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**ECONOMIC DISTRESS AND UNEMPLOYMENT  
IN AUSTRALIA SINCE 1850**

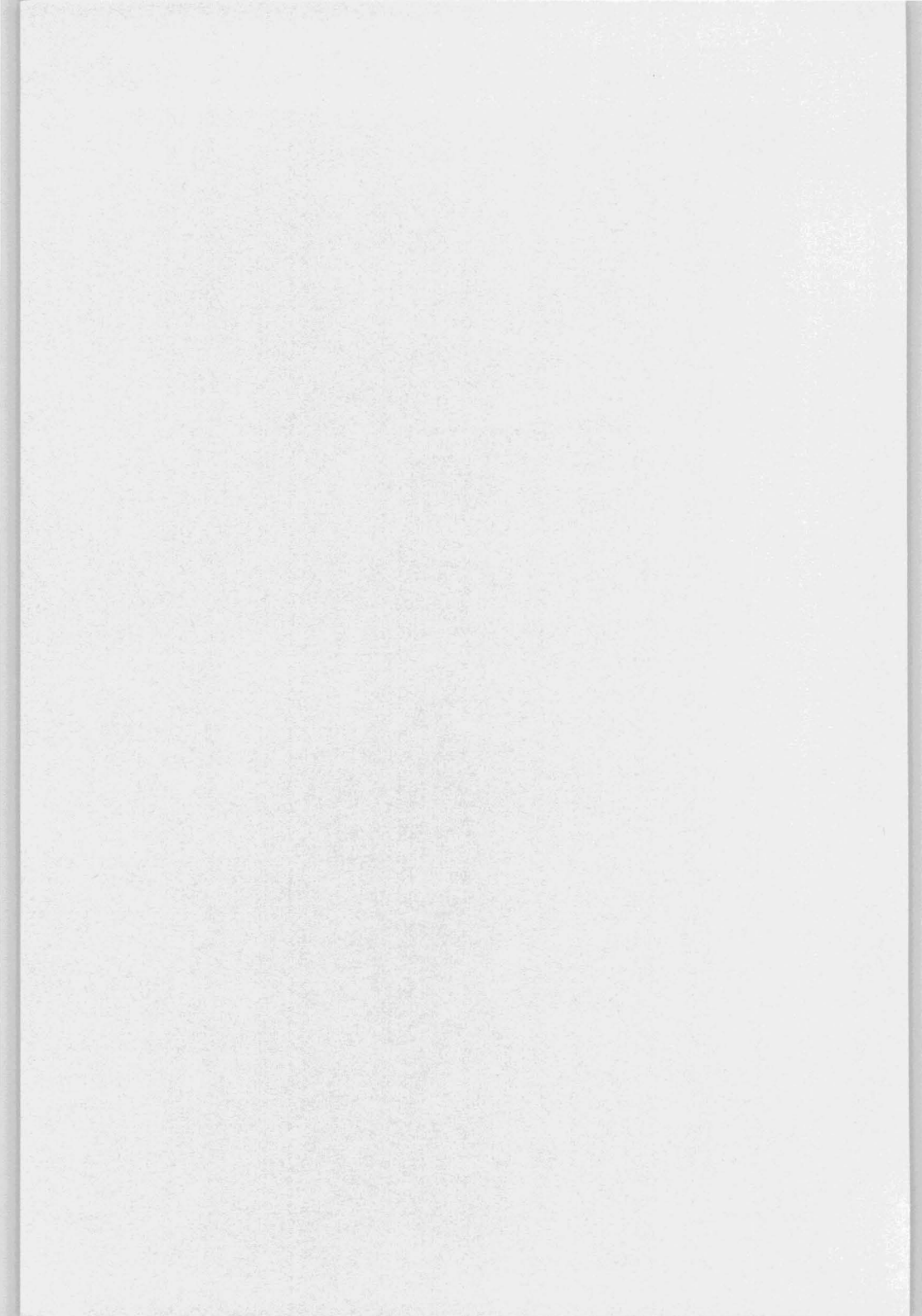
**Paul Johnson**

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## **Economic Distress and Unemployment in Australia since 1850**

### 1. Introduction

This paper proposes and applies a method for using legal data on economic distress to draw inferences about fluctuations in labour market conditions in the absence of credible unemployment estimates. The data are drawn from legal records of civil actions for recovery of debts in five of the six colonies/states of Australia. The data set is large, with many tens of thousands of cases being processed by the courts each year, and these court records give a more extensive picture of fluctuations in economic distress in the second half of the nineteenth century than do the limited and unrepresentative trade union unemployment returns. The analysis of the legal data provides a means of reconciling the often conflicting interpretations of Australian labour market conditions presented by economic and by social historians for the pre-first world war period.

The first section of the paper briefly reviews the existing historical literature and identifies points of difference between the several authors, and the second section gives a summary account of the legal process of debt recovery which generated the underlying court data. The third section presents a tentative model of the relationship between labour market conditions, indebtedness, and default on debt, tentative because there is almost no existing literature and no existing behavioural models on which to build. The data is then examined in the fourth section, and some inferences are drawn about the geographical distribution of economic distress in Australia and its variation over time.

### 1. Economic distress and unemployment

Knowledge of fluctuations in employment and commercial conditions in the six colonies/states of Australia before the second world war is fragmentary. Writing of the late nineteenth century, Boehm has noted that 'we lack the refined data of high quality (such as official annual and quarterly estimates of national product) which have

been compiled increasingly in recent years and which are consciously aimed at portraying the current level and course of business activity.<sup>1</sup> Butlin's national accounts estimates show a 'long boom' from 1861 to 1889 with very little cyclical fluctuation. With the exception of two brief downturns in 1878-9 and 1885-6, Butlin characterizes the period up to 1890 as one of overall labour shortage, noting that 'evidence is abundant of a high level of employment throughout the colonies'.<sup>2</sup>

In fact information about labour market conditions is sparse. Prior to 1891 the only available unemployment data relate to the Amalgamated Society of Engineers, the membership of which ranged in size from 18 workers in 1852 to 690 in 1886. From 1891 unemployment data from a number of trade unions becomes available, but as Forster has remarked, 'the sample certainly is small, at least until 1912, and there are general reasons to doubt its accuracy and/or representativeness'.<sup>3</sup> From 1913 the Bureau of Census and Statistics processed returns for each state relating to unemployment which covered around 50% of trade unionists and about 25% of all employees, but most unions did not pay unemployment benefit and probably were not in a position to provide accurate returns to the Bureau. Even the very well organised Amalgamated Engineering Union seems to have produced substantially inaccurate data.<sup>4</sup>

A further problem of interpretation arises from the fact that trade union returns were invariably biased towards skilled and semi-skilled male workers and against unskilled

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1 E.A. Boehm, Prosperity and Depression in Australia, 1887-1897 (Oxford University Press, Oxford, 1971), p. 25.

2 N.G. Butlin, Investment in Australian Economic Development, 1861-1900 (Cambridge University Press, Cambridge, 1964), p.390.

3 C. Forster, 'Australian Unemployment, 1900-1940', Economic Record xl, Sept. 1965, 426-450.

4 N.G. Butlin, 'An Index of Engineering Unemployment, 1852-1943', Economic Record xxii, Dec. 1946, 241-260.

male workers and female workers who may have experienced different patterns and levels of employment. Broomhill, for instance, has used the 1933 census data on employment and personal incomes in Adelaide to suggest that the trade union data may indicate no more than half the true level of unemployment experienced in the depths of the interwar depression.<sup>5</sup> Lee and Fahey have drawn similar conclusions for the later nineteenth century, suggesting that employment conditions for a very large group of temporary and seasonal workers were far from buoyant even during the 'long boom' from 1870 to 1890.<sup>6</sup> Furthermore, results from an anthropometric study of Australian-born volunteers during the first world war indicate that final adult heights decline for those born between the late 1870s and the early 1890s. The authors conclude from this that 'the long boom was not as long as conventional accounts would suggest'.<sup>7</sup>

In the absence of convincing and comprehensive long-run data, economic historians have tended to stress high wages and strong labour demand as a characteristic trend of the Australian economy in the second half of the nineteenth century. Maddison has estimated that Australians enjoyed the highest real gross domestic product per capita in the world in 1870-90.<sup>8</sup> Meanwhile social historians have emphasised the cyclical instability of working-class economic life and the widespread nature of poverty and

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- 5 Ray Broomhill, Unemployed Workers: A Social History of the Great Depression in Adelaide (University of Queensland Press, St. Lucia, 1978), pp. 11-19.
  - 6 Jenny Lee and Charles Fahey, 'A Boom for Whom? Some developments in the Australian labour market, 1870-1891', Labour History no. 50, May 1986, 1-27.
  - 7 Christine De Souza, Stephen Nicholas and Greg Whitwell, 'Height, health and economic growth in Australia, 1860-1940', NBER conference on Health and Welfare during Industrialization, April 1995.
  - 8 Angus Maddison, Dynamic Forces in Capitalist Development (Oxford University Press, Oxford, 1991), pp. 6-7; Butlin, Investment, pp. 1-15, 390-98.

dependency.<sup>9</sup> There is no necessary contradiction between these quite distinct viewpoints, since they may well be an accurate reflection of experience for different sub-sections of the working population, but in the historical literature they more usually appear as competing rather than as complementary accounts. That they do so reflects the lack of any long-run and comprehensive data relating to the economic status of the working population as a whole.

