Trend Analysis of Union Membership

David Peetz*
Centre for Work, Leisure and Community Research and Department of Industrial Relations, Griffith University

Abstract
Analysis of developments in union membership has been hampered by the variability of official statistics. Use of trend union membership data can give us a more accurate medium and longer term perspective on the degree of union decline or revival at aggregated and disaggregated levels. Across a range of measures, the trend is for the rates of decline of both union membership and density to be easing. This is happening in most states and industries, and amongst most types of employees. Over the longer term, density has been declining by disproportionately large amounts in the private sector, amongst men and amongst casual employees. However, the decline amongst part-timers has been less than that amongst full-timers, due to the shift towards casualisation of full-time work. Continuing improvements in aggregate union membership require substantial continuing internal reform, building on the progress that has been made within unionised workplaces and developing genuine growth strategies.

1. Introduction
The August 2002 union membership statistics presented what appeared at first glance to be a grim picture for unions. In the twelve months from August 2001 estimated membership fell by 69,000 or 3.6 per cent, and density (membership expressed as a proportion of all employees) fell by 1.3 percentage points to 23.1 per cent (ABS Cat. No. 6310.0). This – after two apparent years of (small) growth in membership, and after recorded density grew in both the public and private sectors for the first time in the year to August 2001 – appeared to be a disappointing outcome for a union movement that had struggled for internal renewal over the past five years. Yet a year later, union membership allegedly rose by 33,000, and density fell by a mere 0.1 percentage points; and the following year, membership fell by 25,000, and density by 0.3 points. These result raised questions amongst many practitioners and observers – what was really going on?

There are other problems with interpreting union membership statistics. If it is difficult to make sense of national movements from one year to another, this is doubly the case for disaggregated data – for example, regarding particular industries, states or demographic groups. What, for example, are we to make of the ABS estimate that New South Wales experienced a large drop of 60,000 in membership for 2002, after two years of seeming growth – and followed by growth of 12,000 in each of 2003 and 2004? Or

Address for correspondence: David Peetz, Department of Industrial Relations, Griffith University, Nathan Campus, Brisbane, Qld. 4111, Australia. Tel: 61 7 3875 7600. Email: d.peetz@griffith.edu.au
*I wish to acknowledge the technical assistance and advice of Craig McLaren, University of Wollongong.
© The Centre for Labour Market Research, 2005.
the fact that, in construction or health or personal services, more often than not since 1995, when density goes up one year it goes down the next? Some authors have undertaken detailed analyses of movements in disaggregated membership statistics when they have been published (eg. Lipsig-Mumme, Curtin and Neilsen, 2003) but the very variability of the data raises doubts about the usefulness of the original, published statistics and hence of such analyses. This does not mean the data should be discarded. Rather, we need to use new methods to look for the underlying patterns at state, industry and other levels.

Public policy makers long faced this problem in interpreting the highly variable monthly employment and unemployment statistics arising from the labour force survey published by the Australian Bureau of Statistics (ABS). The ABS eventually dealt with this matter by creating and publishing trend series of labour force statistics. This paper seeks to use the same principles to deal with the problem of variability in the union membership statistics.

2. Statistical Issues and National Trends

Union membership estimates are subject to error. Most importantly, they are drawn from a survey (the ABS Labour Force Survey) and consequently subject to sampling error. There is also the possibility of respondent error, as the person who answers the door or the telephone is asked to speak on behalf of the whole household. There is also some slight inherent underestimation of membership anyway, as the estimates exclude people who belong to a union in their second job but not in their main job. In addition, sometimes unusual things, such as closure of a large company, happen in a particular year. Just as the monthly employment and unemployment figures bounce around from month to month, the annual union membership estimates bounce around from year to year. In fact, they will be even more variable than the unemployment estimates because from one month to the next some seven eighths of the labour force sample is retained and re-interviewed. This builds some inertia into the unemployment and employment estimates that is absent from the union membership data.

Trend estimates can help smooth out the volatility in a time series and give an estimate of the underlying direction of the series. Accordingly, just as the ABS issues trend estimates of employment and unemployment, it is worth our while considering the trends in changes in union membership and density. We use both indicators as they each have their own significance: membership as an indicator of the immediate financial and other resources available to a union, density as one broad indicator of the power of unions (eg. Cohen et al., 2003, Laroche, 2004).

