GOVERNMENT AND THE COLONIAL ECONOMIES

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From the time of Macquarie the beneficial effects of government came less from material support than from the recognition of an emerging free society, dependent for its success on the rule of law, the strengthening of property rights, improved administration, low taxation, and an environment of confidence and opportunity that encouraged voluntary flows of people and capital from Britain and Ireland. After 1860, the value of the government contribution to growth was reduced by the destabilizing and growth-distorting consequences of public investment. The economic contribution of colonial governments in this later period was found less in their willingness to construct public capital assets and more in the provision of a favourable and permissive environment in which private decision-makers were to a large extent free to pursue their own private ends.

INTRODUCTION

Our knowledge of the scale, variety, and influence of government activity on the Australian colonial economies draws mainly on the work of N. G. Butlin. In the forty years since the appearance of his path-breaking paper on colonial socialism (Butlin, 1959), new research and the exploration of new interpretative themes by economic historians have added to and modified Butlin's analysis of government in the second half of the nineteenth century. And, as he was unable to complete his account of the early colonial economy before his death, much remains to be done before a comprehensive statement of the economic influence of government before 1850 can be made. Nevertheless, the debt we owe to Butlin is immense. This article is, in many ways, an acknowledgement of that debt.

Butlin once described the establishment of the convict colony at Botany Bay as a 'project at least as risky as modern efforts to send a man to the moon' (Butlin, 1984: 221). The organizational difficulties and human risks involved in preparing a fleet to transport a thousand people, comprising convicts, marines, officials, and various wives and children, over 15,000 ocean miles to

an unknown destination, and then to establish a secure settlement, are hard to imagine today.² In spite of these difficulties and the great hardships and privation of its first years, the settlement soon flourished. Helped by large subventions from Britain, expenditure began to rise. The convicts and settlers who now clustered around Sydney Cove lived and worked in a surprisingly complex economy on activities which included farming, a variety of manufacturing, crafts, and services, and off-shore enterprises such as whaling, sealing, and commerce.

After its early years, the new colony grew rapidly. Population growth averaged 9 per cent a year in the period to 1860, and output grew faster still. A vast geographical expansion took place, new colonies appeared, and an increasingly complex economy emerged. After the brief stimulus of the gold rushes in the 1850s had passed, the colonies continued to flourish for the next thirty years, though aggregate growth was now slower. Population growth between 1860 and 1890 averaged 3.4 per cent a year. Expansion was sustained by a continued flow of people and capital from Britain. This period saw the building of Australia's cities and rail network and a great expansion in rural capital formation. There were, of course, problems. Urban concentration brought exposure to crowd diseases, and in spite of high incomes there was no discernible improvement in infant and child mortality until the last decade of the nineteenth century. Education became increasingly expensive as the number of children increased, causing governments to economize on quality. In the 1890s class conflict intensified and flared into a series of bitter industrial disputes that were to affect the development of political structures in the new century. Colonial governments rarely played a passive role in these developments.

An initial assessment of the potential for government activity to influence the colonial economy can be made using figure 1. In the earliest years of settlement, government accounted for a large but falling share of total expenditure and employment. This decline was halted briefly during Macquarie's governorship but resumed after 1820. In expenditure and employment terms, at least, government played a smaller role in the economy at mid-century than at any other time before or since. A vigorous recovery in the government share of expenditure and employment from the early 1870s was associated with a growing interest among colonial governments in developing colonial resources through the construction and administration of transport systems and telegraphic and postal communications. Government expenditure on capital formation had reached extraordinary levels by the 1880s.

Figure 1 shows that the government share of expenditure and employment never again reached the levels characteristic of the early years of the convict settlement. The economy itself, however, was vastly larger during the phase of colonial socialism, and the falling share of government in the total masks an

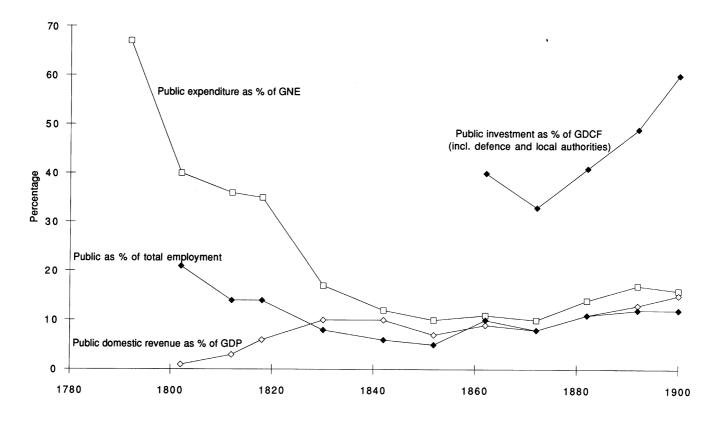


Figure 1. Government as a revenue raiser, spender, and employer

enormous increase in the absolute size of the government sector. Between them, the British government and the local administration may have accounted for one-third of all colonial expenditure in the early 1820s, but the absolute amount they spent was less than £200,000 a year. By 1890 the combined spending of the colonial governments was one-sixth of the total but had multiplied two hundred times and now amounted to over £40 million a year. Over the same period, employment in the public sector grew from under 4,000 to around 270,000 people.

Figure 1 suggests that it is useful to consider the role of government in each of three periods: (1) 1786–1822, when government was the dominant provider of financial and labour resources; (2) 1822–56, a period which saw Britain's financial disengagement from the colonies; and (3) 1856–91, the period of colonial socialism. These periods conform well to stages of colonial development identified by economic historians and are also tied loosely to the main constitutional changes affecting the colonies.

1786-1822

Government involvement in the Australian economy dates from 1786 with the decision to establish a convict settlement at Botany Bay. This decision changed the way British authorities dealt with transported convicts. Previously, contractors had taken convicts to North America where they were sold as penal labour to planters, the sale price forming an important part of the contractor's profit. For their part, the British authorities took little interest in the convicts once they had been delivered to the contractor (Ekirch, 1987: 3). The absence of a market for convict labour in the early years of the New South Wales settlement opened a new chapter in penal history: for the first time the British government took direct responsibility for establishing and maintaining a prison colony and for the transportation and subsequent care of the convicts. The government was now committed to a major act of public investment as well as the transfer of people to Australia.

The task of establishing the new colony and transferring its first prisoners fell to the first governor, Arthur Phillip, then an obscure naval captain on half-pay (Fletcher, 1967). The choice of Phillip was inspired. From the first, he demonstrated a sound grasp of administrative detail and the foresight necessary to anticipate and deal with the multitude of details involved in his task. Though he had to struggle against serious food and supply shortages, defeatism, occasional opposition, and lingering doubt among members of the home government about the wisdom of the convict project, the colony had been securely established when he embarked for England in December 1792. Convicts and their gaolers still made up the bulk of the population, of course, but already over 300 persons, most of them ex-convicts, formed the basis of a free settlement. Some problems had been intractable. In particular, the

government farms worked by the convicts produced miserable quantities of food and only 500 of the 3,500 acres given to ex-convicts and other settlers had been cleared for farming. As a result, the colony remained incapable of feeding itself or of surviving without continued large-scale support from the British government.

