

Financing the Expansion of Cities, 1860-1914

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Article abstract

The expansion of Western cities in the period 1860-1914 required massive amounts of capital. At best, however, municipalities made only a modest contribution to the total expenditure before 1914. This was the case despite the varying beliefs about the role of cities, ranging from the "gas-and-water socialism" of Birmingham to the almost exclusively laissez-faire administrations of St. Petersburg and Madrid. In general private charities took charge of social services and private contractors built houses with privately-raised capital. Individual entrepreneurs, contractors and joint stock companies paid for utilities while property owners contributed to the improvement of paving, street widths and alignments, storm drains and sewers. Individual citizens paid property taxes, the main income of all cities and were always the best market for securities of their own municipalities. In return these private interests realized an increment in urban land values.

Financing the Expansion of Cities, 1860-1914*

D.C.M. Platt

Résumé/Abstract

Pendant les années 1860-1914, des sommes énormes furent investies dans l'expansion des villes de l'Ouest et les municipalités ne participèrent que très peu au financement de ce développement. Sauf quelques exceptions, comme la ville de Birmingham, la plupart des municipalités optèrent pour un laisser-faire presque complet, comme à Madrid et à Saint-Petersbourg. C'est ainsi que les œuvres privées de bienfaisance prirent la responsabilité des services sociaux de l'époque et que seuls les capitaux privés contribuèrent, par le moyen des entrepreneurs, à la construction des maisons. Les contracteurs, les entrepreneurs et les sociétés par actions financèrent les entreprises privées qui possédaient les services publics. De plus, les simples propriétaires se trouvèrent dans l'obligation de participer financièrement à l'amélioration des rues (le pavage, le tracé et l'élargissement) et des systèmes d'égouts et de drainage. Cela n'empêchait pas les citoyens d'être contraints de payer l'impôt foncier, principale source de revenu pour les villes, et de participer activement à l'achat des obligations d'épargne de leur municipalité. L'augmentation de la valeur foncière demeurait le seul avantage pour les propriétaires qui prirent ainsi part au développement de leur ville.

The expansion of Western cities in the period 1860-1914 required massive amounts of capital. At best, however, municipalities made only a modest contribution to the total expenditure before 1914. This was the case despite the varying beliefs about the role of cities, ranging from the "gas-and-water socialism" of Birmingham to the almost exclusively laissez-faire administrations of St. Petersburg and Madrid. In general private charities took charge of social services and private contractors built houses with privately-raised capital. Individual entrepreneurs, contractors and joint stock companies paid for utilities while property owners contributed to the improvement of paving, street widths and alignments, storm drains and sewers. Individual citizens paid property taxes, the main income of all cities and were always the best market for securities of their own municipalities. In return these private interests realized an increment in urban land values.

It may be true that the history of municipal finance, like trade unions and the European Common Market, is an instant cure for insomnia. But the topic can hardly be ignored. How was the expansion of cities financed? The population of London grew from approximately 4.5 million in 1880 to over 7 million by 1911. The urban population of Germany increased in the same period by 24 million. A new city in a new country, Buenos Aires in

Argentina, was a medium-sized town of under 200,000 inhabitants in 1869; it was a huge city of over 1½ million by 1914. Who paid?

The experience of one city is no guide, necessarily, to that of another. But it might be useful to attempt some generalizations. First, we are now accustomed to a wholly different scale of city government – to much greater responsibilities, hence much larger expenses. Over the period discussed in this paper, municipal governments undertook a limited range of activity. Municipal resources were absurdly low. Boston's budget estimate in 1822, for a town of 45,000 inhabitants, was about \$200,000 (£40,000).¹ Paris in 1820 collected ordinary revenues of 26 million francs [£1.04 million].² By the early 1860s the ordinary annual budget of Paris had risen to about £4.5 million.³ But the total gross expenditure from revenue of the London County Council for 1890/91 remained at less than £2 million; education, hospitals, mental services, municipal housing and public assistance, which by the 1930s had become the main elements in the L.C.C. budget, were non-existent or barely visible in the budgets of forty years before.⁴