With union membership having fallen fairly consistently since the start of the 1990s, and density since the mid 1970s, our particular interest is in seeing whether the trends suggest that the rates of decline have slowed and may soon cease. This is the question that is on the minds of unionists (and some employers and policy makers). So our focus here is more on the estimated changes in membership and density, than on their levels.
The simplest way to look at trends in the annual figures is simply to average them over several years. Figure 1 shows the average change in density over successive three-year periods from 1992-95 to 2001-04. It shows the decline in density easing substantially. Density fell by an average of 1.2 to 2.3 percentage points per annum over the first three trienniums, but the rate of decline was just 0.6 points per annum over the latest period, 2001-2004.

Figure 2 looks at changes in membership using the same method. It fell by an average of 45,000 to 90,000 members per annum over the first three trienniums, but again the rate of decline eased to 20,000 per annum over 2001-2004. Indeed, in three of the five years to 2004, estimated membership increased – although this was more than offset by the estimated losses in the remaining years.
A more sophisticated trending approach would be to apply a methodology comparable to that used by the ABS to generate its trend estimates of employment, unemployment and the labour force. The ABS uses a 13 term Henderson-weighted moving average to produce trend estimates from seasonally adjusted monthly data and a five or seven term Henderson-weighted moving average to produce trend estimates from seasonally adjusted quarterly data. The seasonal adjustment method is typically an iterative one in which a provisional trend is identified, seasonal influences and other distorting factors (e.g. moving holidays and ‘trading day’ effects) are estimated and removed, and a final trend is then calculated by attaching varying weights to various seasonally adjusted observations on either side of the observation being considered, which has the largest weight attached to it (Shiskin, Young and Musgrave, 1967). I have applied a 7 term Henderson-weighted moving average\(^1\) to produce annual trend estimates for union membership and density since the early 1980s. No seasonal adjustment has been necessary: since 1986, the surveys have consistently been undertaken in August. One other complication is that, in the earlier years, surveys were not undertaken annually, and estimates for non-survey years\(^2\) have been produced simply by interpolating (averaging) between survey years. This would tend to mute the amplitude of trend movements in those earlier years.

Results of the trending analysis are shown in charts and discussed in the text. Unless otherwise specified, all numbers cited here are trend estimates. A data appendix contains the density numbers for readers interested in examining more closely trends in their own industry, sector or state. There are two important features of trending that need to be borne in mind. First, the trend figures for the final three years (2002 to 2004) are based on fewer data than the other years (because some or all of the ‘post’ observations are not available) and will be subject to revision over the next two years, with the latest observation necessarily being prone to the largest revisions.

Second, when a series is showing long term decline, the nature of the formulas used for trending leads to a tendency for the latest observations (particularly the very last observation) to suggest an easing of that decline. For example, if a series such as union density was consistently declining by one percentage point a year, the trend decline over most of the series, using a 7-point Henderson average, would also be 1.0 points per year, but in the third last year the decline would be 1.1 points, in the second last it would be 0.94 points, and in the last it would be 0.45 points. So we have to be cautious in interpreting an apparent easing of a decline. On the other hand, for the purposes of assessing the effect of, for example, recent changes in union strategy, we would not want to discard the most recent

---

\(^1\) This involves, for most observations, a weight of .413 being given to the current year’s estimate (t), a weight of .294 to the year before and preceding (t-1 and t+1), a weight of .159 being given to the second years before and after (t-2 and t+2), and a weight of -.059 being given to the third years before and after (t-3 and t+3). These weights cannot be directly applied to the last three observations because of asymmetry (we do not know future observations). For the last observation the weights are .534 (t), .383 (t-1), .116 (t-2) and -.034 (t-3). For the penultimate observation weights are .287 (t-1), .058 (t-2), -.053 (t-3). Weights were provided by Craig McLaren.

observations. One way of dealing with this dilemma is to compare how the trend movement over the most recent three year period compares with the trend movement over the preceding three year period. In our hypothetical series that is declining by 1.0 percentage points a year, the trend series would show a decline of 2.5 points over the last three years compared to 3.0 points over the preceding three years. That is, the estimated trend decline over the last three years would understate the actual trend decline by one sixth. So, a reasonable benchmark for improvement in looking at trend declines is this: if the last three years show a drop in the rate of decline that is greater than one sixth of the previous decline, then that is an indicator that the trend rate of decline has eased (at least, until the next year’s statistics come out, which may lead to revisions of the trend estimates). I use this ‘improvement benchmark’ at various points in this article.