For the next thirty years public sector activity was dominated by large and continuing outlays by Britain in the transfer of people, goods, and equipment to sustain the settlement. In one sense, it is possible to see these outlays as a deliberate act of policy derived from recommendations of the 1784 Committee on Transportation (Clark, 1950: 31-3). That committee had envisaged an unprecedented role for government in any new convict settlement and regarded the prospective profit of the settlement as a condition for the resumption of transportation. The decision to settle Botany Bay, however, was not the outcome of an informed assessment of the likely returns to be made by establishing the colony. More important was the need to resolve social problems associated with dangerously overcrowded prison hulks close to London. In any case, fiscal decision-making was so poorly controlled and incoherent at this time that government was incapable of making judgements about the likely returns to investment in the colony or of managing a colony in any sustained way (Cohen, 1965: ch. 2). The British authorities had only just begun to reform their fiscal systems, and the Australian settlements were largely unaffected by reform until after the Napoleonic wars. Indeed, colonial affairs in general received scant attention from a government preoccupied with the crisis in Europe (Young, 1961: 12–17). Responsibility for financing the new colony, moreover, was shared by several government departments with little co-ordination and sometimes strong antipathies between them. It was only after 1815 that the British Parliament and a reformed Treasury began to assert control over colonial expenditure and to pay close attention to the financial costs and commercial benefits of the colony. In the meantime, the New South Wales colonial administration continued to use outmoded fiscal and accounting systems that left the British authorities substantially unable to monitor or control colonial claims on British resources.

British ability to monitor and restrain colonial claims on London depended on the willingness, energy, and determination of the colonial governors, and even the most willing governor found his ability to limit these claims constrained by local circumstances. From the earliest years, governors found that prison farms were inefficient, and to maintain food supplies they had to turn public resources over to private individuals. Governors themselves also had an interest in passing the burden of colonial expenditure on to Britain. Some were as ready as any to use land grants, convict labour, and commissariat resources to benefit themselves and their families and friends. Others complied with settler demands because they were dependent on their help with local administration or were unwilling to offend well-connected

colonists who might appeal to high-placed friends at home. Even when governors did attempt to limit public spending, the lack of adequate accounting procedures meant there was no sure way they could check that instructions were being followed, particularly after King gave the commissariat authority to issue bills on London. Finally, British control was especially tenuous in the periods between the departure of Phillip and the arrival of Hunter (December 1792 to September 1795) and between the arrest of Bligh and the arrival of Macquarie (January 1808 to December 1809). In both these periods the local administration lay with a military and civil elite whose private interests made them ready to make large claims on London and to disburse public funds and assets among themselves and their favourites.

Influential colonists used a variety of ways to enlarge the cost on Britain and to divert the resulting flow of labour and financial resources to their private use. Their livestock was increased through their access to government herds and flocks. Access to commissariat stores and the ability to administer the prices of goods bought and sold by the stores were important avenues to private fortune, as were several of the offices at the disposal of the crown. More important still was the private use of land and convict labour made necessary by the failure of the government farms. Land grants and the assignment of convict labour to private individuals were also means of payment for services rendered to the colony that could not otherwise be met directly from government funds. Costs were also passed on to Britain through the governor's power to requisition goods and equipment and to pay for them with bills drawn on London. The British authorities had no way of testing the validity of these requisitions, given the recording practices of the day, and while officials in London often complained about the costs of running the colony they showed little curiosity about individual requisitions. Invoices were rarely requested, and governors were rarely asked to explain why they had issued particular bills, which in any event appear always to have been honoured in London.

Failure to monitor expenditure in Australia ensured that the burden of colonial support fell heavily on Britain, allowing colonial imports and living standards to rise far above levels that could have been financed by the unaided efforts of the convicts and free colonists. Rather than blunt incentives or effort among the colonists, however, this access to British resources stimulated local economic activity. Opportunities to privatize government resources raised the prospect of fortunes to be made from farming or trade and encouraged the exertions of many in the military who might otherwise have remained idle. This helped to concentrate wealth among the colonial elite, increased the scope for economic specialization, and created opportunities for capital formation and entrepreneurial effort. The transfer of convict labour to private use also created opportunities for employers to offer convict workers incentives in the form of cash, food, drink, and perhaps leisure privileges. These helped to

raise productivity among what was for many years the largest sector of the workforce. Only in areas where initiative was retained by the home government (as, for example, in the flow of convicts to the colony) or where governors attempted to restrict private access to public resources (with Macquarie's use of skilled convict labour for work on public construction being the most prominent example) was this growth process threatened or restrained (Butlin, 1994: 203–6).

Weak imperial control also allowed governors to develop local (and technically illegal) sources of tax revenue. Local taxes were introduced in 1802 when King tried to reduce drunkenness by imposing wharfage dues and landing duties on imported alcohol (Shaw, 1967: 55–61). Initially, income from local taxation was used to rebuild the Sydney gaol and to finance an orphanage, but vigorous economic expansion greatly enlarged the flow of revenue and, by the time Macquarie arrived, there was a large source of funds available for discretionary purposes. Together with the greatly increased inflow of convicts after 1813, this fund provided the foundation on which Macquarie made his reputation as a builder.

Although the diversion of public resources to private use was extensive, the flow of British funds and a growing source of local revenue together allowed the early administrations to perform a remarkably broad and complex range of tasks. Most of these, and by far the greater part of government spending, were associated with the reception, allocation, victualling, clothing, and general administration of the convicts (McMartin, 1983: 74). Special problems of remoteness, the physical character and climate of Australia, the absence of municipal and other local institutions, and the limited amount of private capital also made it necessary for the administration to undertake an unprecedented range of responsibilities. Besides shouldering the traditional functions of defence and law and order, the colonial government administered and controlled harbours, ran farms and factories, supplied building materials, constructed roads, bridges, and public buildings, laid out towns, administered and controlled the disposal of land, licensed businesses and professions, regulated prices, wages, and working conditions, and regulated the currency and banking. It undertook the exploration and surveying of the colony, provided a wide range of medical, religious, and education services and welfare facilities, and spent large sums defending the colony against Aboriginal attacks. In Van Diemen's Land, and later in the privately settled colonies in South Australia and on the Swan River, government support was required for many years before settlement was well enough established to operate on the basis of private economic activity. All these functions required large resources and could not have been undertaken except on a very limited scale without government intervention and large contributions by British taxpayers.

In spite of the wide range of responsibilities carried by government, and in spite of the vigorous attempts by the colonists to go on imposing costs on Britain, government expenditures declined steadily as a proportion of total spending. While part of this decline is explained by Britain's relative neglect of the convict settlements during the wars with France, the principal explanation of the relative decline in government expenditure lies in the rapid growth of the private economy. Similarly, the decline in the proportion of the workforce employed by government was the product of the growth in the free and time-served population. Lax imperial control and the colonial administration's inability to find enough prison-based work to employ most of the convicts productively also led to the growth of private employment of convict labour.

