

MĀNOA

University of Hawai`i at Mānoa Department of Economics Working Paper Series

Saunders Hall 542, 2424 Maile Way, Honolulu, HI 96822 Phone: (808) 956 -8496 www.economics.hawaii.edu

Working Paper No. 20-8

South Australia's Employment Relief Program for Assisted Immigrants: Promises and Reality, 1838-1843

By Edwyna Harris Sumner La Croix

March 2020

South Australia's Employment Relief Program for Assisted Immigrants: Promises and Reality, 1838-1843

Edwyna Harris Sumner La Croix** Monash University University of Hawai'i

10 March 2020

Abstract

Great Britain established the new colony of South Australia (SA) in 1834. The immigration contract signed by assisted migrants required the SA government to provide those who could not find private sector work with employment on public works. We use new data on the compensation of unemployed and private-sector workers to examine how the SA unemployment system functioned before and after the onset of a major economic crisis in August 1840. We conclude that the unemployment system provided highly compensated relief employment to a small number of migrants prior to the crisis but as migrant numbers claiming relief employment soared between August 1840 and October 1841, the government drastically cut compensation for relief employment. The cuts occurred in tandem with the government's release of newly surveyed rural lands, which together provided incentives and opportunities for workers to move to rural areas to seek work on newly opened farms. A comparison of the SA employment relief program with the 1843 temporary employment relief program neither established guarantees of jobs for assisted migrants unable to find work nor provided jobs for all assisted migrants without work during the 1843-1845 period.

Keywords: relief, unemployed, South Australia, migrants, public works **JEL codes**: J65, N37, J38

*Edwyna Harris, Dept. of Economics, Monash University, PO Box 8E, Victoria 3800, Australia; <u>edwyna.harris@monash.edu</u> (Orchid 0000-0002-1333-1197) ; Sumner La Croix, Dept. of Economics, University of Hawai'i, 2424 Maile Way, Honolulu, HI 96822, USA; <u>lacroix@hawaii.edu</u> (Orchid 0000-0003-4690-6927). We thank John Wallis, Tim Hatton, Laura Panza, Martin Shanahan, Peter Hoffenberg, and participants in the 2019 All-UC Economic History Conference, the 2019 Conference on Digitizing Australia's Past, and a University of Hawaii Dept. of History Workshop for their valuable comments and staff at the U.K. National Archives, University of Hawaii Hamilton Library, State Library of Victoria, State Library of New South Wales, State Library of South Australia, the National Archives of Australia, and State Records of South Australia for their assistance in locating sources.

** Corresponding Author

I. Introduction

The British Parliament established the colony of South Australia (SA) in 1834. Unlike other Australian colonies, it had a hybrid administrative structure where eight Colonization Commissioners (hereafter "The Commissioners") controlled immigration and land sales while the colonial governor controlled other governmental functions, such as law and order. The SA colonial organization was based on Wakefield's (1829) theory of systematic colonization which dedicated all proceeds from sales of colonial land to subsidizing passage for immigrants. The Commissioners guaranteed employment on public works to assisted migrants when privatesector employment could not be found (British Parliamentary Papers, 1838: 13-15). Between November 1836 and December 1840, 110 ships arrived in SA disembarking more than 12,000 assisted migrants (Table 1). From 1836 to mid-1840, migrants were relatively seamlessly integrated into the labor market in the capital city of Adelaide as a construction boom provided ample employment opportunities. However, in mid-1840 economic conditions began to deteriorate, and over the next 18 months, the number of unemployed migrants on relief employment increased from less than 10 per week in the first half of 1840 to over 500 per week in October 1841 (Figure 1). Over the next 15 months, big cuts in unemployment compensation and exceptionally strong growth in the colony's agricultural production were accompanied by a steady decline in the number of migrants on relief employment. When the official number of migrants on relief employment reached zero in January 1843, the governor shut down the government employment program.

This article aims to analyze the support provided by the SA system of relief employment to unemployed workers during periods of boom and crisis and to understand why the colonial

government modified the system during the 1841/1842 crisis.¹ We begin by examining the scheme's operation during the initial years of settlement to see how many migrants were served and whether they were well compensated. We pay particular attention to the October 1838 to July 1840 period when the governor spent freely on public projects including police, land surveys, and public buildings and public and private construction projects provided wellpaid employment opportunities for newly arrived assisted migrants. Next, we analyze how the colonial government modified the relief employment system during the economic crisis that gripped the colony from August 1840 through 1842. Our primary interest lies in understanding how relief compensation compared to private sector compensation, how cuts in relief compensation made in June 1841 affected living standards of the unemployed, and whether relief employment undermined incentives for unemployed workers to leave Adelaide in favor of rural employment opportunities. Finally, we examine assertions made by several historians of South Australia that the June 1841 cuts in relief compensation reduced overly high replacement wages paid for relief employment, thereby facilitating the movement of workers from relief employment to the rapidly growing agricultural sector. We focus on conclusions taken by Richard Mills (1915: 253) that large overall cuts in public expenditures and specific cuts in relief compensation initiated in 1841 led to several beneficial results: Labor became "both plentiful and cheap, agriculture became profitable and advanced with rapid strides, while the country population grew at the expense of the town."

We approach these questions by showing how several aspects of the SA relief employment system created distortions in its operation and affected worker incentives to

¹ Harris and La Croix (2020) analyze individual data for assisted migrants and their dependents who received rations due to sickness or destitution.

participate. Using recently compiled wage, price, and welfare ratio series for the 1838-1842 period we find that prior to the cut in compensation for relief employment initiated in June 1841, the full compensation (wages plus the value of rations) paid to an agricultural (predial) worker in private employment was considerably less than the full compensation paid to married men on relief employment. The cut in compensation for relief employment created new incentives for both married and single workers to find employment in the rapidly growing agricultural sector.

We conclude by examining the 1842-1844 New South Wales (NSW) employment relief programs and find that the NSW government set relief compensation for unskilled workers 50 per cent below compensation for agricultural laborers and shepherds, while setting relief compensation for skilled workers, such as carpenters, slightly above private-sector carpenter wages in Sydney. We find that the NSW employment relief program differed from the SA program by neither establishing job guarantees for assisted bounty migrants unable to find work nor providing jobs for all unemployed assisted migrants during the 1843-1845 period.

Why should we care about how the SA relief employment system performed and changed during the early years of the SA colony? Two reasons are that the system represented an innovation in its offer of a job guarantee to ALL assisted migrants – the bulk of the SA population – and its operation encountered many of the same problems faced by modern unemployment insurance schemes. Consider that SA Governor Grey worried that replacement wages paid for relief employment in SA, which were often more than 100 percent of the wage paid to private-sector agricultural workers, created adverse incentives that prevented workers from taking private employment in the country. The optimal rate of wage replacement has also

been the focus of numerous recent studies of twentieth and twenty-first century economies. Raj Chetty (2008: 221) found that it "exceeds 50 percent of the wage" (p. 221) in the United States; Camille Landais, Pascal Michaillat and Emannuel Saez (2018) found that the optimal replacement rate varies countercyclically in the United States, ranging between 33 and 50 percent; and Andreas Pollak (2004) identified a 40 percent wage replacement rate as optimal for Germany. Although the applicability of these results to a nineteenth century frontier environment is limited, the basic tradeoffs are still relevant. Virtually all SA workers were young, had few assets, and were unable to smooth consumption, all considerations that point towards a higher optimal wage replacement rate. Consider also that SA Governor Grey worried that applicants for relief employment were quitting private jobs to take relief unemployment or were hiding assets, such as stock and stakes in land, that would make them ineligible for relief employment. Monitoring whether applicants are eligible for unemployment benefits is also a prominent concern for modern policymakers and economists, with Jan Boone et al. (2007) showing that an optimal unemployment insurance scheme should contain devices to monitor applicant eligibility for benefits.

II. The Operation of the Relief Employment System during the First 3.5 Years of Settlement

The origins of the SA colony lie in the development of new theories of colonization by British social and political reformers during the 1820s and early 1830s. Edward Gibbon Wakefield's short pamphlet, *A Letter from Sydney* (1829), was particularly influential in the early 1830s, as it proposed a new plan for colonization—known as *systematic colonization* designed to avoid many of the economic and social problems found in existing British colonies. The conception and settlement of the SA colony was based on this new theory. A unique

aspect of Wakefield's model was the inclusion of extensive public support for the able-bodied unemployed at a time when the New British Poor Law was rolling back this type of support.² In their 1830 treatise on systematic colonization, Wakefield and Robert Gouger (1830: 55-56) advised that the unemployed or destitute should have a legal claim for subsistence on the colonial government.³ This guarantee was written into the contracts signed by assisted migrants to SA. The Commissioners in Britain instructed their representative in SA, the resident commissioner, that "the most important part of your duty will be to take care that no laboring emigrant falls into a state of destitution."⁴ To comply with their contractual obligations to migrants, the resident commissioner was authorized:

... to provide a maintenance for all such persons, and their families, until they have obtained ... employment at wages adequate to their support; requiring in return for such maintenance, that they shall labor upon the public works, as may be agreed upon by the Governor and [the Resident Commissioner] (British Parliamentary Papers, 1838: 13-15).

