

CHAPTER II

LAND VALUES

SECTION I—*General Considerations.* SECTION II—*Method of Estimation.*

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SECTION I — GENERAL CONSIDERATIONS

IN ORDER to discover to what extent the value of unimproved land may serve as a fiscal basis, it is essential to estimate the relations between the annual value of the land and the annual social expenditure. If the land values are greater than the expenses of social organization, these apparently represent a fund from which social revenue could be derived without many of the difficulties presented by other methods. If these unimproved values are found to be less than social requirements, the extent to which they should be used remains for discussion. The importance, therefore, of establishing the relation between land values and the expense of social organization is evident.

The mere existence of a population upon any fixed area forms the natural source from which all values of unimproved land are derived; and this in the most primitive or complex forms of society. With increase of population and social improvements, the natural value of the land augments. As societies are formed and organized with greater industrial advantage and security, the land, under their influences, becomes proportionately more valuable; that is, the mere surface of the earth in certain positions becomes worth far more than fertile or mineral land in other situations. This added value is given by organized society and the advantages it offers; greater in one place than in another. The value men are willing to pay for the use of unimproved land in one spot is the value they are willing to pay for the advantages offered by society in that place. These generally take the form of security of property, markets, profits, business opportunities, transportation facilities, and other advantages, social and administrative. Thus the value

of unimproved land, or ground-rent, is the price men are willing to pay for the privileges and gains derived from living in organized society. Ground-rent expresses in money what organized society is worth to the individual.

On the other hand, however, organized society implies expense, or cost of organization, and this cost is measured by taxes. Ground-rents represent what society is worth to the individual in profits, and social opportunity; taxes represent what the same society costs the same individual. As these values are usually expressed in the same money, at the same place, and at the same time, they may be compared. If the value of the advantages which society offers in the form of industrial opportunity, profits, wages, and so forth, measured in money, were not greater than the expenses involved in the form of taxes, measured in the same money, men would cease to live in society and scatter themselves irregularly over the surface of the earth. In other words, if the value of social advantages, expressed in ground-rents, did not exceed the value of social expense, expressed in taxes, there would be no economic justification for the existence of organized society. But as society, in its organized form does exist, there is reason to believe it worth more than it costs; or, to express the same relation in different terms, that ground-rents are greater than taxes.

The cost of organizing society could apparently not be greater than the economic advantages derived, as these advantages are necessarily the basis upon which ground-rents depend. Where this is not the case, that is, where taxes are greater than ground-rents, it would seem that the eventual disorganization of the society must follow, for its support would cost more than the advantages offered were worth. Taxes would be greater than the economic advantages obtainable.

As society grows in wealth, however, so will its administrative needs, although it would seem that the latter can never overtake the former, as the cost of administration must follow and be dependent upon the wealth administered. Even in a declining society this relation would prevail; for, where the value of land and social wealth is decreasing, so must the social needs, until, with the divorce of value from the land, the social wealth will disappear and with it the need of administration. It thus seems that, in any and all forms of society, the annual value of land is greater than the annual social expenditure.

The development of the same train of thought might establish a closer relation between the two. The foregoing considerations are

based upon any and all methods of raising revenue; therefore, upon those at present in use. But many of these methods cost the people much more than the revenue obtained. Ground-rents, therefore, are not only greater than the revenue derived, but greater by the cost of the revenue over the amount realized. Nor is this the only addition which may be made to the first estimate, for, through increased prices, due to artificial and protective taxation, and consequently increased living expenses of all kinds, it will be evident that the actual revenue not only costs the people more than the amount derived, but that this amount is decreased in its efficiency, or purchasing power. Ground-rents, therefore, may be regarded as not only greater than social revenue by the cost of the revenue over the amount obtained, but also by the decreased efficiency of the actual revenue created. Still one more consideration may be suggested. All revenue must ultimately be derived from the productive industries of a society, as these industries create the total or gross revenue of the people. As these industries, again, are the chief employers of land and labour, it seems to follow that the total return from the land is diminished through the action of indirect taxation, owing to the necessary restriction of the natural industrial development, and the stifling of normal consuming powers. In other words, if all restrictions were removed from industry and consumption, the productive use of land would be materially increased, and its total annual value correspondingly greater. Natural land values thus seem to be considerably greater than the expenses of social administration.

SECTION II — METHOD OF ESTIMATION

In order to present specific relative estimates of the value of unimproved land and social expenditure, it is necessary to select a few countries, states, and cities; to calculate as nearly as possible the annual value of the land in these places, and compare this value with the total amount of revenue raised at present, while bearing in mind the following principles:

1. Ground-rent, or economic rent, is the total value of unimproved land, including taxes already paid by it.
2. The annual market value of unimproved land is the ground-rent, or economic rent, less these taxes. The annual market value of the land constitutes the net rent.
3. The existing capitalized, or market value, of land is equal to the net annual rent expected (deducting taxes) multiplied by the number

of years, which, multiplied by the current rate of interest, would produce one hundred.

4. The true, or total, capitalized value of land is reached in the same way without the deduction of taxes.

5. The annual ground-rental value of land, therefore, may be considered as equal to the average rate of interest on its capitalized value, plus all taxes levied on land values at present.

One method of establishing the relation of ground-rents to revenue would thus be to calculate the present net unimproved rent, add all taxes paid by this rent at present, and estimate the proportion of this gross or economic rent to gross taxes. There is, however, a slightly simpler method leading to the same result, which may better serve the present purpose.

The method is to estimate as nearly as possible:

1. The present net rent (deducting taxes) of the land in the places selected.

2. The entire amount of revenue produced.

3. The amount of revenue at present raised from ground-rents.

4. The amount of taxes which it would be necessary to assess upon present net ground-rents, in addition to existing taxes, should all revenue be derived from the single source of unimproved land values.

In order to estimate approximately the present net rent of unimproved land within any administrative area, it is essential to establish a relation between land values in general, and some definite value recognized in the present system of valuation, which may thus serve as a basis of calculation, or mean proportional. Total real estate forms the most satisfactory value of this kind; it becomes necessary, therefore, to attempt to establish a generally acceptable proportion between unimproved land values, or ground-rents, and total real estate.

