

Ground Rent Seeking in U.S. Economic History
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Abstract

The term "rent" originally meant the return on land in classical economics, and later also came to mean economic rent, returns not needed to put factors into production. Much rent seeking has been the transfer of land and land rent via the political process, rents in both senses of the term. This paper argues that rent or transfer seeking is induced by the structure of government, which has remained fundamentally unchanged since the adoption of the U.S. Constitution. Public choice theory indicates that rent seeking would take place during the 19th century, an era often pictured as an era of small government and budgets in balanced or in surplus. Much rent seeking did indeed take place, and the vehicle of transfers in the 1800s was land. With income regarded as an increase of assets, the federal budgets during the 1800s had massive off-budget deficits due to the large amounts of lands transferred, reducing the government's asset endowment. The paper also notes that much of the transfers went to concentrated interests, accompanied by substantial fraud and corruption. The paper concludes with an alternative voting structure that would likely reduce the rent-seeking disease of democracy.

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Rent seeking is a function of government structure. As Charles Rowley (1993, p. 1) puts it, "majoritarian democracy generates a mercantilist economy." A central principle of public-choice theory is that transfer seeking, the "disease of democracy," is a consequence of concentrated benefits and spread-out costs, like an iceberg, in which the benefits above the water are borne by the greater mass beneath the surface. This iceberg effect is caused by the incentives of the political structure, as laid out by Mancur Olson (1971). Olson noted that the incentives change with group size, small groups being less conducive to transfer seeking.¹ Rent or transfer seeking is thus an outcome of mass democracy, the existence of large pools of voters electing representatives who depend on expensive media campaigns. The alternative of basing elections on a structure of small groups would induce fewer transfers (Foldvary, 1996), as described in the conclusion.

Although much has changed in American politics since the adoption of the U.S. Constitution, the basic structure of mass democracy has not changed. The main change is the direct election of Senators by the voters in the States rather than by the State legislatures, a change that shifted the recipients of transfers but did not alter the incentives of Senators to engage in the market for legislation. Moreover, as illustrated by the history the political machines of 19th-century American cities, the corruption induced by mass democracy is no recent phenomenon. Henry George, writing in 1871, wrote of "the ease with which a few great rings wrest the whole power of the nation in their aggrandizement" (George, 1871, p. 46).

The inducement to federal rent seeking was present since the adoption of the Constitution. However, the 1800s are regarded as an era of small government, with budgets balanced or in surpluses. "For our first 60 years as a Nation (through 1849), cumulative budget surpluses and deficits yielded a net surplus of \$70 million" (Office of Management and Budget, 1997, p. 15). "Prior to the end of the Second World War there was no 'deficit problem'" (Anderson, 1986, p. 9).

Large federal budget deficits are regarded to be a recent phenomenon. Buchanan, Rowley, and Tollison (1986, pp. 4-5) note that there was a "serious breakdown in the post-1960 nexus between constitutional and legislative decision-making. The broad constitutional consensus in favor of prudent household economics crumbles into insignificance when confronted with the pluralistic, interest group dominated political brokering of legislative politics." The growth of the federal government since 1960 and of the federal deficit since 1970 has indeed been congruent with an expansion of transfers.

However, transfers were significant, even massive, in the 19th century as well, but with a different vehicle of transfer than in the 20th century. The vehicle of the 1800s was not funds obtained by taxation, but an endowment held by the government: land. The land, including natural resources, constituted an enormous stock of assets available for transfer to those with sufficient clout to obtain them. At first, land was sold and generated revenue, but soon, as explained by Anderson and Martin (1987), the land policy became an immense rent-seeking transfer program. Throughout the 19th-century, the federal government gave out land rents as political favors, a practice which continues to the present day. This has been rent-seeking with a double meaning, the political rents being constituted as ground rents. The proposition that the practice is endemic in the structure of government is consistent also with policy going back to ancient times. As noted by Henry George (1871, p. 47), the Senate of ancient Rome had "granted away the public domain in large tracts, just as our Senate is doing now."

These land transfers were not a historical accident, but played a key role in the founding of the government of the United States. Charles Beard (1913) identified three key interest groups that supported the Constitutional Convention: money lenders, protection-seeking manufacturers, and land speculators. A key advantage of the Constitution to the land seekers was that it would empower the central government to take the Indian lands with its national army (Friedenberg, 1992, p. 325). Land located where the Indians were a threat appreciated in value with the prospect of protection by the new government (McDonald, 1958, p. 395). In several Southern states, the western land issue was the key factor in ratifying the Constitution, as the tariff was to northern states. (Ironically, western expansion would later be a cause for secession.) Friedenberg (1992, p. 327) concludes that "without the support of key political figures deeply involved in land speculation, the Constitution would not have been adopted."

As Anderson (1986, p. 18) notes, while officially the federal budgets from 1866 to 1893 had surpluses, "the ordinary figures for federal government expenditures over the period 1866-1900 fail to incorporate the cost of one major federal spending programme - the system of land grants of the public domain." These value of these transfers cancel out the surpluses, and instead created an economic off-budget deficit (Anderson and Martin, 1987, p. 916).

Land-rent granting and transfers have taken several forms: 1) grants of land; 2) public works which increase the value of land; 3) water licenses; 4) leases and royalties for mineral and forest sites at below-market rates; 5) the rental value of the electro-magnetic spectrum; 6) other natural opportunities exploited by technology, such as airline routes, satellite orbits, and the genetic stock of life on earth. The focus here is mainly on the 19th-century grants of land.