The long-run time-series data on personal indebtedness and bankruptcy presented in this paper can be used to fill this void, since being unable to pay one's debts was and is an unequivocal sign of financial distress. In fact the number of people being taken to court for debt is in some ways a more useful measure of economic distress than is unemployment data, even when that data is representative of the entire workforce, because the financial distress manifested by acute indebtedness will incorporate the consequences of extended short-time working or wage-rate cuts as well as unemployment. Similarly bankruptcy data is a more tangible indicator of trading conditions than, for instance, surveys of business confidence. On the other hand, because being taken to court for debt is the end product of a commercial transaction followed by a legal process, it is clearly a less direct indicator of working class welfare than is a measure of labour market conditions, and bankruptcy proceedings may reflect changes in trading conditions only among the more marginal of enterprises. This means that the chain of causation from labour market and commercial conditions to court appearances needs to be clearly specified if economic inferences are to be drawn from the legal records, and conclusions need to be checked against other available evidence. Before considering the economics of debt and bankruptcy it is necessary to provide some brief institutional details of the legal system

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9 Anne O'Brien, Poverty's Prison: The Poor in New South Wales 1880-1918 (Melbourne University Press, Parkville, 1988), pp. 11, 70, 74; Stephen Garton, Out of Luck: Poor Australians and Social Welfare (Allen and Unwin, Sydney, 1990), pp. 35, 72; Janet McCalman, Struggletown (Penguin Books, Ringwood, 1984), pp. 23-4, 31, 34.



that produced the data.

## 2. Indebtedness and the Law

The existence of a link between economic conditions and legal action for recovery of debts, and the way in which this relationship is influenced by the specific institutional details of the legal system, has been recognised in recent studies of consumer credit and debt in Australia. Research by the Australian Bankers' Association has found that consumer bankruptcies (as distinct from commercial bankruptcies) have risen rapidly in the 1980s 'in response to falls in household disposable income, the rise in unemployment, and broader changes including the reduced social stigma of bankruptcy and the rise in the divorce rate'.<sup>10</sup> The pattern varies, however, from state to state, because of small but significant differences in the law. In the early 1970s the per capita level of consumer bankruptcy in South Australia was eight times that in New South Wales, largely because South Australia alone retained the sanction of imprisonment for non-bankrupt debtors, thus giving debtors a strong incentive to seek the protection of the bankruptcy laws which do not permit imprisonment.<sup>11</sup>

Similar legal differences between states extend back to the early years of the nineteenth century when formal arrangements were developed for creditors to recoup sums due from debtors. Small debts were pursued through a system of small debt recovery courts, generally modelled on the English County Courts. In terms of function and procedure these courts operated in much the same way in all six colonies, though they had different names and slightly different competences. In New South Wales the Small Debt Courts had jurisdiction up to £20 in Sydney and £50 in other areas, with District Courts having jurisdiction up to £100. In Victoria, debts under £50 were recovered through the courts of Petty Sessions with larger amounts pursued

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10 'Bankruptcies, Household and Consumer Debt', Business Council Bulletin 47, Sept 1988, 20-25.

11 David St. L. Kelly, Debt Recovery in Australia (Commission of Inquiry into Poverty: Law and Poverty Series, Canberra, 1977), p. 16.

through the County Courts, in Tasmania debts up to £50 could be claimed in the Courts of Requests, in South Australia and Western Australia in Local Courts, and in Queensland in Petty Debt Courts.<sup>12</sup>

Procedure in the debt recovery courts was simple and informal. The first stage was for the creditor to enter a plaint for recovery of the debt to the registrar of the court. The plaint gave the name and address of alleged creditor and debtor and the nature and size of the alleged debt. A summons stating the substance of the action was then served on the defendant, giving the date of a court hearing, which was usually within four weeks of a plaint being entered. The commencement of this legal process appears to have been sufficient to induce many defendants to settle their debts. In New South Wales in 1909, for instance, just over 50% of cases were withdrawn or struck out before a court hearing<sup>13</sup>; although court records contain no evidence of the reason for these withdrawals, it seems likely that they occurred because the defendant agreed to pay.

If at the hearing the case was found for the plaintiff, an order for payment of the debt plus costs would be made and served on the defendant. Cases invariably were found for the plaintiff; for instance only 1.3% of suits commenced in 1909 in New South Wales were found for the defendant. In the majority of cases the defendant did not attend the hearing (with such a low success rate, it probably was worth neither the expense of travel nor the loss of earnings) and the matter was decided between the judge (or registrar) and the plaintiff alone. Because the courts were intended to be as informal and straightforward as possible, normal rules of evidence did not apply to claims under a specific financial threshold (usually either £10 or £20), so hearsay

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12 For brief details see Alex C. Castles, An Australian Legal History (Law Book Co., Sydney, 1982), pp. 367-73.

13 Unless otherwise stated, all data relating to small debt cases and bankruptcy proceedings have been taken from the annual statistical registers or year books of the separate colonies/states.

evidence was admitted.<sup>14</sup> This meant that in the absence of any countervailing statement by the defendant, the hearsay allegation of debt by a shopkeeper was taken by the judge to be sufficient evidence of an individual's indebtedness, and an order to pay would thus be made. If payment still was not forthcoming, a warrant for distress (i.e. possession and sale of the debtor's goods) was issued or, if the non-payment was deemed fraudulent, a warrant for imprisonment for up to two months.<sup>15</sup>

The numbers processed through these small debt courts every year was enormous, and the individual sums involved were, as the name of the courts implies, small. In South Australia in 1900, for instance, 84% of plaintiffs (9876 of 11753) were for sums of £10 or under, with an average amount per plaintiff of £2.18s 6d. In the same year the average amount claimed in small debt plaintiffs in England and Wales was £3. 0s 8d.<sup>16</sup> In this year 82206 plaintiffs were entered in the small debt courts throughout Australia, and 1.16 million in England and Wales, which give proportionate rates of 22 plaintiffs per thousand Australians and 35 per thousand English. Real wages in Australia were 30-50 per cent higher than in England at this time<sup>17</sup> so the English appear to have had somewhat greater recourse to the small debt courts in 1900, and for larger relative sums, than did Australians.

Virtually nothing is known directly of the backgrounds of plaintiffs and defendants in

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- 14 C.R. Ellison, Practical Commentaries on Contracts of Sale of Land, Collection of Small Debts, and Duties under a Will or Intestacy (Watson, Ferguson & Co., Brisbane, c. 1934), p. 25.
  - 15 William R. Donovan and Thomas Aspinall Edwards, Practice and Precedents of Petty Sessions (Charles F. Maxwell Publishers, Melbourne and Sydney, 1884), pp. 4-16.
  - 16 Paul Johnson, Saving and Spending: the working-class economy in Britain 1870-1939 (Oxford University Press, 1985), p. 164.
  - 17 Robert C. Allen, 'Real incomes in the English-speaking world, 1879-1913' in George Grantham and Mary MacKinnon (eds), Labour Market Evolution (Routledge, London, 1994), pp. 129-30.

the Australian courts, but in the registers of the English courts occupations and trades were often stated. The great majority of English defendants were working class men (together with a handful of widows and spinsters), the bulk of plaintiffs were drapers, grocers, bakers, other retail traders, doctors and moneylenders.<sup>18</sup> The opinion of the English County Court judges was that small debt cases related primarily to working class households who could not afford to meet the often very small financial demands of local traders who had advanced them goods or services on credit. The same seems likely of the Australian courts; court records show the majority of cases related to goods sold, with smaller numbers for professional (i.e. medical) services supplied, for rent or rate payment, or for money lent.<sup>19</sup>

Bankruptcy proceedings, on the other hand, were restricted to traders until the 1860s, though thereafter they could be used by private individuals whose total debts amounted to more than £50. Not only did individuals or traders have to be fairly heavily in debt before they could make use of the bankruptcy laws, they also had to have access to considerable resources both in order to pay the £10 fee to submit the bankruptcy petition and to hire the services of a legal representative. It is clear from the surviving records, however, that even labourers found it worthwhile to take advantage of bankruptcy proceedings, and thereby avoid the risk of imprisonment.