M. de Foville estimates the capitalized value of the land of France in private fortunes at three billion pounds sterling; buildings at two billions.¹ This would give an estimate of five billions for total real estate; the land alone would thus be worth three fifths or 60 per cent of real estate. It is probable, however, that these figures include all absorbed improvements of agricultural property as "land," but also that they disregard value attaching to the land through the annual earning powers of franchises public, corporate, and individual; if such

¹ *Statesman's Year Book*, 1911, p. 765.

is the case, the 60 per cent here represented as "land" is probably below the truth. It remains to be discovered to what extent this approximate estimate of 60 per cent may be regarded as applicable to other countries, and all kinds of real estate, to agricultural land, suburban property, and to sites and buildings of metropolitan centres.

With reference to agricultural values perhaps the most comprehensive returns in the most convenient form are found in the following table:

AGRICULTURAL CAPITAL¹

Value, Millions £ Sterling

	Land	Cattle	Sundries	Total
United Kingdom	1,686	202	189	2,077
France	2,580	232	281	3,093
Germany	1,977	303	228	2,508
Russia	2,113	350	247	2,710
Austria	1,473	161	163	1,797
Italy	1,180	92	127	1,399
Spain	1,056	46	110	1,212
Portugal	138	11	15	164
Sweden and Norway	212	41	25	278
Denmark	205	26	23	254
Holland	240	28	27	295
Belgium	300	22	32	354
Switzerland	138	18	16	172
Danube States	420	42	46	508
Greece	94	5	10	109
Europe	13,812	1,579	1,539	16,930
United States	3,314	451	377	4,142
Canada	230	47	28	305
Australia	236	120	36	392
Total	17,592	2,197	1,980	21,769

These relations indicate that more than 60 per cent of total agricultural capital is represented by the value of land. The values here returned as land, however, are doubtless improved values and therefore greater than ground values. On the other hand, many of the values returned under the headings "Cattle" and "Sundries" are, no doubt, not real estate in the proper sense of the word, which would form a perhaps compensating consideration on the other side. An analysis of these figures, however, does not indicate that the value of unimproved agricultural land is less than 60 per cent of total agricultural real estate, which is all that is necessary for the present purpose.

In turning the attention to occupied land, a more complicated series

¹ *Industries and Wealth of Nations*. Mulhall, p. 384.

of values is met; it being evident that the relation between land and real estate will vary almost indefinitely in the same city, the same neighbourhood, or the same street. Instead of reference to particular returns, a safer method of discovering the average relations between land and real estate in cities would be to observe the average which experience has shown to be the most advantageous from the point of view of investment. Such an average would cover occupied land from the least to the most valuable, and present a relation which values will not only approximate, but to which they must ultimately conform, whatever the original relations; for widely differing relations will be proportionately unprofitable, and subsequent variations approach the most profitable average, through a process of elimination.

A thorough study of the subject in this connexion is presented by Mr. Richard M. Hurd, who shows the results of the examination of "the mass of valuations of land and buildings, rentals, and mortgages obtained in about fifty cities," the point of view being that of a "conservative lender on real estate." He says:¹ "The most important consideration governing suitability to location is that of proportion of cost of building to value of land, the safe general rule being that the cost of the building should approximately equal the value of the land. In other words, the typical successful property, land and building, appears to earn double interest on the cost of the building, one half of which capitalized as economic rent gives a value to the land equal to the cost of the building. While there are exceptions to this proportion it forms a median line of departure, applying most closely to business property, whether the building is a \$5,000 one-story brick on a cheap lot or a \$3,000,000 office building in the highest price location."

This statement of the general proportion of land to building values, with reference to the most profitable returns, is of greater interest in the present inquiry than any amount of particular statistical information; certain considerations are, however, suggested.

If land and building represent approximately equal investment, or original cost, there must be a change in their relation in the course of time; and this change will apparently always be in favour of the land, as bricks and mortar rarely, if ever, appreciate while land often does. Where land falls in value the building must of necessity follow suit.

¹ *Principles of City Land Values*, p. 97.

As Mr. Hurd says:¹ "To say, however, that buildings create land values is to reverse the truth, buildings being the servants of the land and of value only as they fulfil its needs." Thus a building, situated upon land rising rapidly in value, may depreciate in proportion to the rise of the value of the land, until the building is torn down. In such a case, the land was not only worth 100 per cent of total real estate, but more valuable with no building, by the cost of demolition. Where land is rapidly declining the same phenomena might occur. Thus, all changes redound to the relative advantage of land. "One fruitful source of error," says Mr. Hurd,² "in studying land values is to regard the problem as involving only a point of time instead of a period of time. Any valuation based upon present facts alone is incomplete, consideration of past influences and future prospects being vitally necessary. The life of value in land, whether the unit taken is a city, a section of a city, or a single lot, bears a close analogy to all other life in being normally characterized by a small beginning, gradual growth, and increased strength up to a point of maximum power, after the attainment of which comes a longer or shorter decline to a final disappearance. Thus all value in city land undergoes a continuous evolution from a state of non-existence through a cycle of changes, to a final dissolution, or to a new birth, when the process is repeated on the same land."

The cycle of changes will in nearly all instances result in the appreciation of land values in relation to improvements, whether the land itself is stable, rising, or declining in value. Thus, with any city as a unit, in which land and improvements represented equal original investment, if these values are compared at any given time, the value of the land may be considerably greater than the value of improvements; only the more recent values conforming to the typical 50 per cent proportion.

Again, it may be remembered, in computing the values of the land area of any city, that the value of its franchises is an essential element in their estimation. The land privilege of a transportation company is as much an element of value as the right to erect a building. Thus, if the capitalized value of all franchises, granted by any city, is added to the present estimated value of its land area, and these values compared to total real estate, the value of the land will, apparently, be

¹ *Ibid.*, p. 17.

