of the surplus between consumption and accumulation:

$$R = \frac{Y_w - A_{ww}Y_w}{A_{ww}Y_w} = (1/A_{ww}) - 1$$

If total private and state consumption is zero, then the rate of surplus (R) is equal to the rate of profit and growth. The difference between the rate of surplus and the rate of growth measures the surplus consumed by capitalists and the state.

The results illustrated by this one-sector model can be applied easily to Marx's schemes of reproduction. Vivian Walsh and Harvey Gram argue that, given Marx's Volume II assumption of constant and equal compositions of capital in Departments 1 and 2 ($C_1/V_1 = C_2/V_2$), his value equations can be expressed as quantity equations.⁴⁹ Thus, the equations for the production of the means of production and articles of consumption are the following:

$$\text{I. } A_{11}Y_1 + A_{12}Y_2 = Y_1$$

$$\text{II. } A_{21}Y_1 + A_{22}Y_2 = (1 - \delta_2)Y_2$$

⁴⁹ Walsh and Gram, 112-3.

Under the assumption of simple reproduction, a surplus product is produced in Department II but not in Department I. With no accumulation, $(\delta_2 Y_2)$ is the proportion of total Department II output devoted to luxury consumption.

Walsh and Gram proceed by formally dividing the production of Department II goods into necessary articles of consumption (Y_2) and luxury articles of consumption (Y_X). If the production of (Y_X) requires inputs of both means of production and necessary articles of consumption, then a share of Department II surplus must be devoted to the production of capital goods:

$$\text{I. } A_{11}Y_1 + A_{12}Y_2 + A_{1X}Y_X = Y_1$$

$$\text{II. } A_{21}Y_1 + A_{22}Y_2 + A_{2X}Y_X = (1 - \delta_2)Y_2$$

These equations are extended to represent Marx's schemes of expanded reproduction by introducing the rate of accumulation and economic growth (g). For growth to occur, the share of the economic surplus devoted to luxury goods consumption must be reduced, and the share allocated to means of production and necessaries increased. Given equivalent growth rates between departments, the equations for expanded reproduction become:

$$\text{I. } (A_{11}Y_1 + A_{12}Y_2 + A_{1X}Y_X)(1 + g) = Y_1$$

$$\text{II. } (A_{21}Y_1 + A_{22}Y_2 + A_{2X}Y_X)(1 + g) = (1 - \delta_2)Y_2$$

If luxury consumption is zero, the rate of accumulation will be equal to the rate of production of economic surplus. Taxation and state expenditure can be easily introduced into

this scheme of expanded reproduction. Following Marx, it is assumed that the state does not engage in production, but only expropriates a share of the surplus through taxation and then expends it on non-means of production. Thus, the state is treated as simply a consumer of luxury commodities, and the rate of economic surplus is independent of taxes and state expenditure. The equations of the expanded reproduction scheme are now expressed by the following:

$$\text{I. } (A_{11}Y_1 + A_{12}Y_2 + A_{1X}Y_X)(1 + g) = Y_1$$

$$\text{II. } (A_{21}Y_1 + A_{22}Y_2 + A_{2X}Y_X)(1 + g) = (1 - \delta_{2p} - \delta_{2t})Y_2,$$

where (δ_{2p}) is private capitalist consumption of luxury goods, and (δ_{2t}) is state consumption of luxury goods, which is assumed to be equal to total tax revenue. It is not possible to determine from the above equations whether taxes and state consumption (δ_{2t}) come at the expense of capitalist luxury consumption (δ_{2p}) or economic growth and accumulation (g) .

Additional theoretical and empirical investigation is required to address the classical question of how taxes affect the allocation of surplus between accumulation and consumption. Under the assumption that capitalists reinvested their entire share of surplus (which Marx made throughout much of his analysis), taxes and state consumption would come at the expense of capital accumulation. If this classical assumption is relaxed, then it is possible to consider the theoretical possibility that

profit taxes simply reduce capitalist unproductive consumption and therefore do not act to reduce capital accumulation. Similarly, the failure of tax reductions to stimulate investment and growth can be explained by the resulting increase in capitalist luxury consumption.

Distribution and Tax Incidence

As was the case for the theory of value and the source of taxation, Marx's comments on the distribution of the tax burden are scarce. Thus, a Marxist theory of tax incidence has to be reconstructed from his critical comments on Ricardo and the other classical economists, and interpolated from his broader theory of distribution. Marx argued that the relations of distribution corresponded to the historical conditions of production. In other words, distribution under the capitalist mode of production assumed an historically specific form.⁵⁰

In keeping with the classical tradition, Marx's analysis of distribution was based on class: "The owners merely of labour-power, of capital, and landowners, whose

⁵⁰ "The so-called distribution relations, then, correspond to and arise from historically determined specific social forms of the process of production and mutual relations entered into by men in the reproduction process of human life. The historical character of these distribution relations is the historical character of production relations, of which they express merely one aspect. Capitalist distribution differs from those forms of distribution which arise from other modes of production, and every form of distribution disappears with the specific form of production from which it is descended and to which it corresponds." Marx, Capital, III, 883.

respective sources of income are wages, profit and ground rent, in other words, wage-laborers, capitalists and landowners, constitute then three big classes of modern society based upon the capitalist mode of production."⁵¹ Marx was unique in that he stressed the historical nature of wages, profits and rent as economic categories. Marx criticized the vulgar economists and their use of the "trinity formula" for assuming that each of the three major forms of income (wages, profits, and rent) all were determined in the same ahistorical way by the forces of supply and demand.⁵²

Throughout his analysis of capitalist distribution relations in Volume III of Capital, Marx abstracted from the existence of taxes and state expenditure. In his earlier analysis of tax incidence in Volume II, Marx maintained the assumption that the imposition of taxes involved simply the further division of the surplus-value originally in the hands of industrial capitalists.⁵³ In other words, the government's claim on surplus-value is treated equivalently to the claims of landowners and finance capitalists.

⁵¹ Ibid., 885.

⁵² Ibid., 814.

⁵³ "The division of surplus-value--which must always exist initially in the hands of the industrial capitalist--into different categories, the bearers of which appear alongside the industrial capitalist as the landlord (for ground-rent), the money-lender (for interest), etc. as well as government and its officials, rentiers, etc." Marx, Capital, II, 497.

Despite a general absence of a theory of tax incidence, a Marxist theory of tax incidence can be derived from Marx's overall discussion of the production and circulation of surplus-value because he linked the theory of distribution to the theory of value.⁵⁴ In Volume I of Capital, Marx argued that the "sum of the values in circulation can clearly not be augmented by any change in their distribution."⁵⁵

In Volume III, Marx built his theory of distribution around the concepts of exploitation and the rate of surplus-value. Similarly, a Marxist theory of tax incidence can be built around the same theoretical concepts employed throughout Marx's economic writings. The following analysis traces the impact of taxes on the distribution of surplus between rent, profit and wages.