² Lindert (1998: 102) observes that after adoption of the New Poor Law (1834), average living standards in England and Wales increased but poor relief, as a share of national product, fell to around 1 percent in the late 1830s and support for able-bodied workers unable to find work fell sharply. From 1851 the majority of those receiving relief were dependents, with able-bodied laborers unable to find work making up less than 0.1 percent of adult males on relief.

³ For an excellent comparison of the South Australia relief system with Britain's Old and New Poor Laws, see Dare (1992).

⁴ When the colony was established the roles of resident commissioner and governor were two separate and distinct positions with the former responsible to the Commissioners and the latter to the British Colonial Office. In the first 18 months of settlement it became obvious that this division of power was unworkable so, from October 1838, these roles were combined under Governor George Gawler.

Why did Wakefield and Gouger include an employment guarantee in their plan for systematic colonization? In their 1830 treatise on colonization, they (pp. 55-56) argue that an unemployment guarantee would provide the Commissioners, who determined the amount of migration, with a clear incentive to limit the number of assisted migrants sent to SA:

In order to prevent any temporary excess of people in the colonies, arising from too great an amount of immigration, caused by any unusual and but temporary demand for labor, it is suggested, that every person in the colonies, being unemployed and destitute, should have a legal claim for mere subsistence ... on the colonial government ... A provision to that effect would render those, who should determine the yearly amount of immigration, very careful not to sin on the side of excess ...

What incentives did this create for the Commissioners to avoid an oversupply of migrants to the colony? First, an oversupply of migrants would require the Commissioners to use money from their land fund to pay for relief employment. This would reduce resources available to subsidize further migrant flows. Less migration could lower the colony's economic growth and in turn hurt the Commissioners' reputations. Moreover, potential migrants might view the presence of unemployment as a signal that their prospects in SA were not as good as advertised and prompt them to choose a competing destination, such as the United States or Canada.

Gouger and Wakefield (1830: 56) also argued that a job guarantee would "absolutely [ensure migrants] against the risk, however slight, of perishing for want." This insurance provision should have helped the Commissioners' agents to recruit hard-working migrants of good character when they started recruiting in early 1835. Recruiters gave preference to

married couples and were supposed to give preference to those with trades needed in the new colony, including agricultural laborers, smiths, tanners, and brick-makers (British Parliamentary Papers, 1836: 27-28). Of the 9,422 applications (submitted by family unit) for assisted passage between 1836 and 1840, embarkation orders were issued to 5,070 households encompassing 3,942 adult males, 3,548 adult females, and 4,718 children (Pike, 1967: 180).

From November 1836 to December 1837, 816 men and their 1,095 dependents receiving assisted passage arrived in SA. We know that some assisted migrants were on relief employment during the tenure of the first governor, John Hindmarsh (December 1836 – June 1838), but have no information regarding particulars, in part because of the disorganized state of government accounts and records during the first two years of settlement. An 11 November 1837 editorial in the *South Australian Gazette and Colonial Register* trumpeted the colony's prospects, and proclaimed that "no new emigrants have been without employment, and only one case of destitution ... has occurred ..." The editorial continued that "within the last week we have had two ship loads of emigrants; and such is the demand for labor that there is not a single individual at present unemployed."⁵

A March 1838 newspaper article reported that some private employers had complained that labor needed by private enterprises had been employed by Resident Commissioner Fisher under the relief employment program, working on public works such as clearing Adelaide streets. The article reported that the Commissioners provided compensation for this relief

⁵ "Second Address by the Editors of the South Australian Gazette to Intending Emigrants," *South Australian Gazette and Colonial Register*, November 11, 1837: 1. In her research, Jade Riddell finds that SA's leading colonists often painted a rosy picture of the SA economy since high early wages typical of new colonies—would be mitigated by new streams of emigrants drawn to a growing colony. Conversation with Dr. Jade Riddell on July 24, 2019 in Adelaide, South Australia.

employment at 12s per week with rations estimated to be worth 13-15s per week, i.e., about 25-27s per week.⁶ Compare this to compensation in the private sector in March 1838 when colonists were willing to give "six shillings per diem to good and five shillings per diem to indifferent hands."⁷ These figures amount to 30s per week for 'indifferent hands' and 36s per week for 'good hands' (excluding rations).⁸ This provides some early evidence that relief compensation (25-27s per week) was initially set 10-16.7 percent below the lowest wages paid to unskilled workers.

In May 1838 the Commissioners issued new instructions to the SA Emigration Agent clarifying that compensation for relief employment was to be paid in rations and clothing only:

... if there should be unavoidable delay in [assisted migrants obtaining employment], [the Emigration Agent] must engage them himself at reduced wages, and offer their labor to the Colonial Government, to be employed in constructing roads or in other Government works ... he must fix the wages decidedly below the ordinary standard, and must pay them entirely in rations of food and clothing, affording the parties shelter, if required, in the Emigrant Dêpot. In no instance ... is assistance to be given to ablebodied laborers, except in exchange for a full equivalent of labor.

⁶ "Mr. Fisher's Pauper Laborers," *South Australian Gazette and Colonial Register*, 24 March 1838, p. 1. In the article some colonists question whether these men were really unemployed because they claim "there are no pauper emigrants in the Province of South Australia [original emphasis]."

⁷ "Mr. Fisher's Pauper Laborers," South Australian Gazette and Colonial Register, 24 March 1838, p. 1

⁸ We have a database of monthly wages for 13 skilled and 5 unskilled occupations in South Australia for the 1838-1850 period. Specific reference in text is from "Mr. Fisher's Pauper Laborers." *South Australian Gazette and Colonial Register*. 24 March 1838: 1.

The Commissioners further state, "rigid observance of this rule is most important to the interests of the colony" (British Parliamentary Papers, 1838: 39).

Governor Gawler ignored these instructions, and continued to pay unemployed migrants in both money and rations. From the last few weeks of 1838 to June 1841, single men working for the government earned 1s 6d/ day plus one ration while married men were afforded 2s/day plus 1s 6d/day if they had children as well as a ration and half a ration for 1-5 children and one ration for 6-7 children (British Parliamentary Papers, 1843: 62-63).⁹ The government's annual ration consisted of 235.87 kg meat, 165.11 kg flour, 94.35 kg rice, 5.90 kg tea, 35.38 kg sugar, 2.95 kg soap, and 44.32 litres vinegar (British Parliamentary Papers, 1843: 9).

How well were single and married men working on relief employment in 1840 able to live? We estimate the standard of living for relief employment workers using methods developed by Allen (2001; 2009) and Allen et al. (2011) and applied by Panza and Williamson (2017; 2019) to Victoria, New South Wales, Western Australia, and South Australia from 1850. These authors provide dietary requirements and rudimentary household products required for a "bare bones" consumption basket and a "respectable" consumption basket that allows for a better diet and more comfortable life (Table 2).¹⁰ We use monthly retail price series for these products to calculate the cost of purchasing a bare bones basket in Adelaide. We then calculate

⁹ Full compensation for married workers is calculated by assuming they have three children and receive an additional 0.5 of a whole ration.

¹⁰ Williamson and Panza (2017) also calculate bare bones and respectable baskets for a worker with a wife and two children.

how many bare bones baskets ("the welfare ratio") married and single workers on relief employment could purchase with their annual compensation.¹¹

Our calculations show that government rations provided to workers on relief employment provided 4,440 kcalories per day. This is more than double the 1,934 kcalories per day provided by the Panza-Williamson bare bones consumption basket. We estimate the full compensation paid for relief employment during 1840 ranged over the year from 3.46 to 4.93 bare bones baskets for a single worker, and from 2.03 to 2.25 bare bones baskets for a married worker with 3 children.

What did workers on relief employment do? Most of the men on relief employment removed stumps from Adelaide streets, worked on leveling Adelaide streets, crushed stones to make gravel, split firewood, and erected direction posts. Others worked on building or macadamizing roads outside Adelaide, and some mechanics worked on government building projects.

Providing relief employment became a bigger responsibility for the government after migration surged from 1839 to August 1840 when assisted emigration was suspended because the Commissioners' funds were exhausted. The surge occurred because land sales had risen considerably in 1839 and the first half of 1840 and the additional revenue allowed the Commissioners to offer assisted passage to roughly 7,600 migrants in 1839 and 1840 (Table 1).