² *Ibid.*, p. 18.

greater than 60 per cent of total real estate.¹ This proportion will therefore, be adopted in the following estimates as well within conservative limits. If the 60 per cent average, however, for any reason is regarded as too high, calculations may be made upon any more satis-

¹ A few specific instances and figures may be presented. An interesting study of the value of unimproved land will be found in Mr. T. G. Shearman's work, *Natural Taxation*. Mr. Shearman there presents careful analysis of a great number of returns in reference to agricultural and urban values; on page 138, Mr. Atkinson is cited as follows with reference to values in Boston: "At the average of recent years the value of land is \$333,000,000; of buildings and improvements, \$250,000,000." Total real estate, \$583,000,000. Land values over 50 per cent of real estate irrespective of franchise values and without estimating the taxes already paid by the land both of which would increase the percentage. Mr. Thomas Hills, who was chairman of the Boston board of tax assessors for twenty-five years is cited on page 237 as giving "the precise figures for 1892, of a single block in the heart of Boston, lying between Washington Street and Tremont Street. This block, containing 97,652 square feet, was assessed, for the land alone, \$7,157,800, and for buildings alone \$982,300. The pure land value was \$73.29 per foot \$3,192,512 per acre; the building value, \$10.05 per foot; \$437,778 per acre. Thus, in one of the most thickly settled and closely built parts of Boston, the land value is more than seven times as great as the building value, and is 86 per cent of the whole real estate." Such examples may be multiplied indefinitely. For example (Mulhall Dictionary of Statistics page 313). "In 1888 there were let on lease for eighty years at Piccadilly and Charing Cross Road, covering 19,000 square feet for £3,600 per annum, being at the rate of £8,300 per acre; the tenant erecting buildings worth £27,000. This would represent a selling value of £300,000 per acre for the land." Estimating the expected return on the capital invested in the buildings at 3 per cent, the annual building rental would be £810. The total rental value of the property thus representing £4,410 of which £3,600 is pure land value; over 75 per cent of the total without reference to the return expected upon the ground rental invested.

"In four years ending 1886, Hamburg put up new suburbs and houses worth £3,305,000, the value of the sites being 60 and the building 40 per cent of the total (Dict. Statistics page 316)." This estimate, of course, disregards taxes already paid by the land together with all franchise values.

A brief historical review of the subject may not be without interest. "In 1660 Petty's valuation places land values at 57 per cent. of total wealth; the selling prices being then under £5 an acre. At the time of Davenant (1703) land had risen to £9; at the time of Young (1774) to £18. The total wealth respectively estimated at (millions) £250, £490, and £1,100. Toward the close of the eighteenth century, Becke, Pitt, and Eden made valuations for Great Britain. The valuation of real estate is given by Doctor Becke as 920 millions—viz.:

Land in England	£600,000,000
Land in Scotland	120,000,000
Houses in Great Britain	200,000,000
Real Estate	£920,000,000
Land	720,000,000

"The most elaborate work of this kind was Colquhoun's, in 1812, which formed the basis on which Lord Liverpool and Pavlo Pebrer evidently constructed their subsequent tables. Pebrer's estimates give the following valuations for the United Kingdom:

Land	1,600 (Mil. Sterling)
Houses	533
Mines and Canals	166
Real Estate	2,299
Land	1,060

"Porter's estimate in 1840 confirmed those previously made and showed a progressive increase in wealth."

Spallart gives the following returns for Italy:

Land	1,160 (Mil. Sterling)
Houses	360
	1,420

factory basis; no essential difference is obtained until the average is reduced to 25 or 30 per cent, for which no justification is found.

A more or less acceptable ratio between pure land values and total real estate is thus established, and it remains to discover what relation these land values bear to social expenditure. Real estate is already estimated in this connexion as one of the present sources of revenue, and will form one of the terms of a proportion, or common denominator, by means of which this relation may be approximated.

In any attempt at even relatively exact study of the subject, it is evident that the distinction between the present annual return of unimproved land and its economic, or true value, cannot be too strongly emphasized. Ground-rents, or total land values, are already taxed to a certain extent by present methods, these taxes have long been capitalized and the market value of the land proportionately reduced. In order, therefore, to reach the true value of ground-rents, the amount of taxes already paid should be added to present net rents. For example: If the untaxed, or gross, rent of a tract of land is £ 1,000, at twenty years purchase its value will be £ 20,000. If, however, this land is subject to a tax of £ 200, or 20 per cent, its capitalized value will be proportion-

Mr. Cogan gives these estimates for Australia:

Land	533 (Mil. Sterling)
Railways	94
Houses	239
Total Real Estate	866
Canada land	288 (Mil. Sterling)
Rails	151
Houses	127
Total Real Estate	566

Cf. *Mukhall's Dict. of Statistics*, pp. 589, 597.

The total ratable valuation for Ireland in 1867 is given as £12,975,000, of which £9,100,000 was land. The valuation for 1901 is given as follows:

Land	£9,066,000
Houses	5,163,000
Rails	704,000
Total	£14,933,000

— *Surveyors' Institute Transactions*, Vol. XXXV, p. 288.

F The land returned throughout these estimates no doubt includes absorbed improvements such as ditching, drainage, tillage, and so on, which will swell its value; on the other hand, the total is always far in excess of 60 per cent of real estate and compensating elements of value have been neglected in taxes already assessed and franchises. These figures seem to show that the estimate of 60 per cent of total real estate values, as pure unimproved land value, is conservative. The subject is thoroughly discussed by Mr. Shearman. He presents a great number of estimates based upon reports of urban and agricultural values in the United States. His conclusions are identical with those of the text although based upon totally different methods of calculation. His conclusion is that unimproved land forms more than 60 per cent of urban real estate values and possibly less of agricultural real estate, while 60 per cent is a conservative estimate of average conditions and in all likelihood below the truth.

lately diminished, or equal to but £16,000; the difference, £4,000, being the capitalized value of the taxes imposed. If, therefore, in order to raise the total revenue from ground-rents alone, it were necessary to impose an assessment upon the land of £500 a year, it is evident that the present assessment need be increased but by £300 as the land already pays £200 of the £500 required.

Nearly all criticism of the taxation of land values regards present land values as untaxed; it appears that to assess all contributions upon ground-rents, would require the assessment of all present taxes upon present ground-rents. This is a mistake to the extent in which taxes are already borne by land values, as the market value of the land, and the rent derived, are naturally reduced by the capitalized and annual value of the taxes paid. As the capitalized value of the land is but the capitalized value of the net rent, it follows that this capitalized value must be proportionately smaller as the net, or taxed, rent is smaller than the gross, or untaxed, rent.

