LRTPP

A. Meaning

Essentially, rent is the net product of land after deducting non-land costs. It includes imputed service flow as well as cash flow, of course, with the former assuming primary importance today because exempt from income tax.

There is a host of definitional details in applying the simple basic concept of rent. In respect to time, "rent" is originally an annual concept based on the yearly repetitive cycles of farming. Most urban ground rent, even under static assumptions, derives from an irregular stream of costs and revenues over the life of a building. To be sure, the ubiquitous parking lot yields yearly and even daily and hourly ground rent with a minimum of intertemporal dependence of costs and revenues. But most urban rent must be discovered by first forecasting the life of buildings; then discounting costs and revenues to the present; and finally multiplying this present value by the capital recovery coefficient,[1] which converts it to a level annuity over building life.

HN
1
.R45

UNIVERSITY of PENNSYLVANIA

PHILADELPHIA 19104

617-
Sheraton Plaza CO7-5300

Wharton School of
Finance and Commerce
REGIONAL SCIENCE DEPARTMENT

January 19, 1968

Professor Mason Gaffney
Department of Economics
University of Wisconsin
at Milwaukee
Milwaukee, Wisconsin

617 ~~547 4800~~ Fall

Resn.

Dear Mason:

As you know, the Regional Science Association holds an annual meeting in North America during the month of November. Our 1968 meeting is now scheduled to be held at Harvard University, Cambridge, Massachusetts on November 8 - 10. Headquarters will be at the Hotel Commander, Cambridge, Massachusetts. The host for the 1968 conference will be the Graduate School of Design at Harvard University.

I am now in process of organizing the program for the second Harvard Conference. Recently Ben Stevens has told me of your most interesting work and has urged me to invite you to present a paper which might be entitled Land Rent, Taxation and Public Policy. I very much hope that you will be able to give us a paper of this sort, or on some related topic.

Because many discussants have urged that papers be sent out for discussion in adequate time for development of comments, I am now instituting the rule that each person who delivers a paper must send out to each of his discussants (of whom he will be informed) a copy of his paper by October 5, 1968. Also, the acceptable papers are scheduled to be published as Volume XXIII Papers, Regional Science Association, 1968. The Association therefore reserves full rights to the publication of these papers.

I look forward to hearing from you soon. I very much hope your response will be positive.

With very best regards.

Sincerely,

Walter Isard

WI/do'd

Accept.

17.85
17.85
35.70

~~'Foresight'~~
~~New ideas 3 stages~~ Oral Speech, RSA, 11-9-68

I. Recent & previous work

Netzer, Harriss, Clawson, Alyea; Turvey; Holland, Lindholm; Kaldor; Brewer; Clark, Rawson (ULI), Groves.

Classics.

Then came George.

But Pigou, T.N. Carver, Marshall, Graham, Hotelling.

J.R. Commons.

Walras - George pales

Wicksell.

Others neutral or hostile.

So not neglected by great ecsts. But has bn. a communicns. gap.

And topic much bigger than the little attn. it has received.

I survey — many challenges.

II. Rent: meaning, sources, fns.

+ A. Meaning

Net product, incl. imputed service flow. Is also MP,

Annualize; ~~[illegible]~~ average over space as well as time, but remember to dist. ave. from mgnl.

Best viewed as Oppy. cost. Ideally, Change to all uses, cut off lower options

Not best viewed a residual, in gnrl., that takes whatever's left over. Landlords are more importunate. Owners shd. impute opp. cost. Worthy of its hire. Always definable, unlike irreversible inputs. Always a

% CHANGES NO WAR

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9106	- 7.34	- 7.34	- 4,713,653
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9108	0.0	0.0	0
9109	0.0	0.0	0
9110	0.0	0.0	0
9111	+ 20.69	+ 92.24	+ 306,417,375
9112	+ 13.35	+ 13.35	+ 2,770,462
9113	+ 28.25	+ 28.27	+ 21,794,299
9116	- 33.36	- 33.30	- 75,543,514
9117	-	- 65.75	- 375,968,787
9118	- 4.14	- 4.14	- 4,814,772
9119	-	- 55.92	- 74,105,827
9120	- 100.00	- 100.00	- 231,660,041
9121	-	- 46.85	- 412,521,674
9122	- 40.64	- 37.56	- 38,408,445
9123	-	- 83.66	- 69,091,540
9124	- 13.79	- 15.75	- 16,102,510
9125	-	- 21.75	- 78,962,489
9126	- 10.10	- 10.10	- 7,347,622
9128	0.0	0.0	0
9129	- 36.67	- 61.58	- 49,780.681
9130	- 5.32	- 23.39	- 104,875,746
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9136	- 54.02	- 47.22	- 19,576,430
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GRAND TOTAL	- 10.22	- 19.71	-1,456,529,847

scrap value.