Taxes and the Theory of Rent

Marx's most detailed analysis of rent appears in Volume III of Capital, Part VI, "Transformation of Surplus-Profit into Ground-Rent." As the title indicates, the source of rent was assumed to be capitalist profit. Like Ricardo, Marx "got rid of rent" and it played no role in the

⁵⁴ "To Marx, then, the task of showing how relations of production 'determine the [forms of] consumption, distribution, exchange' reduces itself, in its essentials, to the task of showing 'how the law of value operates' as commodity production develops." Meek, Studies, 154.

⁵⁵ Marx, Capital, I, 265.

determination of value (or prices), nor did it affect wages. Thus, although Marx criticized Ricardo's theory of rent for being ahistorical in its emphasis on fertility differentials of land, the analytical role played by rent in his theories of value, distribution and accumulation was essentially equivalent to its role in Ricardo's system.⁵⁶ Similarly, the implications of Marx's deviations from Ricardo on rent for the theory of tax incidence are minimal.

While his discussion of capitalist ground-rent in Volume III included an historical digression into rent taxes under a feudal mode of production, Marx did not treat the incidence of taxes on rent in a capitalist economy. Marx emphasized the distributional relationship between workers and capitalists, while relegating landlords to secondary theoretical importance.⁵⁷ It appears that Marx accepted Ricardo's theory of land taxes, i.e., that a tax on rent could not be shifted, and was borne by the landlords out of their claims on surplus-value.

⁵⁶ For a differing perspective, see Ben Fine, "Ricardo and Marx on the Formation of Rent," in Capitalist Economy, 63-75.

⁵⁷ "Assuming the capitalist mode of production, then the capitalist is not only a necessary functionary, but the dominating functionary in production. The landowner, on the other hand, is quite superfluous in this mode of production. Its only requirement is that land should not be common property, that it should confront the working class as a condition of production, not belonging to it, and the purpose is completely fulfilled if it becomes state-property, i.e., if the state draws the rent." Karl Marx, Theories of Surplus-Value, Volume II, (Moscow: Progress Publishers, 1968): 44.

Taxes and the Theory of Capitalist Profit

Marx criticized Adam Smith and the vulgar economists for believing that a "competition of capitals" theory of profit equalization was a sufficient substitute for a theory of the rate of profit.⁵⁸ Marx also observed that, while Ricardo's theory of distribution allowed for the analysis of how wages and taxes affected the level of profit, it too lacked a theory of an absolute level of profits. Implicit in much of Ricardo's discussion of distribution was the idea that profits were derived from the unequal exchange of labor for wages. For Marx, profit had to be explained on the basis of equal exchange, and this was meant to apply to labor as well.⁵⁹ His distinction between labor and labor-power was crucial to this explanation.

Marx drew a formal distinction between the rate of surplus-value (s/v) and the rate of profit ($s/c+v$). While the maximum rate of profit was set by conditions of production, its actual level was determined by the outcome of the conflict and struggle between workers and

⁵⁸ "The competition is sure to equalise the different rates of profit in different trades, or reduce them to one average level, but it can never determine the level itself, or the general rate of profit." Marx, "Value, Price and Profit," 1865, reprinted in Marx-Engels Collected Works, Volume 20, (New York: International Publishers, 1985): 119.

⁵⁹ "To explain, therefore, the general nature of profits, you must start from the theorem that, on an average, commodities are sold at their real values, that is, in proportion to the quantity of labour realised in them. If you cannot explain profit upon this supposition, you cannot explain it at all." Ibid., 127.

capitalists.⁶⁰ Marx accepted Ricardo's fundamental notion that profits and wages were inversely related.⁶¹

In the Volume II of his Theories of Surplus-Value, Marx critically discussed Chapter XV, "Taxes on Profits," of Ricardo's Principles. Marx shared Ricardo's assessment that taxes on necessary commodities would be borne by capitalists. Marx also argued that a tax on any necessary input to production would be borne by capitalists in the form of lower profits:

Taxes on consumers are at the same time taxes on producers, in so far as the object taxed enters not only into individual consumption but also into industrial consumption, or only into the latter. This does not, however, apply only to the necessaries consumed by workmen. It applies to all materials industrially consumed by the capitalist. Every tax of this kind reduces the rate of profit, because it raises the value of the constant capital in relation to the variable.⁶²

In the final sentence of this statement, Marx argues that taxes could alter the value of constant capital relative to variable capital. He did not elaborate on how

⁶⁰ "The maximum of profit is...limited by the physical minimum of wages and the physical maximum of the working day. It is that between the two limits of this maximum rate of profit an immense scale of variations is possible. The fixation of its actual degree is only settled by the continuous struggle between capital and labor...The matter resolves itself into a question of the respective powers of the combatants." Ibid., 145-6.

⁶¹ "The general rise in the rate of wages would, therefore, after a temporary disturbance of market prices, only result in a general fall of the rate of profit without any permanent change in the prices of commodities." Ibid., 108.

⁶² Marx, Theories, II, 385.

such a tax could alter the relation between total capital advanced ($c + v$) and surplus-value (and thus profit). A tax on necessary inputs adds to the cost of production (the price of capital) and therefore will lower profits.

In Volume II of Capital, Marx had referred to the increased cost resulting from a tax on inputs as an incidental cost, or faux frais de production. He dismissed any difference between such a tax and a general profits tax as superficial, by assuming that no shifting of a profits tax would take place. It could be treated therefore as a simple deduction from surplus-value. It made no difference to the operation of the law of value whether capitalists paid the tax on inputs prior to production or paid a profits tax out of surplus-value realized after the process of production and sale of the commodities was completed. It is not clear from Marx's statements whether he believed taxes affected values or just prices of production.

Marx continued his discussion of Ricardo's theory of taxes on profit by asserting that capitalists could not shift a tax on commodity inputs away from profits by raising prices. Such a tax would raise the price of capital by the amount of the tax, but leave commodity prices unaffected:

What matters is only the excess of this price over the price of the capital advanced. If he wanted to raise [the price of] the total product, not only by [the amount necessary to cover the increase in] the price...but to such an extent that the same quantity ...would yield him the same profit as before, then the demand--which is already falling as a result of the rising price of the raw material--would fall

still further because of the artificial rise due to the higher profit. Although the average rate of profit is given, it is not possible in such cases to raise the price in this way.⁶³

In the context of his discussion of taxes and their effects on profits, Marx again criticized Ricardo for his failure to recognize that prices had to diverge from their values if an equalized rate of profit was to be established across industries with differing organic compositions of capital.⁶⁴ While it is true that Ricardo's theory of value does not logically allow for the systematic deviation of prices from their embodied-labor values, Ricardo nevertheless recognized that a profits tax imposed in an economy characterized by industries with differing capital-labor ratios would alter the structure of prices.