Sixty per cent of all real-estate values seems, on the average, represented by the unimproved value of the land. If 60 per cent of total real estate is pure land value, 60 per cent of taxes paid at present by real estate, fall upon ground-rents — that is, are already paid by the land and must, in consequence, be deducted from total taxes in order to discover what additional contribution should be derived from land in order to raise the total revenue from this source.

Here a moment's attention may be given to a subject of importance: that form of socially created wealth coming under the general term "franchise." A franchise is the permission granted by a society to individuals or corporations to make use for a given purpose of certain lands under the jurisdiction of the society. The use of these lands is the only real value attaching to the franchise. Railways are naturally the most important of the land-using corporations to-day, and their land-using privileges, or franchises, are the sources from which they derive their wealth-producing power. The exclusive right to the use of a narrow strip of land, ten or ten thousand miles long, gives railways their value; and this value derived from the land is as much its inherent attribute as the situation of urban property, mineral wealth, or the natural fertility of the soil. The fact that the land used by a railway is but a strip of barren wilderness no more detracts from its value as a medium of transportation, than the fact that a city lot may be useless for pasture detracts from its value as a building site. The

value of land used by a railway is as real and measurable as any form of value adhering to land for any purpose. The value of land depends upon one thing: the use to which it may be put, and to estimate the value of the land used by a railway upon any basis, other than the value of the franchise, is on a par with the estimation of land in urban centres with reference to fertility.

The total value of the securities of a railway corporation, less the total value of its stationary property, rolling stock, road bed, equipment, and so forth, represents the value of its franchises; and the value of these, plus the taxes paid by the railway on land, represents the true or economic value of the land it uses. The relation between these franchises, or land values, is shown in the history of almost any railway, in the difference between the value of its securities and the cost of equipment.

These considerations apply to all forms of franchises. Telegraph, telephone, and gas companies, electric light plants, water works, and street railways owe their wealth-producing abilities to their right to the use of land in certain neighbourhoods. Without this privilege their wires, pipes, rails and rolling stock would be useless. The importance of this privilege may be judged by comparing the value of securities issued against it with the other values involved. If these comparisons are made, the value of the franchise, or the value of the right to the use of the land, will, in all probability, often be found to form by far the greater portion of the total value; much nearer 100 per cent, perhaps, than the 60 per cent adopted. The value of a franchise might in some cases be many times other values involved. In the case of franchise privileges, however, the same average may be maintained, although doubtless much below the truth. The value of both franchise privileges and ordinary ground-rents is created by society as a whole. All land-using interests, individual or corporate, are here, therefore, regarded as "Real Estate" and 60 per cent of their value as ground-rents.

A position has now been developed from which some of the returns of particular societies may be examined with reference to the relative values of ground-rents and revenue in order: (1) to attempt to establish a relation between the two; (2) to estimate the amount of additional contribution necessary from ground-rents in order to produce the entire revenue from this one source.

An able analysis of this nature is in existence; the work of Mr. T. G. Shearman, and, as his figures have stood the test of time, they possess

greater value than would more recent compilations. With one or two exceptions, therefore, the following estimates are a review of Mr. Shearman's study of the subject. The United Kingdom is considered first.

SECTION III — ESTIMATES

Article 1 — Great Britain 1885.

The returns for 1885 are used in the following estimates. The whole amount raised by taxation, says Mr. Shearman,¹ national and local, in Great Britain and Ireland for 1885, was £118,341,000. (*Statesman's Year Book*, 1888, p. 236):

The official returns of the income-tax for 1885 (twenty-eighth *Report Internal Revenue Department*) show the following results. All incomes will be classed as "British."

British Net Incomes from Real Estate — Returned in 1885.

I. From pure ground-rents:

Manors, tithes, fines, etc.	£853,000	
Fishing and shooting rights	572,000	
Market privileges and tolls	607,000	£2,032,000

II. From land and improvements:

Agricultural lands	£65,442,000	
Houses and lots	127,050,000	
Canals, water works, mines, iron works, gas works, etc.	22,381,000	
Railways	33,050,000	
	£247,923,000	
60 per cent of this is		£148,753,000
Net annual ground-rents		£150,785,000

Taxes may now be considered which have been levied already upon land values and which have of course been deducted from gross rent in the above returns. They are as follows:

Land-tax	£1,045,000	
Inhabited house duty	1,855,000	
Income-tax on rents	3,605,000	
Local rates	37,846,000	
Tithes	4,054,000	£48,405,000

¹ *Natural Taxation*. Thomas G. Shearman, p. 143.

Sixty per cent of this amount, or £29,043,000, must be deducted from total taxes, as that much is already contributed by the land; £150,785,000 being the net return in ground-rents.

Gross British taxes	£118,341,000
Deduct taxes now paid from ground-rents	29,043,000
	<hr/> £89,298,000

This is the amount, says Mr. Shearman, which would be collected from British rents if all taxes were levied upon them. It is almost exactly 59 per cent of British net ground-rents, leaving all rent from houses and improvements untaxed. All British and Irish taxes could be paid out of existing rents and yet leave to the landlords a clear income of £61,487,000 (\$300,000,000) per annum, besides their house rents, etc., amounting to at least as much more.

Article 2 — The United States 1890.

The census of 1890, continues Mr. Shearman, estimates the total real "wealth" of the United States at \$65,037,091,197; of which real estate is set down at \$39,544,544,333. But of this, real estate to the real value of \$3,833,335,225 is exempt from taxation; and as there is no use in taxing public property, only to pay the tax out of the public treasury, exempt property may as well be excluded from these calculations.

The *assessed* valuation of property in 1890, which of course has little relation to its real value, was:

Real estate	\$18,956,556,675	-
Personal property	6,516,616,743	
	<hr/> \$25,473,173,418	

Thus it will be seen that real estate constituted $74\frac{1}{2}$ per cent of all assessed property, and therefore bore that share of *ad valorem* taxes. For convenience, this share may as well be called 75 per cent. The local *ad valorem* taxes amounted to \$470,652,000. Reckoning land values as usual at 60 per cent of real estate, those values bore 60 per cent of 75 per cent of all local *ad valorem* taxes. This is exactly 45 per cent, leaving 55 per cent to be borne by land improvements and personal property. Special taxes, such as licenses, succession taxes, corporation taxes, poll taxes, etc., are not included. But, as a large proportion of what is assessed as personal property is in fact real estate

in a disguised form, the probability is that real estate actually bears more than 75 per cent of all local taxes of every description.