¹¹ Methods and wage and price data used to estimate the cost of the bare bones basket are available from the authors upon request. All prices used to calculate the bare bones basket are either retail prices or, in selected instances, wholesale prices adjusted with a markup based on equivalent wholesale and retail prices reported either in the government Blue Books or newspapers during the previous year.

Their arrival more than doubled the 1838 SA population of approximately 6,000 Europeans by January 1841.¹²

Was the SA economy able to absorb the new emigrants? We have weekly data for the first six months of 1840 on (1) passenger arrivals and (2) the number of assisted migrants given relief employment on public works.¹³ Seven ship arrivals do not allow for a rigorous econometric analysis but a graphical analysis points to important patterns in the data. Figure 2 shows arrivals of one or more large ships within a single week from which between 159 and 934 passengers disembarked as well as the number of workers on relief employment each week. Figure 2 shows relief unemployment typically spiked for 1-2 weeks after the ship's arrival, then fell back to near-zero levels. On average, just 5.167 workers were on relief each week from January to June 1840. If we simply divide this number in half and assume that 2.583 workers were married and 2.583 workers were single, then the total cost to the government of the relief employment program for the first six months of 1840 was £358.10. Assuming the number of men on relief employment in the first half of 1840 is representative of the colony's first 3.5 years, then the system supported roughly one month of benefits for approximately 60 men each year at an annual cost to the government of just £716.20.

The limited use of the relief employment system in the first half of 1840 is at least partly explained by the massive increase in public spending during Governor Gawler's tenure (October

¹² The additional land sales were primarily due to Governor Gawler's decision in December 1838 to allow "special surveys" of 15,000-20,000 acres to proceed and take precedence over other survey work. See Harris and La Croix (2018) for a full analysis.

¹³ This is the only period for which we have a reliable weekly series for relief employment. Figure 2 provides a monthly series for 1840 which also reports low levels of relief employment during the first half of 1840.

1838 – May 1841). Extra borrowing to fund government spending on land survey, police, and public projects amounted to £186,145 in 1838-1840 (Table 3). This was 315 percent of government revenues over the period. The extra spending pushed "establishment" government employment on just these activities to 415 people, about 8.9 percent of the male population over 21 years old (4,639 men). Additional workers employed by private construction firms hired to erect government buildings and infrastructure also owed their jobs to this surge in public spending. In sum, regular government employment essentially served as the employer of last resort, and its big expansion in 1839/1840 left little need for migrants to enter relief employment.

III. Government Relief Employment during the Economic Crisis, August 1840-1843

In the first 16 months of settlement, rural land surveys proceeded slowly, delaying the establishment of farms to supply food and employment to the colony's growing population. To speed up land surveys and other government activities, Governor Gawler engineered a massive expansion in public spending. Almost all of the additional expenditures were financed by bills drawn on the Colony's Emigration Fund and, later, the British Treasury. By March 1840, the Commissioners realized their funds were exhausted and sought, unsuccessfully, a private-sector loan to bridge the funding gap. The Commissioners notified the Secretary of State regarding the dire financial circumstances of SA on July 7, and issued a full statement of the colony's problems to the Colonial Office on August 26 (Pitt, 1972). Once the Commissioners and Treasury realized the extent of SA government spending financed by bills drawn on the Land

Fund and British Treasury—£211,747 from 1837 to March 1840 – they rejected £69,247 of Gawler's recently issued bills (British Parliamentary Papers, 1841b: 5; Torrens, 1844: 197).¹⁴

News of declining SA land sales in Britain and rumors of the colony's financial problems were brought to Adelaide by ships arriving in late July 1840. The news of the big decline in land sales led to a sudden stop in house construction in August 1840 as builders anticipated the decline in land sales revenues would reduce the number of assisted migrants and their demand for housing. Concurrent with the construction industry's sharp decline, the number of unemployed assisted migrants housed in the colony's Emigration Depôt and provided with relief employment on public works soared, increasing from 11 in June 1840 to 128 in September, or about 4 per cent of migrants arriving in the colony.¹⁵ By February 1841, official confirmation of the British Treasury's rejection of Gawler's bills reached the colony. Economic activity was immediately affected, as merchants paid with dishonored bills worried about their solvency, and large public meetings condemned the Commissioners for withholding news of the financial crisis (Pitt, 1972).

Figure 3 shows the number of people with relief employment rose from an average of 11 workers per week in June 1840 to 115 in August and 125 migrants by December 1840. By the week of May 8-14, 1841, the number of male workers on relief employment had increased to

¹⁴ The total amount dishonored was calculated from 10 August 1840, when the Commissioners ceased accepting Gawler's bills, to 1 March 1841.

¹⁵ Their families were also housed in the Emigration Depôt (Pike, 1967). The Depôt was a mixture of tents and rudimentary huts located in the parklands just outside the Northwest corner of South Adelaide. Boys housed there went to school for a half day and worked the rest of the day. Men on relief employment were required to house their families at the Depôt.

175. Once the Colonial Office became aware of the extent of the colony's budget crisis in August 1840, it recalled Governor Gawler, replacing him with Captain George Grey.

The Colonial Office provided Grey with strict instructions to impose austerity measures on public spending and find new revenue sources. Upon taking office in May 1841, Grey moved quickly to slash surveying expenditures, disband much of the colony's police force, stop several public building projects, severely cut compensation paid for relief employment on public projects, and increase import duties. Grey eliminated the provision of rations to all workers and dependents, cut pay for single workers by four pence a day to 1s 2d; left pay for married men without children unchanged at 2 shillings per day; and provided a sliding scale of weekly compensation for children starting at 2s 6d/week and falling by 3d for every additional child.¹⁶ After the cuts, an unemployed married emigrant on relief employment with three children and a spouse received 18.75s per week.

In late July 1841, relief employment peaked at 593 male workers, about 11.2 percent of the male population ages 14-50. There were already 175 men on relief employment in May 1841, and government cuts to the police force, surveying teams, and skilled workers on public construction projects added 215 to relief employment. Governor Grey speculated that about half of the remaining 203 workers on relief employment was due to layoffs by private construction firms whose contracts for public building works were curtailed or terminated and about half from layoffs by other private employers (British Parliamentary Papers, 1843: 129-134).

¹⁶ To calculate the welfare ratio for a married man on relief employment after Grey's cuts, we assume the man has three children so the total weekly compensation would be £0.34 or £1.35 per month that is 2s 6d for the first child, 2s 3s for the second, and 2s 0d for the third.

Workers employed on public projects participated in a one-day strike (for which they were docked one day's pay by the governor) and several demonstrations against the cuts. In early August 1841, 184 workers sent a petition to Governor Grey setting forth their case.¹⁷ They argued "[t]hat the amount of wages to be given are inadequate to procure for us the necessaries of life; that at such wages we and our families must soon be in a state of starvation and nakedness ..." (British Parliamentary Papers, 1843: 65-66). Grey's response was to convene the Board of Magistrates to consider whether compensation provided to those on government works were too low (British Parliamentary Papers, 1843: 66). The Board's subsequent report supported Grey's cuts and recommended that any single (married) man refusing to work for a private employer for £20 (£30) per annum plus rations should be refused government work.

As the impact of austerity measures mounted during August-December 1841, the government received more applications from assisted migrants for relief employment. They were forwarded to the Board of Emigration, tasked to thoroughly inquire as to an applicant's financial situation to determine whether public relief was absolutely necessary. Formal applications were required and had to include the name of the last employer, number of dependents, address, and a statement of the level of destitution faced. Numerous applications were refused. In its January 1842 Report and other correspondence, the Board presented as reasons for denial that an applicant owned land; was participating in ventures to purchase land; had quit a private job in order to take relief employment; was renting a plot of land; had close

¹⁷ Additional worker demonstrations occurred in October 1841. A second memorial pleading for better relief compensation was presented to Governor Grey.

relatives who owned stock or land that could assist him; or had saved money when he was working.¹⁸

Over the next 12 months, the SA economy slowly revived. Wages in Adelaide started to fall in 1841 making agricultural and pastoral enterprises more attractive and incentivizing people to abandon the city in favor of rural employment (Pitt, 1972). Table 4 show that acres in crop production rose by 150 percent in 1841 and by a further 194 percent in 1842. Unemployment fell throughout 1842, from 340 men in January to 46 by November 30 (Dickey, 1986: 9-10). By December no able-bodied laborers were still employed on public works. In early 1843 the SA government shut down the relief employment program.

IV. Assessing SA Relief Employment Compensation Before and After Grey's Cuts

Our analysis of compensation for relief employment begins by examining how the full compensation paid to workers on relief changed over the 1840-1842 period, both absolutely and relative to the compensation of predial workers. However, because of big changes in consumer prices during this period, we refine our comparisons by computing welfare ratios for workers on relief employment and predial workers.