It seems plausible to suggest, therefore, that small debt plaintiffs related primarily to working class adult men<sup>20</sup> who for some reason were unable or unwilling to pay debts they had contracted within the preceding twelve month period, whereas

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18 Paul Johnson, 'Small Debts and Economic Distress in England and Wales, 1857-1913', *Economic History Review*, xlv(1), Feb. 1993, p. 68.

19 Based on a survey of court registers for the courts of Murrumbidgee, Wilcannia, Gosford, Morpeth and Queanbeyan in the New South Wales state archive.

20 Minors under 21 could not legally contract debts, and a married woman could not bind her husband to a debt without his express authority. Ellison, *Practical Commentaries*, p. 26.

bankruptcy proceedings related to individuals and traders who were more heavily in debt. There seems to be a prima facie case, therefore, for believing that the pattern of bankruptcy and small debt cases will give some insight into the degree of financial distress suffered by small traders and wage labourers over time. But in order to understand more precisely the link between economic conditions and court actions it is necessary to look in more detail at the relationship between credit and default.

### 3. A model of debt and default

Use of credit was a fact of life for both workers and traders in nineteenth century Australia. Although a number of commentators assert that consumer credit was 'virtually unknown' or 'essentially non-existent' prior to the 1930s<sup>21</sup>, the court records show this simply to be untrue. However, the informal credit arrangements allowed by shopkeepers to their clients were seldom categorized and counted in the way that a variety of credit instruments have been analysed since the second world war. Whitwell has noted that 'the use of instalment credit spread almost like a contagion in Australia after World War II'<sup>22</sup>, with the debt/income ratio rising from the very low level of less than one per cent at the end of the war to about 12 per cent in 1960. But this figure relates primarily to formal hire-purchase contracts arranged through finance houses. A more cautious note has been struck by Maskell who remarks that 'it is unfortunate that only the most rudimentary information is available on a subject of such economic and social importance. To go into any detail it is necessary to make estimates which are little better than informed guesses'.<sup>23</sup>

Maskell found that formal hire-purchase agreements in Australia date back at least to

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21 Kelly, Debt Recovery, p. 1; Business Council Bulletin, Bankruptcies, p. 24.

22 Greg Whitwell, Making the Market (McPhee Gribble, Melbourne, 1989), p. 34.

23 Roy E Maskell, The Hire-Purchase and Instalment Habit (Law Book Co. of Australia, Sydney, 1964), p. 153.

1872, when an advertisement by a Melbourne musical instrument retailer in The Australasian made reference to a system of 'hire for purchase' which had been in use in the piano trade for the preceding twelve years.<sup>24</sup> But the trade was probably fairly small scale; the earliest (and very tentative) estimate of the value of outstanding hire-purchase agreements in Australia refers to 1937/8, and puts the figure at £20.1m, half of which was for producer goods and company cars.<sup>25</sup>

Nevertheless, the very existence of hire-purchase contracts for consumer durable goods in the 1870s shows that some credit was advanced to customers for premeditated and planned purchases of expensive, possibly luxury goods. Other credit, however, was an unplanned response to an unpredictable crisis of reduced income or increased expenditure. In Melbourne in the depressed conditions of the winter of 1893 a reporter for the Age noted of the unemployed that 'the local grocers and storekeepers, for the time being, are more to these people than the Government or anything else, for the grocer can give credit for oatmeal and bran.'<sup>26</sup> Before considering the issue of default, it is necessary to determine why and how demand for these two types of credit might vary over time.

For each household, demand for crisis credit was largely a function of health, life-cycle stage, and income. The increased expenditure on medical services associated with illness, together with the loss of income suffered if it was the breadwinner who was ill, made sickness an important element in the demand for credit, as is shown by the many cases of medical attendance and nursing debts which appear in the New South Wales court registers. But the incidence of ill health was broadly distributed

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24 Ibid., p. 16.

25 H.W. Arndt and P.S. Shrapnel, 'Consumer Credit in Australia, 1945-1951', Economic Record, xxix, May 1953, 35-50.

26 The Age, 12 July 1893, p. 6, quoted in Graeme Davies, The Rise and Fall of Marvellous Melbourne (Melbourne University Press, 1978), p. 220.

throughout the population and fairly stable over time (with some secular improvement due to better nutrition, housing and public health), so sickness was unlikely to produce a highly cyclical pattern of demand for credit. Life cycle factors - the number and ages of dependent children - have a strong influence on the level of disposable income, and so on the propensity of any household to require crisis credit, but again the relationship to the overall demand for credit in the economy is likely to be non-cyclical, following instead gradual changes in the age-structure of the total population. Fluctuations in income, on the other hand, whether caused by lower wage rates, reduced overtime payments, more extensive short-time working or higher unemployment, were likely to create a highly cyclical demand for crisis credit of the sort described in Melbourne in 1893. Although only one element in the overall demand for crisis credit, changes in employment income were likely to be the main cause of fluctuations in the demand for crisis credit, with demand for credit rising as labour market conditions deteriorated.

Demand for premeditated credit, however, is likely to be positively associated with both recent changes in the level of income and with expected future income. Improvements in labour conditions, therefore, will increase the demand for premeditated credit. The total demand for credit is the sum of crisis and premeditated credit, the former negatively associated with labour income and the latter positively associated, but the relative weights of these separate elements in the overall demand for credit is unknown and unknowable. It is therefore impossible to determine whether the combined demand for both crisis and premeditated credit facilities by working people rose or fell with cyclical changes in employment conditions or with the overall rise in average per capita income in the period before 1945. Since we do not know how many people were resorting to either premeditated or crisis credit at any particular time or place, we cannot determine the size of the 'at risk' population which had the opportunity to default on debts. This introduces an obvious problem in interpreting the court data, since constancy in court business may conceal a variation in the use of credit by working-class households.

Indebtedness therefore is not an appropriate proxy measure of either poverty or depressed labour market conditions, since the contracting of debts in a premeditated way can be a function of prosperity and anticipated increases in real income. This is clear from examining the post-second world war period. The enormous expansion of hire-purchase business in Australia between 1945 and 1960 was associated with a pronounced upward trend in the per capita incidence of default. The data for Victoria are shown in figure 1, with the annual number of small debt cases per 100 people drawn against the left-hand scale, and the annual number of bankruptcies per 100 people against the right-hand scale. The surge in the small debt default rate in the 1950s which paralleled the surge in the use of instalment credit but which was not matched by movements in the bankruptcy rate, suggests that debt default rose because of the great expansion in size of the credit-using population at risk of default, and because of the general inexperience on the part of both borrowers and lenders of the newly-available forms of consumer credit.