The valuation of real estate in the census was certainly not made upon any lower estimate of the rate of interest than 5 per cent, as even that would value land at twenty years' purchase. Only a small part of American real estate could be sold then or now at even that rate. Nevertheless, that rate is here accepted. It follows that rent must be reckoned at 5 per cent on the capitalized value of land, since "land" in law is nothing but a name for a title to ground-rents.

On this basis the following results are reached. They are extremely conservative; that is to say, they err on the side opposed to the argument here presented.

True Value of Real Estate 1890

Real estate taxed as such ¹	\$35,711,209,000
Railways	8,685,407,000
Mines and Quarries	1,291,291,000
Telegraphs and Canals, far more than	312,093,000
Total	\$46,000,000,000
Land values, 60 per cent of this	\$27,600,000,000

Ground Rental and Taxes in the United States.

Rent at 5 per cent on \$27,600,000,000		\$1,380,000,000
National expenses	\$357,889,000	
Local taxes	470,652,000	
	\$828,541,000	
Deduct 45 per cent of local taxes already laid on rent	211,793,000	
Taxation on present net rents if all other taxes are repealed		616,147,000
Surplus rent		\$763,252,000

Thus all national and local taxes, if collected exclusively from ground-rents, would absorb only 44½ per cent of those rents, leaving to the owners of the bare land a clear annual rent of \$763,252,000, *besides the absolutely untaxed income from all buildings and improvements upon their land.*

The above estimate of ground-rents is very far below the reality. It does not include one dollar for the enormous value of oil wells, gas wells, pipe lines, the street privileges of gas, electric light, steam-

¹ Real estate worth over \$3,800,000,000 is exempt from all taxation.

heating, or water companies and other land privileges not expressly enumerated.

Article 3—Pennsylvania.

Owing to a very remarkable example of public spirit, the State of Pennsylvania affords an opportunity for an inquiry of this kind, unequalled in any other State. A Revenue Commission has been formed by associations of private citizens, representing all interests, which has pursued a line of thorough investigation for several years past. Although its work is still incomplete and some of its statistics are plainly erroneous, they have been prepared in the best of faith and with unusual care; while their errors are easily found and readily corrected.

In round numbers the Commission estimates the entire wealth of Pennsylvania in 1892, at a true value of \$9,692,000,000. Of this, \$1,250,000,000 are reported as "moneyed capital." This is an obvious error, in a computation of real wealth. Moneyed capital cannot mean anything else than debts and credits. . . . Deducting this item there remains real "wealth" (reckoning land values as part of wealth) to the amount of \$8,500,000,000. On the basis of a full report of fire insurance in the State, the Commission estimates that \$5,000,000,000 of this amount is of an insurable nature, that is, the value of buildings and chattels. This leaves the value of the bare land (which is the only thing incapable of being destroyed by insurable risks) at about \$3,500,000,000, or a trifle more than 41 per cent of the value of all wealth. . . .

The entire local taxation of Pennsylvania in 1892 was \$49,383,906. Of this there was levied upon real estate in various forms, \$36,000,000 as follows:

Taxes on "real estate"	\$32,645,631
Taxes on railways	2,146,331
Taxes on other land-owning corporations about \$1,200,000 say	1,208,038
	<hr/>
	\$36,000,000

Sixty per cent. of this is \$21,600,000; and this was the amount borne by the land values of Pennsylvania in 1892.

The proportion of federal taxation which would have fallen upon Pennsylvania, had federal taxes been direct, and levied in proportion to population, as required by the Consitution, was less than \$30,000,000. But if levied in proportion to land values alone, it would be about

\$36,000,000. These figures furnish all materials necessary to determine the effect upon Pennsylvania land-owners of a concentration of taxes upon ground-rents.

Pennsylvania — Ground-rents and Taxes of 1892.

Rent at 5 per cent on \$3,500,000,000		\$175,000,000
Federal taxes	36,000,000	
Local taxes	49,384,000	
	<hr/>	
	\$85,384,000	
Deduct 60 per cent of real estate taxes already paid	21,600,000	
Taxation on present net rents, if all other taxes are repealed		63,784,000
		<hr/>
Surplus rent		\$111,216,000

Thus all national and local taxes, if collected only from ground-rents, would absorb less than 36 per cent of those rents in Pennsylvania, leaving to the land-owners a clear income of over \$111,000,000 per annum, besides the untaxed income from their buildings and other improvements.

It will be noticed that a much smaller proportion of ground-rent seems to be required for the payment of all taxes in Pennsylvania than in the United States at large. This apparent discrepancy is due to the fact that the valuation of real estate, made by the Pennsylvania Commission, was 25 per cent higher than the census valuation of 1890.

If the census estimates should be accepted with reference to Pennsylvania, as in other cases, the result would be as follows:

Pennsylvania — Ground-rents in 1890 — Taxes in 1892.

Land values, per census 1890 \$2,810,000,000		
Rent at 5 per cent		\$140,500,000
Federal taxes	36,000,000	
Local taxes	49,384,000	
	<hr/>	
	\$85,384,000	
Deduct taxes falling on ground-rents in 1892	21,600,000	
	<hr/>	
Taxation on net rents of 1892, if all other taxes were repealed		63,784,000
		<hr/>
Surplus rent		\$76,716,000

On the basis of the census estimates of value, therefore, the concentration of all taxes upon ground-rents would absorb about 45½ per cent of Pennsylvania net rents. This, it will be seen, is nearly the same proportion of rent which would appear, from the census, to be sub-

ject to absorption by such taxation, if applied to the United States as a whole.

Article 4—Connecticut.

It appears, by the Report of the Special Commission on Taxation, in 1887, that the local taxes of Connecticut then amounted to about \$6,600,000, that the average tax rate was $1\frac{1}{2}$ per cent but railways were separately assessed and taxed exactly 1 per cent. The assessed value of real estate was \$251,000,000 of which land values, at the usual rate of 60 per cent, would amount to \$150,000,000. Railway property within the State was known to be worth, at regular market prices, \$62,000,000; and it was assessed at its full value, the tax being made low on account of the known under-valuation of all other property. The land value in railways, at 60 per cent, amounted to \$37,000,000.

The census of 1890 gives the following returns of the true market value of real estate in Connecticut.