Yields its service flow by being owned & available. This, like lawyer's time, is its stock in trade. Is an input. If no output, land blameless. Is passive & unresponsible. What entrep. does w. land is his fn. ~~If no outp~~

Not risk-bearing. A hired factor, functionally. Capl. advances subsistence. Wicksell. Lessees pay regular flat amount. Imputed rent is that, too.

Def. imptnt:

1. How much ~~[illegible]~~ urban r.e. inc. is rent?
2. How best to tax it?

B. Sources

1. Natural features

Beware going overboard

2. Public spending

Army & police

Works (esply. if low user charges; Newton's Law)

Less landowner contribn. Not less "man's contribn". Public value. Depends on what public does free. Rent is what can be taxed away.

Zoning. Gives or denies.

~~Mapy. of streets. Easements; licenses.~~

3. Agglom. ecs.

Chinitz

Hoover: multiples (specializn); massing of resources (pooling);

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Vet. Admin: Med. Inst.	9105	1,943	16,577,299	21,794,463	20,005,353	97,942,150
Vet. Admin: Administ.	9106	1,690	12,165,129	12,951,073	12,638,999	64,189,148
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U.S.N. Sup. Shipbuilding	9128	111	1,210,000	13,975,000	12,713,275	69,273,781
U.S.N. Facilities Eng. Comd.	9129	180	1,833,425	23,630,774	14,015,467	86,517,152
Frankford Arsenal	9130	5,809	56,741,000	490,182,000	91,774,634	454,621,007
Corps. of Engineers	9131	613	4,980,668	31,274,366	19,350,887	105,006,904
N.A.E.C.	9132	2,423	19,909,063	123,009,063	65,833,455	341,517,987
N.A.D.C.	9133	2,967	30,306,985	92,945,807	46,241,429	238,415,169
NavPub Form Ctr	9134	159	13,050,934	65,867,084	56,402,407	290,717,127
Military Hospitals	9135	3,369	23,062,088	45,107,585	37,663,465	181,202,015
Naval Air Station: WG	9136	1,033	8,636,801	12,295,963	9,636,801	49,328,785
Naval Shipyard: Philadelphia	9138	12,194	113,293,000	295,293,000	206,059,055	1,009,058,222
GRAND TOTAL		79,653	657,430,096	6,010,981,429	1,443,141,969	7,479,173,622

bulk (scale).

Spread words. Add cheaper distrib,

sharing costs; warranting greater outlays.

- dev. basic assets
- unique facilities

what compan.

max. choice. variety; options.

innovation. (Nursery for. of N.Y.)

pool risk; max. load factors; improve credit

~~more options~~

2

Yellow Pages.

Adam Smith

C. Functions

No elicit, just ration.

Supply As, but it As itself. Synergism, fits of absent-mindedness.

Words have been wasted. Depends on context. Elast. supply in our context is one that flees a tax. Can tax the hell --

Tax As supply; a little, if anything

more M for p.w.

more incentive for p.w.

activate inert land

Sector	Title
9116 9117	Defense Personnel Support Center
9118 9119	Defense Industrial Supply Center
9120 9121	U.S. Army Electronics Command: Economic Activity
9122 9123	U.S. Marine Corps Supply Center
9125 9126	Defense Contract Administration Services: Regional
9128	U.S. Naval Supervisor of Shipbuilding
9129	U.S. Naval Facilities Engineering Command, East Central Division
9130	Frankford Arsenal
9131	U.S.A. Corps of Engineers
9132	Naval Air Engineering Center
9133	Naval Air Development Center: Johnsville
9134	Nav Pub Form Cen Naval Publications and Forms Center (NSD) Naval Publications and Printing Services Office 4ND Naval Air Technical Services Facility Naval Oceanographic Distribution Center
9135	Military Hospitals Naval Hospital: Philadelphia Army Hospital: Valley Forge
9136	U.S. Naval Air Station: Willow Grove
9137	U.S. Naval Shipyard: Philadelphia

But supply, natural limit, all the more imptnt. that ~~land~~ rent ~~&~~ serve 2d function, to ration. Where this fn. is ~~(Unless you believe in low density zoning.~~ obstructed, as by lo-density zoning or rent control, supply won't go around.