Figure 4 compares the total compensation (wages plus the value of rations) provided to predial workers and single and married men on relief employment for the four months (January, April, July, and October) in 1840, 1841 and 1842 for which we have comparable data

¹⁸ For reports of workers preferring relief employment to private employment, see Grey to Russell, June 7, 1841; No. 6 in British Parliamentary Papers, 1843, Vol. xxxii, p. i. For accounts of employees owning cattle or "managing to pay for land and cottages, while receiving government support," see Report of Emigration Board, January 11, 1842 in Enclosure i in No. 29, British Parliamentary Papers, 1843, Vol. xxxii. Other examples in the text are from Mills (1915: 248) and from correspondence of Emigration Board Chairman G.V. Butler (State Records of South Australia, GRG 24/83 Copies of correspondence and printed matter, 1841-1842).

on worker wages. Consider first the situation in April 1841, just two months before Governor Grey's cuts in compensation for workers on relief employment. We calculate the total value of monthly relief compensation paid to married workers with a family (£8.37) to be 67 percent higher than the monthly compensation paid to predial (agricultural) laborers (£5.00).¹⁹ Movement of married migrants to rural employment not only meant a loss of compensation to the male worker, but potentially a loss of income earned by wives from part-time domestic work in Adelaide. Given the risks involved in moving to the frontier as well as the premium wages enjoyed on public works, it is unsurprising that some married migrants preferred to stay in Adelaide on relief employment. Unmarried workers faced different incentives. We calculate the total value of monthly relief compensation paid to predial laborers (£4.37) was 12.6 percent lower than the monthly compensation paid to predial laborers (£5.00). Thus, single workers who valued urban amenities and married workers were both better off staying in Adelaide on relief employment.

All this changed when, in June 1841, Governor Grey eliminated rations for all workers on relief employment and cut wages for single workers and allowances for children to married men. In July 1841 (figure 4), the monthly compensation paid to predial laborers (£4.33) exceeded the total value of monthly relief compensation paid to married workers with family

¹⁹ From 1839 to 1842, SA's full compensation for relief employment varied only by a worker's marital status and the number of children in the household and not by occupation or prior earnings. This means that the compensation provided for relief employment replaced a higher percentage of an unskilled worker's relatively low compensation than a skilled worker's relatively high compensation. Thus, unskilled workers had more incentive than skilled workers to choose relief employment over private employment. Incentive does not, however, always imply measurable actions. For example, Benjamin and Kochin (1979) document a similar experience rating system in 1920s/1930s Britain. In an econometric analysis using data on individual workers, Hatton and Bailey (2002) show that the ratio of benefits to wages did not affect the probability of an adult male worker being unemployed in 1920s Britain.

(£3.75) by 15 percent while the total value of monthly relief compensation paid to unmarried workers (£1.40) was 68 percent lower than that paid to predial laborers (£4.33).

During 1838 to 1842 however, the colony experienced very large changes in food and household staples prices, and this means that changes in nominal compensation will not accurately capture changes in living standards for workers. To account for these large price variations, first, we estimate the cost of a bare bones consumption basket derived by Allen (2009) over the period. After normalizing its cost at 100 in 1838, we find that its cost soared in 1839 to a median of 158.44 and then declined sharply over the next three years, reaching 83.10 by October 1842 (Figure 5).

However, we cannot rely on the cost of the bare bones basket alone to indicate the change in living standards experienced by workers in Adelaide because their compensation was also changing substantially between 1840 and 1842. Instead, we rely on welfare ratios, that is, how many bare bones baskets (Figure 6) workers could purchase with their wages. Changes in welfare ratios provide more accurate estimates of changes in living standards than either changes in wages or changes in the cost of a bare bones basket separately would suggest. They show relief compensation provided to an unmarried worker in January 1840 was equivalent to 3.46 bare bones baskets, and by January 1841 had increased to 5.09 bare bones baskets. Despite the discount in relief compensation relative to predial wages, we note that the absolute level of relief compensation provided in January 1841 to single workers allowed them to live at about the same living standard in Adelaide as a single worker in London and at higher living

standards than a single worker in Oxford, Leipzig, Beijing, Amsterdam, and Milan (Allen et al., 2011: 27-29).²⁰

Now consider the situation of married workers. In January 1840 their total compensation for relief employment was equivalent to 2.25 bare bones baskets. By January 1841 these values had improved to 3.07 bare bones baskets. Compare this to the compensation of married predial workers who could purchase 1.59 bare bones baskets in January 1840 and, 2.20 bare bones baskets in January 1841 (Figure 4). These results show that married workers on relief employment were somewhat better off than married agricultural laborers.²¹ It was not until Governor Grey removed the ration component of relief compensation in June 1841 that more substantial incentives for these workers to leave relief employment were generated. Consider that in October 1841 single men on relief employment were able to purchase 1.73 bare bones baskets. In the same month, married men on relief employment could purchase just 1.47 bare bones baskets.

For married workers, these changes in relative welfare were also reflected in the elimination of the gap between relief compensation and predial wages from July 1841. After Grey cut rations, monthly compensation for married workers on relief employment fell to £3.75

²⁰ While both single and married workers might be willing to take a discount in compensation to remain in Adelaide to enjoy urban amenities, married men with wives working part-time domestic jobs in Adelaide had additional incentives to stay as these jobs would be more difficult to find in country districts.

²¹ During the 1841 economic crisis, specie was becoming scarce in SA and many employers began to pay their employees in rations rather than money (British Parliamentary Papers, 1843: 190). Payment in money wages rather than rations provided a new incentive for workers to choose work on public projects.

in July 1841 and stayed at this level through October 1842. Predial compensation over the same period averaged £3.82, a 2 percent premium for married workers.

Did Grey's cuts in relief compensation reduce the number of men on relief unemployment? This is difficult to measure as the government simultaneously stopped construction on a number of large government buildings, thereby putting public and private building and trades workers on these projects out of work. Opportunities for these workers to find new jobs were limited due to the collapse of the home construction industry during the second half of 1840. Because average annual compensation in 1840 amounted to £179.20 for a carpenter versus £80.85 for a predial worker, taking relief employment and waiting in Adelaide for a construction industry revival was the rational strategy for these workers as long as they expected the economic downturn to be relatively short-lived.

Figure 1 provides weekly data on relief employment of married and unmarried men for the week of May 14, 1841, the week of July 18, 1841, and each week from August 15, 1841 through November 30, 1842. The data show that employment of married and unmarried men dropped steadily from a peak of 555 men in late October, 1841 to just 46 by November 30, 1842 (Dickey, 1986: 9-10). Employment of single men on public works—the difference between total men on relief and wives on relief – had essentially ended in December 1841, which is consistent with the much larger cut in relief compensation for unmarried men from July 1841. The slower fall in relief employment of married men is more understandable, as relief compensation and predial wages did not differ much between July 1841 and April 1842.

How much of the decline in relief employment could have been due to the opening of more than 25,000 acres of cropland within a hundred miles of Adelaide between 1840 and

1843? Historians have contended that Governor Grey's 1841 cuts in government spending and compensation for relief employment were behind the expansion of employment and output on farms and sheep stations from 1841 to 1844 (Price 1927; Pike 1967). For example, Richard Mills (1915: 253) concludes that Grey's cuts were followed by three beneficial results: labor became plentiful, agriculture expanded profitably, and the urban population relocated to country areas. Mills is generally correct regarding these outcomes. Concerning his first point, between 1840 and 1843, compensation fell by very large amounts in both skilled and unskilled occupations, e.g., 64.48 percent for laborers in building trades, 54.78 percent for male domestics, and 50.16 percent for predial workers. Over the 1838-1843 period, the decline in compensation for predial laborers was even larger, 61.04 percent. Concerning Mills' second point, cultivated acres soared by a factor of more than ten, from 2,693 in 1840 to in 28,690 in 1843 (Table 4). Regarding Mills' third point, Adelaide's population declined from 9,196 to 7,427 people between 1840 and 1842 (South Australian Statistician 1840; 1842).

How much of a burden was relief employment on the SA government? If the first half of 1840 (for which we have monthly and weekly data on relief employment) is at all typical of the January 1837-June 1840 period, the government supported an average of 5.17 single and married men each month. This would cost just £346.53 over the course of a full year.²² Between August 1840 and May 1841, the number of men supported by relief employment increased from 7 in May 1840 to 115 by August 1840, 125 in December 1840, and 175 in early May 1841. We calculate the annual cost of providing relief employment at May 1841 participation levels increased to £11,730, a very large sum for a government with just £36,515

²² This calculation is the average annual cost of providing relief as computed with price and wage data from the first half of 1840.

in tax revenues for calendar year 1840. How did the cost to the government of relief employment change after Grey's June 1841 cuts compensation? For the last six months of 1841, unemployment relief cost the colonial government £8,136.24, with an average of 89 men, 74 women, and 161 children supported per month (British Parliamentary Papers, 1843: 149, 221). This amounts to an annual cost of £16,272.41. If Grey's cuts had not been implemented, the annualized cost for the last six months of 1841 would have been roughly £33,647.14.