Connecticut—True Values of Real Estate, 1890.

Real estate, returned as such	\$543,421,891
Railways	54,550,504
Mines and quarries	3,108,787
Canals, telegraphs, etc. ¹	14,753,310
	<hr/>
	\$615,834,492

Sixty per cent of this for land values amounts to \$369,500,000. We can now calculate.

Connecticut Ground-rents, 1890, and Taxes, 1887.

Net ground-rent at 5 per cent on \$369,500,000	\$18,475,000
Federal taxes, apportioned on basis of rents	4,800,000
Local taxes	6,600,000
	<hr/>
	\$11,400,000
Deduct taxes already laid on ordinary land values: \$150,000,000 at $1\frac{1}{2}$ per cent \$2,812,500	
Do. on railways at 1 per cent	370,000
	<hr/>
	\$3,182,500
Taxation on present net rents, if all others are repealed	<hr/>
	8,217,500
Surplus rents	<hr/>
	\$10,257,500

The concentration of all taxes upon the ground-rents of Connecticut, therefore, would not absorb more than $44\frac{1}{2}$ per cent of those net rents,

¹ This item includes shipping. But as gas works and other immensely valuable franchises on land are not included, this item is not too large.

leaving to the land-owners a clear income of over \$10,000,000 per annum, besides all their income from buildings and improvements.

Article 5 — Boston.

For the purpose of solving the problem submitted by Mr. Edward Atkinson, concerning the city of Boston, let us accept his figures, although they are not brought quite up to the date of 1890, and certainly understate the value of land.

His figures are given for 1888, and are as follows:

Land, assessed value	\$333,000,000
Buildings, assessed value	230,000,000
Personal property	201,000,000

The whole amount of State and local taxes in Boston, in 1888, is given by Mr. Atkinson at \$10,000,000 per annum; and he estimates the national taxes at "a sum as large if not larger than all the State, county, city, and town taxes combined." But in this he is much mistaken. For many years local taxation has exceeded national taxation; and as we have already shown, the State and local taxes assessed upon property by its value, *exclusive* of licenses, succession taxes, and many others, exceeded, in 1890, the whole amount of national expenditures by about \$113,000,000. In 1888 a direct tax of \$300,000,000 would have amply sufficed to cover all the expenditures of the federal government, pensions included.

Apportioned according to population, as the Constitution requires, Boston's share of such a direct tax would have been \$2,100,000.¹

Apportioned according to the value of the land, either with or without improvements, Boston's share of such a direct tax would have been much less than \$4,500,000. The latter figure may be accepted, not only as affording stronger support to Mr. Atkinson's theory, but also as based upon just principles, in accordance with which it may be assumed that the Federal Constitution would be amended, whenever strictly direct taxation is adopted.

It may be assumed with entire certainty, in this case, as in others, that the assessors' estimate of the value of real estate was based upon the theory that it was renting for at least 5 per cent per annum, net, on its capital value; for it is incredible that the assessors should have valued land at more than twenty times its annual rent. The annual rental value of the bare land of Boston in 1888 was therefore at least

¹ Population, 1890: United States, 62,622,000; Boston, 446,000.

5 per cent on \$333,000,000; that is to say \$16,650,000. The tax rate was \$13.50 per \$1,000 or \$4,500,000 on the bare land.

On this basis, and giving the benefit of every doubt in favour of Mr. Atkinson's views, the following conclusions are reached:

Boston Ground-rents and Taxes in 1888.

Ground-rent at 5 per cent of	\$333,000,000	\$16,650,000
Federal taxes		\$4,500,000
Local taxes		10,000,000
		<hr/>
		\$14,500,000
Deduct taxes on land values already paid		4,500,000
Taxation on present net rents, if all other taxes are repealed		<hr/>
		10,000,000
Surplus rent		<hr/>
		\$6,650,000

Thus all national and local taxes, if concentrated upon the ground-rents actually found and assessed by the assessors of Boston, would absorb barely 60 per cent of those rents, leaving Boston land-owners a clear income of over \$6,650,000 per annum, besides the untaxed income from buildings and other improvements.

Omissions from Boston rents. Thus far it has been assumed that the figures of Boston assessors, upon which Mr. Atkinson relies, correctly represent the market value of all Boston land. . . .

But it is not necessary to enter into this question just now. Even accepting the official assessment, these figures show upon their face that the assessors have omitted from their estimates of land values in Boston some items of immense importance. Where is there any account made of the privileges conferred over and under Boston streets, upon railway, telegraph, telephone, gas, electric light, steam heating companies, etc.? So far as these corporations actually own, in their own names and of record, offices and buildings, over which they have exclusive control, like any other private land-owner, such property is assessed, but only at the same rate per square foot as other private land. But not one dollar of the value of the franchises of any of these corporations, or of the privileges which they have over and under Boston streets, is included in the assessor's estimate of land value. This will appear even more clearly upon examination of the assessor's annual reports. Such franchises and privileges are never assessed under the head of "land" in any State of the union.

No doubt the Boston assessors and Mr. Atkinson were astonished at the suggestion, made some years ago, that all these franchises and privileges come within the definition of "land"; but they certainly do, both under the principles of economic science and under the plain terms of American law. They are "hereditaments,"¹ which form a part of "land" under both Massachusetts² and New York law³ although exempted from taxation by statute in New York, and by the dead hand of Chief Justice Shaw in Massachusetts.

Applying this principle to railroad, telegraph, gas, and other corporate privileges, in or over the streets of Boston, there can be no doubt that the land values appertaining to these franchises would be eagerly bid for at \$3,000,000 per annum. The whole of this large sum is entirely omitted from the official estimate of ground-rents in Boston; and therefore at twenty years' purchase the land of Boston has been undervalued to the extent of \$60,000,000.

This estimate is confirmed by the census 1890, which shows that the real values of real estate, including these franchises, were nearly 30 per cent higher than the assessed values in Massachusetts. The official figures for Boston alone are not at present accessible; but there is every reason for believing that the undervaluation there was as great at least as in the rest of the State, since Boston has more valuable franchises than any other part of the State. In view of these facts let us revise the foregoing table, on the basis of an addition of only 25 per cent, instead of 30 per cent.

Boston Ground-rents and Taxes, 1888. Corrected by Reference to Census.