The arrival of Lachlan Macquarie late in 1809 signalled an end to the period of British neglect and to many of the abuses of earlier years. Soon after, the flow of convicts to the colony began to increase, and there was a temporary halt to the decline in the government's share of spending and employment, as figure 1 shows. Though most of the government functions already listed were in place before this, the new surge of convict arrivals and the vigour of Macquarie's administration helped to concentrate their growth into the period 1810–21. Other distinctive features of the Macquarie years were a focus on the laying out of towns and the provision of schools, hospitals, churches, a convict barracks, and improved road links between Sydney and the surrounding towns and hamlets. Greater attention was paid to the welfare of the convict settlers who had completed their sentences. More use was made of convicts to construct public buildings and to improve communications with the interior. Attention was given to the establishment of clearer rules of market behaviour, clearer recognition of property rights, and to the civil administration of the law. These developments may be seen as an expression of Macquarie's recognition of the presence of an emerging free society. In Britain, however, his efforts to provide for the maintenance and growth of that society were taken as evidence of the extravagance of his administration, and it was this perception of extravagance, rather than Macquarie's alleged despotism or complaints from within the colony of his failure to respect traditional social relationships, that prompted the home government first to establish Commissioner Bigge's inquiry into the state of the colony in 1819 and then to recall the spendthrift governor in 1821 (Ritchie, 1970: ch. 1).

1822-56

The early 1820s mark an important turning point in relations between government and the colonial economy. While Macquarie's initiatives had been little appreciated in London, Bigge's reports now alerted the home government to the changes in the colony and to its emerging value as a field for private development. Policy adjusted quickly. Whilst continuing to transport convicts to Australia, the British government now also encouraged

an inflow of private capital and free migrants. This new policy was accompanied by a closer oversight of colonial affairs from London and an active reduction in British financial commitments (Fitzpatrick, 1939: 228). For their part, the colonists were gradually given more influence in local decisions and in consequence were required to finance a growing proportion of public expenditure.

These changes were not achieved without tensions emerging between colonial and British interests, especially over access to crown lands and the spending of the revenue raised by land disposal. Conflict over these issues came to a head during the 1840s in a series of bitter exchanges between Governor Gipps and the squatter interests in the colonial legislature (Buckley, 1967). Britain's last major administrative initiative before the granting of selfgovernment was the making of Orders in Council in 1847 which gave more secure settlement rights to squatters and were intended to ensure that any weakening in imperial control did not lead to a loss of crown rights over unalienated colonial land. By 1850, British interest in controlling affairs in Australia had faded, and steps were taken to give self-government to the colonies. It is ironic that the ability of local colonial governments to control development had also faded by this time, partly because of the rapid spread of settlement and partly because of budgetary difficulties that arose in the 1840s. The result was that by 1850 government, both imperial and colonial, played a smaller role in colonial economic affairs than at any time since 1788.

British determination to reduce expenditure on the penal settlements arose out of a growing demand for economy in government after the French wars, and this determination could be translated into action because of the improved capacity of the reformed Treasury and Colonial Office to monitor spending in Australia. Growing awareness that an autocracy designed for a convict establishment was no longer suitable in the changed conditions of the colony underlay a move to more democratic forms of government. Bigge's reports on the state of the colony arrived in Britain in 1822 and 1823. They were to form the basis for the New South Wales constitution granted in 1823 and for a series of changes that were to transform colonial administration by 1831. Two changes were to dominate the government's role in the economy: the reform of colonial public finance around a newly created Colonial Fund and the emergence, already noticed, of Britain's new perception of the colonies as fields for private investment and free settlement.

Reform of the local administration began almost as soon as Bigge arrived in New South Wales. The taxes and duties that formed the Police Fund, hitherto raised illegally in the colony, were sanctioned by Parliament in 1819. A local Legislative Council was provided for in 1823, and, on Bigge's recommendation, the Police Fund was replaced by a Colonial Fund scrutinized by the British Treasury. Initially, the duties and taxes that formed the basis of the Colonial Fund were a prerogative of the governor, but Acts of

1825, 1828, and 1834 increasingly made the governor's actions conditional on approval by the Legislative Council. These important constitutional changes, however, had little immediate impact on the sources of revenue or on the way they were collected. In New South Wales and Van Diemen's Land over 80 per cent of tax revenue continued to be raised from customs and other duties and from licence fees. The rest came from a wide range of sources including post office revenues, fines, and income from various public assets. Sales of crown land became an important source in the 1830s, but the terms on which land was sold and the revenues raised, which were for the most part hypothecated by London to finance its assisted migration schemes, were kept firmly under British control until self-government in 1856. These developments mark the beginning of modern forms of taxing in Australia. Apart from its use of colonial land revenues to finance migration, British financial commitments to Australia began to narrow after 1823. Britain ceased to provide financial support for the civil establishment in 1827, and for the police in 1833. While New South Wales commissariat expenditures continued to contain some grants-in-aid. British expenditure now focused narrowly on penal and defence considerations. Grants-in-aid and commissariat and other expenditures continued elsewhere.

Because of these changes, tax and other revenues raised in the colonies began to rise rapidly (Vamplew, 1987: 109–31). In New South Wales, they increased from 6 to 10 per cent of GDP in the 1820s and stayed at this level until 1840. The absolute increase in revenue was from £45,000 in 1821 to £486,000 in 1840. Revenue fell absolutely in the depression of the 1840s but by 1850 had recovered to £442,000 or 8 per cent of GDP. The weight of local taxes also increased in Van Diemen's Land notwithstanding the maintenance of British support. In the 1830s, slower population growth left people in Van Diemen's Land paying about 20 per cent more in taxes per head than their counterparts in New South Wales. Colonial governments never completely filled the gap left by the reduction in British spending, with the result that publicly-provided services and public service administration lagged increasingly behind the private economy, especially during the rapid pastoral advances of the 1830s. The position worsened following the economic crisis of 1841, when the New South Wales Legislative Council began to look for economies in government spending in addition to those imposed by Britain. The 1840s thus became a decade of extreme parsimony on the part of the public sector.

It is not easy to gain a clear impression of the economic consequences of this decline in the financial presence of government. The reduced British contribution to total spending in the colonies may have been a slowing influence in the 1820s and 1830s, though its effect at this time was outweighed by other expansive influences. Large fluctuations in British commissariat spending in the 1830s added an element of instability to the New South Wales economy, whilst reduced British spending on assisted migration in the 1840s,

and on the colony generally following the end of transportation to the mainland, gave an extra deflationary twist to an already depressed economy. Continued British spending, in contrast, gave relief to the flagging fortunes of Van Diemen's Land and the Swan River Settlement during the late 1830s and 1840s. In South Australia British expenditure was important to the early survival of the settlement, but severe cuts in government spending after 1841 helped to keep that colony in depressed conditions well into the 1840s.