This more recent experience shows that trends in the incidence of default on debts can be caused by underlying changes in the size of the 'at risk' population, or by changes in the behaviour of this population in using credit facilities. Fluctuations around the trends, however, are likely to be the result of short term economic influences. Both the rich and the poor, the upwardly and the downwardly mobile, make use of consumer credit, but default is likely to be restricted to those debtors affected by acute financial inadequacy. This was certainly the case before the second world war, because the cost of default was high. Small debt courts levied a fixed scale of fees for drawing up the summons and making additional copies, and court bailiffs then charged for serving the summons on the defendant. In addition, costs were allowed to successful parties in a case for legal fees and to witnesses for travel expenses, up to certain limits specified by the court.<sup>27</sup> The only published data on the aggregate

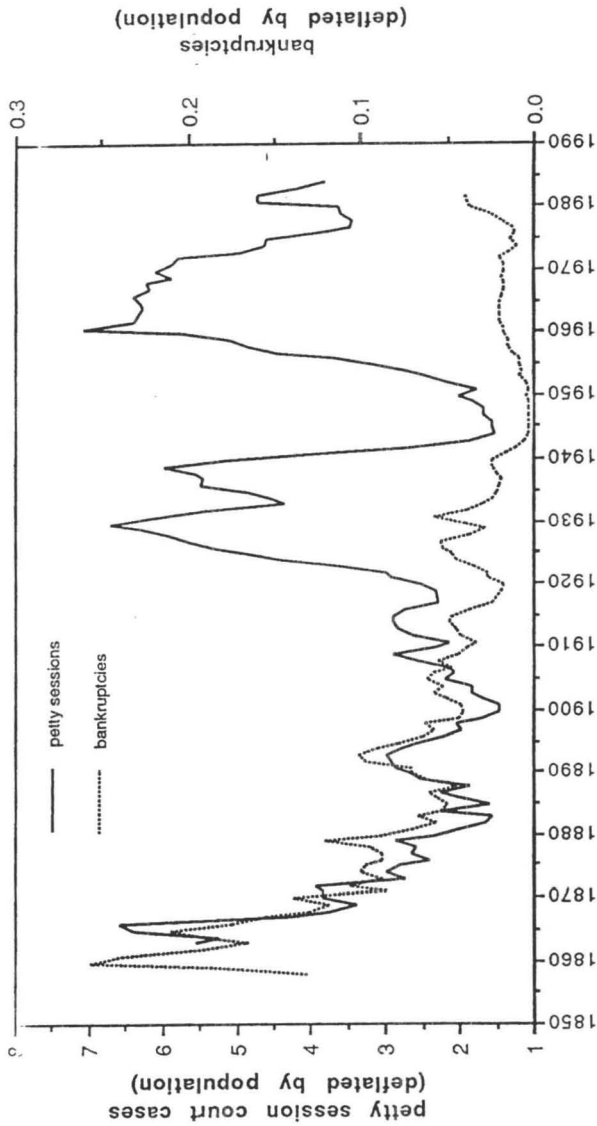
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27 County Courts: Rules, Order and Forms (Government Printing Office, Melbourne, 1869), p. 32.



FIGURE 1

Victoria: number of petty session court cases and  
bankruptcies deflated by population, 1855-1984



value of costs and fees comes from the Western Australia local courts, where fees equalled around 12 per cent of the amount recovered through the courts, and costs amounted to another 15 per cent. Not only could the defendant expect to lose almost 99 cases out of 100 heard in the courts, but he could expect to be required to pay costs and fees equal to over a quarter of the value of the total debt. And the smaller the debt, the higher the proportionate value of the fees. In the Murrurundi (NSW) court registers for 1892-1904 there are many examples of plaintiffs for ten or twelve shillings incurring fees equal to well over half the value of the debt.

It seems most unlikely that users of consumer credit would have willingly and wilfully defaulted on their debts if they had possessed the means to pay, since the cost of default was so high once the legal process was initiated. It seems plausible to suggest, therefore, that short-term fluctuations in the level of default were directly related to fluctuations in the financial capacity of working class households, a capacity which was itself largely a function of labour market conditions.

Default cannot, however, simply be equated with household destitution or absolute poverty (though in some cases, no doubt, it was), because it is clear from the court records that a large number of cases were settled before coming to court, that most defendants paid their debts when ordered to by the courts (usually on a weekly or monthly instalment basis), and that relatively few debtors had their goods seized or were imprisoned. Default instead should be seen as part of a process by which individuals were forced to adjust downwards their current and expected future consumption stream in response to non-marginal changes in income. Default is therefore more akin to a measure of relative poverty, in so far as it reflects the inability of a household to sustain hitherto established social norms of consumption expenditure.

No surveys of personal indebtedness in Australia were conducted before the second world war, so this interpretation of default is based on a priori reasoning and evidence

from other periods and places. A report on consumer debt in Australia during the 1980s found that 'credit was used [by poorer households] in the short term for adjustment to what may have been perceived as a temporary slow-down in living standards. Households would have gradually adjusted to lower income expectations but time lags in repayment of debt would have kept debt to income ratios higher than intended for some time. However, for some households a change in economic circumstances - through unemployment, for example - meant that previous credit commitments were no longer sustainable'.<sup>28</sup>

This adjustment of expectations is most acute for lower income families for three reasons. First, their asset base is low, so they have few resources which might cushion the expenditure consequences of income variance. Second, they are often solely reliant on wage labour income, and so are more directly affected by labour market changes than are families with more diverse income streams. Third, they tend to be heavy users of credit. The only remotely contemporaneous study of consumer debt was carried out by the National Bureau of Economic Research in the U.S. in 1935-6, based on a survey of 60,000 families. This survey found that:

although families in all income levels increased consumer debt to a greater extent than they decreased it, lower income families exhibited the strongest tendency in this direction during a period of economic expansion. Since lower-income families went deeper into debt for each type of credit as well as for all types combined, it would appear that consumer credit in the year 1935-36 was applied primarily to the raising of a standard of living in anticipation of increasing income, and with particular intensity by

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28 Economic Planning Advisory Council, Economic and Social Implications of Consumer Debt (Council Paper no. 7, Australian Government Publishing Service, Canberra, April 1989), p. 18.

families whose need was greatest.<sup>29</sup>

If the behaviour of Australian consumers before the second world war was similar to that of Australians in the 1980s and Americans in the 1930s, then default on consumer credit would have been highly cyclical, reflecting the way in which consumption expectations were adjusted to changes in employment conditions and labour income. For the  $i$ th household, therefore, default will occur when income falls by some proportion  $\Delta Y$  such that the new income is insufficient to sustain current expenditure. Current expenditure is made up of four components, subsistence expenditure  $X$ , above-subsistence normal expenditure  $N$ , discretionary (luxury) expenditure  $L$ , and debt repayments  $R$ . For the  $i$ th household, therefore, equilibrium is defined as:

$$[1] \quad Y_i = X_i + N_i + L_i + R_i$$

If income falls, luxury expenditure can be reduced to compensate, but if the fall is such that:

$$[2] \quad (Y_i - \Delta Y_i) < X_i + N_i + R_i$$

then the household budget will still be left in deficit. Since  $X_i$  is fixed in the short run, then either  $N$  or  $R$  must be reduced. In a relative income world in which it is more difficult, for psychic and social reasons, to reduce normal expenditure than to increase it, many consumers may decide to reduce  $R$ , i.e. to default on their debts, in the hope that future changes in income will occur soon enough to allow repayments to be made up before legal action is resorted to on the part of the creditor. If income does not increase and repayments are not made up, then legal action will coerce the

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29 Blanche Bernstein, The Pattern of Consumer Debt, 1935-36 (National Bureau of Economic Research, New York, 1940), p. 108.

debtor to adjust downwards normal above-subsistence expenditure  $N$ . This explains why many cases were settled after action had been commenced but before they came to court, and why so few cases resulted in forced seizure of goods. However, if

$$[3] \quad (Y_i - \Delta Y_i) < X_i$$

then no downward adjustment of expenditure is possible, and legal action would not be worthwhile. In order to prevent absolute destitution, the legal system protected the basic property of the very poor (clothing, bedding, tools of the trade) from seizure by creditors<sup>30</sup>, and if debtors were without resources courts would often make repayment orders for such small instalments spread over such a long period that it was not worth cost of collection for the creditor. It may be anticipated, therefore, that as employment conditions and income decline over the course of a depression, creditors will initially take debtors to court to coerce them to adjust their expenditure patterns downwards. This is likely to occur as workers suffer the effects of wage reductions and short-time. As the depression lengthens and deepens, as unemployment succeeds short-time work, and as household expenditure tends towards the subsistence level  $X$ , so the incentive for creditors to take legal action will decline. It can be expected, therefore, that the number of small debt cases will rise in advance of the unemployment rate, but that as unemployment grows, the number of debt recovery cases will tail off.