Ground-rent assessed as such	\$16,650,000	
Correction of under-assessment per census	4,162,000	
	<hr/>	\$20,812,000
Federal taxes	\$4,500,000	
Local taxes	10,000,000	
	<hr/>	\$14,500,000
Deduct taxes on land values already paid	4,500,000	
	<hr/>	
Taxation on present net rents, if all other taxes are repealed		10,000,000
		<hr/>
Surplus rents		\$10,812,000

¹ *Smith v. New York*, 68 N. Y. 552.

² *Rev. Stat.*, ch. 3, § 7.

³ *1 Rev. Stat.*, 750.

The concentration of all taxation upon ground-rents, in Boston, would not, therefore, absorb as much as 48 per cent of those rents.

Article 6—Summary.

All the foregoing calculations have been made without any preconceived theory as to the proportion which taxation would probably bear to rent, and without any anticipation that there would be much uniformity in the results obtained from such widely separated and widely different communities. Let us now compare these results, reckoning the British pound at \$4.85.

	Net ground- rent, less present tax	Additional tax	Proportion taken by tax
Great Britain	\$ 731,307,000	\$433,095,000	59 %
United States	1,380,000,000	616,748,000	44½ %
Pennsylvania	140,500,000	63,784,000	45½ %
Connecticut	18,475,000	8,217,000	44½ %
Boston	20,812,000	10,000,000	48 %

The uniformity of result, where the figures are based upon the same census, as in the United States at large, Pennsylvania, and Connecticut, is remarkable.

In Great Britain the estimate of ground-rent does not allow a dollar for the value of vacant land or unoccupied houses, parks or pleasure grounds. The magnificent estate of Chatsworth is rated at only \$3,000 per annum. An addition of one third to the values included above would be far below the truth. With such an addition, the proportion of taxes to British rents would be reduced below 44½ per cent.

All attainable statistics thus point to the conclusion that the entire cost of the most expensive and even extravagant governments in civilized countries could be placed upon ground-rents, without taking in taxation even half of the present net income of land-owners from that source alone.

SECTION IV—OTHER ESTIMATES

Article 1—Great Britain 1899.

The foregoing estimates are from a single source; one more, therefore, may be added adopting a different date and method. The United Kingdom is chosen, and the returns for the year 1899-1900, preceding the increase in taxation required by the Boer War, as representing the

most normal year of a later decade. The fiftieth number of the *Statistical Abstract* for the United Kingdom is used (1888-1902), the page given refers to that upon which the returns cited may be found; only round numbers are presented.

The total Imperial revenue, derived from taxes, is given (p. 9) in the year selected as nearly £100,000,000. Of this total Imperial revenue a certain amount is derived from funds representing ground-rents. An approximation of this amount might be reached by estimating the total Imperial taxes paid by real estate and funds invested in land-using corporations; 60 per cent of this amount will probably approximate the taxes already paid by ground-rents. In order to estimate the amount of Imperial taxes contributed by real estate, it is necessary to discover what proportion of the income-tax is derived from that source. This be suggested as follows:

Schedule A. (p. 36) gives a total income for the United Kingdom from the ownership of lands, houses, and so forth of about . . .	£228,000,000
Schedule B. (p. 36) from the occupation of land . . .	17,000,000
Schedule D. (p. 39) total derived from railways, mines, gas works, water works, quarries, markets, tolls, etc. . .	69,000,000
Total income derived directly from landed interests . . .	£314,000,000

The total income assessed (p. 37) is about £565,000,000; the total revenue produced (p. 37) about £19,000,000. That portion of the total revenue of £19,000,000 produced by real estate might be established by the proportion:

$$314 \text{ (Mil. Ster.)} : 565 = (10) : 19.$$

In other words, the income derived from real estate (£314,000,000) will be to the total income (£565,000,000) directly as the revenue derived from real estate is to the revenue derived from total income (£19,000,000). This proportion suggests that about £10,000,000 of the income-tax is derived from landed interests. This permits the following estimate:

Total Imperial Taxes Derived from Real Estate.

Estate, etc. Duties (p. 9)	£14,000,000
Land-tax (p. 9)	800,000
House duty (p. 9)	1,600,000
Income-tax derived from real estate	10,000,000
Total Imperial taxes from real estate	£26,400,000

It thus seems that about £26,400,000 of the Imperial revenue was derived from interest coming under the heading real estate, or landed

interest. Sixty per cent of this amount may, therefore, be regarded as having been contributed from ground-rents; or £15,840,000 of Imperial taxes as derived from unimproved land values in the year selected.

Attention may now be directed to local taxes.

Total receipts for local expenditure 1899-1900 (p. 51)		£122,000,000
Deduct Government contributions	£16,000,000	
Loans	28,000,000	44,000,000
		<u>£ 78,000,000</u>

This leaves approximately £78,000,000 as the amount raised by taxation proper derived from local rates, representing water, gas and electric light undertakings, tramways, tolls, rents, sales of property and so forth.

No less an authority than Sir Robert Giffen¹ may be cited in support of the opinion that the entire incidence of local rates falls upon ground-rents. He says: "The idea of the separate rating of ground values arises from a misunderstanding of the real incidence of rates. As that burden falls *ab initio* upon the ground landlord, diminishing the sum of capital or income he is able to obtain for his property, there is really no separate ground value to be assessed." If this is the actual incidence of rates, as many authorities believe, it follows that the amount of local revenue derived from ground-rents is 100 instead of 60 per cent of the total revenue. Upon this supposition, the proportion of both Imperial and local revenue combined, borne by ground-rents at present, would be much greater than 60 per cent, and the proportion of present net rents, necessary to assess, in order to raise all revenue from that one source, correspondingly less. But limiting the percentage of land values to the estimate of 60 per cent of real estate, the following results are obtained; 60 per cent of £78,000,000 or £46,000,000 representing the amount of local taxes paid by ground-rents.

	Total revenue	Derived from ground-rents
Imperial taxes	£100,000,000	£16,000,000
Local rates	78,000,000	46,000,000
Total tax revenue	£178,000,000	£62,000,000
Derived from ground-rents.	62,000,000	
	<u>£116,000,000</u>	

¹Memoranda presented to the Royal Commission on Local Taxation, p. 97, cited by Professor Smart. Taxation of Land Values and the Single Tax, p. 46.