Trending does not solve the underestimation problem (which affects the density figures by less than one percentage point) and it does not totally overcome the sampling error problem, but it suppresses volatility in the series far below that arising from sampling error in the original series. That said, sampling error can still have an effect, particularly when looking at series with small sample sizes (for example, mining, electricity, gas and water supply, and the Northern Territory) and so we must still be cautious in interpreting some of the data.

3. Trend Estimates of Aggregate Density and Membership

Let us first examine aggregate estimates. Figures 3 and 4 show, for the period since the 1980s, original and trend estimates of union density and membership. The scale in figure 4 has been truncated to emphasise the differences between the original and trend estimates. (Several pairs or groups of early years show the same growth or decline in original estimates, due to the use of averaging for non-survey years.) The early 1990s (when state governments started passing legislation aimed at restricting unions, and the employer push against unions gained momentum) appear to signify a deterioration on the rate of change in both series. Still, the trend declines appear to be easing.

Over the three years 1998-2001, trend membership fell by 140,000; over the last three years, from 2001-2004, trend membership fell by just 26,000. This represents a drop of 82 per cent in the trend rate of decline, and more than satisfies our improvement benchmark that the trend should improve by at least one sixth in order to be considered an improvement. For density, the improvement is by two thirds – a trend decline of 3.9 percentage points over 1998-2001 becomes just 1.2 points over 2001-2004. Again, we should recall that these last trend estimates are subject to revision in later years as subsequent data become available.

If we are looking for trends in the decline of unionism, however, it is visually easier to identify whether and how patterns have changed using charts which show the changes in, rather than the levels of, trend membership and density. Figures 5 and 6, then, show changes in the trend estimates.
As can be seen, the trend decline in union density reached its worst depths in 1994 and 1995, eased off a bit before worsening again during the first two years of the Workplace Relations Act, and has been showing fairly steady improvement since 1998 (figure 5). A broadly similar pattern is shown for trend union membership. In 2004, the trend decline in union membership was a mere 1,700, indicating that in practical terms trend union membership had finally stabilised (figure 6).
If present trends continue, we might also expect an end to the trend decline in union density fairly soon. Measured (original) membership and density might also improve in or after 2004, but these are even more difficult to predict than trend density and membership. Other factors may intervene to change the strength or direction of the trends: governments may introduce legislation that is more or less favourable to unions, structural change may accelerate or weaken, unions may change strategies, for example moving closer towards or further away from organising approaches. Any optimistic ‘projections’, then, in effect assume that the present rate of expansion in the adoption of organising continues, that government policy does not change, and that structural change and employment growth proceed at similar rates.
to the recent past. As forthcoming (at time of writing) amendments to the Workplace Relations Act are designed to weaken unions (McCallum, 2005), it is too early to say that union membership and density can be expected to grow in the near future.

4. Interstate Variations

Undertaking trend analysis is even more important for state level data than for national data. This is because state and territory data are subject to high sampling error and variability due to smaller sample sizes. This makes the original estimates for states and territories somewhat unreliable, and leads to odd patterns in original data from one year to the next. Figures 7 to 9 show trend membership data for each state and territory, while figures 10-12 show trend density data.

All states and territories experienced trend declines in membership and density in the 1990s, and, broadly speaking, the relative positions of states did not change much during this period. Throughout the period, for example, Tasmania and South Australia maintained their rankings as having the highest and second highest densities respectively, and Western Australia retained the lowest density amongst the states. However, there were variations in the timing, speed and magnitude of falls.

Turning to membership first, the trend reduction in NSW membership started before Victoria’s, under the influence of the Greiner industrial relations legislation. However, when the more radical Kennett legislation took effect in Victoria its impact was more severe, until some stabilisation occurred through the escape of many Victorian workers to the then friendly federal system (Hamberger, 1995). After the Workplace Relations Act came into effect membership fell again in both states. Under Kennett, Victoria fell from third ranking in 1993 to sixth in 1995 and never recovered its relative position, being seventh in 2004.

Trend membership in Western Australia fell earlier and more rapidly than in South Australia, again reflecting the timing and nature of state industrial legislation. Queensland and ACT were relatively stable through the earlier part of the 1990s (Queensland’s density fell more in the 1980s under the influence of the Bjelke-Petersen government) but they both fell more rapidly later under the influence of Workplace Relations legislation.