As noted by Henry George (1871, p. 5), there is a check on transfers of revenues raised by taxation, since the general loss is felt by the taxpayers, even though they may be rationally ignorant as to the recipients and their efforts to obtain the transfers. This check does not exist with transfers of natural resources, and huge transfers can be and have been made with little public opposition. The land federal land program was called the "giveaway system" and the "great American barbecue" for its widespread corruption and misuse of the Homestead Act, the Timber and Stone Act and the Forestland Script Legislation (Gates, 1984, p. 43).

Land and the American Revolution

From the beginning of Britain's colonization of the mainland of North America, there was no consistent philosophy or policy regarding the efficient and equitable distribution of the rights to use, and collect the rent of, the land. The land charters "contained no provision as to the means, methods, and procedures for the distribution of the land (Curtis, 2014, p. 489, citing Sakolski 1957: 21). "Nor was there any mention of the land rights of the aboriginal people; however, it became common for the individuals and companies to expropriate territory inequitably and often violently, with little interference from England" (Curtis, *ibid.*).

The legal basis for the European conquest of the Americas was the Discovery doctrine declared by the Vatican. This doctrine of Christian Discovery originated in 1455 when Pope Nicholas V issued the papal bull *Romanus Pontifex*. Without any Biblical justification, this declaration justified the conquest of African lands by the king of Portugal. Pope Alexander VI extended the doctrine to the Spanish conquests in the Americas (Foldvary, 2014).

This doctrine is not in the US Constitution, but has been adopted by the US courts. Under this doctrine, the first Christians to discover land held by non-Christians have a legally legitimate claim, and the indigenous dwellers have no legal property rights. As stated in "Bully's Justice" (Zebrowski, 2014, p. 28), this Doctrine of Discovery is "one of the rare principles of American law that came not from English common law or from the pen of some Enlightenment philosopher but rather from the Vatican." The US Supreme Court recognized the doctrine in *Johnson v. M'Intosh* in 1823 under Chief Justice John Marshall, and was used in recent court cases.

Until 1763, "England politically and economically supported the interests of the wealthy landowners" (Curtis, 2014, p. 475). Land grants were a primary inducement to the establishment of colonies and to emigration to North America. Land companies "could make their venture profitable and enticing to important British officials by offering them shares of stock at special prices" (Curtis, 2014, p. 536-7).

Many of the leaders of the 1776 independence movement were land speculators, including George Washington, George Mason, Thomas Jefferson, Patrick Henry, and Benjamin Franklin (Cobb, 2014). George Washington applied his surveying abilities to speculate in the western lands (Curtis, 2014, p. 512). Land speculation was not just for profit, but also for status, as land “was the outward sign and the economic foundation of the southern gentleman’s style of life” (Curtis, 2014, p. 513). The “westward migration and land speculation were necessities to the large plantation owners” (Curtis, 2014, p. 510). The town merchants also used their wealth to finance their speculation in the frontier. Speculative ventures included the Mississippi Company and the Ohio Company.

Principled motives, for liberty and republicanism, played an important role, but they were, to a large extent, induced by economic motives. As stated by Cobb (2014, p. 461), “People ... cloak their ambitions in universal ideals in order to attract support.” Also, the economic history literature that emphasized the political philosophical arguments “crowded out explanations based on self-interest” (Cobb, 2014, p. 446). Curtis (2014, p. 590) notes, “Political issues would not have been so thoroughly developed and expanded if the controversies over land tenure, regulation of western expansion, regulation of commercial activities, and taxation had not arisen.” Also, as stated by Philip Davidson (1941: 123-32), “Liberty and property became linked together in the arguments of the revolutionary leaders.”

The wealthy Virginians especially had depended on land holdings in the frontier for their fortunes and social status, and they engaged in landed rent seeking: “the great planters ... used their positions on the governor’s council or in the House of Burgesses to patent huge tracts of western lands” (Breen, 1985: 35-26). They also applied their ground rent seeking in the U.K. “The colonial leaders would try to interest politically important Englishmen in specific land schemes, hoping that these men might be able to help them get the blessing of the Crown in the form of a land grant” (Curtis, 2014. p. 518).

The main economic cause of the American revolution was the sharp change in policy which the United Kingdom adopted in 1763. With the defeat of the French and the proclamation of 1763 and subsequent acts, “land policies became more restrictive and the wealthy land interests lost much of the political and economic power they had held” (Curtis, 2014, p. 476).

Charles Beard (1913) identified three key interest groups that supported the Constitutional Convention: money lenders, protection-seeking manufacturers, and land speculators. A key advantage of the Constitution to the land seekers was that it would empower the central government to take the Indian lands with its national army (Friedenberg, 1992, p. 325). Land located where the Indians were a threat appreciated in value with the prospect of protection by the new government (McDonald, 1958, p. 395). In several Southern states, the western land issue was the key factor in ratifying the Constitution, as the tariff was to northern states. (Ironically, western expansion would later be a cause for secession.) Friedenberg (1992, p. 327) concludes that “without the support of key political figures deeply involved in land speculation, the Constitution would not have been adopted.”

The Proclamation of 1763 “was a complete reversal of the previous English land policy” (Curtis, 2014, p. 535). The U.K. extended imperial control over the Indian lands. The Quebec

Act of 1774 extended the territory of Quebec south, preventing the Americans from continuing to move into lands they regarded as properly theirs. The Act not only voided the sea-to-sea claims of colonies such as Virginia, but also made worthless the claims of speculators that included Benjamin Franklin, George Washington, and Patrick Henry. The transfer of territory was one of the grievances spelled out in the Declaration of Independence, the complaint that the king prevented the migration into and “new appropriation of lands” and had altered the land charters. “The economic complaints of the speculators were given a political turn in the Declaration” (Curtis, 2014, p. 561).