The absorption of men on relief employment into private agricultural employment was slowed by a mismatch between the men's occupations, the size of their families, and the labor demands of rural employers. Consider the occupations of men on relief employment during the week of 23 February 1842. Governor Grey noted that of the 236 able-bodied emigrants on relief employment:

79 are masons, quarrymen, or miners, carpenters, sawyers, &c., belonging to trades which are not likely to be in demand unless extensive public buildings are carried on, 5 are blacksmiths or wheelwrights, and therefore likely soon to be in demand. 125 are laborers, likely to make good farm-servants, and to be soon employed. 27 belong to trades not likely to be in demand in a new community ... I therefore fear it is probable that many months may still elapse before the public purse will be altogether relieved from the charge of supporting destitute emigrants ...²³

As noted earlier, skilled workers, who earned more than double the wages of predial workers, had incentives to take low-paid relief employment and wait for re-employment at the higher

²³ Copy of a Despatch from Governor Grey to Lord Stanley, 22 February 1842 and Enclosure 3 in No. 42, Returns of Trades and Occupations of Emigrant Laborers on the Government Works in British Parliamentary Papers (1843: 162-164, 173).

wages of their occupations as long as they expected a relatively rapid economic recovery. Workers with large families also had incentives to take relief employment which provided extra compensation to larger families, whereas farmers and graziers were unwilling to hire laborers with large families due to the cost of additional ration payments. Governor Grey wrote to Colonial Secretary Russell on January 16, 1842 that the extra payments made by the relief employment system for larger families "necessarily congregated all the large families in the neighborhood of the town" taking relief employment (British Parliamentary Papers 1843: 138).

South Australia's recovery from the 1841-1842 financial and economic crises was driven by four other factors besides Grey's cuts in relief employment compensation. First, the British government's November 1840 decision to bail out the colony and honor Governor Gawler's bills of exchange saved many Adelaide investors and merchants from ruin. Official news of this decision came to SA in late July 1841, with payment of the outstanding bills proceeding gradually over the next few years.²⁴ Second, in January 1842, Colonial Secretary Russell explicitly ordered Governor Grey to end relief employment on public works and to send unemployed assisted migrants to other Australian colonies. Governor Grey ignored this order, and instead used bills of exchange drawn on the Treasury to finance continued spending on relief employment through January 1843. Grey's defiance of Russell's order allowed SA employers to productively employ these unemployed workers when demand for labor from the rapidly expanding farm and pastoral sectors increased in 1842 and 1843. Third, Governor Gawler's decision to fast-track surveying activities when he took office in October 1838 allowed

²⁴ For further information, see "Parliamentary Proceedings on South Australia," *Southern Australian*, July 30, 1841: 3. Pike (1967: 190-195) spells out how additional bills issued by Governor Grey in 1841 and 1842 were not repaid by the Treasury but instead were converted into debentures that were "payable at the discretion of the colonial government" and could be sold only at a deep discount.

country acres to be released much faster to purchasers, new farms to be started, and acres under cultivation to increase. During the first 18 months of settlement under Governor Hindmarsh, the government was slow to survey country lands, while early purchasers delayed selecting their country land allotments from those available in the hope that lands still to be surveyed and released would be more valuable. Slow survey and delayed land selection placed a ceiling on land available for farming and slowed establishment of new farms. Gawler's expansion of the Survey Department in 1839 and 1840 and the subsequent distribution and sale of more surveyed lands eliminated this constraint on farm-sector expansion by mid-1841. And, fourth, the discovery of substantial copper deposits in 1843/1844 led to the rapid development of a copper mining sector that by 1850 would produce roughly 10 percent of the world's copper output. All that said, Grey's cuts in compensation for relief employment in June 1841 corrected fundamental imbalances in the SA relief employment system and provided much stronger incentives for unskilled laborers to move to rural areas to work in the expanding farm and grazing sectors. Disentangling its particular contribution to SA economic recovery from the other factors cited above would, however, require panel data on workers that, unfortunately, does not exist.

V. Parallels in the Structure and Operation of NSW and SA Relief Employment Programs

SA was the first Australian colony to provide relief employment to unemployed workers and was followed in 1842 by the Port Phillip District of New South Wales and in 1843 by the Sydney City Council and the New South Wales Legislative Council. In this section we compare the SA and NSW experiences to determine whether the NSW government encountered the same issues as the SA government and whether they dealt with them differently given their

knowledge of the SA experience. We proceed by first reviewing the origin and operation of the NSW programs, and then focus on answering three questions. First, what was the value of relief compensation offered by the NSW government and the Sydney City Council programs? Second, did NSW authorities repeat the mistakes of SA authorities by setting relief compensation for unskilled workers too high relative to private-sector compensation for agricultural workers? Third, how did the NSW government respond to the huge influx of applicants for relief employment in 1843 and 1844?

Unemployment was not a major issue in NSW (which until 1851 included Victoria and until 1859 Queensland) prior to the 1830s because the convict labor force provided coerced labor to the government. Assisted migration to NSW under the "bounty" system of subsidizing migrants' passage started in 1831. Urban and rural labor markets in NSW were able to employ annual flows of bounty migrants ranging from 484 in 1835 to 8,416 in 1839 due to the colony's general prosperity stemming from the rapid expansion of sheep grazing in the late 1830s.²⁵ Even as NSW's economy fell into depression in 1841, labor markets were still able to absorb 20,103 bounty migrants that year.²⁶ In 1842, the number of bounty migrants fell to just 6,823 but with the continuation of depressed economic conditions, both Sydney and Melbourne experienced sporadic outbreaks of unemployment.

²⁵ For a review of bounty migration to NSW, see Haines (1994). More than 84,000 migrants, almost all from Great Britain, arrived in NSW under the bounty system. NSW colonists who arranged for people with specified characteristics to migrate could claim a bounty after the migrant's arrival in NSW. From 1839 the system changed to allow ship owners to select migrants and claim bounties when migrants were delivered and certified.

²⁶ Australian Historical Population Statistics (2019: Table 1).

Unlike SA, NSW did not have a system of relief employment in place at the start of 1842 as the British government had never required the government to establish one and unemployment had not previously been a serious problem. In early 1842 the Port Phillip District moved first to provide employment on public works to unemployed migrants, with 362 men on the rolls in May 1842. In Sydney, Governor Gipps stated in May 1842 "there are now unemployed and receiving rations from the government in Sydney 27 men, 30 women and 87 children." Gipps downplayed the significance of these numbers in a colony with 162,367 people, stating that the "... number [is] so insignificant, especially as it consists almost entirely of invalids or of men with large families'" (Watson and Chapman, 1914: 43).²⁷

By early 1843, Sydney's unemployment started to be discussed by the public and City Council, with a number of newspaper reports suggesting convicts assigned to public works should be replaced with unemployed free labor.²⁸ Rising unemployment was largely confined to Sydney and Melbourne, with most rural counties simultaneously experiencing labor shortages (British Parliamentary Papers 1844a: 135-140; Abbott 1970: 3).²⁹ The NSW government was slow responding to the crisis, and in March 1843 4,129 distressed laborers signed a petition requesting relief (British Parliamentary Papers, 1845: 10-11; Abbott, 1970: 4).

²⁷ Main quotation is from Abbott (1970: 2) and secondary quote is from *Historical Records of Australia*, Series 1, Vol XXII, p. 43.

²⁸ Various reports of the unemployment problem in the first five months of 1843 were presented in the *Australasian Chronicle*, "City Council, Tuesday 3rd January," January 5; *The Australian*, "Free Labor," January 2; *The Sydney Morning Herald*, "Public meeting of the Coolie oppositionsts," January 18; *The Sun and NSW Independent Press*, "The labor market," February 11; and *The Maitland Mercury and Hunter River General* Advertiser, [no title], May 5.

²⁹ Fourteen of 27 rural districts experienced labor shortages (British Parliamentary Papers, 1844a: 135-140).