Tasmania declined through the 1990s under the effect of state, then federal, legislation. Over the fourteen year period 1990-2004 it experienced the second greatest decline in trend membership (38 per cent), just below South Australia’s (40 per cent). These compared to the smallest fall of 16 per cent in Queensland. These divergences were not so much due to differences in the falls in density - all states experienced falls in density of between 41 per cent (NSW) and 48 per cent (WA). Rather, the relatively poor membership changes in Tasmania and South Australia reflected their poor trend employment growth – totalling just 9 and 13 per cent respectively over the thirteen year period, compared to Queensland’s 45 per cent.
More recently, we can see improvements across all states, but these improvements are more convincing in certain states. Over the 1998-2001 triennium, trend membership in Queensland fell by 38,000, but over 2001-2004, trend membership actually rose by 14,000. Turnarounds were also seen in Tasmania (from a loss of 7,000 in the former triennium, to a gain of 3,000 in the latter), the ACT (from a loss of 7,000 to a gain of 1,000) and the Northern Territory (from a loss of 4,000 to a gain of 900), though in the last case small sample size suggests some caution is warranted. The decline in membership also improved in all other states except Victoria which went from a loss of 21,000 in the former triennium, to 18,000 in the latter. Although technically the rate of decline fell, it was not enough to satisfy our “improvement benchmark”, that is, it seemed to just be a reflection of the arithmetic properties of the trending technique. In the year to August 2004, Queensland showed the strongest growth in membership in both absolute terms (3,200) and relative terms (0.9 per cent).

On a triennium basis trend density (figures 10-12) continues to fall in all states. In the year to 2004, New South Wales was the only state to record a trend increase in density, by just 0.1 percentage points. In most other states density fell by 0.1 to 0.2 points, the outlier being South Australia where it fell by 0.9 points. However, in South Australia, as in all other states, the picture in the latest triennium is clearly better than in the preceding one.

As mentioned, trend estimates for all states for the most recent years are subject to revision when later official data are published. Nonetheless, the patterns shown here in the state data are clearly better than what we would have seen in the recent past.
Figure 8  Trend Union Membership, Queensland, South Australia and Western Australia

Figure 9  Trend Union Membership, Tasmania and Territories
Figure 10 Trend Union Density, New South Wales and Victoria

Figure 11 Trend Union Density, Queensland, South Australia and Western Australia
5. Industry Trends

There is greater variation between the experiences of industries (figures 13-16) than of states. Our trend data for industries cover a shorter period than for states due to a change of industry definitions by the ABS after 1993. They are therefore less robust for the mid 1990s. Nonetheless, some interesting patterns emerge.

Several industries are showing particularly hopeful signs after periods of decline. After dropping 6.2 percentage points (representing a seventh of members) over the triennium 1998-2001, transport and storage showed a trend fall of just 0.3 points over the latest triennium 2001-2004 (figure 13). Education had a 5 percentage point fall over 1998-2001, but a very slight rise over 2001-2004. Electricity, gas and water may have been the biggest success story, going from a 7.8 percentage point drop over 1998-2001 to a 3.1 point increase over 2001-2004, though we need to be cautious given the small sample size. In culture and recreation the trend rate of decline has fallen from nearly 5 points to just 0.2 points, but it is now on a low base. Retailing, too, virtually stabilised over the last triennium after a fall of 4 points over the previous triennium, but also at a very low base (figure 14). Personal and other services has been relatively stable through the past decade, and after falls to 1997 has recorded uneven increases since then, including a 0.3 point rise over 2001-2004. Nearly three in ten workers in this industry are still unionised. This industry division includes small businesses (photo labs, hairdressers, video libraries) and private households employing staff, but it also includes emergency services and unions themselves, and in both these industry classifications union density tends to be very high (Fleming and Peetz, 2000).

The decline in construction began to ease in the late 1990s, and between 2000 and 2002 there was a one point increase in trend density. However, in the face of concentrated government efforts to deunionise this industry,
including through the establishment of a Royal Commission (Marr, 2003) and a bureaucratic task force targeted at the construction unions, trend density fell by a similar amount between 2002 and 2004. In the light of the attention given it by the federal government, it is notable that unionism in this industry remains above the national average.