Ethically, the policy change of 1774 was not unjust. The new law required “that land be purchased from the British government at a fair market price,” and with a continuing payment of rent. But politically, the new policy unified the various land-seeking groups, including the small farmers that would provide the troops for the revolution. As concluded by Curtis (2014, p. 601), the new British land policies “tied the economic interest classes together and brought the agrarian masses into the struggle on the side of the revolutionaries.”

Since the taking of land was the chief impetus of the European colonization and the prime motive of the American revolution, it is understandable that after independence, the policy of facilitating the taking of land especially by powerful special interests would be continued.

Land transfers of the 1800s

The stock of land held by the United States government during the 1800s (which grew with the acquisitions of the Louisiana territory, the northwest, Texas, the southwest after the Mexican war, and Alaska and Hawaii) was so large it was thought to be inexhaustible. As late as 1870, the General Land Office reported U.S. government or “public domain” holdings as 1,387,732,209 acres, including Alaska (George, 1871, p. 1). This land provided the government with an asset which could be transferred to special interests such as the railroads. The stock of natural-resource land has also expanded with the development of technology such as radio and television, since the electro-magnetic spectrum is also economic land divisible into usable frequency lots.

The transfer of lands is a reduction of government assets, but it does not show up as a deficit in national income accounting. When the government sells some land at the market price, the funds are counted as income. In terms of proper accounting, the government has exchanged a real asset for a financial asset. It is not really Haig-Simons income, since there is no change in total asset value. But national accounts record the sale as income, and when the income is used for public consumption, then the total assets held by the government are reduced, and this should be properly recorded as a deficit. When assets are given away, the result is also a deficit, an expenditure not matched by income, a reduction in asset value being a deficit just as an increase in asset value is income. Hence, the gratis transfers of the electro-magnetic spectrum also constitute actual budget deficits, and the 19th-century transfers of “public” or government-domain land to private parties constituted massive government budget deficits.

During the 19th century, the U.S. government disposed of 871 million acres (Anderson and Martin, 1987, p. 905). Some of the original 13 states held western lands which were also transferred. Virginia handed over much of Kentucky to insiders by 1783, which led settlers to

secession. "Five years after the Kentucky country was opened, the lands had been so engrossed by absentee speculators that the settlers pleaded for Virginia to take corrective action" (Friedenberg, 1992, p. 214). According to Friedenber (p. 220), this Kentucky episode was of national significance: "the entire political structure of the United States, from the lower levels of state legislatures and governors to the U.S. legislature and then the Supreme Court and presidency, was fueled for many decades thereafter by money made in this land speculation." The large land holdings in Kentucky and other new southern states entrenched the institution of slavery. Had these lands been settled and owned by small farmers, the history of the south would have been substantially different.

In Georgia, the Yazoo companies (named after the Yazoo River in Mississippi) obtained grants of over 25 million acres in 1789, comprising most of Alabama and Mississippi, for \$200,000. "It is evident that the groups securing these grants had been hastily formed and had no well-developed plans for exploiting the territory" (Livermore, 1939, p. 148).

Federal land sales were dominant after 1818. In 1836, sales constituted 48 percent of federal income (Gates, 1984, p. 37). During the 1860s alone, some 200 million acres were transferred to the railroads (George, 1871, p. 3).

In the early years of the U.S., it was the intention of many Congressmen to allocate land to actual settlers for actual use. In discussions of the government domain in 1796, Congressmen voiced support for the encouragement of freeholders and for dividing the land into small lots. The common view was that this would encourage the economic independence and prosperity of the citizens (Wellington, 1914, pp. 1-2). However, up to 1870, only about 100 million acres had been transferred to farmers (George, 1871, p. 4), hence most of the land went to those not using it for immediate productive use and much of it to large holdings.

From 1850 to 1900, the average annual expenditures of the U.S. federal government amounted to \$300 million (Office of Management and Budget, 1997, p. 1). The 871 million acres disposed of in the 1800s, if priced at \$2 per acre would, at five percent interest, yield \$87 million per year in rent. Only a small amount of the lands granted were "junk land" (Anderson and Martin, 1987, p. 911). Thus, as a rough estimate of the order of magnitude, the land transfers were tantamount to an annual deficit of about 30 percent of the latter 19th century annual federal budgets. With the average price of railroad land about \$4.75 per acre in 1880 (Anderson and Martin, 1987, p. 908) and an overall average per acre estimated at \$7.50 (p. 917), the deficit was most likely substantially higher. Taxation could thus have been significantly lower if the government had been collecting rent on that land or earning interest on the proceeds of land sold at market prices. The rental value of all U.S. land would have been more than the tariff and other consumption taxes. As argued by Anderson and Martin (1987), land sales were a substitute for the tariff, and so the political pressure from the North was to give the land away so that there would need to be a protective tariff which also provided revenue. This pressure became especially effective after the South seceded, as the various transfer acts of 1862 were passed.

The bulk of the transfers were gratis or at very low prices. According to George (1871, p. 4), "the receipts from sales has been not much more than sufficient to pay the cost of acquisition or extinguishment of Indian title, and the expenses of surveying and of the land office." Until 1820, sales were made at \$2 per acre, when the price was reduced to \$1.25.

Western interests opposed using the land sales for revenue, preferring to keep land cheap. President Andrew Jackson in 1832 favored disposing of the lands at a low price to speed up settlement. Since the national debt was almost paid off, he advocated that the land transfers "shall cease as soon as practicable to be a source of revenue" (Wellington, 1914, p. 42).

As Peter Barnes (1971, part 1) put it, "the typical speculator's gambit was to form a "company" which would bid for massive grants from Congress or the state legislatures, generally on the pretext of promoting colonization. Once a grant was obtained - and it never hurt to be generous with bribes - the land would be divided and resold to settlers, or, more likely, to other speculators. The enormous Yazoo land frauds-in which 30 million acres, consisting of nearly the entirety of the present states of Alabama and Mississippi, were sold by the Georgia legislature for less than two cents an acre, and then resold in the form of scrip to thousands of gullible investors - was perhaps the most famous of these profit-making schemes. Huge fortunes were made in such swindles, often by some of the most respected names in government."