Marx's criticism of Ricardo may be considered unfair. Marx never treated taxes in Volume III of Capital where he demonstrated that prices systematically deviated from their labor values. Even throughout much of his Volume III analysis of distribution, Marx aggregated the various components of value, and proceeded under the assumption that

⁶³ Ibid.

⁶⁴ "[T]he establishment of the general rate of profit requires that the prices or cost-prices which are determined and regulated by that general rate of profit [are] very different from the values of the commodities. And this most important aspect of the question does not exist for Ricardo at all." Ibid., 386.

these divergences canceled one another.⁶⁵ But it is clear from the above discussion that a systematic theory of the incidence of profit taxes requires an analysis at the level of individual capitals rather than the "collective capitalist." Again, Marx treated a profits tax as if it could be simply deducted from capitalists' share of surplus-value without any effect on values or prices.

Taxes and the Theory of Wages

From Quesnay to Ricardo, the classical economists held a social subsistence theory of wages. It was assumed that workers did not share in the economic surplus and thereby were precluded from bearing a share of the burden of taxation. Taxes on both wages and necessary goods were assumed to fall on capitalists in the form of lower profits or on landlords in the form of lower rents. Marx's writings on wages and the value of labor-power was considerably more complex. Reconstructing a Marxist theory of wages and wage taxes is difficult because of the fact that Marx's writings on the subject varied widely and were not always consistent with one another.⁶⁶ The theory of the incidence of wage

⁶⁵ "[W]e may leave out of consideration the distinction between price of production and value, since this distinction disappears altogether when, as here, the value of the total annual product of labour is considered, i.e., the product of the total social capital." Marx, Capital, III, 832.

⁶⁶ "Marx defines the value of labour-power in three different ways, basing himself successively on: (1) the cost of production of labour-power under given historical

taxes will obviously depend upon which particular Marxist conception of wages is adopted.

Within Marxist economics, the debate rages between orthodox Marxists who focus on the sphere of production and argue that wages will gravitate around the value of labor-power, and Sraffians who tend to emphasize class conflict in the sphere of distribution as the key determinant. The former position finds support throughout much of Capital, and the latter in Marx's essay Value, Prices and Profit.⁶⁷ If wages are equal to the value of labor-power, then it follows that workers do not share in surplus-value. Unless taxes alter the historically and socially determined value of labor-power, they cannot affect the level of wages. But if actual wages reflect the state of the class struggle between labor and capital in the distributional sphere, then the possibility arises that workers can capture a share of

conditions, (2) the traditional standard of life to which workers are accustomed, and (3) the standard of living which prevails in non-capitalist modes or forms of production. Although they may sometimes coincide in practice, these definitions are not conceptually equivalent to each other, and no single one of them can be regarded as the unique and authentic expression of Marx's view. On the other hand, there is a common thread running through all of them--the idea of a minimum standard of life which wages must be sufficient to provide." Bob Rowthorn, "Marx's Theory of Wages," in Capitalism Conflict and Inflation, (London: Lawrence & Wishart, 1980): 210.

⁶⁷ "In Wages, Price and Profit Marx recognizes the importance of power and conflict, and that for the most part wages are determined by a process of bargaining between Capital and Labour, the outcome of which depends upon the relative power of the two sides." Ibid., 215.

the surplus, and also a share of the tax burden. Class struggles over tax and expenditure policies can change the "social wage," which is defined as the value of both private wages and public benefits provided to the working class.⁶⁸

Throughout much of Capital, Marx assumed that wages were simply equal to the value of labour-power, which in turn was determined by the quantity of socially necessary labor-time required for its production and reproduction. In other words, the value of labor-power can be resolved into the value of necessary wage goods required to support the working population: "The value of labour-power...therefore varies with the value of the means of subsistence, i.e. with the quantity of labour-time required to produce them."⁶⁹ The value of the means of physical subsistence formed the minimum limit of average wage rates.⁷⁰

⁶⁸ "[I]t is often cheaper and more efficient to provide things collectively, and the taxes required to finance the services concerned may be considerably less than the additional wages required to purchase the same services privately. Thus, by transferring certain activities to the state sector, the total resources required to provide workers with a given standard of living are reduced and, provided the resulting savings are appropriated by capital, profits are increased. Such a transfer of production from the private to the state sector is clearly analogous to the creation of relative surplus value which occurs when production is reorganized within the private sector itself. In each case, the amount of labour required to provide workers with a given standard of living is reduced." Ibid., 211.

⁶⁹ Marx, Capital, I, 276.

⁷⁰ "The ultimate or minimum limit of the value of labour-power is formed by the value of the commodities which have to be supplied every day to the bearer of labor-power,

Marx did not adhere to a physical subsistence theory of wages; the actual value of labor-power (and wages) was set by the particular social and historical circumstances operating at that level of capitalist development.⁷¹ If tax and expenditure policies are taken to be part of the social and historical data, then it follows that the state can affect the value of labor-power and the distribution between labor and capital.

In Volume I, Marx distinguished between the market wage rate, which was determined by the forces of supply and demand, and the value of labor-power. The latter was the gravitational center around which actual wages fluctuated.⁷²

the man, so that he can renew his life-process. That is to say, the limit is formed by the value of the physically indispensable means of subsistence." Ibid., 276-7.

⁷¹ "But there are some peculiar features which distinguish the value of the labouring power, or the value of labour, from the values of all other commodities. The value of the labouring power is formed by two elements--the one merely physical, the other historical or social. Its ultimate limit is determined by the physical element, that is to say, to maintain and reproduce itself, to perpetuate its physical existence, the working class must receive the necessaries absolutely indispensable for living and multiplying. The value of those indispensable necessaries forms, therefore, the ultimate limit of the value of labour. ...Besides this mere physical element, the value of labour is in every country determined by a traditional standard of life....This historical or social element, entering into the value of labour, may be expanded, or contracted, or altogether extinguished, so that nothing remains but the physical limit." Ibid., 144-5.

⁷² "As with all other commodities, so with labour, its market price will, in the long run, adapt itself to its value; that, therefore, despite all the ups and downs, and do what he may, the working man will, on an average, only receive the value of his labour, which resolves into the

For Ricardo, the mechanism by which a conformity between the market rate and the natural rate of wages was established was the Malthusian law of population. Marx rejected this demographic line of argument, and instead, developed a social and economic theory based on technological change to explain the mechanism by which the market rate of wages was brought into line with its value rate. Capitalist competition and the drive to accumulate was the primary factor influencing relative employment and wages.⁷³ The relative size of the pool of unemployed workers (the reserve army of labor) regulated wages over the course of the business cycle.⁷⁴

value of his labouring power, which is determined by the value of the necessaries required for its maintenance and reproduction, which value of necessaries finally is regulated by the quantity of labour wanted to produce them." Ibid., 144.