Secondly, although these were the years of growing popularity for municipal socialism, much remained to be done. It seemed right to pass the larger part of finance in

* This paper has its origins in a research project on the financing of the expansion of Buenos Aires; the project was supported by the English S.S.R.C., the University of Oxford, and the Instituto Torcuato Di Tella (Buenos Aires). The results, which were extended and amplified by research in Montreal, are now being published as articles on "Domestic Finance in the Growth of Buenos Aires: 1880-1914," "The Financing of City Expansion: Buenos Aires and Montreal Compared, 1880-1914," and (by Dr. Susan Cunningham, S.S.R.C. Research Fellow) "The Financing of Urban Development in Buenos Aires, 1880-1914: The Role of the Joint Stock Companies in the Public Utility Field." Furthermore, research reports are available through the S.S.R.C. and the *Bulletin of Latin American Research* (1983). The present article takes up the broader implications of the Argentine and Canadian research, from a wider reading in this somewhat neglected field.

the direction of the private entrepreneur, and to leave the individual (lightly controlled) with the opportunity to make a profit in construction or the public utilities. Finally, rising land values were the key to the financing of city modernization everywhere. This was most obviously the case in business districts. Lots valued at \$20 in Chicago's business district were changing hands at \$1.25 million by the mid-1890s.⁵ Less familiar, perhaps, is the experience of residential suburbs. Before the approach of the suburban railway, agricultural land in Golders Green (London) was rented annually at £3 an acre; the same land was retailing as building land in 1906 at £10,000 an acre.⁶

I

Although, before 1914, the rational pursuit of self-interest was generally believed to be the most efficient supplier of city services, there were areas, as Anthony Sutcliffe explains, where the answer was acknowledged to lie elsewhere – in particular, “streets and public thoroughfares, drainage and sewage, fire-resistant building, and atmospheric pollution.”⁷ Not everyone was prepared to go that far. The municipality of Madrid took responsibility for virtually nothing before 1914, other than cleaning its streets.⁸ By contrast, Liverpool's government managed its own electric light and water supply, its tramways, markets, worker housing, baths and wash houses, docks, and extensive real estate.⁹ Others took positions somewhere in between. Glasgow owned its own water supply, while in London water was brought in by private companies. Glasgow tramways became public property in 1894, as did the small tramway system of London; but in London omnibuses and tube railways (which supplied the mass of passenger traffic) were private. Glasgow by the 1900s “administered and owned itself the four great departments of Gas, Water, Electricity, and Street Railways.”¹⁰

The contrast was less dramatic than it might seem. The services undertaken by municipal governments were intended to fill a gap where private enterprise was not available, or to encourage and supplement private initiatives. The principle was unchanged. “Education, health, transportation, and plentiful lands were tools to encourage individuals to work effectively as private profit makers. The works of the individual profit makers were to be the return for the public costs and effort.”¹¹ Housing was a matter for the individual, assisted by charity or by private business. Some worker housing was undertaken before the World War, more in London than anywhere else, but the scale never remotely matched demand for the housing of the really poor. Cities demolished slums, built new streets, opened squares, plazas and public gardens, but the object was to eliminate an abuse, not to substitute for it. The motives of the trustees for Glasgow city improvements, Allan reminds us, were “sanitary rather than

philanthropic... , not even municipal Glasgow [a leader in municipal socialism] was prepared, in the 1890s, for publicly subsidized housing.”¹²

Within these limitations, cities raised money by taxes on their citizens and by loans at home and abroad. The per capita cost of municipal government in Boston rose from \$4.40 in 1822 to \$45 in 1909, to be accounted for by an increase in the tax rate (\$3.65 to \$16.50), by the development of new sources of income, by sales of public lands and by the accumulation of a public debt of over \$100 million (£20 million).¹³ The largest element in tax revenue was almost always the tax on real estate;¹⁴ “the general property tax remained the key-stone of the revenue system [of Chicago].”¹⁵