The land transfers to speculators for resale did not merely enrich a few at the expense of many, but affected the subsequent settlement of the country. The speculative demand increased land prices and thus hindered settlement by those who lacked the means to purchase land. As noted by Hibbard (1924, p. 219), speculative purchases "held land out of the market for at least a time and so compelled settlement to pass around or across it." Agriculture was often held back, since speculation was regarded as more profitable until the bulk of the land was claimed. Government policy facilitated it because many officials were involved. "It was an open secret that many members of Congress were deeply involved in land speculation" (Hibbard, 1924, p. 219).

Many of the grants and purchases were not subdivided, and thus led to a pattern of concentrated land holding which has, if anything, intensified. The Gini coefficient among farms has risen from .57 in 1910 to .76 in 1987, and the measure is .92 if one adjusts for the loss of farms (Gaffney, 1993, p. 120).

In 1835, with the national debt paid off, the federal government began generating a surplus based on land sales tied to expanding bank credits protected by securities provided by land speculators in return for bank paper which was used to buy ever more public land at \$1.25 per acre. The government surplus was thus a paper surplus (Wellington, 1914, p. 49), the land sales now tied to the issue of excessive bank credit.

Much of the land speculation in the U.S. has been related to government public works projects, which greatly increase the value of the land serviced. In the 1830s, the stimulus was canal building. The success of the Erie Canal in New York State and the rapid rise of land values along its route led to the extension of the same speculative calculations to Chicago when a canal linking Lake Michigan (and New York via the Erie Canal) to the Mississippi River was proposed. In 1833, the federal government appropriated \$25,000 to dredge the harbor. The local Black Hawk Indians were subdued by federal and local troops in 1832, sparking a rush of settlers to Chicago (Hoyt, 1933, p. 19).

The speculative mania was fed by a "superabundance of paper money issued under diverse state laws" (Hoyt, 1933, p. 28). Government lands could be purchased with irredeemable "rag money" created by the state-controlled "wildcat" banks (Sakolski, 1932, p. 234). The newly chartered State Bank of Illinois was empowered to loan funds for real estate. A branch of the bank was established in Chicago in December 1835. "One of the most potent devices for raising land values, liberal credit to land buyers, was thereby created" (Hoyt, 1933, p. 27). Various government interventions were thus tied to the land-rent seeking: transfers of land, public works, and state control of the banking system.

Jackson issued the specie circular of July 11, 1836, requiring payment for land in gold and silver (Wellington, 1914, p. 51). Speculation ceased, but the damage had been done. Land prices had nowhere to go but down. In May 1837, the banks of New York suspended specie payments and there was a tightening of the money market. On May 29, 1837, the Illinois banks suspended specie payments, backed by a special act of the legislature. It became impossible to borrow money on real estate or to renew existing loans. The panic of 1837 became a national depression. Real estate prices collapsed. Debtors defaulted. Chicago land purchased for \$11,000 an acre in 1836 sold for less than \$100 in 1840. Land that had been staked out and held during the speculation of the 1830s was converted into cultivation during the 1840s when no further immediate gains were anticipated (Hoyt, 1933, p. 40). Land policy was thus the root cause of the depression.

President Van Buren favored a policy of pricing land sales according to value, and for actual improvement (Wellington, 1914, p. 70). In 1841, after temporary bills in 1838 and 1840, the right of pre-emption was granted to settlers on surveyed land, which extended to unsurveyed land in 1862. This law allowed families to settle on 160 acres of unsurveyed public land, with first right to purchase when the land was ultimately placed on sale.

The next real estate cycle was underway as the long-awaited Chicago canal opened in 1848. The Illinois Central Railroad secured a land grant of 2.5 million acres from Congress in 1850. The city constructed plank roads, sidewalks, gas lights, sewers, and bridges. "Plank roads contributed greatly to the rise of land values" (Hoyt, 1933, p. 64). The ease of borrowing money from the new state banks again encouraged real estate speculation. There was also a rapid rise in land values in San Francisco; "speculation carried it beyond prudent heights" (Sakolski, 1932, p. 258). In the summer of 1857, a financial panic began, starting in New York. (Land values had collapsed earlier in California.) Overspeculation in western lands and too-rapid railroad building were blamed. Banks suspended specie payments. A depression followed in 1858. Most holders of real estate hung firmly to the peak prices of 1856, but by 1859, land values had dropped sharply to half or more than the previous levels.

The South had blocked free grants to settlers, fearing an increase in the population of the non-slave lands. After the Civil War began, the Homestead Act of 1862 was passed, granted citizens the right to own up to 160 acres at \$1.25 or \$2.50, depending on its quality, on the condition of cultivating it. Homestead grants amounted to 214 million acres (Anderson and Martin, 1987, p. 908), but most lands were granted to corporations and non-cultivating individuals for a few cents per acre (George, 1871, p. 5). "Cattlemen and speculators, both large and small, made widespread use of the 'dummy entryman' trick and other ruses to acquire

holdings far in excess of 160 acres, and the Land Office lacked either the will or the ability to stop them" (Barnes, 1971, part 5).

Homesteaders as actual settlers were supposed to have priority before public sales of land, but in practice, there were public sales before lands were settled. Speculators were thus able to obtain choice lands at low prices, often circumventing the law. "By means of cabins built on wheels or at the intersection of quarter section lines, and false affidavits, a good deal of land grabbing has also been done under the pre-emption and homestead laws" (George, 1871, p. 5).