⁷³ "But in fact it is capitalist accumulation itself that constantly produces...a relatively redundant working population, i.e. a population which is superfluous to capital's average requirements for its own valorization, and is therefore a surplus population....This is a law of population peculiar to the capitalist mode of production; and in fact every particular historical mode of production has its own special laws of population, which are historically valid within that particular sphere. An abstract law of population exists only for plants and animals, and even then only in the absence of any historical intervention by man." Ibid., 782-4.

⁷⁴ "Taking them as a whole, the general movements of wages are exclusively regulated by the expansion and contraction of the industrial reserve army, and this in turn corresponds to the periodic alterations of the industrial cycle. They are not therefore determined by the variations of the absolute numbers of the working population, but by the varying proportions in which the working class is divided into an active army and a reserve army, by the

In Volume II of Capital, Marx raised the possibility that fluctuations in wages were a causal factor in the business cycle: "A part of the reserve army of workers whose pressure keeps wages down is absorbed. Wages generally rise...this lasts until, with the inevitable crash, the reserve army of workers is again released and wages are pressed down once more to their minimum and below it."⁷⁵ Such suggestions have led some Marxists to advance the so-called "profit-squeeze" hypothesis of capitalist crises.⁷⁶ In a recent empirical test of the United States economy, Richard Jankowski found little evidence to support the hypothesis that changes in tax policy can affect post-tax profit rates, thereby allowing the state to intervene to mitigate the effects of the "squeeze" on profits.⁷⁷

In Volume II of Capital, Marx treated wages within the context of the total circulation of capital and surplus-value.⁷⁸ Some Marxists and radical post-Keynesians have

increase or diminution in the relative amount of the surplus population, by the extent to which it is alternatively absorbed and set free." Ibid., 790.

⁷⁵ Marx, Capital, II, 391.

⁷⁶ See, for example, Andrew Glyn and Bob Sutcliffe, British Capitalism, Workers and the Profit Squeeze, (New York: Penguin Books, Inc., 1972).

⁷⁷ Richard Jankowski, "The Profit-Squeeze and Tax Policy: Can the State Intervene?" Review of Radical Political Economics, Vol. 19, No. 3 (Fall 1987): 18-33.

⁷⁸ "In so far as the worker converts his wages almost wholly into means of subsistence, and by far the greater part into necessities, the capitalist's demand for labour-

employed Marx's reproduction schemes of Volume II in order to develop an under-consumptionist theory of economic crises.⁷⁹ The origins of such an approach can be traced to the work of the Polish Marxist economist Michal Kalecki, who argued, "Mr. Keynes' theory gives us a new basis for the inquiry into the problems of taxation. The analysis of the influence of various types of taxes on effective demand leads...to quite unexpected results, which may be of practical importance."⁸⁰ The operating assumption of these theories is that both workers and the state have higher marginal propensities to consume out of revenue than do capitalists. Thus, taxes or transfers which shift income away from capitalists to workers are assumed to increase effective demand and employment.

Marx argued that a shift from surplus-value to wages would not result in a change in the total quantity of value produced or in circulation, but only a change in the proportion of social capital devoted toward the production

power is indirectly also a demand for the means of consumption that enter into the consumption of the working class." Marx, Capital, II, 197.

⁷⁹ See, for example, Josef Steindl, Maturity and Stagnation in American Capitalism, (New York: Monthly Review Press, 1976); Paul A. Baran, The Political Economy of Growth, (New York: Monthly Review Press, 1957); and Paul A. Baran and Paul M. Sweezy, Monopoly Capital, (New York: Monthly Review Press, 1966).

⁸⁰ Kalecki, 444.

of necessary and luxury commodities.⁸¹ Thus, Marx dismissed underconsumptionist theories and their implications for the economic role of the state.⁸² John Eatwell has made the only serious effort to develop a theory of taxation which links Sraffa's theory of prices and distribution to the post-Keynesian theory of effective demand.⁸³

Sraffa and the Classical Theory of Taxation

Marx's scattered writings on taxes and their incidence were restricted to an analysis at the "level of values," and did not incorporate "Volume III prices of production." Marx's failure to satisfactorily solve the so-called transformation problem severely limited his public finance discussions. But in his Production of Commodities by Means of Commodities, Piero Sraffa provided the necessary theoretical apparatus to logically derive Marx's prices of

⁸¹ Marx, Capital, II, 413-4.

⁸² "It is pure tautology to say that crises are provoked by a lack of effective demand or effective consumption...If the attempt is made to give this tautology the semblance of greater profundity, by the statement that the working class receives too small a portion of its own product, and that the evil would be remedied if it received a bigger share, i.e. if its wages rose, we need only to note that crises are always prepared by a period in which wages generally rise, and the working class actually does receive a greater share in the part of the annual product destined for consumption." Marx, Capital, II, 486-7.

⁸³ John Eatwell, "A simple framework for the analysis of taxation, distribution, and effective demand," in Growth, Profits, & Property: Essays in the Revival of Political Economy, Edward J. Nell, ed., (Cambridge: Cambridge University Press, 1980): 165-72.

production. These prices of production can be explicitly introduced into Marx's schemes of economic reproduction. By doing so, a comprehensive theory of taxes and their effects on prices, wages, rent and profits can be developed.

Sraffa himself provided some suggestions for treating taxes within his system of reproduction, and a small number of journal articles have since been written in which the authors have attempted to further develop these ideas. The analytical similarities between Sraffa's system and Marx's schemes of reproduction can be illustrated by representing the latter in the equivalent matrix notation employed in the above discussion. Prices of production are first introduced into a two-sector model and then generalized to the n-sector case.

It is assumed that the two commodities are produced in separate industries and exchanged in a market after the production process has been completed. Both commodities are further assumed to be required as inputs into the production of the commodities. This system is represented mathematically by the following equations:

$$\text{I. } A_{11}Y_1 + A_{12}Y_2 = Y_1$$

$$\text{II. } A_{21}Y_1 + A_{22}Y_2 = Y_2$$

Assuming simple commodity production (no surplus), the sum of the first column ($A_{11}Y_1 + A_{21}Y_1$) must be equal to the total output of Department 1 (Y_1), and the sum of the second column ($A_{12}Y_2 + A_{22}Y_2$) must be equal to the total output of

Department 2 (Y_2). Each commodity is assumed to be initially distributed according to the technological requirements of production. The output of both commodities end up with the producers at the completion of the production period. As Sraffa demonstrated, there exists a "unique set of exchange values which if adopted by the market, restores the original distribution of the products and makes it possible for the process to be repeated."⁸⁴ Thus, the values of commodity one (P_1) and commodity two (P_2) are the variables in the system to be determined:

$$\text{I. } A_{11}Y_1P_1 + A_{12}Y_2P_2 = Y_1P_1$$

$$\text{II. } A_{21}Y_1P_1 + A_{22}Y_2P_2 = Y_2P_2$$

Taking one of the commodity prices to be the numeraire, the system reduces to one independent equation and one unknown.