+ Lets no one ~~forget land~~ believe open space is a free good.

Ecze on natural features; public spending; & synergism.

+ Same effects as Ag supply, but at no cost.

E & W -- sorter & arranger -- ff. von Th.

Rent more subtle. Determines opt. intensity. Several dimensions.

1. Ht. Marshall

2. Quality

3. Density or crowding

+ 4. anything that As yrly. service flow or product

Virgin territory. (Tastes differ. & Even F. Wn. married a widow)

For given Co, shorter life. (i.e., devote capl. to Ag service flow rather than Ag life)
For given life, higher Co

Even more subtle

+ Rent has social, aggreg. fns -- ~~makes~~ coords. peoples' economizing.

Stimulates produ. of synergism -- yes, even those that are produced in fits of absent mindedness! Invis. hand, once removed.
Mkt. even makes people produce spillovers.
(I'm not von Mises anarchist; only occasionally vote Republican.

~~Just see a fn.~~) But F.E.E. may be overlooking a good thing)

Bcs. highest use ~~gives access~~ complements neighbors.

Sector	Title
9101	U.S. Department of Agriculture ARS, Eastern Utilization Research & Development Forest Service: NE State & Private Forest Service: NE Forest Experimental Station ERS, Natural Resource Economics Division Soil Conservation Service
9102	U.S. Post Office Department Regional Post Office General Post Offices Postal Inspection Services
9103	Social Security Administration Social Security Administration Payment Center Social Security Administration District Office
9104	Internal Revenue Service Regional Office District Offices Mid-Atlantic Service Center
9105	Veterans Administration: Medical Institution V.A. Hospital: Philadelphia V.A. Hospital: Coatesville V.A. Outpatient Clinic: Philadelphia
9106	Veterans Administration: Administrative V.A. Service Center V.A. Data Processing Center
9107	U.S. Coast: Gloucester City
9108	U.S. Mint: Philadelphia
9109	Bureau of Customs
9110	U.S. Treasury: Bureau of Accounts
9111	U.S. Department of Housing & Urban Development Regional Office Renewal Assistance Metropolitan Development Housing Assistance Federal Housing Administration
9112	National Park Service Regional Service Center Independence N.H.P. Hopewell Village N.H.S. Bureau of Outdoor Recreation, Regional Office

~~This comes about bcs.~~

+ Landowner only wants access. But law of Reciprocity.

Access is mutual. So what is poor Snooze to do.

In spite of worst intentions

So rent makes synergism self-reinforcing.

Timing of succession.

Synchr. synergistic succession: (SSS)

So; rent shd. be changed. Has important fns. No rent control; no snob zoning. (FEE shd. redirect its guns on the latter)

III. Taxn. & fns. of Rent

~~Can~~ May tax & not obstruct.

Must tax, not to obstruct: ~~(PPP)~~ (PPW)

Tax not an added charge. Replaces interest

$$CC = (i + t) \cdot P$$

$$P = \frac{a}{i + t}$$

$$CC = a$$, regardless of t.r.

So some say makes no difference. But naive fellow who thinks taxing land adds to cost & forces land into use

THE PHILADELPHIA INVERSE:

A Toy For Regional Scientists

A Tool For Regional Planners

Walter Isard
Thomas W. Langford, Jr.

Department of Regional Science
University of Pennsylvania
Philadelphia, Pennsylvania

8 November 1968

is right, too. Is just more subtle.

Replacing i by $\underline{r}$ is potent.

A. ~~Cap~~ Price discr. in credit

1. Poor pay more. Get less, shorter time, less certainty of refinancing.

Basis is collateral, not m.p.

Liquid funds flow uphill

Equity buffers, imputed int. at oppty. rate

Corps. plow back surplus funds

Heiresses, retirees, not responsive to imputed cost, but oppties.

No wealth effect, no cash drain

2. Price you pay for land is P.c. Poor pay more

Price discr. in reverse.

Screens out bottom of mkt.