In July 1843 the Sydney City Council moved first by providing relief employment to 30 men to improve city streets. By the end of August the City Council had increased the number on relief employment to 300 married men paid 2s 6d/day without rations.³⁰ Paralleling this, 518 unemployed workers had registered with the NSW government, and 332 of these men were provided with employment on public works, with more than half of them skilled building and trades workers (Waston and Chapman, 1914: 95; Abbott, 1970: 6). Hundreds of other unemployed workers were not provided with jobs on public works. Pay was set at 3s/day for skilled workers, such as carpenters and masons, and 2s/day for unskilled workers (British Parliamentary Papers, 1844a: 128).³¹

Governor Gipps may have provided relief employment because doing nothing could have led to an outflow of assisted migrants. In fact, from September 1843 to January 1844, more than 700 migrants (including women and children) departed for Valparaíso, Chile, while hundreds more left for other Australian colonies (Abbott, 1970: 10).³² If bounty migrants left NSW, the government was effectively losing its investment in them, i.e., the cost of their passage. This situation became particularly problematic when the economic crisis worsened

³⁰ See <u>http://archivesinvestigator.cityofsydney.nsw.gov.au/Entity.aspx?Path=%5CActivity%5C22</u>. The Council offered relief employment exclusively to married men and capped their number at 300. Jobs were rationed according to "number of dependents and their needy situation, as long as they were also of good character."

³¹ See also: *The Australian*, "City Council," 9 September 1843: 2.

³² Also see "Legislative Council." *Sydney Morning Herald* (1844: 2), August 16 and October 2. In August 1844 Legislative Councilor William Wentworth asserted that during 1843, 4,000 people had left the colony. Beyond the Valparaiso emigration, the only other (in)direct evidence of emigration from NSW in 1843 is that South Australia reported that 1,168 people emigrated from other colonies, presumably the majority from NSW (169,135 people in 1843) rather than the much smaller Van Diemen's Land (60,664 people) or Western Australia colonies (4,350 people).

during 1843 and bounty immigration fell to just 11 people, despite continuing shortages of labor in rural areas.

Over the last three months of 1843, NSW unemployment continued to increase. By November a Select Committee reported that of the total Sydney population of 29,973 people, 1,243 men with 2,505 dependents reliant on their support were unemployed (British Parliamentary Papers, 1844a: 84). Over 440 of these men were skilled workers, such as carpenters, who had become unemployed due to the fall in private construction during the depression (British Parliamentary Papers, 1844a: 84; Abbot, 1970). The Select Committee urged the government to provide rations to the most needy families, to appropriate £500 to subsidize transport of unemployed men and their families to rural districts with labor shortages, to speed up construction of public buildings already budgeted for 1844, and to add money for a Customs House to be built primarily by unemployed workers (British Parliamentary Papers, 1844a: 85-86). The government's response to these recommendations was to add £3,500 to the 1844 budget for a Customs House (Irving and Cahill, 2010: 52). Unemployment persisted throughout 1844, with 489 married men and 83 single men still out of work.³³ As the NSW economy began to recover in 1845, the government unemployment relief efforts ended when construction of the Customs House was completed in April 1845 (Coghlan, 1918: 438-439).

How did the annual value of the relief wages provided by the NSW government compare to relief compensation paid by the SA government? Assuming the NSW relief workers were employed 6 days a week for 50 weeks a year and paid the per diem wages listed above, then skilled workers were paid £45 per annum and unskilled £30 per annum. Using the same

³³ See, *Sydney Morning Herald*, "Legislative Council," October 2, 1844: 2.

assumptions and substituting the per diem wage paid by the City Council, we find that men on Council relief employment were paid £37.50 per annum. Compare this with the much higher annual relief compensation (which included rations) in SA paid in 1840 and the first five months of 1841: A single unemployed SA worker received £57.77 while a married SA unemployed worker with three children received £102.63.

Second, how did the relief wages offered by the NSW government and Sydney City Council compare to private-sector wages in rural districts? We compare compensation for relief employment to the median annual compensation of two rural occupations, farm laborers and shepherds, and one urban skilled occupation – carpenters (Table 5).³⁴ Single unskilled workers in NSW would have earned 73-116 percent more per annum as a farm laborer and 50-87 percent more as a shepherd than working on relief employment. Results are different for some skilled workers, e.g., a carpenter would have earned 2.6 percent more on relief employment than in private-sector jobs as carpenters. The big discount in relief compensation for unemployed unskilled laborers could have been due to the heavy representation of rural interests on the NSW Legislative Council who would gain by inducing unemployed unskilled workers to migrate to country areas. By contrast the government may have provided the small premium in relief compensation for skilled workers in order to enable them "to wait" in Sydney until economy recovery increased demand for their skills. The alternative, setting a big discount

³⁴ We include the value of rations for both single and married farm laborers and shepherds.

in their relief compensation and inducing migration to rural areas, could have led to a mismatch between their skills and the labor demands of rural employers.³⁵

Finally, how did the NSW governor respond to program demands in 1842 and 1843 that exceeded colonial government budgets? Administrators in Melbourne cut compensation for relief employment and limited enrolment while those in Sydney set more strict enrolment limits. In response to rising unemployment in early 1842, Lieutenant Governor Charles La Trobe, the district administrator, provided relief employment on public works to 350 married men (Shaw, 2003: 148). These workers were paid 20s/week without rations.³⁶ With most workers unexpectedly still on relief employment in April 1842, La Trobe cut the wage to 18s/week. Two hundred workers undertook strike action against these cuts but returned to work at the reduced wages (Quinlan, 2019: 246).³⁷ Whereas in Sydney, the government only provided relief employment to workers with large families and pressing needs. Hundreds of applicants were turned away.

VI. Conclusion

The SA relief employment program was the first British colonial government program designed to guarantee jobs to migrants who could not find employment. During the colony's first 3.5 years, the cost of the program was small in that it provided jobs to less than ten

³⁵ An alternative explanation is that setting relief compensation at the desired level becomes more difficult when wages are volatile as they were in NSW and SA during the 1838-1845 period. In fact, the NSW 1843 Select Committee spent considerable time discussing the remuneration men were willing to accept in private employment (British Parliamentary Papers, 1844a: 87-115).

³⁶ *Port Phillip Patriot and Melbourne Advertiser*, "Immigration," April 21, 1842

³⁷ *Colonial Observer,* "Port Phillip," May 11, 1842: 255. There is no evidence of exactly when the men returned to work after this strike action.

migrants per month who were typically unemployed for less than three weeks. During 1839 and 1840, the low number of unemployed using the program was the result of two factors: The 1838-1840 housing construction boom that raised demand for both skilled and unskilled migrant workers; and Governor Gawler's massive public spending program that provided public and, indirectly, private jobs for a wide variety of workers with different occupations. When the colony's economic crisis deepened in the first half of 1841, private sector activity fell, leading hundreds of migrants to choose relief employment. This was facilitated by relief compensation for married workers set well above compensation for rural agricultural workers and by skilled workers making decisions to take relief employment and wait for the downturn to end rather than accept much lower compensation as agricultural laborers.

Once Governor Grey cut relief compensation in June 1841, incentives for single workers changed as remuneration in rural occupations became much higher than compensation for relief employment. The change in incentives was complemented by a massive expansion of acres in crop production beginning in 1840 and accelerating in 1841 and 1842 (Table 4). By the end of 1842, Grey's cuts, the expansion in cultivated acreage, and the British government bailout of the colony's debts had together led to the elimination of assisted migrants on relief employment. It is a bit puzzling that relief employment provided to married men fell to zero by the end of 1842 even when the replacement wage on relief employment was about the same as the compensation paid to agricultural laborers. We speculate the government took the initiative to wind down provision of relief employment as job openings with roughly equal pay emerged on newly opened farms. Correspondence from the Board of Emigration during the first half of 1842 suggests that pressure would have been applied to those on relief to accept

these positions or be penalized by being refused continued government employment. Further, as detailed in Pike (1967: 191), the unequivocal orders from England for Grey to reduce expenditure and the British government's refusal of his bills issued to support the unemployed created clear incentives for the governor to wind down the program as soon as private rural employment opportunities expanded sufficiently.

Prior to the crisis, unemployment was on a small scale and a generous relief employment program cost the government very little. As unemployment numbers rose, considerations emphasized by modern economists, such as lowering the replacement wage and close monitoring of an applicant's eligibility, became the focus of reform efforts. The SA government lowered the replacement wage as it became apparent that it was far above the private-sector wage in country areas and surely far above the optimal replacement wage as identified in recent studies. As unemployment rose, the SA government also instituted better monitoring via the Board of Emigration to weed out those who did not meet the program's eligibility criteria. The cost of such monitoring was lowered by the Board's requirement that all those on relief employment were to be housed at Emigration Square, where the officer in charge could exercise control over their employment search efforts.

References

Abbott, G.J. (1970). "The Emigration to Valparaiso in 1843." Labour History, 19: 1-16.