The reasons for and pattern of bankruptcy can be dealt with more briefly. For individuals petitioning for bankruptcy, the underlying economic causes were the same as for small debtors; the only significant difference was the sum involved. For small traders in metropolitan areas, insolvency was likely to follow labour market fortunes. Defaulting consumers would be pursued through the courts by traders who themselves were being pressed for payment by wholesalers, and so commercial bankruptcies were

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30 Kelly, *Debt Recovery*, p. 11.

likely to follow patterns of personal debt default, particularly in the depths of a depression when creditors could no longer coerce former customers to repay out of their near-subsistence income. Bankruptcy cases relating to small traders, therefore, can be expected to be high when the unemployment rate is high. In rural areas, however, the pattern of commercial insolvency was more likely to be determined by agricultural yields and price movements. In the major cities bankruptcies were also likely to be affected by the building cycle and by the cost and availability of commercial credit.

Interpretation of commercial bankruptcy data is complicated, however, by the fact that not all insolvent businesses formally filed a petition in bankruptcy. In many cases creditors preferred to make a private arrangement which allowed the insolvent trader to continue in business, since this often offered better prospects of an ultimate repayment of debts. The extent to which private arrangements varied over time or between states is entirely unknown, and this makes it impossible to place a strong interpretation on the trend level of bankruptcies, though it seems plausible to suggest that fluctuations in bankruptcies should follow cyclical movements in labour market, agricultural and commercial conditions.

#### 4. The data

This section first tests for a consistent relationship between small debt and bankruptcy data and state-specific unemployment rates for the interwar period to see how far the hypothesised relationship between default and unemployment developed in the previous section exists in practice. Then the debt and bankruptcy data for the years 1864 to 1911 is examined in order to gauge trends in labour market conditions in this period.

In order to compensate for population change over time, both small debt and bankruptcy data are analysed as rates per 100 people. The small debt percentage rates should not be thought of as being a measure equivalent to the unemployment percentage; the purpose of the population deflation is simply to take account of

population growth over the period of study. Since children could not legally contract debts, and since women were seldom prosecuted for default, the maximum 'at risk' population was the total number of adult males, who constituted just under one third of the total Australian population for the period covered by this study. An upper bound measure of the chance of an adult male worker being taken to court on grounds of default in any year is therefore roughly three times the percentage rate shown in the diagrams.

It should be stressed that this is very much an upper bound estimate, because some debtors might owe money to several traders and thus appear in the same court several times in a year, and persistent debtors could appear for many years in a row. The number of such repeat appearances throughout the Australian courts is unknown, but some indication of likelihood comes from a survey of the Murrurundi Small Debt Court registers for the period from 6 September 1892 to 14 December 1898.<sup>31</sup> The 276 plaintiffs entered into the court over this period related to 189 individuals, of whom 149 appeared only once (the most persistent of the debtors appears in the court register ten times). In any single calendar year in this period each 100 plaintiffs on average related to 86 separate individuals. If other courts experienced similar levels of repeat prosecution, then it seems reasonable to conclude that being prosecuted for small debts was a very common experience for working class adult males in Australia before 1945.

Long-run data on small debts and bankruptcy rates are available for Victoria, Queensland, South Australia and New South Wales (small debt and bankruptcy data for Tasmania are available only for the periods 1850-1921 and 1872 to 1916 respectively, and for Western Australia for the periods 1896-1945 and 1893-1915 respectively). Small debt data for New South Wales is available only from 1893, but

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31 Murrurundi Courts of Petty Sessions, Small Debts Register. New South Wales State Archive 4/6590.

district court data (which relates to debt claims of larger amounts up to £100) can be obtained from 1862. There is a strong positive association between these two series; over the period 1893-1945 the correlation coefficient is .81. All the colonies/states show relatively high rates of debt default and bankruptcy in the mid-nineteenth century, and rising rates after the second world war. A general decline in the small debt rate in the second half of the nineteenth century may reflect a general reduction in the economic insecurity of working-class life in Australia, since there does not appear to have been any major structural change in the supply of credit which might account for this reduction. However, uncertainty about changes in the size of the underlying 'at risk' population makes it difficult to draw firm inferences from trends in the debt or bankruptcy data.

The aim of this paper, however, is not to compare small debt data with bankruptcy data, but to see whether either or both data sets can provide information about the course of labour market and commercial conditions in Australia before 1945. To do this it is necessary to compare data on default with other economic indicators, but this poses enormous problems. Butlin's GDP estimates are available for the separate colonies only for the period before 1860; thereafter all GDP data relate to Australia as a whole. The highly imperfect unemployment data for the period before 1912 are also available only on a national basis (and relate primarily to industrial workers in New South Wales and Victoria)<sup>32</sup>. After 1912 trade union unemployment series are provided by state, and the limitations of these data have been noted in the introduction, but despite their shortcomings they are the best set of labour market indicators that we have.

The unemployment estimates by state for the period after 1912 should reflect broader

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32 From 1860 to 1911, A.S.E. members in Victoria and New South Wales constituted around 80 % of A.S.E. membership, which totalled 5793 in 1911. K.D. Buckley, The Amalgamated Engineers in Australia, 1852-1920 (Australian National University, Canberra, 1970), pp. 314-5.



labour market conditions, and so should in some way relate to patterns shown by the debt and bankruptcy data. To see whether this is indeed the case, logarithmic time trends were fitted through the debt and bankruptcy data for each state in order to find the deviation from the trend as a percentage of the trend level. Fitting the trend line abstracts from long-run changes in the size or the behaviour of the 'at risk' population, and taking the deviations in percentage terms reduces any problems of heteroscedasticity. This procedure isolates the cyclical component in the debt and bankruptcy data. The relationship between the unemployment and debt data in each state was then estimated using the following model:

$$U = aB + bD + cD(-1) + k$$

where:

U is the reported trade union unemployment rate

B is the percentage deviation from the trend level of per capita bankruptcies

D is the percentage deviation from the trend level of per capita small debts

k is a constant

When unemployment is high, the bankruptcy rate is expected to lie above its trend value, so the coefficient on B should be positive unless different trends in agricultural or building sector bankruptcies dominate. The coefficient on the lagged small debt variable D(-1) is expected to be positive, because debt cases are expected to rise in response to a reduction in real earnings that precedes actual unemployment. When unemployment itself rises, the propensity of creditors to take legal proceedings against debtors will fall because their chances of full repayment are reduced, so the expected coefficient on D is negative.

As already noted, gaps in the data restrict this interwar analysis to Victoria, New South Wales and South Australia; in Table 1 the dependent variable is the state-specific unemployment rate. In Victoria and New South Wales the debt data

dominates the bankruptcy data and coefficients on the debt variables are as expected. In New South Wales the coefficient on bankruptcy is unexpectedly negative, but is not statistically significant. In South Australia the bankruptcy data dominates debt. This shows that the variations in debt and bankruptcy laws between states can have a significant impact on how the courts were used by creditors (it was noted above that South Australia continued up to the 1970s to use bankruptcy rather debt proceedings to a much greater degree than other states).

**TABLE 1**  
**Unemployment estimates, 1912-1938**

Dep.Var.	B	D	D(-1)	BEER	k	R <sup>2</sup>	d.w
[i] VICU	.0153 (0.79)	-.2738 (4.39)	.3487 (5.54)		10.2 (11.9)	.65	1.09
[ii] NSWU	-.0302 (1.15)	-.1357 (2.10)	.2629 (4.36)		10.3 (9.86)	.71	.76
[iii] SAU	.1231 (5.18)	-.0287 (0.43)	.0186 (0.25)		8.11 (5.75)	.60	.83
[iv] VICU	.0175 (1.37)	-.1192 (2.37)	.1688 (3.16)	-.3199 (5.40)	9.73 (16.9)	.85	1.76
[v] NSWU	-.0446 (2.82)	-.0277 (0.66)	.1541 (3.90)	-.2548 (6.54)	10.4 (16.6)	.90	1.22
[vi] SAU	.0630 (3.10)	.0383 (0.79)	.0212 (0.41)	-.5409 (5.07)	8.11 (8.27)	.81	1.26

(t-statistics in parentheses)

Figure 2 shows the actual and estimated unemployment rates by state; although the estimated rates do not always closely match the trade union unemployment series, the fit generally quite good, with the unemployment peak of the early 1930s being clearly identified. This is strong support for the belief that the debt and unemployment data do reflect changes in labour market conditions.