Is also demand weakness. But this is supply side. Redoubles weakness.

Other durables, depress. is a cost, and dilutes interest diffs.

Asset must have 40 yr. life before yrly. int. cost $\geq$ depres.

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3. Land appreciates. Deduct from interest cc, opposite of depreca. Fortifies differences. A principle of leverage.

$\cancel{\frac{9\%}{6\%} = 1.5 \qquad \frac{9-3}{6-3} = \frac{6}{3} = 2}$

$\frac{7\%}{4\%} = 1.75 \qquad \frac{7-3}{4-3} = \frac{4}{1} = 4.0$

4. Differences of risk
Land is risky for newcomers ~~bu~~ renting, & even moreso buying it.

No one advises a non-owner to rent or fnce. more land to reduce risk. Is a hired factor.

Buying it esply. risky. Not only pay the hire, you buy the principle, is part of yr. debt service. Value of principle is hi relative to hire.

But if you already own the principle, payment of hire is optional. Can draw on that to cover risk. But that is peanuts. You can draw on principle to cover risk, by banking it.

So landowner may min. risk by underimproving. Avoid hi service flows from land -- last quarter of inc. is "low quality".

Depreciable assets, ~~in~~ esply. those of hi turnover, short

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lives, have much less value relative to current cash flow and cost. Much less a cushion ~~to cover~~ value to risk.

(Is not social risk that is avoided. L.V. is not a fund of capl. Landowner who draws on it to meet deficit is drawing on other capl.)

Also minimizes ~~avoids~~ mgmt.

So: Δ t replaces a cost & poverty w. less discrim. one.
Good allocative effects. Also good distrib. effects.
Makes propty tax progressive.

Land superior good. Good neighborhoods are superior good.

And then the poor pay more besides.

Helps small bus. Now, majr oil cos. get all good corners. Neg. current cash flow, but they can wait. Who can wait so well as they? Duke of Plaza-Toro. Spruce. Expansion depends on ~~selle~~ finding weak sellers.

B. Land appreca.

Virtually exempt from inc. tax.

Needs to be offset.

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9118 9119	Defense Industrial Supply Center
9120 9121	U.S. Army Electronics Command: Economic Activity
9122 9123	U.S. Marine Corps Supply Center
9125 9126	Defense Contract Administration Services: Regional
9128	U.S. Naval Supervisor of Shipbuilding
9129	U.S. Naval Facilities Engineering Command, East Central Division
9130	Frankford Arsenal
9131	U.S.A. Corps of Engineers
9132	Naval Air Engineering Center
9133	Naval Air Development Center: Johnsville
9134	Nav Pub Form Cen Naval Publications and Forms Center (NSD) Naval Publications and Printing Services Office 4ND Naval Air Technical Services Facility Naval Oceanographic Distribution Center
9135	Military Hospitals Naval Hospital: Philadelphia Army Hospital: Valley Forge
9136	U.S. Naval Air Station: Willow Grove
9137	U.S. Naval Shipyard: Philadelphia

C. Recourse to other taxes

Bias landowner vs. heavier taxed use.

Thus get shifted to poor. Bec. they use land more intensively. Weakens their bidding power vs. rich.

Weakens new vs. old. Prevents s.s.s.

Weakens intensity; lose synerg.

Adds to sprawl.

Wd. sterilize mgnl. land, like Tithes.

But ∆ P.W. Synergism pushed outward.

D. Logrolling

Unearned enrichment.

P.W. the coin of distrib. "equity" — among electoral districts.

Discredits wealth & propty. p. 31

E. Mkt. imperfections.

Mnpy. elements in rent.

Assembly. Every nightmare imaginable.

Hoarding. No pooling. Vert. int, everyone holds own neurosis becomes foresight.

reserve.

Waiting for certainty -- & imposing uncertainty.