After the Civil War, "Chicago shared the zeal for public improvements with many American cities". These included sewers, street paving, lamp posts, and bridges. "Lavish expenditures for improvements, and some political corruption, were blended in the land boom that culminated in 1873" (Hoyt, 1933, p. 88). Post Civil-War land values gained impetus near parks and boulevards. One contemporary writer noted that "the city acceded to the demand of every real estate speculator who asked for improvements" (p. 117). The value of real estate was often raised on the strength of projected improvements. By 1873, business profits were receding. Wages declined. Land values halted their advance. The stock market crashed, and commercial failures brought on the Panic of 1873.

As Wellington (1914, p. 115) concludes with respect to the land policy, a "really scientific law could not have been enacted, for it would have been opposed by those sections which regarded it as harmful to their interests."

Recipients of Land Grants

Most grants of land by the federal government to individuals went to war veterans, amounting to 78 million acres. Land payments to veterans began with the Revolutionary War, with soldiers paid in script for claims on western land. The land debt in turn created pressure to kill and remove the Indians, which required a strong national government (Friedenberg, 1992, p. 356). The plantation and patroon lords used State-backed paper money to buy up the confiscated Loyalist lands (p. 357).

Congress rewarded veterans of the War of 1812 and the Mexican War with land in Ohio, Michigan, Illinois, Maryland, and Arkansas (Gates, 1984, p. 38). These grants could be considered as part of the payments for military services rendered, hence not rent transfers. However, the transfers were in the form of warrants for land, almost all of which were sold to land speculators rather than exercised for land. The yield to the warrant sellers has been estimated at 25 cents per acre. The opportunity cost of these land grants was the funds that could have been raised by sales, amounting to \$91 million at \$1.25 per acre, while even at 50c per acre the soldiers obtained only a total of \$36 million. Settlers paid about \$2 per acre to the speculators who bought the warrants (George, 1871, p. 6). Thus, even payments in kind for military services led to a substantial transfer of unearned rents compared to the maximum the government could have obtained for the lands.

The federal government also transferred large amounts of lands to the States for public works, government buildings, schools and colleges, and reclamation. Though the explicit

recipients were the State governments, this rent seeking originated with the manufacturing interests of the North Atlantic States. Homesteading would induce emigration to the west, raising wages in the east and also decreasing northeastern land values. As noted above, these interests also opposed large land sale proceeds for federal revenue, which would reduce the effectiveness of political pressure for a protective tariff that also raised revenue. They advocated that sales proceeds be distributed among the States by population (Wellington, 1914, p. 5).

The Agricultural College grant was enacted in 1862. The States were given 30,000 acres for each Senator and Representative. States such as New York lacking in federal lands were able to take land in other States. New York State was thus able to obtain rent from land it owned in other States. Since the land of the southern States was reserved for homesteading by an Act of 1866, they too, along with Texas (whose public land belongs to the State), obtained lands in other states. Thus, for example, Californians ended up paying rent to or buying land from colleges in many other States, a redistribution in favor of States which obtained land grants located in other states (George, 1871, pp. 6-7).

The most notorious example of land grants were the railroads. A precedent was set by grants of four million acres for roads and 4.5 million for canals. The grants to railroads began in 1850, with 2.5 million to Illinois Central. The Pacific Railroad bill of 1862 gave the Union, Central, and Kansas rail companies ten sections (one square mile, or 640 acres) of land per mile plus bonds, doubled in 1864 to 20 sections, or 12,800 acres per mile of railroad (George, 1871, p. 7). Land grants to the Northern and Southern Pacific railroads did not include bonds, but doubled the land area in the Territories to 40 sections, 25,600 acres per mile. The largest grant, to the Northern Pacific, totalled 58 million acres. The railroad in addition obtained rights of way and land for stations and other facilities. The railroad companies also obtained the privilege of cutting timber on government land (p. 8). These assets were far in excess of the cost of building the railroads by private firms that in a pure market would be financed by the investors.

The lands obtained appreciated in value, adding to the gain by the railroads. At \$20 per acre, the land grants amount to half a million dollars per mile of railroad, or over \$1.1 billion to the Northern Pacific for a railroad costing it \$80 million. The company's own publication stated that it would have a surplus even at \$2 per acre (George, 1871, p. 9).

An argument for grants of land to the railroads was that the rail lines brought in settlers, making the land more accessible and thus adding to the land value. But as George (1871, p. 10) noted, the subsidy only bought time, inducing the railroads to be built sooner than they would have been. The railroads would have been built without subsidies later on, when business would warrant the construction. Moreover, the early building of the rails was at a cost to those who settled after the grants, since they had less land available for homesteading, having to buy land or pay rent to the railroads. The increased price of land then may have retarded some settlement, the greater access to land being offset to some extent by its greater price.

Another argument was made that the lands were unoccupied (except by Indians) and were free, so there was no cost to the public. But this ignores the opportunity cost. The foregone public revenues were transfers from the government domain to the concentrated interests

obtaining the grants. Secondly, investments made because of a subsidy draw funds from other investments which could have been made, which customers at the time are willing to pay for. The opportunity costs were recognized by Henry George (1871, p. 11), long before the concept became familiar to economists: "for the investment in capital in one enterprise prevents its investment in another."

Land transfers in California

Land transfers in California followed a pattern similar to that of the United States: massive transfers to concentrated recipients. Even with a population of only some 600,000 in 1870, the same voting structure, mass democracy, induced the same type of land rent seeking, indicating that just having a smaller scale (lower population) does not reduce the extent of rent seeking.

A lasting effect of the 19th-century land transfers is the continuing high concentration of landownership in California. A 1970 study by the University of California Agricultural Extension Service found that 3.7 million acres of California farmland are owned by 45 corporate farms. This constitutes nearly half of the agricultural land in the state and about three-quarters of the prime irrigated land (Barnes, 1971, part 3).