Figure 13  Industry Trends in Union Density (I)

Figure 14  Industry Trends in Union Density (II)
Figure 15  Industry Trends in Union Density (III)

Figure 16  Industry Trends in Union Density (IV)
At the other extreme (figure 15) are industries where employers have waged aggressive anti-union strategies and industry restructuring is occurring (see, Waring, 2000; Timo, 1997; Ellem, 2002; Peetz, 2002; Hearn Mackinnon, 2001; Workers Online, 2000; and Van den Broek, 2003): finance and insurance (which lost 9 and 4 percentage points in the 1998-2001 and 2001-2004 trienniums respectively), communication (down 17 and 7 points in the two trienniums) and mining. These industries have experienced near catastrophic falls in density. Indeed, since 1996 density in each has dropped by around half – though wholesale trade, hospitality (accommodation, cafes and restaurants), and property and business services are not much better on this criterion. Manufacturing is also in a poor position – the decline over the last triennium, at 4 percentage points, is barely better than in the earlier triennium. In neither manufacturing, mining or hospitality is there an indication yet that the trend rate of decline has decelerated, once we allow for the benchmark criteria discussed earlier.

It had seemed that most of mining’s membership losses occurred in the 1980s3. Yet mining is now experiencing what on the surface looks like an acceleration of the rate of decline – from 5 to 9 percentage points between the trienniums. However, this conclusion is very heavily influenced by the inclusion of the original figures for 2004, which appeared to show a drop of two fifths in original union density in just one year. We must remember the small sample size in mining. Despite the existence of strong anti-union campaigns by employers in this industry, a drop of that magnitude goes beyond what would credibly have been expected. Before the inclusion of the 2004 original data, mining had a very different story – it had managed to halve the rate of decline between 1997-2000 and 2000-2003. This halving has, in effect, been revised away by the inclusion of the original 2004 data. We should probably hold off on making a definitive judgement on mining till other data become available.

I referred to the importance of aggressive employer strategies. Let us look a bit more closely at the relationship between employer strategies and union decline. One indicator of aggressive employer strategies against unions is the use of Australian Workplace Agreements (AWAs), individual contracts registered with a government agency which override industrial awards and effectively preclude union representation in bargaining. They have been available in the Federal jurisdiction since 1997. Some state jurisdictions have also offered registered individual contracts, most notably Western Australia. Table 1 shows the relationship between coverage by registered individual contracts in 2002 (2004 data are not published), and the decline in trend union density from 1996 to 2002 and 2004. We can see that the three industries with the highest incidence of registered individual contracts (mainly AWAs) in 2002 – mining, communications, and finance and insurance – had the three highest rates of decline in trend union density over the period since AWAs were introduced. The correlation between AWA coverage and decline in density by 2004 is 0.73. The beta coefficient in a simple OLS regression equation suggests that for each one per cent of the industry workforce that is covered by AWAs, union density declines by 0.8

3 Between 1986 and 1993 (the year the ABS industry classification system changed), in original data, union density in mining fell by 16 percentage points, double the national average decline and the highest of any industry.
percentage points between 1996 and 2002, and by 1.2 points between 1996 and 2004. While AWAs directly reduce union membership, their use is also a proxy for aggressive employer strategies towards unions, so a beta coefficient greater than one is quite plausible. That said, the results are a bit influenced by the 2004 estimates for mining, so I conducted a sensitivity test by using the 2003 trend estimates (that is, estimates generated before the 2004 original data became available). This reduced the correlation coefficient, though it was still a strong 0.6, and a one per cent increase in AWA coverage still led to a 0.9 per cent fall in union density in each of 2002 and 2003. The intercept is unchanged between 2002 and 2004, suggesting that the decline in trend union density since 2002 has been primarily driven by increased use of individual contracting and other forms of employer anti-union behaviour.