A further refinement can be introduced by incorporating in the equations a variable which captures changes in discretionary expenditure. The household income-expenditure identity given in equation [1] above shows discretionary expenditure as the first casualty of cyclical income reduction, to be followed by default on loan repayments and then by a reduction of normal above-subsistence expenditure. Given the relatively short time-horizon of credit arrangements, it is probable that this reduction in discretionary expenditure would appear to be contemporaneous with a rise in debt default in annual data. Beer production has been taken as a proxy for discretionary expenditure, and percentage deviations from the trend level of beer production in each state have been included in equations iv-vi in table 1.<sup>33</sup> The inclusion of this proxy for changes in discretionary expenditure further improves the fit of the equations, as can be seen from the 'beer' unemployment estimates plotted in figure 2.

Given this strong association between indicators of financial distress and unemployment in the interwar period, it seems appropriate to use the debt and bankruptcy data to draw inferences about fluctuations in labour market conditions in the nineteenth century. However, it is not possible simply to impose the coefficients

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33 Beer consumption would be a more appropriate variable, but it is not possible to obtain complete data; however, the available data on beer consumption tracks the production data very closely. Separate production figures have been used for Victoria and New South Wales. No data was available for South Australia, so Victorian beer production data was used instead in equation ii. The data has been drawn from the statistical registers.

**FIGURE 2**  
**Actual and estimated unemployment rates for**  
**Victoria, New South Wales, and South Australia, 1912-38**

Unemployment rates, Victoria, 1912-1945

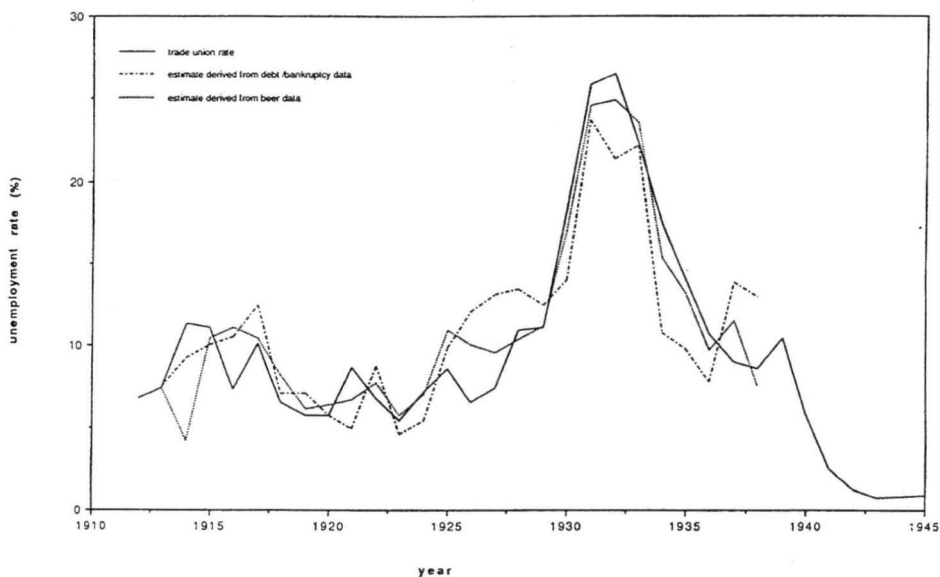
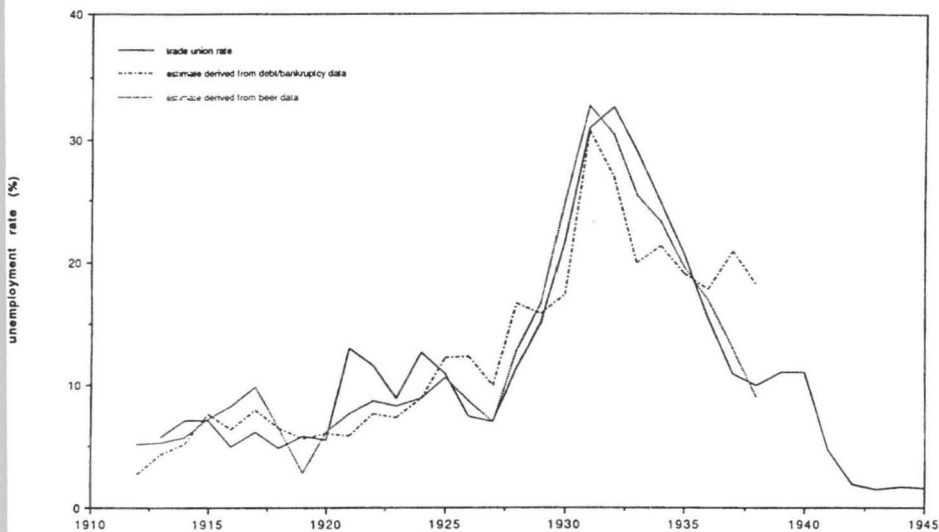
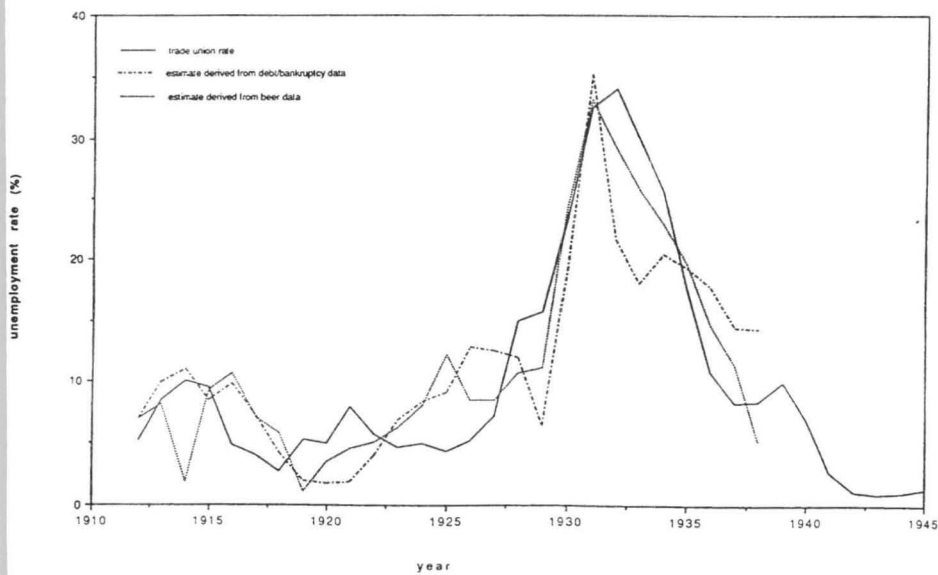


Figure 2 (cont.)

Unemployment rates, New South Wales, 1912-1945



Unemployment rate, South Australia, 1912-1945



estimated in Table 1 on the pre-first world war debt and bankruptcy data to derive unemployment estimates because there are important discontinuities in both the legal and unemployment data. In 1924 a fundamental change was introduced into bankruptcy proceedings when Commonwealth bankruptcy legislation superseded the different bankruptcy laws of the separate states.<sup>34</sup> Not only can this be expected to have changed the relationship between bankruptcy and unemployment, but also the relationship between small debts and unemployment, because of interactions, different in each state, between bankruptcy proceedings and small debt proceedings.

In addition, there appears to be a jump in unemployment rates in Victoria and New South Wales from the ASE estimates up to 1911 and the all-union estimates from 1912. Comparing the ASE rates for 1900-1911 with the NSW and Victorian unemployment rates for 1912-23, then the ASE data have maximum, minimum and mean values all around four percentage points below the equivalent for the state-specific data. This may indicate a consistent under-representation of industrial unemployment among the skilled membership of the ASE. It also suggests that the value of the constant in pre-war equations should be lower than in the interwar estimates (in the range 4-6, rather than 8-10).

We therefore need to estimate new equations for the period up to 1911, using the ASE unemployment estimates. Since the ASE data relates overwhelmingly to members in New South Wales and Victoria (though the split is unknown), the equations have to be limited to these two states. Even so, the relationship between the dependent and independent variables is unlikely to be strong, because the debt and bankruptcy data reflect conditions among a much broader (and larger) section of the population than do the ASE unemployment returns. The regression results for Victoria and New South Wales are presented in table 2.

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34 A.N. Lewis, Australian Bankruptcy Law (Law Book Co., Sydney, 2nd ed. 1934), pp. 21-3; Kelly, Debt Recovery, pp. 89-93.