California's land transfers had a special feature, the Mexican land grants (which existed also in other Mexican territories such as New Mexico), in turn inherited from Spanish grants. By the terms of the cession of California to the United States, these land rights were retained. Some of the original Spanish grants have been retained as giant holdings today, including the Irvine Ranch (88,000 acres in Orange County), the Tejon Ranch (268,000 acres in the hills and valleys northeast of Los Angeles, 40 percent owned by the Chandler family (which publishes the Los Angeles Times), Rancho California (97,000 acres to the northeast of San Diego, jointly owned by Kaiser and Aetna Life), and the Newhall Ranch (43,000 acres north of Los Angeles) (Barnes, 1971, part 3).

The borders of these grants were often not well determined, and this left many titles uncertain and unsettled, hence subject to litigation. Being unfamiliar with American law, native Mexican grant holders were taken advantage of by land speculators and their lawyers. Most of the grants passed on to other owners (George, 1871, p. 14). This constituted a subtle form of land takings, the law permitted or did not prevent a massive transfer of titles by means of fraud, such as with forged title papers. According to George (p. 15), "there are pieces of land in California for which four or five different titles have been purchased."

Besides the fraudulent land transfers based on historic grants, there were bogus grants, sometimes bearing the signatures of former Mexican officials. The holders of the bogus grants then drove off the settlers, backed by the sheriff and even U.S. troops. Holders of bogus grants enjoyed legal possession until the final legal settlement of a case, and in some cases were able to extort payments from settlers (George, 1871, p. 16). There were attempts to remedy the situation with legislation in the U.S. Congress, but "somehow or other it has always turned out for the benefit of the land grabbers" (p. 17).

Many settlers who thought they had settled on government land wound up losing their lands and improvements to the holders of grants whose borders "floated" according to the value of the neighboring properties. "The grants have been extended here, contracted there, made to assume all sorts of fantastic shapes, for the purpose of covering the improvements of settlers and taking in the best land. There is one of them that on the map looks for all the world like a tarantula" (George, 1871, p. 15).

Much of the best valley land in California was granted to the railroads. Although they received alternate sections, in practice the lands were not marked, and homestead settlers could not determine what land was government and what was railroad land. Where land was surveyed and marked, the "vaqueros" or cowboys working for the railroads pulled up the stakes (George, 1871, p. 18). Thus, lands granted to the railroads for the purpose of enhancing settlement instead hampered it. Whereas it was argued that the companies would sell their lands to settlers, in actuality they were "in no hurry to sell their lands, preferring to wait for the greater promise of the future (p. 18).

If not the Mexican land grants or railroad lands, the land under federal domain in California could have been transferred to individual settlers. But much of that land went to a few speculators, often through fraud. Lands not sold were marked on maps as taken (George, 1871, p. 18). Settlers at a land office would be put off while the land they wanted was acquired by a speculator, and the settler would then be referred to him for purchase. Much land was also bought at 50c per acre from Agricultural Colleges of the eastern states and then resold for \$4 to \$20 per acre. Some land in California was bought with script issued to Indians for their lands. Purchasers who claimed to be attorneys for Indians obtained some of the script and were able to obtain land with it (p. 19).

The federal government granted to the State of California some 7.4 million acres of land, plus 3.4 million acres of swampland (wetlands) via the Swamp Lands Act of 1850. The government of California disposed of the land to rent seekers in a manner similar to the federal government, consistent with the hypothesis that the structure of government and voting engenders such rent seeking.

Contrary to the laws of the United States and the Act admitting California into the Union, the State sold unsurveyed land until stopped by the courts in 1863. Restrictions on warrants for State lands were ignored. Settlers who had relied on federal law had their lands taken away by those with the land warrants. In 1868, the legal restrictions on the amounts and use of lands sold by the State were eliminated. Buyers were no longer required to settle the lands bought (George, 1871, p. 20).

Buyers had an incentive to declare a site as swamp land, which was sold for \$1 per acre, with the proceeds applied to reclamation. The state sold to anyone who could present an affidavit. George estimates that about half the land sold (or given away, with the funds returned for "reclamation") as swampland was dry land. George noted that buyers had "powerful friends in Washington" (1871, p. 22).

Henry Miller's acquisitions illustrate the methods used. The Swamp Lands Act provided lands to individuals free of charge if they would agree to drain them. "The law provided that the land had to be underwater and traversable only by boat. Miller loaded a rowboat onto the back end of a wagon and had a team of horses pull him and his dinghy across his desired grassland. Eventually the government received a map of the territory from Miller, together with a sworn statement that he had crossed in a boat. Thousands of acres thus became his" (Barnes, 1971, part 3).

In 1877 under the impetus of California's Senator Sargent, who acted on behalf of Haggin and Tevis, San Francisco tycoons, Congress approved the Desert Land Act, the bill signed by President Grant in the last days of his administration. The law removed several hundred thousand acres from settlement under the Homestead Act. These lands, alleged to be worthless desert, were to be sold in 640-acre sections to any individual who promised to provide irrigation. The price was 25 cents per acre down, with an additional \$1 per acre to be paid after reclamation.