Sector	Title
9101	U.S. Department of Agriculture ARS, Eastern Utilization Research & Development Forest Service: NE State & Private Forest Service: NE Forest Experimental Station ERS, Natural Resource Economics Division Soil Conservation Service
9102	U.S. Post Office Department Regional Post Office General Post Offices Postal Inspection Services
9103	Social Security Administration Social Security Administration Payment Center Social Security Administration District Office
9104	Internal Revenue Service Regional Office District Offices Mid-Atlantic Service Center
9105	Veterans Administration: Medical Institution V.A. Hospital: Philadelphia V.A. Hospital: Coatesville V.A. Outpatient Clinic: Philadelphia
9106	Veterans Administration: Administrative V.A. Service Center V.A. Data Processing Center
9107	U.S. Coast: Gloucester City
9108	U.S. Mint: Philadelphia
9109	Bureau of Customs
9110	U.S. Treasury: Bureau of Accounts
9111	U.S. Department of Housing & Urban Development Regional Office Renewal Assistance Metropolitan Development Housing Assistance Federal Housing Administration
9112	National Park Service Regional Service Center Independence N.H.P. Hopewell Village N.H.S. Bureau of Outdoor Recreation, Regional Office

THE PHILADELPHIA INVERSE:

A Toy For Regional Scientists

A Tool For Regional Planners

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Philadelphia, Pennsylvania

8 November 1968

Land taxn. oils up the mkt.

Speaking of oiling up

Challenges for regional scientists

New life. Only hints. Only scratching. More hands needed. Basic reeval. of society's most basic instn. at center of field of reg. sci.

How much boldness -- ?

Netzer:

Macro -- that virgin territory.

In 2 yrs. I hope to prove.

Capl. requrts. of urban living

Mke. study will nail down

Volume effects vs. distance effects.

Releasing land to commerce is also self-reinforcing, this time constructively. When land ownership turns over faster and easier, everyone's hoarding propensity relaxes. As to the waiting and certainty problem, synchronized assessment increases over whole neighborhoods give the signal that lets every landowner know the time is nigh, and lets each one avoid narrow self-sufficiency and orient his improvement to the immediate prospect of a total interdependent community, complete with Yellow Pages, rising around him.

IV. How to Tax Rent

We saw earlier that many local taxes are shifted to rent, and are indirect taxes on rent. So the trick for public policy is not just to tax rent, it is to tax it in such manner as to exploit the fact that rent may be taxed with benefit rather than damage to economic functions.

A. Fiscal leverage vs. fiscal profit sharing

The benefits spring, to repeat, from imposing a regular cash cost on the landholder, a charge that discourages his ever retaining land in uses whose service flows fail to cover it. To this, many have objected that it is too harsh; that land users prefer risk-sharing and profit-sharing to leverage. They can point to some voluntary contracts between private lessor and lessee where rent is a share of profit, or of gross. One could point, on the other hand, to ordinary mortgage terms, with debt service in excess of land rent, which apply more leverage than mere cash rent would. But there are reasons why government should apply more leverage than a private landlord does to his lessees.

One, government possesses a power to allow for exogenous risks, a power not generally available to private landowner lessors, by its

assessment of land. That is if, through no fault of a landowner, land on which he had built should suffer a neighborhood decline, a government taxing rent would share the loss by lowering his land assessment. If the fault were his, on the other hand, he would suffer it all, for there would be no general decline of neighborhood values. Likewise, he would reap all the gain from his superior management.

There are a few instances of private contracts tying interest or wage or farm rent payments to some index of market changes. For urban land, however, there is no device in private contract that ties rent to an annual assessment: hence recourse to less perfect devices. Government alone is in a position to apply maximum incentive leverage while still sharing exogenous risk. Sharing the latter, it can reasonably be much firmer about the former.

Two, government as representative of the whole community is interested in fostering cumulative spillover benefits from private investments. It wants private investors to complement its public works with matching private works, containing urban sprawl by meeting demand from good central land. It wants to synchronize interlocking private investments and minimize mutual uncertainty in developing areas. It wants to unfreeze the whole land market, discourage hoarding, and prevent all the social wastes of blocking competition.

Three, private risk-sharing contracts presuppose a large guaranteed lessee investment in a building. There is the leverage. Government can not get involved in everyone's private business like that, telling landowners when to build and how much they must invest. By charging a regular rent tax, regardless, it assures that landowners will raise buildings in good season.

A complicating question in rent taxation has always been the treatment of increments to value; and the choice of capital value or current income (realized or "notional") as the tax base.

As to the first, taxation of land value increments obviously lacks the good incentive effects of taxing rent. It is avoidable by not selling, and greatly diluted by deferring sale. It puts a hurdle in the way of sale by investor to builder, and then applies no leverage to the buyer. It warrants short shrift.