Unfortunately, revenues from taxation fell far short of demand. Percy Edwards, clerk of London's Improvement Committee, described the whole process. The Metropolitan Board of Works (London's governing body from 1855 to 1888) spent £15 million net on new roads and street improvements. This was financed partly by parish rates (assessed on real estate), but also by borrowing (aided by a state guarantee by which money could be raised at 3/3½ per cent) and by the coal and wine duties.¹⁶

Every city experienced a shortfall in revenue. W. Tite, in an unsympathetic account of the financing of Haussmann's Paris, found it “not at all astonishing” that that city, assisted by the state, was paying at the rate of 70 per cent on the outlay for street improvements, despite recovery on resale of land. This might, he said, be tolerated in a highly centralized country like France, where the capital city was everything and the rest of the country nothing by comparison, but it would hardly be acceptable in England, “where we pride ourselves on making every place pay for its own improvements.”¹⁷

Tite was wrong, even for his own day. Later, the financial losses on London's street improvements, such as New Oxford Street, became notorious. Olsen's study of Victorian London concluded that street improvements seldom recovered the cost from improved site values; Regent Street and, much later, Northumberland Avenue were lonely exceptions to the general rule.¹⁸ London had to come to the capital market. Its Metropolitan Board of Works between 1856 and 1868 received four-fifths of its borrowing requirement from the Bank of England and the National Debt Commissioners, and the remainder from the insurance companies. In 1860 it was the first local authority in Britain to obtain power to borrow on stock, and by 1907 its successor, the London County Council, had accumulated long-term debts of over £75 million.¹⁹

But it was not a serious problem to dispose of municipal bonds before 1914; cities could borrow readily and at very competitive rates. Apart from the crisis year of 1907 and a

short period after World War I, the London County Council was always able to raise money on good terms.²⁰ Paris, back at the time of the Second Empire, found no difficulty in raising a series of huge loans; a debt of 163 million francs (£6.52 million) in 1853 had become 2.5 billion francs (£100 million) by 1870.²¹ The same was true for cities in the New World. As might be expected, Chicago's bonds were "marketed with ease and readily taken up, particularly by those who lived in the city."²² But in 1878 Hyde Clarke had already noticed as much for the United States, Canada, and the British colonies in general, where "town loans [were] always to a great degree locally subscribed."²³ Neither Montreal nor Toronto had difficulty borrowing, very cheaply, in the 1900s; Toronto's 3½ per cents, indeed, were selling at a premium in the last years of the nineteenth century.²⁴ Canadian municipal borrowing from 1908 to 1913, principally in Britain but also in the United States, amounted to \$330 million (£66 million); there was, in truth, no alternative to borrowing abroad if municipal responsibilities were to be met – just the water, sewage and paving costs incurred by Canadian cities during the building boom of 1905 to 1913 reached a billion dollars (£200 million).²⁵

II

While money was so easily and so cheaply borrowed at home and abroad, the part taken by municipal governments in mobilizing finance for their own improvement became a matter of individual taste. Productive investment in public utilities, in ports, and even in housing, could be expected to pay its way. The point at issue was the relative efficiency of municipal administration on the one hand, and of private management and ownership on the other. Certainly, large areas of what are now regarded as public responsibility were paid for by charity. Poor relief, medical services, and social welfare in general were ill supplied everywhere before 1914. The church (Catholic and Protestant) did as much as it could. Terry Copp describes the St. Vincent de Paul Society as "the cornerstone of Montreal's welfare structure"; it gave assistance to some 2,500 families a year between 1900 and 1914, and Montreal charities took the prime responsibility for funding and administering hospitals, orphanages, insane asylums and industrial schools until the end of World War I.²⁶ The St. Vincent de Paul Society was active in other Catholic cities of the New World, such as Buenos Aires and Sao Paulo, and Protestants contributed similarly through institutions like the Salvation Army and the "Ys" (Young Men and Women's Christian Associations). Immigrant communities formed their own protection societies. Newton describes the "ostentatious prosperity" of the German colony in Buenos Aires at the time of the centennial celebrations of the Argentine Republic in 1910, and the British colony in Buenos Aires (of much the