Table 1  Relationship between Coverage by Registered Individual Contracts, 2002, and Change in Union Density to 2002 and 2004

<table>
<thead>
<tr>
<th>Proportion of employees covered by registered individual contracts (%)</th>
<th>Change in trend union density 1996-2002 (percentage points)</th>
<th>Change in trend union density 1996-2004 (percentage points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining</td>
<td>19</td>
<td>-13</td>
</tr>
<tr>
<td>Communication services</td>
<td>13</td>
<td>-29</td>
</tr>
<tr>
<td>Finance and insurance</td>
<td>4</td>
<td>-17</td>
</tr>
<tr>
<td>Property and business services</td>
<td>3</td>
<td>-5</td>
</tr>
<tr>
<td>Government administration and defence</td>
<td>3</td>
<td>-9</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>2</td>
<td>-11</td>
</tr>
<tr>
<td>Retail trade</td>
<td>2</td>
<td>-6</td>
</tr>
<tr>
<td>Transport and storage</td>
<td>2</td>
<td>-11</td>
</tr>
<tr>
<td>Personal and other services</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Construction</td>
<td>1</td>
<td>-5</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>1</td>
<td>-6</td>
</tr>
<tr>
<td>Accommodation cafes and restaurants</td>
<td>1</td>
<td>-5</td>
</tr>
<tr>
<td>Education</td>
<td>1</td>
<td>-7</td>
</tr>
<tr>
<td>Health and community services</td>
<td>1</td>
<td>-5</td>
</tr>
<tr>
<td>Cultural and recreational services</td>
<td>1</td>
<td>-10</td>
</tr>
</tbody>
</table>

Correlation with incidence of registered individual contracts -0.63 -0.73

Equation predicting change in union density against on incidence of registered individual contracts:

\[
\text{Slope (β) } = -0.84 -1.16 \\
\text{Intercept } = -6.1 -6.1 \\
\text{r}^2 = 0.40 0.54
\]

Sources: DIR/OEA (2003) and trend estimates derived from ABS Cat. No. 6310.0. Note: The ABS did not release data on registered individual contract coverage in electricity, gas and water.

4 Similarly, when the trend data based on 2003 statistics are used, there is no change in the intercept between 2002 and 2003.
Other industries show varying rates of decline, with a tendency towards an easing of decline but with considerable divergence in the strength of those trends. In accommodation, cafes and restaurants (figure 14) a stabilisation that appeared to be taking place has been reversed. Trend density fell by over 5 points (representing nearly a third of members) in the triennium 1996-1999, but there was no fall over the period 1999-2002. However, two seemingly bad years have seen density fall by 2.5 points to 2004. Despite a low incidence of AWAs in the 2002 ABS data, the Employment Advocate records 37,000 AWAs being registered in that industry over the three years to December 2004, the third highest as a proportion of employment of any industry (OEA, 2005). While this might simply reflect the high labour turnover in the industry, it might also reflect employer strategies to further reduce the role of unions in the industry (van Barneveld, 2004), particularly amongst permanent workers. The original data suggest that most of the decline in membership has been amongst permanent workers, who might normally be the target of AWAs. Over four fifths of employment growth in the hospitality industry has been amongst casual workers, who have lower density levels anyway.

Amongst the remaining industries (figure 16), the patterns broadly fit the national picture. Government administration and defence has clawed back from a four point loss in the 1998-2001 triennium to 1.3 in the most recent. Health has halved its rate of decline, which had been a relatively modest two points, to one point. In wholesale trade the trend rate of decline has been cut by nearly three quarters, but trend density is now below eight per cent. Agriculture has similarly slowed its decline but has a ruinously low base.

6. Gender
Since 1990 trend union density has been falling amongst both males and females. However, the decline has been greater amongst males, both over the most recent triennium and over the longer term (which we shall focus on here). Between 1990 and 2004 trend density fell from 45.6 to 23.8 per cent amongst male employees and from 34.9 to 21.7 per cent amongst female employees. In 1990 female employees were only 77 per cent as likely as male employees to belong to a union, but by 2004 they were 91 per cent as likely to belong. The remaining gap between male and female union density is due entirely to the differing occupational and employment status of the two genders. Women are disproportionately concentrated in casual jobs and in low-density occupations. Based on original data for 2001, if males had the same distribution amongst occupations and casual/permanent status as females, male union density would have been only 21 per cent, that is slightly below female union density. In 1990, women accounted for 37 per cent of union members in trend terms; by 2004, 44 per cent of unionists were female.