Capital value as a tax base has been often criticized as overtaxing rising land whose capital value has risen out of proportion to current cash income. Heilbrun [, pp. 123-27] has demolished this argument as it deserves.[12] The income from rising land includes appreciation, at the time it accrues. To get at this income, without waiting for sale, a simple tax on capital value suffices.[13] To tax current cash income in the lower use is to miss out altogether on taxing the increment. To tax capital value is to have an increment tax, but one that is not diluted by deferral until sale, and does not discourage timely ownership turnover.

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[12] For mathematical treatments see Mason Gaffney Tax-Induced Slow Turnover of Capital [, pp. 308-13 and 321-22; and Mason Gaffney Land Cost ... [ ].

[13] The tax is a fixed percentage of the capital value. So, in equilibrium, is the yearly appreciation. Therefore the tax is a fixed percentage of the appreciation.

B. Rent, spillovers, and congestion of open facilities

There are two brakes on increasing returns from urban synergism: internal congestion; and external markets. Here we treat the first.

Those who fear congestion of open common space and facilities--streets, schools, parks, air and water--rank high among people who oppose letting rent serve its economic function of forcing land to the best use. They regard congestion of common open space as an external diseconomy from use of private land: where I have stressed synergistic gains, they see net losses. They favor taxes on actively using, rather than passively holding land, interpreting user taxes on landowners as user charges for open common land and facilities. They favor compulsory land-consumption via low density zoning, the better to insulate man from his neighbor, and above all to avoid letting immigrants in cheap housing dilute the school tax base. They do not share the Horace Mann philosophy of paying out a social dividend to the poor man's children by taxing the rich man's land.

There is no question of the premise that congestion and pollution are bad. What to do about it is something else again.

One must concede something to each of the points, but not very much, for they are based on a number of confusions.

Confusion number 1 is not to hold population constant in the analysis. That is, intensive land use is implicitly blamed for the birthrate. Land economics takes population as given. Its problem is how to deploy people, not to sterilize them. Thus, intensive land use near downtown does not in itself increase street loads. Rather, it lets a given number of people get downtown by walking or bus-riding a few blocks rather than driving a few miles and parking all day. Which

arrangement imposes less burden on streets, air, and open space? Which puts more sprawl between the city and recreation in the open country?

True, the more efficient city then attracts immigrants. But these bring added economies of urban scale. The point of urban planning is to achieve a maximum of such positive interdependencies with a minimum of negative frictions like congestion. To that end, accommodate efficiently each given increment of people, and welcome the next. Those who agree with William H. Whyte that "open space is not merely the absence of something bad; it is a positive good" will be pleased to note that the immigrants to these efficient cities cannot avoid leaving great realms of empty open space behind them.

Confusion number 2 is to equate intensity of private land use with congestion of common space. In fact, private buildings transport people vertically, substituting elevators for horizontal street movement. If we cut off the marginal twentieth story of an apartment or office, and relocate the floor space ten miles out at the other margin of the city (the horizontal one), we would throw a great new load on ten miles of common streets. This is no way to decongest them.

Intensive private land use does not mean an absence of park land. Population around parks justifies the public investment in space, in landscaping and furnishing it. Putting private land to work meeting the legitimate space demand for homes, work, and market relieves the pressure to invade park land. Central city park sites become dearer, it is true. But if urban sprawl were contained by intensive central development, fringe lands now eyed by subdividers would revert to low values and open recreational use.

Confusion number 3 is to overlook the factor of age and quality of buildings. Taxes on buildings and low density zoning are thought to screen out marginal buildings and their inhabitants. But they screen in buildings that become marginal by virtue of senility.

Confusion number 4 is to conceive of congestion in short run terms. An overloaded sewer, for example, is a sign of short run increasing costs, but not long run. It is a signal to replace the mains with larger ones, achieving in the process great economies of scale. Car-choked streets manifest increasing social cost of cars, but not of transport. They are a signal to tax cars and promote mass transit, again achieving economies of scale. Crowded schools do not reflect overpopulation but inadequate schools, and failure to take advantage of Conant's Law of increasing returns to scale of school.