same size) was even wealthier.²⁷ Neither was larger than about 50,000, whereas the population of Italian communities in the Americas ran into millions. Italians were generally poorer than Britons or Germans, but their numbers brought resources for the provision of widespread social services in the centres of Italian immigration – the United States and Canada, Brazil and Argentina.

Charities were no monopoly of the New World – far from it. Sampson Lowe's 1861 survey of the number and income of London charities showed that private charities in his day disposed of an income greater than the provision of public funds for the relief of distress,²⁸ and an aggregate income of nearly £2.5 million for the major charitable agencies in 1861 had doubled by the end of the 1880s.²⁹

The range of charities for all cities was impressive, and it substituted inadequately for municipal and state expenditure. Sir Richard Assheton Cross, Disraeli's Home Secretary, in an otherwise sympathetic account of the plight of the poor, gave expression none the less to the real barrier in contemporary thought, the opposition to state intervention which continued to place so heavy a burden on private charity throughout the nineteenth century. "I take it as a starting point," he said (in 1882) "that it is not the duty of the Government to provide any class of citizens with any of the necessaries of life..."³⁰ Sir Richard applied his ideas to working-class housing where, as his contemporary Sir John Simon was to explain, the object to be desired was that the demand for *quantity* of house accommodation should be met "on purely commercial principles ... with public authorities in general not acting except for the purpose of *qualitative* control." Sir John, one of the leading sanitary reformers of his day, approved most particularly of self-financing philanthropy (philanthropy at 5 per cent) which contrasted happily with the harmful effect on the labouring man of outright charity.³¹

Working-class housing in London, with the assistance of the Peabody Donation Fund, the Improved Industrial Dwellings Company, the Artisans', Labourers' and General Dwellings Company, and the individual energy of Dr. W.A. Greenhill and Miss Octavia Hill, was more ambitiously supported by charity than in most cities. But model housing by the 1890s had also been developed elsewhere in Britain and, to a lesser degree, in France, Germany, Holland, Scandinavia and the United States. By the late 1900s it had even spread, on a very small scale, to Buenos Aires.

Building societies were themselves charitable institutions, or at least agencies for self-help; there might have been as many as 2,500 operating over Britain by the middle of the nineteenth century.³² Colonial Melbourne housed seventy-four building societies by 1885, lending a record £4.9 million.³³ Just under 5,500 building and loan societies were functioning in the United States in

1900, with control of assets averaging more than \$100,000 apiece.³⁴

None the less, building societies did not reach the really poor, and neither did the model housing societies which in Britain spread from London to Manchester, Leeds, Bristol, Glasgow and other industrial towns. The very poor could not afford an economic rent. Private housing societies showed merely that new housing could be provided commercially for the well-to-do artisan, but not beyond.³⁵

Anthony Wohl is surely right when he concludes that “the size of the problem of overcrowding defeated Victorian philanthropy.” As he says, the 123,000 people housed by London’s nine principal housing companies and trusts by 1905 represented little more than the population increase of Greater London for a year and a half.³⁶ His observations for housing apply equally to the scope of charitable activity everywhere; clearly, social services were cheap before World War I simply because they were totally inadequate.