This two-sector system can be generalized to an n -commodity system in which the $(n - 1)$ independent linear equations uniquely determine the $(n - 1)$ prices. If the system produces a surplus, which then is distributed between capitalists and workers, it becomes self-contradictory. There is one fewer unknown than there are independent equations in the system.⁸⁵ By adding a uniform rate of

⁸⁴ Sraffa, Commodities, 3.

⁸⁵ "The difficulty cannot be overcome by allotting the surplus before the prices are determined, as is done with the replacement of raw materials, subsistence, etc. This is because the surplus (or profit) must be distributed in proportion to the means of production (or capital) advanced

profit for all industries as an additional unknown, Sraffa arrived at a system of n independent equations which determine the $(n - 1)$ prices and the rate of profit.

Returning to the two-sector economy case, just one rate of exchange needs to be determined--the relative price. By inserting a uniform rate of profit $(1 + r)$ into the system, the price equations become:

$$(P_1A_{11} + P_2A_{21})(1 + r) = P_1$$

$$(P_1A_{12} + P_2A_{22})(1 + r) = P_2$$

As in the case of the non-surplus producing system, there exists a unique rate of exchange which enables the inputs to be replaced and profits to be distributed in proportion to the capital advanced in production. The financing of an independent state apparatus requires the existence of an economic surplus in at least one industry. The following quantity and price equations explicitly account for the existence of economic surplus, as well for taxes and state consumption:

$$(A_{11}Y_1 + A_{12}Y_2)(1 + g) = (1 - \delta_1 - \delta_1t)Y_1$$

$$(A_{21}Y_1 + A_{22}Y_2)(1 + g) = (1 - \delta_2 - \delta_2t)Y_2$$

in each industry; and such a proportion between two aggregates of heterogeneous goods (in other words, the rate of profits) cannot be determined before we know the prices of the goods. On the other hand, we cannot defer the allotment of the surplus till after the prices are known, for, as we shall see, the prices cannot be determined before knowing the rate of profits. The result is that the distribution of the surplus must be determined through the same mechanism and at the same time as are the prices of commodities." Ibid., 6.

$$(P_1A_{11} + P_2A_{21})(1 + r^*) = P_1$$

$$(P_1A_{12} + P_2A_{22})(1 + r^*) = P_2 \quad ,$$

where (r^*) represents the post-tax rate of profit. The necessary adjustment to the pre-tax rate of profit $(1 + r)$ in the price equations depends upon the specific type of tax imposed. It is obvious from the above system of equations that relative prices of the two commodities will depend upon the technological coefficients of production, rate of profit, and the tax.

In their seminal article, "Some Effects of Taxation in a Linear Model of Production," Ian Steedman and J. Metcalfe used a simple two-sector model "to examine the effects of certain taxes on relative prices, the wage/profit rate frontier and the choice of technique."⁸⁶ Following Sraffa, they derive the equilibrium price equations for the two commodities as:

$$P_1 = [a_{11}P_1 + a_{21}P_2](1 + r) + a_1$$

$$P_2 = [a_{12}P_1 + a_{22}P_2](1 + r) + a_2 \quad ,$$

where a_1 and a_2 are the quantity of labor devoted to the production of commodities one and two, respectively. From these equations, Steedman and Metcalfe show:

$$P_2/P_1 = \frac{a_2 + (a_1a_{12} - a_2a_{11})x}{a_1 + (a_2a_{21} - a_1a_{22})x} = f(x)$$

and

⁸⁶ J.S. Metcalfe and Ian Steedman, "Some Effects of Taxation in a Linear Model of Production," Manchester School of Economics and Social Studies, 39, (3), (September 1981): 171.

$$w = \frac{1 - (a_{11} + a_{22})x + (a_{11}a_{22} - a_{12}a_{21})x^2}{a_1 + (a_2a_{21} - a_1a_{22})x} = g(x)$$

where $x = (1 + r)$. Steedman and Metcalfe proceeded by introducing indirect, payroll, profits, and value-added taxes into this system of equations: "[T]he price ratio is always given by $p = f(x)$, where x is to be interpreted as

$$x = (1 + r)(1 + t_i) \text{ for an indirect tax,}$$

$$x = (1 + r) \text{ for a payroll tax,}$$

$$x = 1 + r(1 + t_p) \text{ for a profits tax,}$$

$$\text{and } x = 1 + r(1 + t_v) \text{ for a value-added tax.}^{87}$$

Willie Semmler generalizes this system of equations to the n -commodity case by using an n -sector linear production model. He demonstrates that a uniform tax rate on profits would result in a change in relative prices and a fall in the general after-tax profit rate.⁸⁸

Following Sraffa, who argued that if the organic compositions of capital differed across industries a change in the distributive variable would alter the structure of relative prices, Metcalfe and Steedman also demonstrate that, in general, it is not possible to predict the effect of taxation on relative prices. This is analogous to Ricardo's observation of the "curious effect" that an indirect tax could have in causing the relative price of the taxed commodity to fall.

⁸⁷ Ibid., 174.

⁸⁸ Semmler, 144.

The rate of profit and relative prices are determined independently of the allocation of the surplus between consumption and accumulation. In other words, choices by capitalists and the state concerning the use of the surplus may affect the level and composition of output, but leave relative prices unaffected. This differs from neoclassical theory where output and relative prices are determined simultaneously. In the classical system, the effect of a tax on the rate of accumulation is determined by the relationship between taxes and capitalists' decisions to consume, and not by changes in relative prices.

Sraffa's distinction between basic and non-basic commodities also has important implications for the analysis of taxes and their effects on relative prices and distribution.⁸⁹ Those commodities that do not directly or indirectly enter into the production of other commodities are defined as non-basic and play no role in the determination of the rate of profit or relative prices in the basic system. A tax on a basic commodity will affect the relative prices of all other basic commodities, as well as the nominal value of the wage and profit shares. By

⁸⁹ "The distinction between basic and non-basic products provides the potential to clarify some problems concerning the effects of taxation. This, and other analytical possibilities, lead to the conclusion that the distinction between basic and nonbasic products may be the aspect of Sraffa's theory of greatest direct interest in terms of its potential application to problems of economic policy." Alessandro Roncaglia, Sraffa and the Theory of Prices, (Chichester: John Wiley & Sons, 1978).

contrast, taxes on non-basic commodities will have no effect on the relative prices of basic commodities or on distribution:

A tax on a basic product then will affect all prices and cause a fall in the rate of profits that corresponds to a given wage, while if imposed on a non-basic it will have no effect beyond the price of the taxed commodity and those of such other non-basics as may be linked with it. The effect which the tax has on the price of a non-basic will vary with the type of non-basic. If it does not enter any of the means of production, its price will change to the extent required to maintain the original ratio of the value of the aggregate product of the process (after deduction of the wage and of the tax) to the value of its aggregate means of production. If it belongs to a group of interconnected non-basics, the prices of all or some of the components of the group will change so as to maintain that ratio.⁹⁰

The idea that a change in technology or in the rate of taxation on some commodities would not affect the overall rate of profit is foreign to neoclassical economics and also, to some extent, Marx when it comes to prices of production (given his errors with the transformation problem). The general rate of profit is determined only by the conditions of production (and taxation) of necessities. This Ricardian result is consistent, however, with Marx's theory of exploitation and supports a Ricardo-Marx linkage. Thus, Sraffa's theoretical framework provides an analytical tool to incorporate prices of production into Marx's schemes of economic reproduction in order to better analyze taxation.