7. Casual and Part-time Work
Most part-time jobs are casual, and so we would expect the trends for these two series to be similar. Surprisingly, this is not the case.
In the late 1980s, trend density amongst permanent and casual employees declined at similar rates. During most of the period since then the decline has been worse amongst casuals. Between 1990 and 2004 trend density fell from 46 per cent to 28 per cent amongst permanent employees, but it more than halved from 19 per cent to 8 per cent amongst casuals. Thus in 1986, a casual employee was approximately 42 per cent as likely to be unionised as was permanent employee. The figure fell slightly, to 41 per cent, by 1990, to 36 per cent by 1993, where it remained until 1997, but has since fallen markedly to 30 per cent by 2004. Still, in the most recent triennium there has been an easing of the rate of decline amongst casuals: from 3 percentage points over 1998-2001 to just 0.5 points over 2001-2004.

At the same time, of course, casual employment has grown in importance. In trend terms it accounted for 20 per cent of employees in 1990 but 28 per cent in 2004. The growth of casual employment appears to be easing – four fifths of that growth in the casual share took place in the first half of that fourteen year period. The growth in casual employment itself reduces union density, other things being equal. However, the contribution of casualisation to union decline has also eased substantially in recent years. Using shift-share analysis, it can be calculated that between 1990 and 1996, 15 per cent of the overall decline in trend union density could be attributed to increased casualisation. However, from 1996 to 2004, casualisation accounted for only five per cent of the decline in density. Over that latter period, the shift to casualisation was less important in explaining union decline than the loss of density within casual employees themselves, which explained some 15 per cent of the overall loss in density. In other words, while casualisation is a problem for unions, it is not as big a problem as it was, and is now not as big a problem as the fact that unions are losing membership amongst casuals. Thus, despite the growth of casual employment, casuals accounted for only 10 per cent of trend union members in 2004, compared to 11 per cent in 1996 (but nine per cent in 1990).

Density has also been declining amongst both full-time and part-time employees, but the part-time picture is very different to the casual picture. Amongst full-time employees trend density fell from 45 per cent in 1990 to 25 per cent in 2004; amongst part-timers it fell from 25 per cent to 17 per cent. In 1990 a part-time employee was 56 per cent as likely to be unionised as a full-time employee, but by 2004 this figure had grown to 66 per cent. Over the triennium 2001-2004, trend union membership amongst part-timers grew by 7,000, after dropping by 27,000 over 1997-2000. By contrast, membership amongst casuals dropped by 900 over 2001-2004. Whether these trends continue in later years remains to be seen, but they illustrate the notable differences between the casual and part-time picture. Part-time employees accounted for 15 per cent of union members in 1992, 19 per cent in 1997 and 22 per cent in 2004.

The divergence in trends between part-time and casual employees is due to the changing nature of full-time and part-time work. While the use of permanent part-time work is increasing, full-time work is becoming casualised. So, though the proportion of permanent employees who were
part-time increased (in original terms) from 14 per cent to 16 per cent in the five years from 1999 to 2004, the proportion of casual employees who were full-time increased from 30 per cent to 36 per cent. It is casual employment status, not part-time hours of work, that has the significant negative influence on union density: in 2004, original union density was 28 per cent amongst permanent full-time employees but 29 per cent amongst permanent part-time employees; and density was 8 per cent amongst casual full-time workers, and 9 per cent amongst casual part-time workers. So the relative growth in unionisation rates amongst part-time employees is due to the increasing permanency of part-time employment, and the increasing casualisation of full-time work.

8. Sector
Trend density has been declining consistently in both the public and private sectors. However, the decline has been more severe in the private than the public sector. Between 1990 and 2004, trend density fell from 67 per cent to 47 per cent in the public sector, and from 31 per cent to 17 per cent in the private sector. Comparing recent trienniums, the decline has eased much more in the public sector. During 1998-2001 public sector density fell by 5 percentage points, double the fall in the private sector. By 2001-2004, public sector decline was just 0.6 points, half that of the public sector. This meant that, whereas in 1990 a private sector employee was 46 per cent as likely as a public sector employee to be unionised, by 2004 she was only 37 per cent as likely.

Alongside the relative decline of density in the private sector has been the growing importance of the private sector and diminution of the public sector. In trend terms, public sector employment fell from 27 per cent of total employment in 1990 to 19 per cent in 2004. The decline of the public sector accounts for 14 per cent of the overall decline in trend union density since 1990, and this figure was relatively stable through the period.

9. Conclusion
Official figures for each of the past four years suggested union membership had grown, then shrunk, then grown, then shrunk. Taking a longer term perspective gives us a different, more measured perspective. Across a range of measures, the trend is for the rates of decline of both union membership and density to be easing. By 2004 union membership, in trend terms, had stabilised.