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**TABLE 2****Unemployment estimates, 1864-1911**

Dependent variable: ASEU

	State	B	D	D(-1)	k	R <sup>2</sup>	d.w
[vii]	VIC	.1161 (5.32)	-.0710 (2.56)	.0256 (1.10)	4.88 (12.6)	.37	.90
[viii]	NSW	.0514 (2.72)	-.0791 (3.06)	.0622 (1.79)	4.28 (11.7)	.45	.92

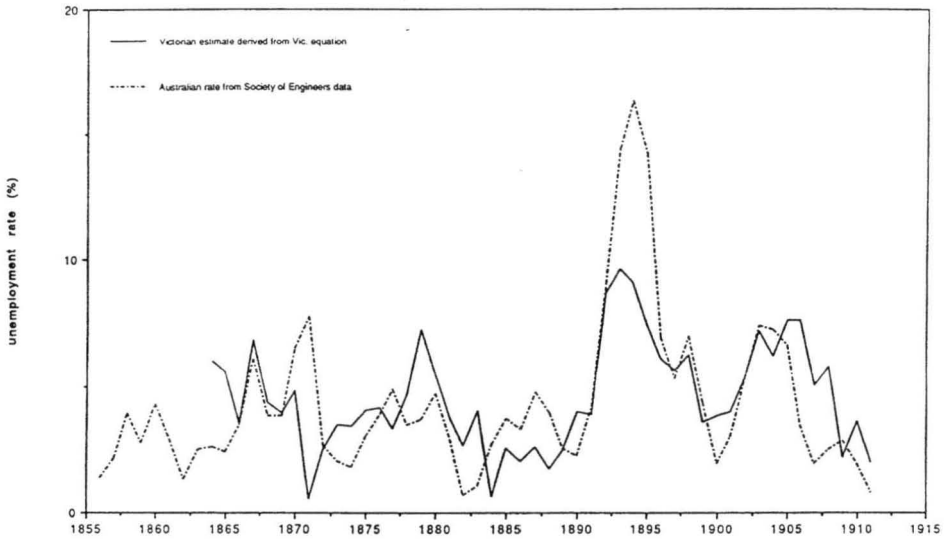
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Figure 3 shows the actual and fitted values for these two states. It is clear that this simple model reflects the cycles and turning points in the ASE unemployment series, though the fit is not particularly close, especially at the unemployment peaks of the 1890s depression. Nevertheless, these equations provide a way of calibrating the debt and bankruptcy data against the only existing unemployment series for the later nineteenth century. If the ASE unemployment series in fact has a mean value significantly above or below the 'true' (but unknown) unemployment rate in Victoria or New South Wales, then this calibration will also be an over or understatement. If, however, the mean level of the ASE series reflects the mean level of the 'true' series, then the unemployment rates estimated by equations [vii] and [viii] should give a more accurate picture of actual labour market behaviour than the ASE figures if the arguments above about the relationship between debt, bankruptcy and underlying labour market conditions are correct. Note that the coefficients in these equations have the expected signs, and that the constant is in the expected range. Beer production data for Victoria only is available for the nineteenth century, and this was included in equation [vii] but it had no significant impact on the estimated

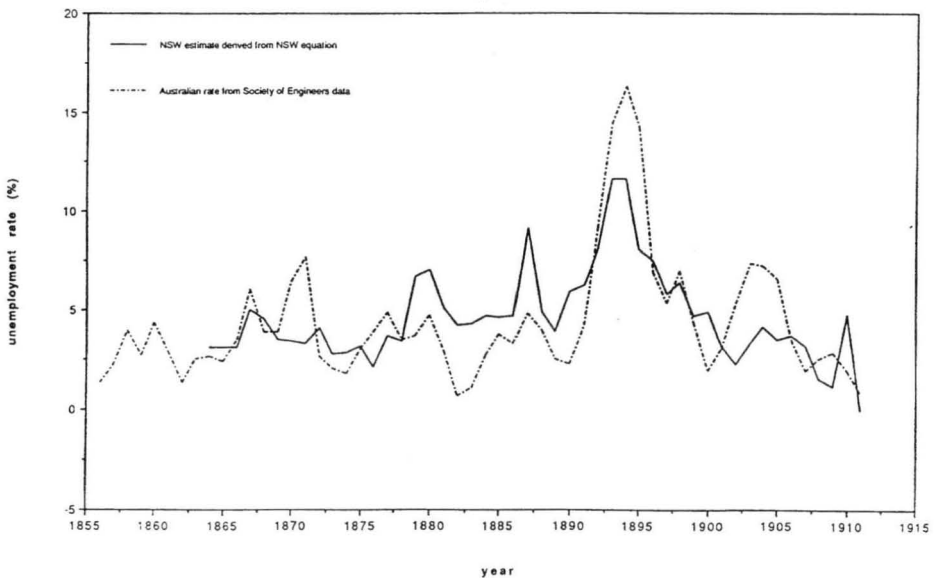
**FIGURE 3**

**ASE unemployment rate and estimated unemployment rates for  
Victoria and New South Wales, 1856-1911**

Unemployment rates in Victoria and Australia, 1856-1911



Unemployment rates in NSW and Australia, 1856-1911





unemployment rate, and no other appropriate proxies for discretionary income in the nineteenth century have yet been located.

Because the ASE membership in South Australia, Queensland and Tasmania was only a small proportion of the ASE total, the ASE unemployment rate is unlikely to give any reasonable guide to labour market conditions in these three states. Debt and bankruptcy data, however, are available for these states, and the parameters estimated in equations [vii] and [viii] can be applied to these data to construct proxy unemployment rates. It will be noticed that bankruptcies are given more weight in equation [vii], and the previous year's number of small debt cases receive more weight in equation [viii]. Since the bankruptcy data tends to be more volatile than the small debt data, estimates using the Victoria parameters tend to give higher values than those using the NSW parameters.

Figure 4 presents the two alternative proxy unemployment rates for South Australia, Queensland and Tasmania, together with the national ASE unemployment rate. It is immediately apparent that these proxy unemployment rates diverge substantially from the ASE unemployment rate in both South Australia and Queensland. Are these divergences meaningful and plausible? The data for South Australia indicate severe depressions in 1869-70, 1879-81 and then a long recession throughout the 1880s, from 1883-86. This is consistent with what is known about the state of the South Australian labour market, particularly the economic downswing from 1882-87. The unemployment peak of the mid-1880s which appeared in New South Wales and Queensland but which was not seen in Victoria is also consistent with accepted views of this period.<sup>35</sup>

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35 W. A. Sinclair, The Process of Economic Development in Australia (Cheshire Publishing, Melbourne, 1976), p. 143.