⁹⁰ Sraffa, Commodities, 55.

In the above discussion of taxation and Sraffa's theoretical system, the rate of profit was exogeneously introduced into the system of equations. Labor (or wages) did not explicitly appear in the system of equations, but was assumed to be included in the technical coefficients of production. But in order to develop a complete theory of distribution and tax incidence, it is necessary to explicitly account for wages. This is particularly true if it is assumed that workers share in surplus output and therefore can share part of the tax burden.

If wages are set at some minimum subsistence level, then they can be incorporated easily into the technical coefficients of production in Sraffa's system. In his Commodities, Sraffa momentarily considered treating the subsistence wage component as fixed and part of the means of production and the surplus portion as variable. Although Sraffa acknowledged the analytical shortcomings of treating the entire wage as variable, he nevertheless opted for such an approach.⁹¹ The primary drawback of this method for the analysis of taxation is that taxes on wages and necessities

⁹¹ "The drawback of this course is that it involves relegating the necessities of consumption to the limbo of non-basic products. This is due to their no longer appearing among the means of production on the left-hand side of the equations: so that an improvement in the methods of production of necessities of life will no longer directly affect the rate of profits and the prices of other products. Necessaries however are essentially basic and if they are prevented from exerting their influence on prices and profits under that label, they must do so in devious ways." Sraffa, Commodities, 10.

can no longer directly affect the rate of profit and relative prices. The effect of a wage tax on "surplus wages" will be similar to a tax on capitalist profit.

This approach also is inconsistent with the classical method of treating wages and wage taxes as part of the capital advanced to production. In Sraffa's model, wages are treated as a share of the surplus output resulting from production and are assumed to be paid post factum. Similarly, taxes on the surplus going to labor must be assumed to be paid post factum as well.

Following Sraffa, by setting total annual labor equal to unity, the equations in our two-sector model can be rewritten as:

$$(P_1A_{11} + P_2A_{21})(1 + r) + wA_{11} = P_1$$

$$(P_1A_{12} + P_2A_{22})(1 + r) + wA_{12} = P_2$$

$$wA_{11} + wA_{12} = 1 ,$$

where w is the nominal wage per unit of labor. Sraffa proceeded by demonstrating that the total output of such a system, as well as the share going to wages and profit, can be measured in terms of the "Standard composite commodity." The share of surplus output accruing to the state in the form of tax revenue also can be measured in terms of this theoretical commodity.

The effect of taxation on the "wage-profit frontier" obviously will depend upon the specific type of tax imposed on the system. Metcalfe and Steedman trace through the

effects of an indirect tax, payroll tax, profits tax, and a value-added tax on the wage-profit frontier.⁹² Thus, Sraffa's rehabilitation of classical political economy and taxation provides the theoretical foundation for the analysis of the incidence of taxes in a modern capitalist economy, in which the theoretical possibility that workers share in a portion of the economic surplus is allowed.

Taxation and Capital Accumulation

While Sraffa's system provides a theoretical framework for the analysis of tax incidence, it can not be easily extended to include a theory of taxes and their effects on accumulation. Although Marx considered the theory of accumulation to be central to the analysis of the capitalist mode of production,⁹³ he wrote very little on the question of whether state fiscal policies could affect economic growth. As a consequence, the Marxist theory of taxes and accumulation remains largely undeveloped.

Orthodox Marxists identify the theory of value with the law of the tendency for the rate of profit to fall: "Marx's entire mature works were devoted to explaining economic

⁹² Metcalfe and Steedman, 176-80.

⁹³ "The whole character of capitalist production is determined by the valorization of the capital value advanced, thus in the first instance by the production of the greatest possible amount of surplus-value; secondly, however, by the production of capital, i.e. the transformation of the surplus-value into capital." Marx, Capital, II, 159.

crises, and his theory of crisis is inseparable from his theory of accumulation."⁹⁴ Given the assumption that the source of such crises stem from the sphere of production, it is difficult to see how the state could intervene through tax policy to counteract such a tendency. A plausible argument can be made however, that the supply-side tax cuts of the early 1980's, particularly the accelerated depreciation allowances, allowed corporations to overcome the problems created by the moral depreciation of capital. These tax policies allowed for the massive restructuring of capital in many industrial sectors without a serious fall in profits. Such hypotheses obviously require additional theoretical and empirical investigation.

Conclusion

Recent efforts to revive and extend the classical theory of taxation have been shown to be in a direct line of descent from the works of Karl Marx. The focus on Marx's reproduction schemes has provided not only the theoretical basis to incorporate taxation into his broader theories of value, distribution and accumulation, but also to situate his work within the classical tradition which extends from Francois Quesnay and the Physiocrats to Piero Sraffa and contemporary political economists.

⁹⁴ Weeks, 189.

Marx's writings on the theory of taxation and actual systems of public finance were consistent with his overall theory of historical materialism. For Marx, the fiscal practices of the state and the evolution of classical theories of taxation were both linked to the historical development of the capitalism. Unlike Ricardo and the earlier classical economist, Marx treated taxes, wages, profits, and rent as historically specific economic categories. Central to any Marxist theory of taxation is the notion of class conflict over the surplus produced in the economy. In capitalism, surplus-value created by wage laborers represented the surplus available to the state in the form of tax revenue.

Unlike his classical predecessors, the theory of taxation did not play a central role in Marx's theories of value, distribution and accumulation. The theory of tax incidence was left undeveloped and incomplete in Marx's writings. Marx's failure to develop this part of the classical tradition can be explained by his lack of an adequate solution to the so-called transformation problem. It was argued in this chapter that Sraffa's model has provided a theoretical model to derive the "prices of production" necessary to reviving the classical theory of tax incidence. However, much theoretical and empirical work remains to be done in this area of public finance.