The transfer of fiscal responsibility and increased emphasis on local accountability had implications for public sector administration. The public establishment grew at roughly the same rate as the economy as a whole, but an increasing share of its wages and salaries had to be paid from local revenue. The transition to local funding also coincided with the introduction of a fully salaried bureaucracy and the phasing out of unpaid convict clerks. The colonists thus faced a rapidly rising public sector salary bill. At the same time the administration was faced with the urgent task of reforming its procedures to meet its new responsibilities. Changes carried through during Darling's governorship (1825–31) had impressive results. 4 On his arrival Darling found a public service that was undersized, underpaid, and staffed with convicts and numerous other inefficient officers. Many public servants supplemented their salaries with private activities and through the conversion of public assets to their own use. In spite of imperial parsimony and persistent administrative intervention, Darling successfully established a salaried and professional public service twice the size of that he had inherited. He removed inefficient officers and most of the convict clerks; he reorganized departments, giving them more clearly defined responsibilities and authority and so allowing for the more effective co-ordination of interdepartmental and political relationships; he reformed the colony's financial system and checking procedures, imposed greater regularity on public financial transactions, and laid the foundations of a modern budgetary cycle. These reforms facilitated British financial disengagement without disrupting the colony's administration. They also bequeathed to Darling's successors an administrative structure that survived substantially intact and served the colony well between his departure in 1831 and the introduction of self-government in 1856, in spite of the intervening increase in the scale and complexity of the economy and the disruptions consequent on the depression of the 1840s and the gold discoveries of the 1850s. It was an impressive achievement.

Financial disengagement is only part of the story of government after 1822, for in other ways British intervention became more vigorous and effective. The Bigge report and the Darling reforms were the colonial complement to reforms already achieved in imperial administration. The result was that colonial affairs were more effectively monitored from London and were exposed to contemporary currents of British legislative opinion requiring the colonies to conform more closely to colonial policy. The British government

imposed more control over local patronage, revenue-raising, and tax rates. British government ministers and civil servants continued to determine key aspects of local policy, leaving a surprisingly small amount of discretion with the governor and the Legislative Council. These circumstances, and the British government's determination to enforce stricter economies on colonial administration, account in large part for the continuing conflict between Governor Gipps and many in the Legislative Council over the disposal of crown land and the control of crown land revenues.

Before 1822, and apart from occasional interference from London, the administration of crown land policy lay with the governor. Grants were issued at moderate or nominal quit rents according to the status and means of the occupier. By 1822, more than half a million acres had been alienated in New South Wales. Macquarie often granted land in highly informal ways, even in the towns, so that much land was occupied without clear title, while squatting (which gave no title to the occupier) was common in rural areas. Though an urban land market flourished, and though squatting allowed a vigorous growth in pastoral activity, a more formal resolution of the issues of land alienation and title to colonial lands became increasingly urgent. The movement of squatters into the newly discovered country south and west of Sydney threatened crown rights in unsettled areas, and a lack of formal title among other landholders caused confusion in the settled districts. As a result, disposal of land directly through the governor was replaced in stages during the 1820s by a system of sale at auction. At the same time, Brisbane and Darling began to clarify the confusion among existing title claims. A boundary survey of the newly discovered regions available for settlement was completed in 1828. In these ways, property rights in land were more clearly established and a means was found to alienate land in a way that ensured the recognition and protection of crown rights.

These reforms affected neither the terms on which colonial lands were alienated nor control of land revenue. Both remained firmly under British control, for the home government took the view that the 'waste' lands of the empire were held in trust for all its members, not just for residents of the country where they lay. The colonists, on the other hand, thought both that land should be available to local residents on the most favourable possible terms and that the spending of land revenues was a matter for local discretion. A bitter conflict thus arose between the colonists and the imperial government. Before 1856, however, the colonists' arguments were to no avail. All important aspects of land policy continued to be made in London, including the methods of land disposal, the terms on which land was to be held, the organization of surveys, the size and expenditure of the Survey Department, its personnel, and the disbursement of land revenue.

At about the time the boundary survey was completed in 1828, British policy came under the influence of Edward Gibbon Wakefield and his

followers. New imperial policy on land alienation, issued in the Ripon Regulations of 1831, was directed to the achievement of Wakefield's aims of promoting closer settlement and assisting migration from Britain. Crown land within the survey boundaries was to be sold at auction at a minimum price of five shillings an acre (raised to twelve shillings in 1838 and twenty shillings in 1840). Until 1842 revenue from land sales was directed almost entirely to financing the movement of free settlers from Britain. Thereafter, the British authorities required at least half of all land revenue be used in this way. A million pounds was raised from land sales in the ten years after 1832, and almost all of it went to finance assisted migration. Arrivals of assisted and unassisted migrants in these ten years exceeded the total white resident population of 1832.

Whether, on balance, these policies were appropriate to colonial circumstances is difficult to determine. Doubtless, colonial development was greatly accelerated by the arrival of so many free settlers. Immigration reduced colonial dependence on convict labour and speeded the demise of the convict system in New South Wales. Increased supplies of free labour, moreover, so enhanced other aspects of private economic activity that returns to the economy increased faster than the costs imposed on employers by the higher price of non-convict labour. But ideas of closer settlement and the sale of land at high prices ignored the economics of the burgeoning pastoral sector. Indeed, land sales were overwhelmed by the scale of squatting, and to protect crown rights in unsettled regions legislation was passed in 1836 permitting the occupation of land outside the limits of settlement on payment of a licence fee of f_{1} 10 a year. British insistence that land revenue be used to finance assisted passages meant the neglect of other avenues of public expenditure. This effect was fully intended, for one of the main aims of the Ripon Regulations was to prevent the expansion of government activities that would inevitably follow the extension of settlement. As a result, there was almost no growth in public capital formation between 1830 and 1850, whilst expenditure cuts imposed on the Colonial Surveyor's office greatly reduced that department's value to colonial development. Even the migrant expenditures themselves lost some of their potential benefit in that nearly two-thirds of the migrants arriving in 1832-42 came in 1840 or later, well after the pastoral boom had passed its peak and the demand for labour had fallen.

With the end of convict transportation to New South Wales, the British government sought to shift the cost of maintaining convicts on to the colonies themselves. Partly in response to this, and partly in response to economic crisis and depression in the early 1840s, the newly created and partly elected Legislative Council of New South Wales demanded more control over the colony's affairs. It imposed cuts on government spending and pressed harder for control of colonial land revenues and the terms on which crown lands would be made available. The result was a vigorous attack from all sides on

government spending and a searing conflict between the Council and Governor Gipps (Buckley, 1967). Differences over land policy were eventually resolved by the British Orders in Council of 1847 which gave squatters preemptive rights to their homesteads and improvements, though the loose phrasing of the orders continued to plague Victorian and New South Wales governments for many years (Roberts, 1924; ch. 15). In the meantime, government departments experienced severe spending cuts. The Surveyor General's department was left quite incapable of performing its functions in the face of these cuts and the greatly increased demand for its services attendant on the Orders in Council. Police services were left unready to deal with the demands arising from the gold rushes of the 1850s. Education was neglected, with total expenditure in New South Wales stagnating between 1839 and 1856 in spite of a rapid growth in the number of children. Even where expenditure cuts were restrained, British withdrawal and the continuing regime of strict economy meant colonial public services found it hard to attract staff.

As the eastern and southern colonies moved towards self-government, both the British and colonial administrations could claim to have made important contributions to their development. Four colonies had been separately founded, supported, and guided through the critical years of first settlement. Public spending and employment had supported high levels of personal consumption and encouraged the development of a vibrant private market during critical stages of each colony's foundation. Government had brought the rule of law, even if early on it had been military law. British imperial connections and institutions had imposed fewer constraints and given greater encouragement to private development than might have been expected from any other European colonial power. The basic principles so essential to the formation of a successful private economy, such as private property, profitmaking, personal choice, and the early placing of land in private hands, were inherited as part of British traditions and protected by a benignly-disposed government. These features had made it possible for a free society to emerge from the unpromising material of a prison colony.