"The chunk of it eyed by Haggin and Tevis was located close to the Kern River, and was partially settled. A San Francisco Chronicle story of 1877 describes what happened next: The President's signature was not dry on the cunningly devised enactment before Boss Carr [Haggin and Tevis' agent in the valley] and his confederates were advised from Washington that the breach was open. It was Saturday, the 31st of March. The applications were in readiness, sworn and subscribed by proxies... All that Saturday night and the following Sunday, the clerks in the Land Office were busy recording and filing the bundles of applications dumped upon them by Boss Carr, although it was not until several days after that the office was formally notified of the approval of the Desert Land Act. Thus, by hiring scores of vagabonds to enter phony claims for 640 acres, and then by transferring those claims to themselves, Haggin and Tevis were able to acquire title to approximately 150 square miles of valley land before anybody else in California had even heard of the Desert Land Act. In the process, they dislodged settlers who had not yet perfected their titles under old laws and who were caught unawares by the new one. The Chronicle called the whole maneuver an 'atrocious villainy' and demanded return of the stolen lands. A federal investigation followed, but Haggin and Tevis, as usual, emerged triumphant" (Barnes, 1971, part 4).

Material natural resources

The timber land and water rights were also a vast store of value that became vulnerable to being transferred to a few hands under the General Mining Law of 1872 and the Timber and Stone Act of 1878. Using the latter, lumbermen and quarry operators obtained millions of acres at \$2.50 the "dummy entryman" technique. Under the former, large tracts of public land were obtained for purposes that had nothing to do with mining or even settlement (Barnes, 1971, part 5).

As stated by Hibbard (1924, p. 457), over 13.5 million acres of timber land was alienated, amounting to four-fifths of the forest domain, under the Timber and Stone Act. The prices paid

were below the market value of the timber. Also, under the "Timber Cutting Act vast areas of the forest regions were stripped of valuable timber without any returns whatever" (p. 457).

The electro-magnetic spectrum

The Radio Act of 1927 established the Federal Radio Commission, followed by the Communications Act of 1934 and the establishment of the Federal Communications Commission (FCC) ("The FCC," 1997), which regulates the non-federal electro-magnetic spectrum. In 1996, sections of the spectrum were sold by the FCC at auction. Previously, however, some \$100 billion of spectrum was given to American broadcast companies (Karrigan, 1995). The government doubled the amount of spectrum each broadcaster controlled. Originally intended for High Definition Television, the space is now available for other uses such as paging and cellular telephones. Thus, land-rent seeking and taking continues in new forms.

Rent Seeking via Capitalization

Adam Smith (1976 [1776], Book I, p. 275) noted that "Every improvement in the circumstances of society tends either directly or indirectly to raise the real rent of land, to increase the wealth of the landlord." The rental value of land is increased by externalities that add to the demand to be located at some site. As noted by Jasinowski (1973, p. 10), when subsidies are tied to territory, the price of land rises by the present value of the future stream of benefits that come with the ownership of land. Once granted, capitalized expectations become a powerful political force in resisting any reduction in the subsidy, since that decreases the value of the land.

An example, Boxley and Anderson (1973, pp. 88-9) report on research findings that farms sold with tobacco allotments were enhanced by \$300-600 per acre in 1945 and \$1673-2500 in 1957. Comparable values have been found for peanuts (p. 90). The subsidy to sugar production, which is protected from competition by quotas and a tariff, has also been found to become capitalized in higher land values, has raised the value of sugar-beet farms (Ballinger, 1973). That landowners rather than farm workers have benefited from the subsidies is shown by the increase of the labor-price of a farm from 6 years' wages to 17 years' wages from 1954 to 1987 (Gaffney, 1993, p. 120).

The capitalization of urban government services has been tested by several studies. Among them, Oates (1969) concluded that services and property taxes were indeed capitalized. Sonstelie and Portney (1980), using gross rentals and amount of tax rather than tax rates, found empirical evidence for the capitalization of community services, including public safety, fire protection, streets, reduction of pollution, and education. Stern and Ayres (1973, p. 131) conclude that transportation outlays are typically "more than fully reflected in increased rents and land values."

The provision of such services and subsidies from taxes on wage income and capital returns are thus a transfer of wealth to the owners of the real estate whose value is capitalized.

The problem in land transfers

Transfer seeking is deplored both because it forcibly reallocates resources, because of the social waste or loss of resources, and because of the inequality of granting privileges to concentrated special interests. In the case of the historic land transfers, resources were not extracted from producers, but taken from the natural endowment. Hence, while one could deplore the corruption and unequal allocation, some might argue that there was no damage to future generations, there was no excess burden in simply allocating land, and it does not matter from a social viewpoint who now has title to the land.

However, the massive land-rent seeking has had lasting negative effects. First, there was the opportunity cost of the transfers. If a country has some collective endowment of wealth, then this provides an opportunity for perpetual income that can substitute for taxation that imposes an excess burden. Secondly, the allocation of land to a privileged few denied the population of the United States an equal opportunity to use its natural resources and created lasting inequalities in wealth. In agriculture, for example, the four percent of the private landowners with the largest holdings own 47 percent of the land (Wunderlich, 1993, p. 5). As noted by Paul Gates (1924, p. xii), "Within a generation or two, forces governing prices sent land values to hundreds of dollars per acre and produced the rapid emergence of tenancy. Giving land away did not assure permanent family farm ownership."

The land policy of the U.S. government has also had the effect of burdening workers with high taxes on their wages and on their financial investments, and hampering the growth of wealth and industry, having foregone the opportunity to fund the government instead from the rent that would have been generated from the lands that were given away.

The effects of land-rent seeking in the U.S. even extend to economic science, as the authorities governing universities funded by gains from rent seeking might select compatible faculty and thus viewpoints. Neoclassical economics may have thus been influenced by land-rent seeking. A key institution was Cornell University, named for Ezra Cornell, founder of Western Union. Both Ezra Cornell and the Cornell University held massive amounts of western land. The Morrill (Agricultural) Act of 1862 had given land script to the states in proportion to their populations, giving New York a large share. Ezra Cornell obtained over a half million acres of timber land with New York Agricultural College script at less than market prices (Gates, 1943). Cornell donated \$500,000 to found the college (Gaffney, 1994, p. 74).