CHAPTER SEVEN

SUMMARY AND CONCLUSION

[T]he state must attempt to establish equitable forms of taxation in order to conceal the inequitable content of the tax structure and the exploitative nature of the class structure. History has shown that when the state is no longer able to conceal tax exploitation or justify it ideologically, there is the risk of a tax revolt (and thus a class revolt) and an intensification of the state's fiscal problems (and thus political problems).¹

By the early part of the twentieth century, neoclassical economics had supplanted classical political economy as the dominant paradigm in public finance theory. It is a claim of this dissertation that the paradigm-shift to neoclassicism occurred because classical theories of taxation could no longer provide the necessary ideological justification for the fiscal structures and patterns of distribution that characterize mature capitalist economies.

¹ James O'Connor, Fiscal Crisis of the State, (New York: St. Martin's Press, 1973): 203.

By contrast, neoclassical orthodoxy provides the ideal foundation for the ideology of laissez-faire fiscal policies and its resultant distribution of income and wealth.

The revival of classical and Marxian theories of taxation provides an alternative framework for the understanding of the fiscal practices of the capitalist state throughout its history. At the same time, it lays the intellectual foundation for the political struggle against capital in the fiscal operation of the state. The historical review of classical theories of taxation contained in this dissertation is thus intended to be more than just an academic exercise.

The present study was prompted by the resurgence of free-market conservatism which swept through the United States and England in the early part of the 1980's. This policy shift was a product of the crisis in fiscal practice and economic theory that occurred in the prior decade. The fact that "supply-side" economics could be taken seriously as a foundation for fiscal policy reflected the crisis in orthodox economics.² Paradoxically, the political success of Reagan and Thatcher was due to their ability to revive a radical free-market economic ideology which had been dormant

² "A sure sign of a crisis is the prevalence of cranks. It is characteristic of a crisis in theory that cranks get a hearing from the public which orthodoxy is failing to satisfy." Joan Robinson, "The Second Crisis of Economic Theory," in Collected Economic Papers, 4, (New York: Humanities Press, 1973): 102.

for decades. Inequity in both the tax structure and the distribution of wealth came to be seen once again as virtuous. Only with the recent outbreak of rioting in the streets of London in reaction to Thatcher's poll tax, has the "risk of revolt" reappeared on the historical stage.

Significance and Contribution of Dissertation

This dissertation represents an effort to fill the gap in economic scholarship concerning the development of classical political economy and theories of taxation. By providing a critical and systematic history of theories of taxation advanced by the major classical writers from the Physiocrats to Karl Marx and Piero Sraffa, this study offers a unique interpretation of the development of economics.

The emphasis on the classical writings on public finance sheds valuable light on the evolution of theories of surplus-value, distribution and accumulation. I have shown that theories of taxation have been central, and in some cases, determining, factors in the development of classical economic theory.

In Chapter Two it is argued that the most important difference between mercantilism and classical economics is not the economic role accorded to the state, but rather the mercantilist principle that surplus was derived from trade and thus constituted the source of tax revenue.

In Chapter Three, it is shown that the writings of the Physiocrats represent not just a reaction against feudalism,

but more particularly, a reaction against feudal forms of taxation in pre-Revolutionary France. Successive versions of the Tableau Economique were developed by Francois Quesnay in order to provide theoretical and mathematical support to proposals for fiscal reform, as well as to illustrate the effects of state policies on the production and accumulation of economic surplus generated in agriculture. The Tableau Economique reflects the classical unity of theory and policy. Theoretical advances in the conceptualization of surplus created in the sphere of production were the direct result of the Physiocrats' efforts to explain the impacts of various tax schemes on economic reproduction.

Historians of economic thought also have underestimated the importance of Adam Smith's public finance writings to his overall theoretical accomplishments. The general absence of attention to questions of taxation has reinforced the erroneous belief that Smith lacked a developed theory of distribution. In Chapter Four it is demonstrated that because Smith's distribution theory was integral to his theory of tax incidence, an emphasis on Book V of The Wealth of Nations is necessary for an accurate portrayal of Smith's place in the history of economics.

Chapter Five addresses the work of David Ricardo. Ricardo's rejection of Smith's theory of tax incidence was a key component in his overall critique of Smith's theories of value, distribution and accumulation. The review of

Ricardo's writings on taxation from his early works on monetary theory to his Principles of Political Economy and Taxation illuminates the central role that the theory of value played in his theory of distribution. This study also provides a careful point by point refutation of the work of Samuel Hollander, the major proponent of the viewpoint that neoclassical economics is a logical outgrowth of Ricardian political economy.

The contributions of Karl Marx and Piero Sraffa are the subject of Chapter Six. Although Marx never put forth any explicit or systematic theory of taxation, the reproduction schemes developed in Volume II of Capital provide the analytical structures necessary to incorporate taxation into the corpus of his broader economic theories. By emphasizing Marx's reproduction schemes in this dissertation, a backward linkage to the Physiocrats and a forward linkage to Sraffa and the twentieth-century revival of classical theories of taxation are illuminated.

Chapter Six also describes the Sraffian model of the determination of prices and the distribution of output in a capitalist economy characterized by class conflict. The model is used to trace the effects of specific taxes on prices, distribution, and economic reproduction. Sraffa's model is the technical means for rendering the Marxist-classical approach useful today, particularly when current economic science demands a high degree of mathematical

formalism. The Sraffian approach is consistent with the historical materialist approach, which explicitly uses class as a primary factor in the analysis. It also allows for the integration of value theory with a Marxist theory of distribution, accumulation, and the role of the state.

In addition to extensive analyses of original texts, this dissertation also includes a critical review of the limited secondary history of economic thought literature on public finance questions. This study exposes the historical inaccuracies and errors in interpretation of classical tax theories which have been put forth by neoclassical historians of economic thought such as Joseph Schumpeter, Mark Blaug and Samuel Hollander. In so doing, this study contributes to the ongoing debates over the theoretical relationship between classical political economy and neoclassical economics which surround the works and scholarship of Sraffa. The review of classical theories of taxation supports the view that the classical approach represents a distinct theoretical tradition that is not part of a continuum leading to the development of neoclassical orthodoxy, and that steady scientific progress has occurred within classical political economy which makes it applicable to contemporary fiscal questions.

Major Findings of the Study

This dissertation demonstrates that theories of taxation and the treatment of fiscal questions are central

elements in classical theories of value, distribution and accumulation. In fact, the primary object of classical analysis is identified as the scientific analysis of how fiscal policies of the state influence the production, distribution and accumulation of economic surplus. The focus on economic surplus reflects the classical principle that surplus represents both the potential source of accumulation and the fund from which tax revenue is derived. In broad terms, economic surplus is defined as the total produced output of society minus the portion required to reproduce that output. The latter represents the necessary inputs to production, and includes both the produced commodity inputs and the subsistence goods of the laborers in the production process.

The classical conception of surplus makes it clear how the fund from which tax revenue is extracted is created, who creates that fund, and who ultimately bears the burden of the tax. The answers to these questions have bearing upon all of the major issues of classical political economy including a capitalist economy's potential for growth or stagnation, for economic and political stability or crisis, and for its appearance as fair and egalitarian or unfair and inequitable.