Such achievements must be kept in perspective, however. As figure 1 shows, government was already a declining part of the economy by 1810. That relative decline, only briefly arrested during Macquarie's governorship, together with the administrative reforms carried through by Darling, helped to ease the transfer of financial and political responsibility for colonial administration from Britain to the colonists themselves. As we have seen, the absolute size of government may have risen rapidly but it was soon outstripped by the growth of the private sector. In the early years of settlement private growth was encouraged by large subventions from Britain to support the colonists whilst they undertook the early tasks of exploring, adapting to, and learning to live in an unfamiliar and often hostile environment. From the time

of Macquarie, the beneficial effects of government came less from material support than from the recognition of an emerging free economy that depended for its success on the rule of law, the strengthening of property rights, improved administration, low taxation, and an environment of confidence and opportunity that encouraged voluntary flows of people and capital from Britain and Ireland.

Many of these benefits arose as by-products of the British government's desire to put its own financial affairs in order rather than from any belief in the positive benefits of active intervention by government in colonial development. Indeed, the overwhelming impression one gains of these years is one of the relative absence of close government supervision over large areas of private colonial activity. Before 1822, this must be attributed in part to the inefficiencies that plagued imperial administration. More important, however, were the problems of distance, environment, climate, and geography, and the sheer pace of growth in the size, complexity, and geographic dispersal of the colonial economies. Together, these meant that many colonists were out of reach of government for long periods. Administrative methods, even when they were improved, could not maintain close supervision of so rapidly expanding a society. A kind of benign neglect by government thus conditioned the environment in which private activity flourished.

1856-91

The 1850s brought important changes to colonial society, the economy, and the role of government. The Australian Colonial Government Act of 1850 provided the basis for the separation of Victoria from New South Wales in 1851, the establishment of self-governing colonies in 1856, and the separation of Queensland from New South Wales in 1859. These events occurred against the background of the gold rushes and their associated demographic and social upheavals. They also heralded a period of slower aggregate economic expansion that Butlin and others have attributed to the influence of general long-run constraints on the economy (Butlin, 1986; Greasley and Oxley, 1997). The constitutional development of the colonies brought important changes to the organization of government and to the content and direction of government policy and activity. Freed from most of the restrictions of British interference, colonial governments could respond to newly emerging political pressures and domestic requirements for policies designed to facilitate economic development on a larger scale.

Political responsibility for developing these new policies resided with colonial parliaments consisting largely of inexperienced politicians operating on the basis of personality and faction, rather than party and discipline. Changes in government were numerous. Much consistency was none the less

evident in policies affecting economic development. Each colonial government drew on a common legal, constitutional, and administrative heritage, even if local differences in constitution and temperament produced some differences in practice. The structure of economic activity and of private investment, patterns of population distribution and land settlement, and the nature of the Australian physical environment all thrust similar responsibilities on to colonial governments and prompted strikingly similar solutions. The effect was that in addition to fulfilling the usual role of supplying defence, law and order, and education, colonial governments helped to develop colonial resources by investing in roads, railways, and telegraphic and postal communications and by spending heavily on assisted immigration. Public capital formation came to rival private capital formation, public borrowing in London rivalled private borrowing, and government-assisted immigrants outnumbered unassisted arrivals.

Through their control of railway, postal, and telegraphic communications, colonial governments came to administer great commercial organizations and their associated workforces. The departments shouldering this task were for the most part poorly staffed, underpaid, and, depending on the colony, were either neglected by politicians or subject to much political interference (Caiden, 1963; Radbone and Robbins, 1986: 452–8). Political leaders ignored ideas of public service independence, and patronage in appointment and promotion was widespread. There were frequent complaints about public service inefficiency and maladministration to which governments, buffeted by changing economic fortunes, responded with periodic bouts of retrenchment and salary cutting. Ten separate Royal Commissions reported on ways to improve the various colonial public services between 1856 and 1900. Few changes were initiated, however, and none had a lasting effect. As a result, the professional guidance and restraining hand of an experienced bureaucracy were either absent or a greatly weakened influence on government decision-making. Opportunities for political log-rolling were extensive, and legislative aspiration was often thwarted by the imperfect instruments of government.

Against this background of weak political and administrative institutions the direction of government policy changed: disengagement from economic affairs was replaced by active involvement in large-scale capital projects designed to accelerate the pace of economic development by improving the main avenues of communication both within the colonies and between the colonies and their markets overseas. Government shares of total expenditure and employment doubled between 1850/4 and 1890/4, and public capital formation became the main way of expanding the colonial stock of physical capital. Between 1850 and 1900 the workforce employed by government rose twenty-fold, total revenue rose fifty-fold, and total expenditure more than sixty-fold. Together, the growth in revenue and heavy borrowing in London

allowed colonial governments to undertake an increasing range of activities. Traditional functions also grew in scale and complexity, though not always in quality. Land and tariff policies became more complex, and towards the end of the century an increasing concern with labour markets and with problems of economic instability brought government into contact with the private economy at an increasing number of points. It is this growth in scale and complexity as much as the increasing share of the economy in the hands of government which makes government intervention so striking a feature of the decades after 1860 and which has led to these years being characterized as the era of colonial socialism.

In spite of the greater scale and complexity of colonial society, areas such as social services, defence, policing, and justice remained minor parts of government budgets. Expenditure on law and defence, for example, fell from 17 per cent of the New South Wales budget in 1861 to 7 per cent in 1891 (Vamplew, 1987: ch. 15). The fall in Victoria was from 18 to 8 per cent, and similar falls were recorded in the other colonies. Total spending on social services (including all current and capital expenditure on health, education, libraries, art galleries, unemployment relief, assistance to charities, and the care of orphans, young children, and the aged) declined after self-government to 8 per cent of total budget spending in 1871, and these items accounted for only 9 per cent of spending as late as 1890.

The history of public education in New South Wales illustrates the government parsimony characteristic of this period. Numbers attending school grew rapidly, but constant conflict over religious and secular matters provided a convenient excuse for governments to do little. Education reform Acts were passed in 1866 and 1880, but successive governments were unwilling to commit funds to improving the quality of public education. The funds that were committed, however, seem to have been well spent, and by 1891 illiteracy had virtually disappeared.

Compared to the limited attention paid to these areas, the amount spent on transport and communications was generous by any measure. Roads, railways, and the telegraph took up about a quarter of colonial budgets by 1860. Thereafter, construction and operation of railways dominated government expenditure. Railways were already the main single item of public capital spending, and they continued to absorb half of all government spending on new capital formation to the end of the century. To finance their investments, governments became major borrowers in the London capital market, and they embarked on ambitious programs of assisted immigration to ease labour supply problems caused by their demand for labour.

Governments had not been the first railway builders. Private lines were attempted in both Sydney and Melbourne in the 1850s, but these came to nothing. Local capitalists were unable to command resources on the required scale, and there were in any case more profitable uses for private investment

capital in these years. Also, railway investment in new countries yielded social returns that investors found difficult to capture. When the early private attempts failed, the colonial governments were left as the only bodies capable of raising the sums necessary to finance railway construction.