III

Where government failed and charities were insufficient, finance was left to private business and the individual. In Britain, building societies paid for a large part of the growth of suburban housing. Ninety per cent mortgages were obtainable from 1904, paying interest at about 4½ per cent. Alan Jackson quotes the example of a Catford estate house in 1907, for sale leasehold at £275 (£20 down and £2.3.0 a month) – terms which put it within reach of clerks and the upper levels of the working class.³⁷ In Germany, few such intermediate sources of capital existed, and German banks were asked to supply much of the funds for building; Germany’s big investment banks associated themselves closely with those large, highly capitalized companies that took charge of the development of so much of Germany’s building land.³⁸

On the other hand, British joint-stock banks were reluctant to tie up their money in building loans, and London builders borrowed from insurance companies and building societies.³⁹ Reeder identifies the sources of capital for property development in London as, first, the savings of landowners, middlemen and builders; second, mortgages and share capital through solicitors and public companies; and third, reinvested profits of speculative land deals and the sales of ground rents.⁴⁰ The money-lending solicitor, he concluded, was the base for much small-scale, speculative house-building, and the solicitor mobilized what became the chief source of capital for suburban development in London and provincial cities, that is, the savings of professional people and small capitalists (builders, clerks and others among the lower income groups).⁴¹

The unplanned, urban sprawl of cities in the Americas, like Chicago and Boston, was paid for by thousands of small investors who themselves made up the mortgage market; the “final agent of metropolitan construction was the individual builder.”⁴² In Buenos Aires, the very rich and the very poor continued to live, for different reasons, in the centre of the city; the middle class, with the help of commuter railways, electric trams and mortgages, found its way to the suburbs; skilled and semi-skilled workers bought plots of land on the outskirts of the city, paid for them monthly over as many as ten years, built a two- to four-room house themselves and borrowed the money from mortgage companies, building societies and land developers.⁴³ The outer suburbs of Buenos Aires were almost entirely built this way – pink or white one-storey houses, some no more than gipsy cabins, interspersed with field of alfalfa grass and maize.⁴⁴ And it need hardly be said that the acquisition and sale of building land in Buenos Aires was a far more attractive option to the small investor than the bonds of the *Caja de Ahorros de Buenos Aires*, the municipal savings bank.⁴⁵

Utilities, like housing, found most of their funds on the private market. Today, after decades of technological change and maladministration, investment in public utilities seems foredoomed to disaster. But the economics of public utilities, particularly in the United States, have not always seemed so discouraging. Burton Kolb, writing as recently as 1964, explained that it was “part of our economic folklore [in the United States] that public utility enterprises are less subject to risk than are firms engaged in manufacturing, mining, distribution or service....”⁴⁶ Garfield and Lovejoy’s book on the economics of public utilities, reprinted in the 1960s, still speaks of the attractions for American investors of public utility securities; they are of “relatively low risk, for the most part, and have great appeal to those investor groups who want to minimize their risk factor” (banks, insurance companies, trusts, pension and endowment funds, philanthropic institutions and, above all, the cautious individual).⁴⁷

Certainly before World War I, public utilities were generally regarded as an attractive area for investment, whether administered privately or by the municipality. There can be no mystery about the source of their finance. Manchester’s tramways, administered by the city from 1901, were “very profitable,” paying nearly 14 per cent on capital outlay during the mid 1900s.⁴⁸ Birmingham’s municipal gas undertaking was described in the 1890s as a “magnificent success.”⁴⁹ The utilities of London (water, gas and electricity), privately administered, seldom made less than 7 per cent on money invested before the end of the century.⁵⁰ In the 1900s London’s three gas companies were beginning to feel the competition of electricity, but they had paid good dividends until then and had no trouble raising the money they needed.⁵¹ It was “absurdly

easy” during the 1890s to sell electric tramway securities to legitimate investors in the United States; they could be distributed, in the stock market phrase, “right out of the window.”⁵²