There is such a thing as true congestion. There comes a scale of city so large and central density so high that an absolute space limit is approached. The "linkage sector" of the city (transport and utilities) moves into the stage of long run increasing costs. In this extremity the optimal solution is not to abandon the principle of taxing rent, but to extend it to the linkage sector, which now yields rents, too. In this case the object of the charge is to limit use and space-consumption in the linkage sector, and so it should take the form of a user charge. Use of unfenced open space without tenure protection is temporary tenure of the space. So a "use" tax on open space is analogous to a flat tax on the rent of land in formal private tenure. It is not analogous to a tax on the use of private land, but exactly the reverse. To tax the use of private land is to untax the non-use of it. This lets owners hold the space without charge, which is analogous to letting them "use" public space free.

The optimal user charge would be selective, hitting and screening out congesting and polluting uses, reserving limited downtown street space for higher and less congesting uses. With such a concept in hand, and someone like Professor William Vickrey or James Nelson to administer it, there might indeed be no limit on the optimal size of a city. May we be so lucky as to have a chance to find out soon! Meantime we already observe progress in this direction on many fronts, from parking meters to pollution police.

Confusion number 5 would be to think of school congestion as a space problem. It is a problem of finance and distributive equity. The solution, I am sure, is to support schools in part by state or federal aids based on population or attendance. Redistributing wealth and paying social dividends are not functions we can realistically expect of local government in a mobile age.

C. Intergovernmental relations

The second brake on increasing returns from urban synergism is the external market. Many cities fear growth because they think their market is limited.

If a private firm reasoned that way, economists would identify it as a monopoly and evaluate the attitude accordingly. To cities we give more rope: they represent the public. But what "public?" Only the landowners of the city. They are all too happy to exploit other "publics" in the old Hanseatic tradition documented by Schmoller [ ] and the German Historical School.

Central government represents the larger public. Its interest is to apply more positive leverage to cities than they might apply to

themselves, to counter any monopoly restriction or stodginess. One such kind of leverage I have already mentioned, the payment of school subventions based on population. Legislative reapportionment based on population affords another growth motive, albeit with some unwholesome pork barrel implications.

A third kind might be a state tax on rent, as now proposed in Oregon by Dean Lindholm. State government finances many of the public works that generate urban rent. It has a legitimate interest in being recompensed. It stands toward cities much as they stand toward private individual landowners. The state spends to give the city opportunities. Many cities fail to respond with spending on local feeders and network lines to match the State's trunks. The State needs to apply tax leverage.

It has the institutional power. State taxation of real estate is not dead, merely quiescent. Some creative economist needs to propose a specific formula for sharing rents between State and city. The important thing is the general purpose: collect State-created rents to prompt cities to spend to generate more rents. In sharing these new rents between State and city, both can afford to be generous. Synergism yields a comfortable surplus for the city. As for the State's tax base, Adam Smith noted 193 years ago that the "Commerce of the Towns Contributed to the Improvement of the Country." [, Book III, Chap. IV]

"Land Rent, Taxation, and Public Policy"--the field has lain fallow too long. This generation of economists and regional scientists are giving it new life. My brief survey only hints at what they are doing; they are only scratching at what needs doing. Many more hands are welcome: the spillovers are positive; the returns are increasing synergistically.

December 19, 1968

Morgan D. Thomas, Editor
Papers
Regional Science Association
Dept. of Geography
University of Washington
Seattle, Washington 98105

Dear Morgan:

Please note the following emendations in the mimeographed manuscript of "Land Rent, Taxation, and Public Policy" which I sent you recently.

p. 15, n. 18: Last line.... hence

p. 19: Line 8 ..... nearer

p. 30: 2nd line from bottom .... medicine
35: 1st line .... clumsy
p. iv: #50, A. T. Henley, "Land Value Taxation in California," American Journal of Economics & Sociology 28(4):377-86 (October 1968)

Sincerely,

Mason Gaffney,
Professor

MG:fl

No. 1 on mailing list, RSA paper. – 2 copies sent 12/16 & 18

UNIVERSITY OF WASHINGTON
SEATTLE, WASHINGTON 98105

Department of Geography

October 18, 1968

Professor Mason Gaffney
Department of Economics
University of Wisconsin
Milwaukee, Wisconsin 53211

Dear Professor Gaffney:

I would very much appreciate receiving the final draft of the paper you plan to present at the Regional Science Association meetings to be held in Cambridge, Massachusetts, November 8-10, 1968. Please send final original copy to me by December 31, 1968.

Thank you.

Sincerely,

Morgan D. Thomas
Editor, Papers
Regional Science Association

MDT:sb