- Allen, Robert C. (2001). "The great divergence in European wags and process from the Middle Ages to the First World War." *Explorations in Economic History*, 38: 411-447.
- Allen, Robert C. (2009). *The British Industrial Revolution in Global Perspective*. Cambridge: Cambridge University Press.
- Allen, Robert C., Jean-Pascal Bassino, Debin Ma, C. Moll-Murata, and Jan Luiten van Zanden (2011). "Wages, Prices, and Living Standards in China, 1738-1925: In Comparison with Europe, Japan, and India." *Economic History Review*, 64: 8-38.
- Benjamin, Daniel K., and Levis A. Kochin (1979). "Searching for an Explanation of Unemployment in Interwar Britain." *Journal of Political Economy*, 87:441-478.
- Boone, Jan, Peter Fredriksson, Bertil Holmlund, and Jan van Ours (2007). "Optimal
 Unemployment Insurance with Monitoring and Sanctions." *Economic Journal*, 117: 399-421.
- British Parliamentary Papers (1838). Third annual report of the Colonization Commissioners for South Australia. London.
- British Parliamentary Papers (1841a). *First Report from the Select Committee on South Australia*. House of Commons, Session 1, Paper 119.
- British Parliamentary Papers (1841b). South Australia. Returns of copies of any correspondence in the Colonial Department relative to the establishment of the settlement of South Australia since the year 1834, and its present financial difficulties.
- British Parliamentary Papers (1843). Papers relative to South Australia. London: Cowes and Son.
- British Parliamentary Papers (1844a). *Accounts and Papers. Colonies and Emigration.* Volume 4. House of Commons, Paper 35.
- British Parliamentary Papers (1844b). Copies of correspondence and memorials on the subject of the Colonial Land Fund of South Australia, and on the expediency of renewing emigration to that colony. House of Commons, Paper 609.
- British Parliamentary Papers (1845). *Accounts and Papers. New South Wales.* Volume 5. House of Commons, Paper 32.

- Chetty, Raj (2008). "Moral Hazard versus Liquidity and Optimal Unemployment Insurance." *Journal of Political Economy*, 116: 173-234.
- Coghlan, T. A. (1918). Labour and Industry in Australia: From the first settlement in 1788 to the establishment of the Commonwealth in 1901. Vol. 1. Melbourne: Oxford University Press.
- Dare, Robert (1992). "Paupers' rights: Governor Grey and the poor law in South Australia." *Australian Historical Studies*, 25: 220-243.
- Dickey, Brian, with contributions from Elaine Martin and Rod Oxenberry (1986). *Rations, Residence, Resources: A History of Social Welfare in South Australia since 1836.* Netley, South Australia: Wakefield Press.
- Haines, Robin (1994). "Indigent Misfits or Shrewd Operators? Government-assisted Emigrants from the United Kingdom to Australia, 1831-1860." *Population Studies*, 48: 223-247.
- Haines, Robin, and Ralph Shlomowitz (1991). "A statistical approach to the peopling of South Australia: Immigration from the United Kingdom, 1836-1900." *Journal of the Historical Society of South Australia*, 19: 105-115.
- Harris, Edwyna, and Sumner La Croix (2018). When Colonization Goes South: Understanding the Reasons Behind the Failure of Wakefield's Systematic Colonization in South Australia. Paper presented at the 2019 ASSA Meetings, Atlanta Georgia, January 4, 2019.
- Harris, Edwyna, and Sumner La Croix (2020). Understanding How South Australia's Relief Program for Sick and Destitute Immigrants Worked, 1840-1842. Unpublished manuscript.
- Hatton, Timothy J. and Roy E. Bailey (2002). "Unemployment Incidence in Interwar London." *Economica*, 69: 631-654.
- Irving, Terry and Rowan Cahill (2010). *Radical Sydney: places, portraits, and unruly episodes.* Sydney: University of New South Wales Press.
- Landais, Camille, Pascal Michaillat, and Emmanuel Saez (2018). "A Macroeconomic Approach to Optimal Unemployment Insurance: Applications." *American Economic Journal: Economic Policy*, 10: 182-216.
- Lindert, Peter H. (1998). "Poor relief before the Welfare State: Britain versus the Continent, 1780-1880." *European Review of Economic History*, 2: 101-140.

- Mills, Richard Charles (1974). *The Colonization of Australia, 1829-1842: The Wakefield Experiment in Empire Building.* Sydney: Sydney University Press.
- Panza, Laura, and Jeffrey G. Williamson (2017). Australian exceptionalism? Inequality and Living Standards 1821-1871. CEH Discussion Paper 01, Centre for Economic History, Research School of Economics, Australian National University.
- Panza, Laura and Jeffrey G. Williamson (2019). "Squatters, Convicts, and Capitalists: Dividing Up a Fast-Growing Frontier Pie, 1821-1871." *Economic History Review*, 72: 568-594.
- Pike, Douglas (1967). *Paradise of Dissent: South Australia 1829-1857.* 2nd ed. London and New York: Cambridge University Press and Melbourne University Press.
- Pitt, G. H. (1972). "The crisis of 1841: its causes and consequences." *South Australiana*, 11: 43-81.
- Price, A. Grenfell (1924). *The Foundation and Settlement of South Australia 1829-1845.* Adelaide: F.W. Preece.
- Quinlan, Michael (2019). *The Origins of Worker Mobilization: Australia 1788-1850.* London: Routledge.
- Shaw, A. G. L. (2003). A history of the Port Phillip District: Victoria before separation. Melbourne: Melbourne University Press.
- South Australian Government Gazette (1841). "Annual Finance Minute." 22 April.
- South Australian Statistician (1840). Colony of South Australia: Statistical Returns prepared for the Colonial Office. State Library Victoria microfiche (LMTF 53).
- South Australian Statistician (1842). Colony of South Australia: Statistical Returns prepared for the Colonial Office. State Library Victoria microfiche (LMTF 53).

Sydney City Council (2020). http://archivesinvesigator.cityofsydney.nsw.gov.au

- Torrens, Robert (1844). The budget on commercial and colonial policy with an introduction in which the deductive method as presented in Mr. Mills system of logic is applied to the solution of some controverted questions in political economy. Cornhill: Smith, Elder, and Co.
- Watson, Fredrick, and Peter Chapman (1914). *Historical Records of Australia*. http://nla.gov.au/nla.obj-442186184.

- Wakefield, Edward Gibbon (1829). *A letter from Sydney, The principal town of Australasia.* London: Joseph Cross.
- Wakefield, Edward Gibbon, and Robert Gouger (1830). A statement of the principles and objects of a proposed National Society for the cure and prevention of pauperism by means of systematic colonization. Piccadilly: James Ridgway.

Year	Assisted	Unassisted	Total	
	Migrants	Migrants	Migrants	
1836	441	105	546	
1837	984	84	1,068	
1838	1902	266	2,168	
1839	4202	833	5,035	
1840	4679	346	5,025	
1841	0	175	175	
1842	0	145	145	
1843	29	125	154	
1844	43	77	120	
1845	255	44	299	

Table 1: Total migration from Great Britain to South Australia, July 1836 - 1845

Source: Haines and Schlomowitz (1991: 115). SA also received migrants from other Australian colonies and Germany.

	Bare bones	s basket		Respectable basket		
Goods	Quantity	Kcal per	Proteins	Quantity	Kcal per	Proteins
	(Yearly)	day	per day (gr.)	(Yearly)	day	per day (gr.)
Potatoes	200 kg	667	10.25	165 kg	394	8.5
Wheat	95 kg	882	35.6			
Bread				110 kg	711	30
Sugar				16.5 kg	171	0.2
Milk	17 kg	30	1.5	45 kg	79	4.0
Теа				9.8 lb		
Beans/peas	17 kg	159	11.9	40 kg	370	28
Meat	20 kg	136	12	60 kg	408	36
Butter	3.0 kg	60	0.1	2.6 kg	104	0.1
Cheese				2.6 kg	54	1.5
Eggs				52 each	11	1.0
Rum				14.56 lt	118	
Soap	1.3 kg			2.6 kg		
Linen	3.0 m			5.0 m		
Candles	1.3 kg			2.6 kg		
Lamp oil	1.3 lt			2.6 lt		
Fuel	2.0 M BTU			5.0 M BTU		
Total		1934	71		2420	109.3

 Table 2: Adelaide Consumption Baskets: Bare Bones and Respectable Baskets

Source: Panza and Williamson (2017), as adapted from Allen (2009).

				Emigrants,			
				Emmig.	Public		
	Revenues	Expenditures	Bills Drawn	Board	Projects	Surveying	g Police
1839 estimate	22,780	137,168	44,633	6,048	31,516	39,796	15,736
1840 estimate	36,515	146,826	123,176	3,090	38,221	22,256	18,685
1841 estimate	31,968	70,426	na	15,040	4,677	21,095	9,056
1842 Estimate	49,974	57,204	22,631	16,335	0	3,579	8,503

Table 3: South Australia Government Expenditures and Revenues: 1839-1842

Source: Data for 1839 are from British Parliamentary Papers (1841a: Appendix, 99-101). Data for 1840-1841 are from British Parliamentary Papers (1843:17-18, 108-115, 149-150). Data for 1842 are derived from data in British Parliamentary Papers (1843:149-150, 221-222) and British Parliamentary Papers (1844b: 16-18).