This leaves £116,000,00 to be assessed upon present net ground-rents if all revenue were derived from these values.

It now remains to estimate at what amount present ground-rents may be approximated. This may be done by taking 60 per cent of total income derived from real estate. This total has already been estimated at £314,000,000, 60 per cent of which is £188,000,000, a conservative amount at which to set the present net ground-rents of the United Kingdom. The foregoing estimates may therefore be summarized as follows:

<i>United Kingdom.</i>			
Total tax revenue	Net ground-rents (less present tax)	Additional assessment	Proportion of rent assessed
£178,000,000	£188,000,000	£116,000,000	61 per cent
	Net ground-rents	£188,000,000	
	Assessment	116,000,000	
	Surplus ground-rents	£72,000,000	

In the year 1899-1900 the entire revenue, Imperial and local, could apparently have been raised from the value of unimproved land, or economic rent, and still have left £72,000,000 of socially created wealth in the hands of individuals, together with the untaxed revenue from houses and improvements.

It is unnecessary to add to the number of these estimates; they may be made for any city, state or country, where the data is available. In any systematic study, however, care should be taken to obtain the real value of the unimproved land. This real annual value is usually at least equal to the assessed annual value; plus the annual value of the franchises of all land-using corporations; plus 60 per cent of the annual taxes already paid by total real estate. The sum of these annual values will approximate the true, or untaxed, annual value of the unimproved land, or gross economic rent. This gross rent may then be compared with the total revenue. If, for example, it is desired to discover the gross economic rent of the United Kingdom, to the present net ground-rent should be added all taxes paid by these rents at present. The estimates of the previous illustrations show:

<i>United Kingdom — Economic Rent.</i>	
Present net ground-rents	£188,000,000
Taxes already paid by ground-rents	62,000,000
Total untaxed or economic rent	£250,000,000

This gross, or economic, rent may be compared with the total revenue of £178,000,000 leaving £72,000,000 of economic rent untouched, were all revenue derived from the land.

Or, again, as in the illustrations presented, taxes already paid by unimproved land — that is, 60 per cent of taxes borne by total real estate, may be deducted from total taxes, and the remainder may approximate the amount to be assessed upon present net ground-rents in a direct fiscal system, based upon socially created wealth alone.

Article 2 — Other Countries.

Without carrying detailed calculations any farther, it may be of interest to attempt to discover to what extent those presented apply to other countries. This may be done through a study of the relations existing between total property and real estate, total earnings and tax-burden.

If these relations in a number of different societies present no fundamental distinctions between the same relations in the countries considered, there seems ground for the opinion that the annual value of economic rent more or less approximates the same relation to revenue in other countries as in those examined.

The following table¹ presents an approximation of the relations of tax burden to total earnings.

	Earnings Millions £.	Million £ Sterling			Ratio of Tax.
		Nat. Taxes.	Local.	Total.	
United Kingdom	1,423	79	43	122	8.6
France	1,199	102	42	144	12.0
Germany	1,284	85	45	130	10.1
Russia	1,004	84	11	95	9.5
Austria	707	69	15	84	11.9
Italy	436	56	27	83	19.0
Spain	273	29	7	36	13.3
Other states	816	52	28	80	9.8
Europe	7,142	556	218	774	10.8
United States	3,116	65	98	163	5.2
Total	10,258	621	316	937	9.1

The following table presents the approximate relation of real to total property in the countries named. It may be found in Mulhall's

¹ Mulhall's *Industries and Wealth of Nations*, p. 53.

*Industries and Wealth of Nations*¹. The proportions have here been roughly transposed from diagrammatic to numerical relations.

Proportion of Real to Total Property.

United Kingdom	35 per cent.
France	50 per cent.
Germany	45 per cent.
United States	49 per cent.
Russia	50 per cent.
Austria	50 per cent.
Italy	52 per cent.
Spain	55 per cent.
Holland	49 per cent.
Belgium	50 per cent.
Australia	37 per cent.
Canada	37 per cent.
Average	46 per cent.

These relations between total and real property, total earnings and total expenditure, apparently show that economic rent does not fall below the administrative requirements of a society. Such relations lead but to approximate opinion; the fairly constant nature of the series seems, however, not without significance.

In any attempt to estimate the value of unimproved land in any city, state, or country, it should be remembered that the available returns in many cases do not present the necessary material; or the material presented may be misleading. For example; in New Zealand the value of the unimproved land is returned² at about £95,000,000 for 1902. The general taxes for that year amounted to about £6,000,000 from which £3,000,000 may be deducted as derived from state owned railways, post-offices and so forth, leaving £3,000,000 to be added to about £2,500,000 of local revenue; a total tax revenue of about £5,500,000. At twenty years' purchase the annual value of the unimproved land returned would be but £4,750,000. Under the Land and Income Assessment Act of 1900, there was an ordinary land-tax on the actual value of the land, and an income-tax. Mortgages are subject to the land-tax at the rate of 1d. in the pound. In addition to the ordinary land-tax there is a graduated tax on land, rising from one eighth of a penny in the pound on values from £5,000 to £10,000, up to twopence in the pound on values of £210,000 and upward.³ Yet, even with

¹ Plate XXV, p. 52.

² *Statesman's Year Book*, 1904, p. 366.

³ *Ibid.*, pp. 364, 365.

allowance for the exceptional incidence of these taxes upon unimproved values, the amount returned as such may not approximate what seems to be the normal relation as established by the returns of England and the United States. If this is the case, it is necessary to inquire whether the item returned as unimproved land represented unoccupied land alone—that is, did not include land occupied by improvements. These are returned at about £60,000,000; this estimate may include improvements and sites. If this is the case, 60 per cent of these £60,000,000, should be added to the £95,000,000, in order to reach a closer approximation of the real value of the land. It is also necessary to inquire whether, in the values returned, any account had been taken of the values of the franchises of land-using corporations, and not until these had been estimated and added to the other values can even an approximation to the real value of the land be obtained.

These estimates suggest that the annual value of economic rent in any society is generally in excess of the social expenditure; or, to present a closer relation, that the entire expenditure of the societies considered might have been met in the years selected by an increased assessment of, approximately, 50 per cent upon the present net value of the unimproved rents.