The mercantilists first developed the idea that taxable capacity was limited by the scope of a nation's economic surplus. From Thomas Mun to Sir James Steuart, the

mercantilists believed that surplus was derived from circulation or international exchange. Tax revenue was derived from, and limited to, positive trade balances. The mercantilists were unable to build a theory of value upon this conception of economic surplus. Mercantilist theories of distribution and tax incidence were hampered by the absence of clear class distinctions among workers, manufacturers (capitalists) and landlords. Many of the analytical categories used to explain the distribution of taxes nevertheless were adopted by the later classical economists. The origin of the classical theory of subsistence wages, for example, can be traced to Thomas Mun's theory of tax incidence.

Physiocracy marked a theoretical advance over mercantilism by virtue of its contention that economic surplus was created in agricultural production, not in the sphere of circulation. The Physiocrats saw rent on land as the unique form of surplus and therefore the unique source of tax revenue. Because economic surplus could be measured in material output, the theory of value did not play an explicit role in much of the Physiocratic discussions of taxation. Because the Physiocrats restricted much of their analysis to the material aspects of production and distribution, they had difficulty integrating the theoretical formulation of wages, profits and rent into their theory of tax incidence. Quesnay was successful,

however, in incorporating taxes into his Tableau Economique to produce one of the earliest growth models in the history of economics.

By generalizing the production of economic surplus to all sectors of production, including manufacturing, Adam Smith was able to provide an analysis which was better suited to industrial capitalism. Smith correctly identified capitalist profit as a distinct form of surplus in capitalism. Smith recognized that if economic surplus was derived from production of heterogeneous commodities, it was necessary to develop a general theory of value. His so-called "adding-up theory of value" proved to be inadequate, however, as a foundation for a theory of distribution and tax incidence. Taxes on wages and manufactured goods, for example, were assumed to be passed on to consumers in the form of higher prices.

As Ricardo later pointed out, under this theory it would be logically impossible for the sum total of the tax burden to be borne by the three major classes of society. Because Smith lacked a theory of the forces which influenced the general rate of profit, his theory of taxation and accumulation remained largely undeveloped.

One of Ricardo's primary objectives was to re-establish Smith's abandoned labor theory of value as the appropriate method for the analysis of capitalism. For Ricardo, the accumulation of capital did not render the labor theory of

value obsolete. Ricardo's theories of taxation were developed in conjunction with his rejection of Smith's adding-up theory of value. Ricardo's theory of natural values, and not his discussion of market prices, served as the foundation of his theory of tax incidence. Only after developing an alternative theory of value did Ricardo turn his attention to distribution and tax incidence. Ricardo distinguished clearly between rent and profit as different forms of surplus-value. These two forms of surplus-value constituted the basic sources of tax revenue.

For Ricardo, the new theory of rent was central not only to developing an alternative to Smith's adding-up theory of value, but also an alternative theory of distribution. Ricardo linked the analysis of taxation to his fundamental postulate that wages and profits were inversely related. A tax on wages would leave the natural wage rate unaltered, and result in a fall in the rate of profit. Hollander's contention that the fixed exogenously determined wage assumption was relaxed by Ricardo in his analysis of taxation finds no textual support. Ricardo argued that the existence of taxes did not alter the fundamental laws which regulated the distribution of surplus among workers, landlords and capitalists.

The issue of how taxes affected the relative distributive shares of economic surplus accruing to capitalists in the form of profit and landlords in the form

of rent formed a crucial element in Ricardo's theory of accumulation. Ricardo linked his functional theory of distribution and tax incidence with his theory of economic growth, by assuming that landlords devoted their entire rent share to luxury consumption, while capitalists devoted their profits to productive investment. Whether tax revenue came at the expense of productive capitalist investment, or luxury consumption, thereby became a central question in Ricardo's political economy.

For Marx, surplus-value represented the unique source of tax revenue available to capitalist states. The share of surplus-value accruing to the state in the form of tax revenue could not be explained on the basis of exchange relations, but only upon the relations of production between workers and capitalists. Taxes did not affect the quantity of surplus-value generated in production, only the distribution of that surplus between capitalists and the state. For Marx, the production, distribution and accumulation of economic surplus could not be explained independently of the labor theory of value.

Marx argued that the relations of distribution corresponded to the historical conditions of production. Thus, Marx stressed the historical nature of taxes, wages, profits and rents as economic categories. Marx left undeveloped the theory of tax incidence because it depended upon the satisfactory solution to the so-called

transformation problem--which eluded him. Marx claimed that taxes belonged to the faux frais de production. It was further shown that Sraffa's model provides a theoretical structure to derive the prices of production necessary for the revival of a classical theory of tax incidence.

Methodology of the Study

The methodological premise of this study is that the relationship between the classical theory of taxation and theories of value, distribution and accumulation is understood only within the historical context in which they were written and applied. The explanation of the development of theory includes an analysis of the "context of discovery" of political economy's theoretical concepts. Each chapter of the dissertation has focused upon the links among the economic development of capitalism, the fiscal practices of the state, and the evolution of theories of taxation. The theories of the mercantilists, Physiocrats, Adam Smith, David Ricardo and Karl Marx are shown to be the products of specific historical, material conditions.

The method of this study is therefore consistent with Marx's philosophy of historical materialism. As such, political economy is shown to be concerned with the analysis of the historically specific form of economic surplus in the capitalist mode of production. Similarly, classical analyses of taxation are shown to center on the historically specific form of state extraction of surplus in capitalism.

The emphasis on the historical and political context of the development of classical theories of taxation in no way precludes an analysis of their internal logical structures. On the contrary, since the classical economists explicitly considered the theory of taxation to be a central component of theories of value, distribution and accumulation, the historical analysis of successive theories of public finance highlights the scientific advancements in the classical theory of value. Indeed, classical discussions of the sources of tax revenue were linked to progressive attempts to integrate theoretically the material and value aspects of economic surplus.

In his address to the Sraffa Memorial Meeting in Rome (October 24, 1983), John Eatwell argued that the writings of Piero Sraffa could be characterized by three major elements or themes: a commitment to economic scholarship; attention to the logical structure of theory; and the search for an objective basis of economic analysis.³ This dissertation attempts to emulate the Sraffian methodological standard by including a critical historical review of past economic doctrines, attention to the logical foundation of competing tax theories, and the search for an objective theory of taxation and the rejection of subjective concepts. The term "objective" refers to an analysis which is historically

³ John Eatwell, "Address to the Sraffa Memorial Meeting," printed in Science and Society, (Summer 1984): 211-16.

grounded in the concrete economic and political institutions of society. The revival of the classical approach to political economy and taxation provides the theoretical apparatus necessary for the scientific analysis of contemporary fiscal problems.

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