At first, governments approached the task of railway building cautiously and with fairly strict attention to profitability. Gradually, however, decisions to expand the system came to take on classic public-choice features. A concern for profitability soon gave way to an emphasis on less quantifiable, though politically easily justified, social and general economic considerations (Coghlan, 1918: ch. v). By the mid-1880s, when even these vague criteria had been abandoned to permit extensions of railway networks for political ends, prospective economic returns had become largely irrelevant to expenditure decisions. Only in the Swan River Settlement, where British rule continued, was the urge to construct new lines restrained, though even there ambitious construction plans quickly followed the transition to self-government in 1890. Railway building in Australia as a whole reached a peak in the 1880s, when the length of track in use more than doubled. By 1891, 15,000 kilometres of track had been laid at a cost of £122 million, a figure equal to 77 per cent of colonial public debt.

Historians have disagreed about the economic benefits of this railway building. Coghlan, for example, thought the benefits of the New South Wales railways were considerable: had it been possible for the whole of the 1898/9 railway traffic to be carried by horse and bullock teams, the cost of transporting merchandise 'would have been £7,684,367 instead of the sum of £1,722,579 (exclusive of terminal charges) actually charged by the railway commissioners' (Coghlan, 1900: 817). One the other hand, N. G. Butlin, in one of his rare contradictions of Coghlan, argued that the returns to railway investment were meagre and slow to emerge and that much of the railway building undertaken was a waste of resources (Butlin, 1959: 72; 1964: 293–8, 368-9, 415-16, 442-3). Aggregate revenues from the railways did not even cover running costs and the interest on the money borrowed to build them. Nor, in Butlin's view, were there immediate social benefits to set against the poverty of these direct returns. Railways rarely did more than duplicate existing transport routes, and reductions in transport costs meant comparatively little, except in coal mining, until the 1920s when railwayassisted development began at last to yield dividends in the agricultural and mixed-farming regions.9

In contrast, Davidson's explicit attempt to evaluate the direct and indirect benefits of railways suggests that they yielded a handsome return. Once social benefits are included, investment in New South Wales railways between 1852 and 1920 produced an annual rate of return of 15 per cent, or twice the long-term bank overdraft rate (Davidson, 1982). These benefits would have been lost had railway building been left to private enterprise since private investors

would have been unable to capture enough of these social benefits to make railway building profitable. On this view, the railways built by the New South Wales government (and by implication railways in other colonies) contributed greatly to the growth and development of the Australian economy in the late nineteenth and early twentieth centuries.

There are, however, problems with Davidson's estimates of the net benefits of railway investment. Errors in the road and rail freight rates he uses bias his results in favour of railways (Boot, 1996), while some of the gains attributed to railways, such as the development of wheat farming in the Riverina, depended also on other factors. It is doubtful, moreover, whether all of the benefits he identifies would have been lost had the railways not been built (or, more to the point, had the railway system been less extensive). If the economic history of railways in other countries is a guide, the structure of economic activity would have adjusted to the absence of railways in a manner that would have left the colonial economies less affected by the problems and costs of distance than Davidson's estimates suggest. ¹⁰

The consequences of government attempts to accelerate development through railway construction were also wider than is implied by Davidson's cost-benefit calculations, for railway construction programs interacted with other aspects of government policy that affected colonial development in important ways. Butlin argued, for example, that while the original aims of land and tariff policy in the 1860s might have been to find work for unemployed gold miners, both lines of policy were quickly subverted to the capital demands of the railways (Butlin, 1964: 377–88). Similarly, intervention in domestic banking and capital markets was conditioned by the shifting capital needs of the colonial governments and by the relative advantage each government sought from playing the domestic banks off against each other and against foreign banks and the London capital market.

Butlin also maintained that government demand raised the cost of capital and labour to the private sector (Butlin, 1964: 291–8). One result, in his view, was a short-term inverse relationship between public and private investment, public and private borrowing, and between assisted and unassisted immigration. While the statistical evidence of short-term inversity is not unambiguous (Jackson, 1985), this does not in itself undermine Butlin's central contention that public sector competition for capital and labour crowded out private activity. This contention remains controversial.

According to Butlin, crowding out appeared in both capital and labour markets. In the capital market, government borrowing affected private borrowers in several ways. Government debentures attracted local savings away from private borrowers. If these borrowers turned to foreign sources of funds, governments could ensure that a large share ended up in their coffers by raising tariffs on imports or by offering land for sale on favourable terms. Alternatively, a government could maintain its spending by running down

its deposits in private banks, and this in turn would reduce bank lending to private borrowers. Colonial government borrowing in London also affected the terms on which private borrowers could raise funds from British lenders. Since British investors in Australia held strong preferences for safe government securities, colonial government borrowing induced a fall in the amounts deposited with the London offices of the Australian banks. The banks responded by raising interest rates on deposits, and this led to higher interest rates in Australia.

In the labour market, competition between public and private sectors took place against a background of labour scarcity. The share of the public sector in total employment rose from 5 to 12 per cent between 1850 and 1890, as figure 1 shows. It is not surprising, therefore, that governments had a growing influence on colonial labour markets. As early as the 1860s colonial governments were seen as wage leaders, and as railway and other capital building projects boomed, complaints that government demand for labour was pushing up wage costs became commonplace. Throughout the 1870s and 1880s colonial governments also influenced labour markets by taking responsibility for labour bureaus, by providing public works to support employment when times were slack, and by enacting factory legislation. The effect was to maintain a high floor to real wages and to keep labour markets tight in almost every year from 1860 to 1891.

To offset these labour-market pressures, colonial governments were frequently involved in programs of assisted immigration. In the absence of more detailed work by historians, it is difficult to judge the effect of these programs either on numbers arriving in Australia, or on the level of wages and employment. According to Butlin, assisted migration did little to ease pressure on wage costs, even during peak years of arrivals in 1877 and 1883. This is because the number of assisted migrants tended to lag behind, and sometimes well behind, the growth of government demand for labour. Many migrants were also unwilling to move away from the metropolitan cities to areas where labour-intensive capital works were being built. Whether or not government-financed immigration programs added to unemployment is equally unclear. Though many contemporaries believed immigration had this effect, Pope and Withers (1993: 728–9) have argued that immigration usually added as much or more to demand as to supply in the short run and so did not raise unemployment. This conclusion, however, is more firmly established for the twentieth century than for the nineteenth. Pope and Withers, moreover, do not distinguish between private and public immigration or examine the possibility that these may have had different employment effects.

It is difficult to believe that colonial labour markets were entirely unaffected by assisted immigration. The total net migrant intake between 1861 and 1890 was nearly half the increase in workforce numbers, and more than half the intake was assisted in some way by government. It is possible, in the absence

of the assisted passage schemes, that labour scarcity and stronger wage pressures would have attracted more unassisted migrants, but we can be confident that any such effect would have been small in view of the high cost of moving to Australia. To this extent, assisted migration must have modified labour-market pressures, though experience in 1882–4 indicates that governments were not willing to press on with such programs if the numbers arriving threatened to cause any obvious adverse movements in wages or employment.