Tramways in central areas of dense population were profitable, and private companies in the last decades of the nineteenth century did good business. Electrification extended the range of tramway systems, and the number of passengers carried was enormous. The privately owned and operated tramway system of Buenos Aires, the “City of Tramways,” took 101 million passengers in 1900 and 382 million in 1912 (by which time the system was totally electrified).⁵³ At the peak of the tramway business of the United States in the early 1920s, 14 billion passengers were carried every year.⁵⁴ The new Paris Metro, opened in 1900, was “extremely successful, both for the public who patronized it and for the private capitalists who built it.”⁵⁵

In small towns, public utilities often had a struggle to survive. But in large towns and cities their securities before World War I were very attractive. They “rarely, if ever, showed a deficit,” and, as Frederic Howe said, “the complaint is more frequently made that they make too large a profit out of the consumer.”⁵⁶ Besides, they could expect to raise money outside the capital market. Horse-car tramlines, in the United States and elsewhere, were backed and encouraged by individuals interested in real estate promotion. Manufacturers installed and invested in public utilities at home and abroad – the Compagnie Générale de Traction (Franco-Belgian) and Thomson-Houston (American) in French tramways, the Continental Telephone Company and Bell Telephones (American) in the telephone services of Argentina and Uruguay. Great railway companies, such as the Great Northern and the London and South Western in Britain and the Great Southern and the Central Argentine in Argentina, supported the development of underground railways between their main terminals. John Mackay describes construction profits as “a primary incentive for streetcar investment in France as elsewhere,” and Weetman Pearson, a prominent contractor, took a large proportion of the stock in return for the contract to build London’s Great Northern and City underground railway.⁵⁷

In practice, there were no difficulties in the private funding and administration of city utilities before the financial crisis of 1907, and the market had picked up again well before the Great War.

IV

A further element, of prime importance, was the contribution of the individual proprietor. Proprietors, naturally, were interested in the extension of services to their property, and Sam Warner is right to draw attention to

the substantial proportion of the cost of installation of utilities – gas, electricity, water, sewers, telephones – which was paid by the owner of the new land to be served.⁵⁸ Warner was referring to the growth of Boston from 1870 to 1900, but the experience was general. Proprietors subscribed heavily to the Lots Road Power Station in London in order to supply electricity to their area, and they subscribed equally to London’s underground railways.⁵⁹

The huge costs of city expansion, after all, were more often to be encountered in construction work, housing and building, street widening, improved thoroughfares and paving, than they were in the new generation of public utilities. The contribution of the individual to the financing of housing has already been discussed – and clearly the municipality took little part before World War I; so has the financing of street improvements by the municipality, principally through borrowing. Public utilities drew on the contributions of interested proprietors, as did street improvements. By contrast, in London during the last decades of the nineteenth century proprietors were not charged for the cost of street improvements, although this suggestion was made both to the Metropolitan Board of Works and to its successor, the London County Council. A tax on betterment values might have seemed the obvious solution in the financing of street improvements, but there was fierce opposition to any such tax in Paris, among others, in the late nineteenth century. The practice in most new cities – Chicago, Buenos Aires or wherever – was to levy a proportion of the cost of improvements on the property directly benefiting from the improvement – as much as two-thirds for roads, pavements, sewers and turfing in Toronto, and full cost to abutting real estate in Los Angeles.⁶⁰

V

Huge sums were invested in the expansion of cities before 1914. At best, municipalities themselves made only a modest contribution to total expenditure, although their acknowledged responsibilities ranged from the “gas and water socialism” of Birmingham to the almost exclusively *laissez-faire* administrations of St. Petersburg and Madrid. Private charities took charge of the meagre social services of the day. Private entrepreneurs, contractors and companies paid for the public utilities. Private proprietors contributed to the improvement of paving, street widths and alignments, storm drains and sewers. Private individuals bought houses from private builders and contractors, and built others for themselves. Individual citizens were always the best market for the securities of their own municipalities, and they supplied the main element in the income of all cities – the property tax. The interested proprietor, assisted by the increment in land values and operating with little help from the city administration, was the basis of the financing of expansion and modernisation of western cities before 1914.

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