Alvin S. Johnson of Columbia University, a student of J.B. Clark, was hired by Cornell University. Johnson (1902) was instrumental in putting forth a new meaning of "rent" as a return to land to any surplus over opportunity cost. The blending of returns to land and capital (real and financial) was part of the neoclassical turn, as much as marginal utility analysis. At the time, the towns and counties of Wisconsin were attempting to tax the land holdings of the Cornells, and this was successfully resisted by the owners. Mason Gaffney (1994, p. 75) writes that the administrators of Cornell University would have most likely "hired someone to defend their

position as absentee land speculators." Besides shifting the very meaning of rent, Johnson explicitly rejected the case for obtaining public revenue from land rent in his 1914 article in the Atlantic Monthly, "The Case against the Single Tax." Johnson was a mentor of Frank Knight at Cornell and through Knight influenced the Chicago School (Gaffney, 1994). Johnson's implicit defense of land-rent seeking thus coincides with his theoretical obfuscation of the concept of land rent, which then permeated neoclassical economics. Herein may lie some clues as to how massive transfers of land and its rent have taken place and continue with little knowledge or concern by economists as well as by the public.

The U.S. government had the same attitude to the land as did the government of the former Soviet Union. In Marxist ideology, all value derives from labor, hence land has no value. The government of the Soviet Union thus did not take into account the rental value of land, and vast amounts of land were wasted by pollution and the exhaustion of fertility. The U.S. government considered the land to be a free resource and thus gave it away rather than taking the cost into account, including the literal accounting in the national budget of the loss of land value and rent. Land sale proceeds were counted as revenue without counting also the loss of value of a national asset.

The alternative policy, the lost opportunity, would have been for the U.S. government to transfer land only to settlers for actual use, with no grants to railroads, colleges, and the States (and with proper compensation to the American Indians). Moreover, a transfer of perpetual and transferable leaseholds would have generated perpetual rental income to the federal and State governments with little excess burden. The rental income would then have substituted for the taxation of income, sales, and buildings. Such a policy would have provided both greater equality of opportunity (and outcomes) and a greater growth of wealth, and also avoided the power of government over the financial affairs of households and enterprises. Thus the historic opportunity costs of the land transfers were immense and profound.

Constitution, Democracy, and Market Failure

Critics of markets who concede its efficiency often state that markets fail to distribute income justly. Aside from the fact that the market process in the U.S.A. as in all other countries has been skewed and distorted by intervention, the outcomes of an economy depend on the initial distribution of resources, which comes down to the ownership of those resources not produced by the market itself: land, including all natural resources. With the distribution of land in the U.S. largely set by the transfer seeking of the political process, a substantial part of the inequality seen the U.S. today derives from the land transfers as well as other non-market factors such as slavery. Such inequality has thus been a political rather than a market failure.

To have avoided the whole land transfer business would have required two basic structural changes in government. First, there would have had to be an explicit constitutional philosophy and policy regarding land tenure. Had the Constitution required either that land be sold only for use at market prices, or had it made the possession of land conditional on the payment of rent for public and community revenue rather than authorizing taxation, the process of transferring land would have equalized the benefits of the land endowment rather than channel rents and privileges to politically well-connected powerful interests. The use of the land rent for

civic services would also have preserved decentralization and facilitated the privatization of community services, the rent paid to private developers and civic associations (Foldvary, 1994), since rent is more feasibly collected locally than are taxes on productive processes.

Secondly, the prevention of transfer seeking and its associated corruption requires fundamental reforms in the voting process. Constitutional restraints on policy and the funding of candidates are insufficient. Large-group democracy creates a structure with incentives for transfer seeking that are too strong to contain by limits on funding and activities. The public cannot and will not act to monitor and prevent the transfers, as shown by the history of the U.S. since its founding.

The fundamental governance reform that would prevent such rent seeking is a restructuring of voting to small-group democracy, with all voting taking place only in small groups or communities (Foldvary, 1996). Such a communitarian democracy would be based on the local neighborhood with a size small enough so that 1) the candidates would be personally known by the voters, 2) there would be little cost or effort for a person to become a representative, and 3) media campaigns would be redundant, hence funding superfluous.

Local neighborhoods of some 500 persons (150 voters) would elect councils, the members recallable at any time. These councils in turn elect higher-level councils representing blocks of 12-20 neighborhood councils. The process would continue to ever higher level councils up to the city, State, and federal governments. At each level, representatives would be drawn from the lower-level councils and would be recallable at any time.

This would leave powerful interests with little leverage in obtaining transfers and privileges. The demand for funds for media campaigns would be much reduced, if not eliminated. This bottom-up multi-level structure would provide incentives for both voting and monitoring, since for each level a small group elects its representatives and can recall them when dissatisfied. If corruption took place at the top, the level below could quickly change the policy or recall the officials; if not, then the next lower levels would be able to recall those representatives, and so on down to voters at the bottom.

We have seen the same type of massive privatization transfers to the politically powerful interests in the de-socialized newly democratic countries of Eastern Europe as took place in the United States with the land. Similar political structure induce similar outcomes. This paper has shown that the transfer process in the U.S. was massive, corrupt, and fraudulent in the 19th century, the vehicle then being land rather than tax funds. The analysis here has argued that these transfers resulted from two Constitutional failures: the failure to articulate a market-based land policy, and the failure to structure democracy so as to avoid the dysfunctional impotence and rational ignorance of the public.

Note

1. I concur with Leland Yeager's (1995, p. 386) suggestion that "rent seeking" has been "a misleading term from the start" and that "we would do well to ... speak of efforts to enlist government for one's own special purposes as transfer-seeking."

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