**FIGURE 4**

**ASE unemployment rate and estimated unemployment rates for  
South Australia, Queensland and Tasmania, 1856-1911**

Unemployment rates in South Australia and Australia, 1856-1911

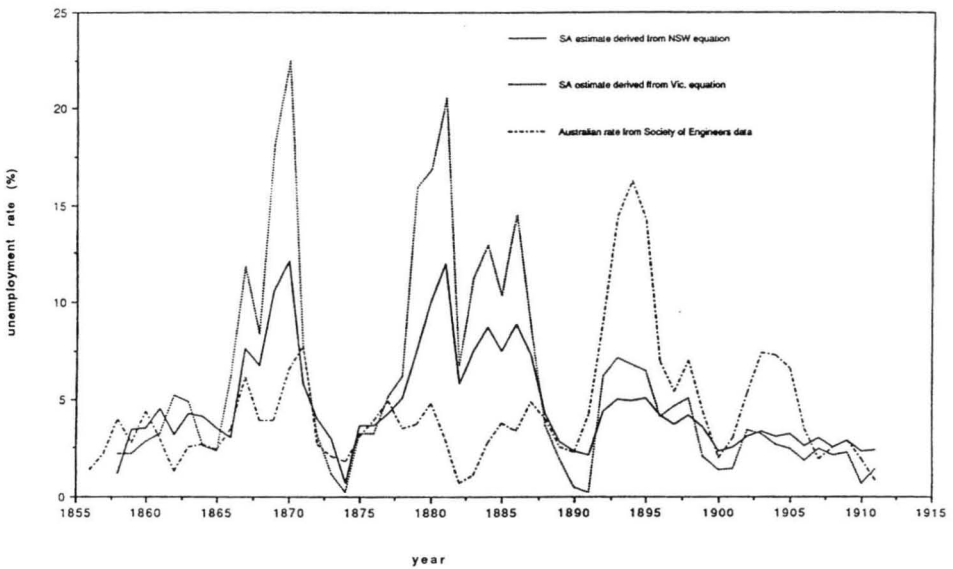
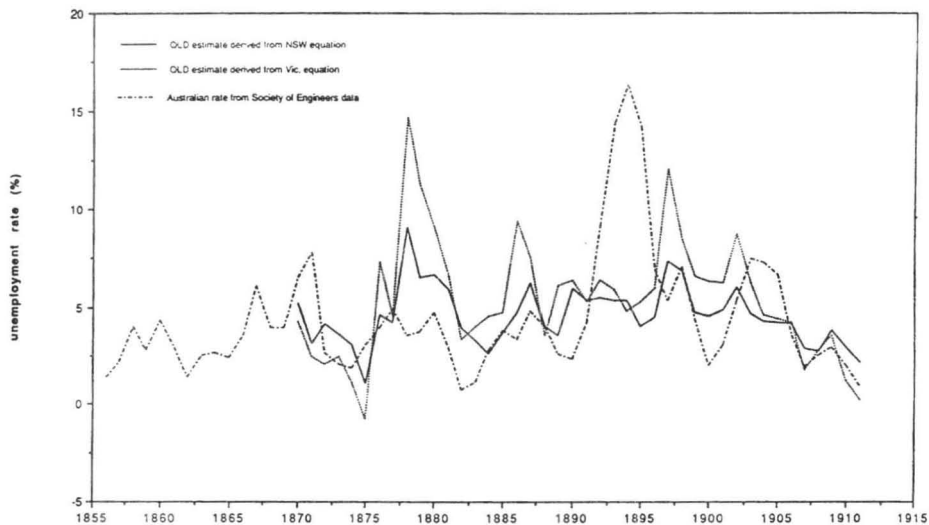
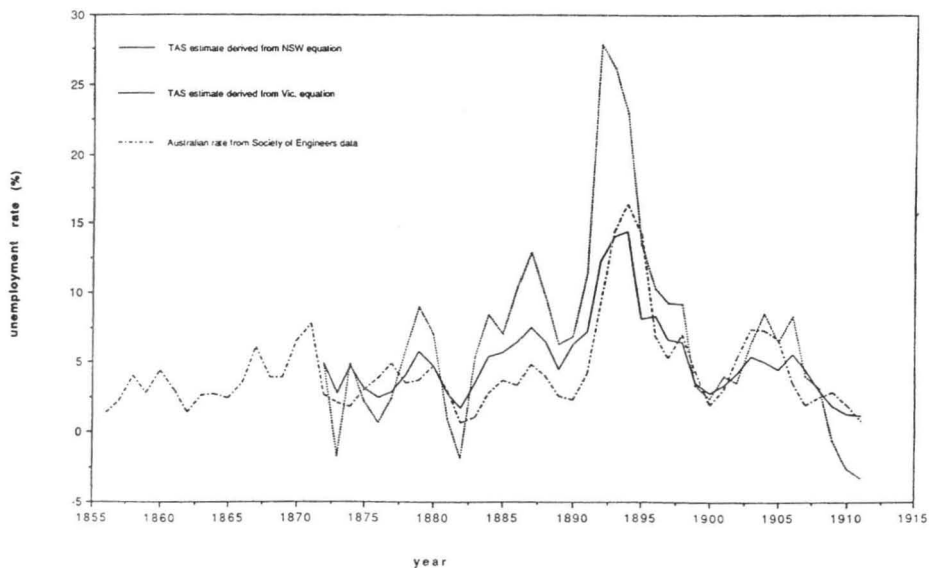


Figure 4 (cont.)

Unemployment rates in Queensland and Australia, 1856-1911



Unemployment rates in Tasmania and Australia, 1856-1911



## 5. Discussion

The equations in table 1 and graphs in figure 2 demonstrate that small debt and bankruptcy data can be used to produce reasonable proxies of unemployment rates in Victoria, New South Wales and South Australia in the interwar period, and the goodness of fit is further improved when some measure of changes in discretionary expenditure is included. This suggests that similar procedures for the pre-1912 period may give equally valid results. For this earlier period the application to other states of parameters estimated for Victoria and New South Wales obviously involves an element of pure guess-work, but the estimates plotted for South Australia, Queensland and Tasmania in figure 4 seem to fit with our sketchy knowledge of labour market conditions in these colonies/states, and are undoubtedly better than the aggregate ASE unemployment figures.

What do these new unemployment estimates, and the underlying debt and bankruptcy data, tell us about the general course of labour market conditions in Australia between the 1860s and the second world war? First, they show that there was considerable variation before the first world war in the cyclical pattern of debt default, and therefore of unemployment, between the five colonies/states considered in this paper. In figures 3 and 4 all five states show a peak in estimated unemployment rates in 1879-80, and the three states for which we have data for the 1860s show a similar peak in 1867. At other times, however, the unemployment peaks do not coincide. For instance, in the 1880s, New South Wales and Tasmania show a peak in 1887, Queensland in 1886, Victoria in 1883, and South Australia a double peak in 1883 and 1886. The depression of the early 1890s seems barely to have touched Queensland, and to have been muted in South Australia, and the more minor downturn around 1905 appears to have been confined to New South Wales and Tasmania. Although the Australian economy was becoming more integrated over this period, regional labour markets were still characterised by distinct trends. .

Furthermore, the amplitude of the cycles shown in figures 3 and 4 indicate that the

labour markets in all the states exhibited abrupt and apparently large fluctuations in demand conditions. These fluctuations appear in the original debt and bankruptcy data and so are reflected in the unemployment estimates but are in no way created by the estimation procedure. In characterising the growth of the Australian economy, Butlin has noted that 'only very slight and brief fluctuations occurred in the long period between 1861 and 1889'<sup>36</sup>, but these unemployment estimates suggest that many workers in Australia would have seen a much less stable labour market. Most notably, in South Australia during most of the 'long boom' from 1861-1889 there appears to have been high unemployment.

This raises the question, seldom given the attention it deserves, of the way in which the variance of working-class income interacts with the level of income to determine overall living standards. Since Australian real wages and living standards were higher than those in Britain, a similar volatility of the labour market in both countries should have caused less real poverty in Australia than in Britain. An indication of whether this was in fact the case can be derived from a comparison of debt default in the two countries. Taking the period 1868-1913, the mean annual number of debt cases per 100 inhabitants in England and Wales was 3.85, with considerably higher rates in most industrial and mining areas,<sup>37</sup> compared with 2.44 for Victoria, 2.35 for Queensland, 4.61 for Tasmania, 4.62 for South Australia and, for the period 1893-1913, 2.35 for New South Wales. Since defendants were practically confined to the adult male population, which comprised about a third of the total population in Australia and about a quarter in England and Wales, the Australian figures need to be multiplied by 3 and the British by 4 to obtain comparable estimates of debt cases per 100 adult males. If the repeat prosecution rate found in Murrurundi (100 cases in any year representing 86 separate defendants) applied more generally, then the annual probability of an adult male being taken to court for default on debts in this period

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36 Butlin, *Investment*, p. 9.

37 Johnson, 'Small Debts', table 2.

was:

Victoria	.06
New South Wales	.05
South Australia	.12
Tasmania	.12
Queensland	.06
England and Wales	.13
Warwickshire	.27
West Riding	.17
Glamorgan	.18
London	.12

Although labour market conditions did display some pronounced volatility in late-nineteenth century Australia, therefore, the majority of Australian adult males faced a much lower chance of being pursued through the small debt courts by their creditors than was the case for British workers. Moreover, the average sum owed by Australian workers was substantially lower in real terms than for British workers - between two and three weeks average earnings for an Australian, compared with over four weeks average earnings for an Englishman.<sup>38</sup> If being able to avoid the small debt courts is taken as an indicator of financial resources and economic capacity, workers in New South Wales and Victoria were three to four times more secure than their counterparts in the industrial and mining regions of Britain. Social historians are right to stress the precarious and fluctuating nature of labour market conditions in late-nineteenth century Australia, but economic historians are also right to stress that economic conditions for workers were much better in Australia than for their fellow workers in Britain.

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38 Taking estimates of average annual earnings of manufacturing workers from Allen, 'Incomes in the English-speaking world', p.131.

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