The contribution of the surge in public capital formation after 1870 to boom conditions has already been noted. In Butlin's view, very high railway investment during the 1880s also exacerbated the fundamental imbalance emerging in the economy as exports and import-replacing output failed to match the growth of imports and of interest and dividend payments overseas. The willingness of colonial governments to go on enlarging social capital in the 1880s raised total investment, imports, and foreign borrowing. By the early 1880s governments were borrowing heavily to build lines into areas where they had little immediate potential to enhance export growth. Planning for further building in New South Wales and Victoria was then being driven by inter-colonial rivalry for the trade of the Murray River and by the local porkbarrelling interests of politicians. The Queensland and South Australian governments had both entered into expensive projects that would add long developmental lines to the system but would contribute few immediate gains in revenue or export earnings. The result was that throughout the 1880s public investment remained high, and this raised interest and payments obligations without making a significant contribution to the growth in exports required to meet those obligations. This effect was intensified by any tendency for government competition for labour and capital to raise domestic costs relative to overseas prices. To this extent, governments must bear part of the responsibility both for the balance-of-payments situation that came to a head in the economic crisis of the early 1890s and for the seriousness of the depression that followed.

Butlin argued that government-inflated capital and wage costs distorted the whole structure of economic activity by causing too much private investment to go into activities like grazing, banking, and commerce, where the promise of short-term results was high, and too little into areas like manufacturing and agriculture where returns were yielded more slowly. This effect, however, is less clear than he appears to have believed. Lougheed and Tamaschke (1991) have argued that public investment did not dampen private investment (and thus production) in export and import-competing industries. In their view, public investment is more likely to have boosted domestic demand and stimulated private investment. Certainly, investment in housing and pastoral activity was abundant, as Butlin's structural-imbalance thesis would suggest. Labour shortages were also endemic. These shortages, however, were most

severe in rural districts and regions where major public works were in progress. Manufacturing was less affected, partly because of the growth of female and child labour in the cities. There were, in any case, other constraints on manufacturing development. The relative backwardness of Australian manufacturing technology, the smallness of the domestic market, and the decline in the world prices of manufactured goods all inhibited local manufacturing. Indeed, what requires explanation in these circumstances is the surprising rapidity of manufacturing growth: manufacturing output rose twice as fast as GDP in the thirty years to 1891, and manufacturing more than doubled its 1861 share of total product. ¹²

Nor were the constraints on agriculture fundamentally a matter of capital and wage costs, as the history of government attempts to promote agricultural development demonstrates. Radical demands to unlock the land in the late 1850s directed attention to land reform and support for small-scale agriculture (Roberts, 1924: chs 20-1). The outcome was a series of land reform Acts, beginning with Robertson's Land Act in New South Wales in 1861, ostensibly designed to make land available to small farmers on easy terms (Baker, 1967: 103-26). This legislation was followed in a general way by other eastern colonies and remained the basis of land policy until the mid-1880s. Whatever the original intention of the legislators, the new measures were far from generous to small farmers, and when the Acts were revised (as, for example, in New South Wales in 1871) the main concern was to raise extra revenue from land sales (Lamb, 1967: 38-68). Thus, although the area under small-scale arable farming undoubtedly increased, the effect of the Acts was to induce existing pastoral leaseholders to make strategic land purchases as a means of preventing encroachment by small farmers.

In 1883 and 1884, three of the colonial governments again attempted to come to terms with the problems arising from their closer settlement policies. Fearing that wholesale disposal of land would prejudice its efforts to raise funds in London, the New South Wales government revised its land laws to make land available through conditional leases instead of outright sales. Rents were increased substantially. In Queensland, the influence of the Henry George movement led the government to pass Dutton's Act which resumed large portions of squatters' runs for rent and sale to small settlers. The Victorian response appeared in Acts designed to deal with the remnants of the land still in public ownership and to resume the Mallee lands for closer settlement. In each colony the Acts had unintended consequences. The changes in New South Wales produced a sharp fall in land sales and temporary financial problems for the government. Dutton's Act was a financial disaster for the Queensland government, and in both colonies the resumed land became a degraded breeding ground for rabbits. In Victoria, the changes served to reduce further that colony's small income from land. The New South Wales legislation produced a sharp rise in rural investment as lessees fenced

and improved their retained portions and as new properties formed out of the resumed areas came on to the market. In this way, government action helped to stimulate pastoral growth. The Acts thus reinforced the pastoral character of land use. More vigorous action to promote closer settlement, however, would also have been unsuccessful, since the physical environment, the prevailing technology of arable farming, and transport conditions combined to render many areas unsuitable for anything beyond sheep or cattle grazing. Only in South Australia and parts of the Riverina was there scope for land reform to stimulate much agricultural development before the end of the century. ¹³

As with land reform, tariff policy has often been discussed in terms of the differences between New South Wales and Victorian government responses to the radical demands of unemployed gold miners at the end of the 1850s. Revenue considerations, however, also mattered. Both colonies used tariffs to maintain income when revenue from other sources declined, though New South Wales, with its greater land area, was always better placed to maintain revenue from land sales. In Victoria, pressure to adopt protective tariffs originated in Geelong and was initially directed towards agricultural protection. It was not until the late 1850s that protection came to be associated with manufacturing. Legislation to raise tariffs was delayed until 1867 and then went only a small distance towards meeting protectionist demands. The tariff took on a distinctly protectionist character only when Victorian budgetary needs became pressing with the growth of railway spending in the 1870s. In New South Wales, where land revenue eased pressure on the budget, mercantile lobby groups with an interest in cheap imports remained ascendant. As in other colonies, the governments of Victoria and New South Wales became favourably disposed to different interest groups because they faced different revenue-raising problems and not simply because of a deep commitment to free trade or protection.

Whether the higher tariffs levied in Victoria explain why manufacturing was more important there than in New South Wales is less clear-cut than many historians appear to believe. As Sinclair (1971) has pointed out, Victoria would have had more manufacturing than New South Wales even without a protective tariff because there were fewer opportunities there for employment in primary production once the surface gold had run out. This said, high tariffs probably stimulated Victorian manufacturing development but neither the extent nor the permanence of the effect is clear (Jackson, 1977: 165–8).

Much of the historical debate assumes, incorrectly, that the protective or revenue-raising features of the tariff arose from informed and rational government action. In fact, the Victorian system was largely arbitrary, often irrational, and frequently harmful to manufacturing interests: luck rather than design often determined whether a particular industry benefited. The

net effect on industrial development is thus difficult to unscramble (Paterson, 1968; Sinclair, 1971). Victorian tariffs on wheat produced in New South Wales inhibited wheat production around Albury. This reduced the earnings of the Victorian railways and possibly restrained the growth in demand for manufacturing by raising food prices in Melbourne. Tariffs on machinery delayed the introduction of new techniques and were enough to suppress meat canning as an industry in Victoria. The carriage-making industry was also hit by tariffs on parts, while the footwear industry languished because of the tariff on leather.

Taking these points together, it seems that the tariff had a marginal and somewhat arbitrary effect on Victorian manufacturing development. As in the other Australian colonies, the main influence on manufacturing growth after 1870 was not government protection but local factor endowments, increases in population and real wages, and the growth of cities. Compared to these, the ability of higher tariffs to accelerate the growth of Victoria's manufacturing sector was limited.