Crop	1837	1838	1839	1840	1841	1842	1843	1844
Wheat	0	20	120	1,059	4,154	14,000	23,000	18,980
Barley	0	1	28	388	897	2,700	3,300	4,264
Oats	0	5	30	424	501	700	790	1,045
Maize	0.25	10	60	192	714	850	290	241
Potatoes	1.5	20	75	440	456	690	470	397
Vineyard	na	na	na	na	na	na	na	na
Gardens	6	25	60	na	na	850	840	761
Total	7.75	86	443	2,693	6,722	19,790	28,690	25,698
Population	3,000	6,000	10,315	14,630	15,485	16,500	17,196	18,999
Acres/person	0.0026	0.014	0.043	0.18	0.43	1.2	1.67	1.35

Table 4: Acres of Land under Cultivation in South Australia, 1837-1847

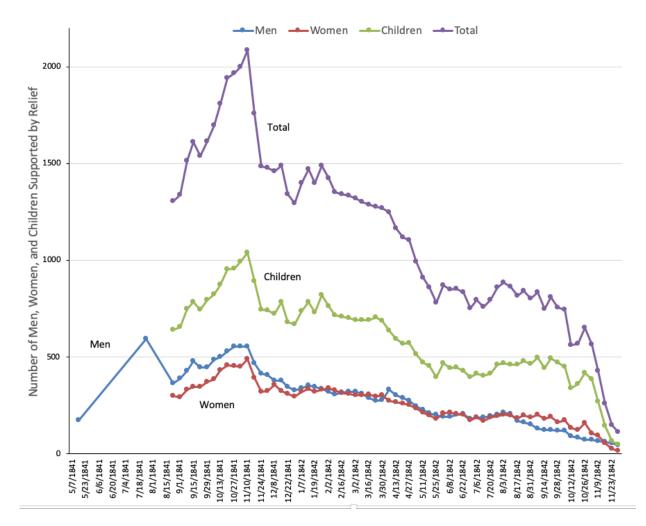
Sources: Data for 1837-1839 are from *British Parliamentary Papers* (1843:320). Data for 1840-1842 are from *British Parliamentary Papers* (1844b:21). Data for 1843 and 1844 are from Colonial Secretary's Office, 31 January 1845. Crop data for 1837 and 1838 are not official returns.

NSW Occupations	Without Rations Single (£)	With Rations Single (£)	Without Rations Married (£)	With Rations Married (£)
Government skilled relief employment	45.00	-	-	-
Government unskilled relief employment	30.00	-	-	-
Council relief employment	-	-	37.50	-
Predial workers	-	64.80	-	107.57
Shepherds	-	56.20	-	90.92
Carpenters	-	43.88	-	57.30
SA Occupations	Without Rations Single (£)	With Rations Single (£)	Without Rations Married (£)	With Rations Married (£)
Relief employment	16.80	-	45.00	-
Predial workers	-	46.28	-	51.01
Carpenters ^a	91.70	-	91.70	-

Table 5: Total Compensation for Various Occupations and Relief Employment: NSW (1843)and SA (1842)

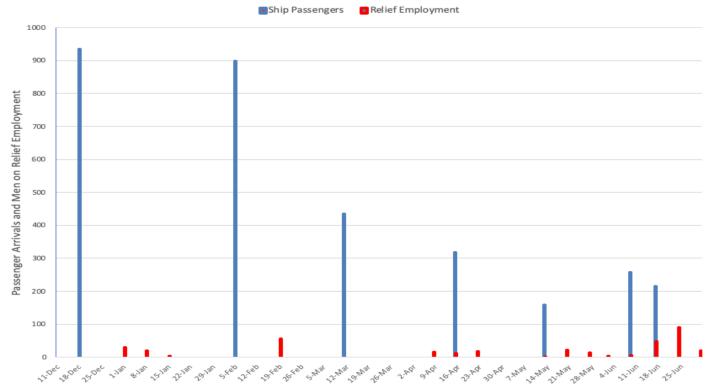
^a We do not have wages for carpenters in SA during 1842 however, we have wages in an equivalent occupation, cabinet makers and we have used that figure here.

Note: Panza and Williamson (2017) estimate that rations in NSW for single male workers during the 1830s were valued at £20.13 per annum and that married workers received an additional 0.66 rations compared with their single counterparts. We use these estimates to calculate the total compensation earned by single and married workers in private employment in NSW. The value of rations may have been marginally higher in the 1830s compared with the 1840s given that consumer prices fell during the 1841-1845 depression. We assume workers were employed 6 days/week for 50 weeks/year. *Sources:* NSW wages are from British Parliamentary Papers (1844a: 158). SA wages are from the SA Blue Books 1842. Calculations of the value of rations are available from the authors on request.





Sources: Dickey (2006: 9-10). May 8-14 and July 24, 1841 observations are from British Parliamentary Papers (1843: 11, 32).





Sources: Relief employment data are from *South Australian Register*, July 11, 1840, p. 5. Passenger ship arrivals are from Pioneers Association website: https://www.pioneerssa.org.au/ships _1839_-_1844.html.

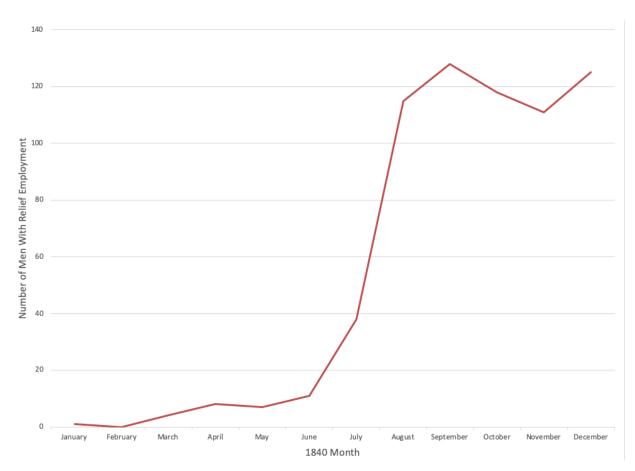


Figure 3: Unemployed Migrants on Relief Employment: Monthly Data, 1840

Source: "Annual Finance Minute." South Australian Government Gazette. April 22, 1841, p. 4.

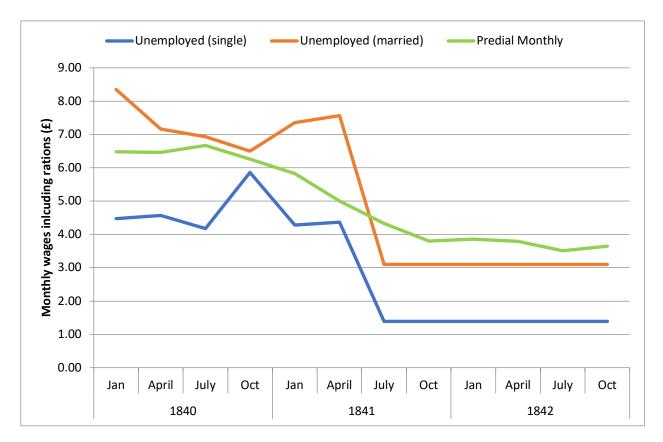


Figure 4: Full Predial Compensation and Full Relief Compensation: Quarterly Data 1840-1842

Note: Data are quarterly observations with the exception of predial wages for 1842 for which we have just one observation from the SA Blue Books that covers the entire year.

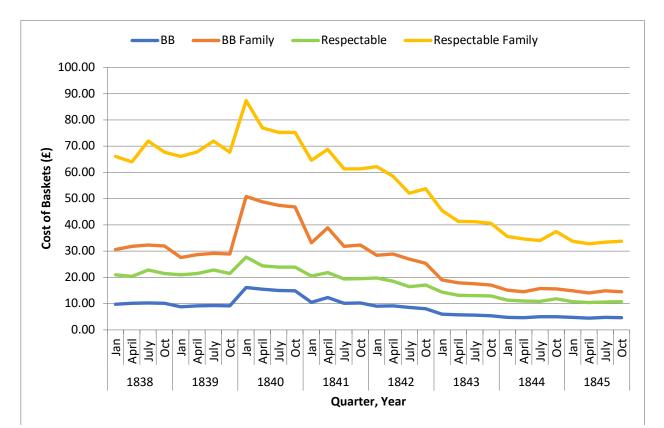


Figure 5: Cost of Bare Bones Basket and Respectable Basket: Data for January, April, July and October, 1838-1845