In sum, government activity produced many economic benefits during the period of colonial socialism. Police, justice, education, health, and other public welfare services had grown in range and scale, if not always in quality. Colonial resources had been developed through extensive public capital formation, particularly in railways. Urban centres were linked to each other by electric telegraph and by undersea cable to London and other major centres in Europe and America. A sophisticated postal service further enhanced communications throughout the colonies. Towns and cities were graced with many fine municipal buildings. Substantial progress had been made in the paving of urban roads, the construction of water-supply systems, and the development of sewerage systems. Life in the towns was becoming healthier and cleaner, diet had improved, and opportunities for recreation had broadened. In the countryside life was less lonely and the environment had been rendered less hostile.

The years of colonial socialism also established a pattern of government involvement in the economy that was to persist into the new century. The scale of the achievement, the effectiveness of administration, and the stability of public investment in the decades following self-government are remarkable considering the lack of overall planning, the frequent changes in government, and the weakness of the public service. The improvements flowing from government investment undoubtedly assisted in the development of colonial resources and provided social benefits that would not have been realized had matters been left to private enterprise.

While these were important benefits, it is hard not to be struck by incongruities appearing between the extent of government involvement and the general trend of colonial growth and stability. The slowing down in aggregate growth rates after the 1850s is a key aspect of Australian economic

experience reflecting the emergence of constraints on growth. Capital expenditure on railways and other communications after 1860 can be seen as an increasingly unsuccessful attempt to remove these constraints, and the failure of growth to improve in the face of the huge investments undertaken remains one of the most striking features of the period of colonial socialism. This leaves a question mark over the value of government contributions to growth after 1860, particularly in view of the destabilizing and growthdistorting consequences of public investment. Significant and long-lasting costs arose from the destabilizing effects of excessive railway building and the associated public borrowing; from the parochiality of colonial governments willing to subvert the wider, long-term interests of inter-colonial trade to the short-term interests of Sydney, Melbourne, and Adelaide; from the waste of resources arising out of the rivalry for the trade of the Murray River; from the extension of railways far into regions where the improbability of an economic return was plain for all to see; and from the detrimental effects of diverting resources from private to less productive public use.

In the light of these considerations, it is worth emphasizing that in the period of colonial socialism, as in the years before self-government, the key to unlocking the productive power of Australian resources was not the interventionist role played by colonial governments but access to the savings and migrant labour of Britain and the development of a vigorous private sector capable of adapting these to the unique demands of the Australian environment. The economic contribution of the colonial governments is found less in their willingness to construct public capital assets and more in the provision of a favourable and permissive environment in which private decision-makers were to a large extent free to pursue their own ends.

APPENDIX

Table 1. Government as a revenue-raiser, spender, and employer, 1790-4 to 1900

	Public Expenditure as % of GNE	Public Domestic Revenue as % of GDP	Public Investment as % of GDCF (excl. defence)	Public as % of Total Employment
1790–4	67			
1800-4	40	1		21
1810-14	36	3		14
1816-20	35	6		14
1828-32	17	10		8
1840-4	12	10		6
1850-4	10	7		5
1861-4	11	9	40	10
1870-4	10	8	33	8
1880-4	14	11	41	11
1890-4	17	13	49	12
1900	16	15	60	12

Sources: Butlin (1994, 1964); Vamplew (1987).

Notes: Of the four measures shown in table 1, only public expenditure as a share of GNE presents serious problems of estimation. These arise mainly because of uncertainty over amounts spent by the British government on the Australian colonies before 1850. Figures prepared from British sources do not agree well with those derived from colonial sources, and both sources appear to be incomplete in some areas whilst including in others some double counting as well as expenditure items not related to Australia. The estimates in the table for the period up to 1850-4 are calculated by adding Butlin's estimate of the net deficit on trade to his estimates of colonial government expenditure financed by tax revenues raised in Australia. Until the late 1820s, trade deficits were financed almost entirely by British expenditure in the colony. Pastoral expansion in the 1830s encouraged a large inflow of private capital from Britain which provided the basis for a sharply increased import deficit. This inflow of capital was supplemented by cash and goods brought by immigrants. The inflows of capital and migrant funds slowed sharply after the economic crisis of 1841–2 but recovered after the discovery of copper in South Australia in 1845. Butlin's (1994: 101) tentative estimates of private capital inflow between 1826 and 1850 suggest that by the mid-1820s about one-third of the foreign trade deficit was financed by British subsidies and the remainder from private capital flows. These proportions were maintained until the late 1830s when private flows jumped to about ten times the value of the British subsidy. With the fall in private capital inflow after the economic crisis of 1841-2 British support again increased in relative importance, reaching two-thirds of the trade deficit in 1850. On this basis, British and colonial government spending accounted for about 17 per cent of GNE between 1828 and 1832 and about 12 per cent between 1840 and 1844. Figures for 1860 and later are from Butlin (1964). Figures for public employment before 1861 are those implied by government shares of GDP, following the convention of valuing government services at the level of wages and salaries earned in their provision. After 1860 government product included material used in railways, road making, and public buildings. Butlin's figures allow expenditure on these items to be excluded. The first reliable estimates of government employment appear in 1904 (Vamplew, 1987: 149). A check against these figures suggests that table 1 understates the share of public employment in the total by less than 2 per cent in 1900.

NOTES

- 1 The list of Butlin's works at the end of this paper is not exhaustive and includes only those items that are fundamental to the themes of this article. Given the extent to which I have drawn on these sources for factual information, conjectural estimates, and interpretation, it is impossible to acknowledge each debt as it arises. My debt to Butlin is the same as that of all historians of the Australian economy: immeasurable.
- 2 McMartin (1983: 17–42) gives a detailed account of the administrative problems faced by the government in preparing the First Fleet. This book is an invaluable source on most aspects of colonial administration before 1856, and I have drawn on it extensively.
- 3 A detailed statement of the range of activities performed by the early colonial administration can be found in McLachlan (1957).
- 4 This paragraph draws heavily on McMartin (1983: 143-228).
- 5 On the vigour and effectiveness of continuing British intervention in colonial administration in the 1820s, see Eddy (1969).
- 6 The Swan River settlement continued under direct British control until the grant of self-government in 1890.
- 7 For an examination of the continuing British controls on colonial freedom, see Finn (1987).
- 8 This paragraph draws on Barcan (1988).
- 9 Similar views are expressed by Sinclair (1976: 93–5, 130–1, 150–1) who concludes that railways may have stimulated growth before 1880 but that the accelerated construction of the 1880s helped to arrest economic growth and contributed to the economic crisis of the early 1890s.
- 10 Without cheap rail transport, for example, wheat farming in the Riverina might not have developed as far and as early as it did, but the loss would have been compensated by the greater development of wheat farming in South Australia, Tasmania, and areas close to the Murray River system that were not dependent on cheap rail transport.
- 11 Queensland accounted for 50 per cent of assisted migrants; New South Wales for 19 per cent; Victoria, 13 per cent; South Australia, 12 per cent; and Tasmania and Western Australia, 3 per cent each.
- 12 Thompson (1970) has suggested that manufacturing could have accounted for as much as 15 per cent of GDP in 1890.
- 13 For a strongly positive view of the benefits of small settler legislation in the Riverina, see Buxton (1967).

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