Applying trend estimates to state level data also indicates that across all states and territories the rate of decline of density is easing and in some states and territories there are signs of increases in trend membership and, in one state, density. Some industries – including electricity, gas and water, transport and education – are also already demonstrating that declines in density can be arrested. In others, particularly communications, finance, mining and manufacturing, continuing aggression and structural change by employers are having major severe effects on density. The gender gap in union density is closing, and only persists at all because of the different
occupations of men and women and women’s concentration in casual jobs. The density decline since 1990 has been worse amongst casual employees than permanent employees, but it has been less severe amongst part-time than full-time employees. The reason for this seeming contradiction lies in the growing (in relative terms) permanency of part-time work and the growing casualisation of full-time work. The decline is worse in the private sector than in the public sector. In addition, the continuing decline in the size of the public sector is itself responsible for about one seventh of the overall decline in union density, and this figure has been relatively stable since 1990. By contrast, the contribution of casualisation of the labour force to union decline has been much weaker since 1997 than it was in the first half of the 1990s, and it is now much less of a problem than declining density amongst casual (and permanent) employees.

An implication of the national data is that, if present trends continue, we would be likely to shortly see the end of the decline in trend density. Any such ‘projection’, of course, only concerns underlying trends, not the particular figures for any particular year. For example, it would still be consistent with original density rising and falling from time to time over the next few years. It takes no account of further changes to the external environment, the underlying rate of structural change in the economy, or the strategies of unions, and assume for example that the uptake of organising approaches amongst unions continues. Most significantly, it takes no account of the impact that forthcoming legislative changes, targeted specifically at weakening unions, may have on union density. The decline in unionism seems to have eased in the period since around 1999, coinciding with a period in which the union movement has increasingly allocated resources to organising approaches to unionism. So far, the weight of evidence suggests that this shift is starting to bear fruit.

Finally, even if current trends do continue to the point where membership and maybe even density stabilise, it is another matter as to whether membership and especially density would grow into the future. It would be hazardous to make projections based on current trends for more than a couple of years ahead. Indeed, most of the upward or downward phases in the trend cycle shown in figures 5 and 6 have only lasted for around three to four years. For unions to show growth in trend density would require at least seven years of improvement from the nadir of 1998. While not impossible, it would require substantial continuing internal reform, building on the progress that has been made in reinforcing unionised workplaces through the development of delegate structures, and developing genuine growth strategies. The figures imply that, though some progress has been made, there is still a long way to go.
## Data Appendix

### Trend Estimates of Union Density 1988-2003

<table>
<thead>
<tr>
<th>Year</th>
<th>All employees</th>
<th>Male</th>
<th>Female</th>
<th>Public</th>
<th>Private</th>
<th>Casual</th>
<th>Permanent</th>
<th>Full-time</th>
<th>Part-time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988</td>
<td>42.0</td>
<td>47.1</td>
<td>35.7</td>
<td>68.0</td>
<td>31.8</td>
<td>19.8</td>
<td>47.2</td>
<td>45.6</td>
<td>24.7</td>
</tr>
<tr>
<td>1989</td>
<td>40.9</td>
<td>46.1</td>
<td>35.0</td>
<td>67.2</td>
<td>31.1</td>
<td>19.3</td>
<td>46.1</td>
<td>45.3</td>
<td>24.8</td>
</tr>
<tr>
<td>1990</td>
<td>40.5</td>
<td>45.6</td>
<td>34.9</td>
<td>67.1</td>
<td>30.7</td>
<td>18.7</td>
<td>45.9</td>
<td>45.0</td>
<td>25.1</td>
</tr>
<tr>
<td>1991</td>
<td>40.2</td>
<td>44.8</td>
<td>35.0</td>
<td>67.0</td>
<td>30.2</td>
<td>18.1</td>
<td>46.0</td>
<td>44.7</td>
<td>25.2</td>
</tr>
<tr>
<td>1992</td>
<td>39.2</td>
<td>43.3</td>
<td>34.7</td>
<td>66.6</td>
<td>29.1</td>
<td>17.1</td>
<td>45.5</td>
<td>43.9</td>
<td>24.8</td>
</tr>
<tr>
<td>1993</td>
<td>37.5</td>
<td>41.0</td>
<td>33.4</td>
<td>64.6</td>
<td>27.6</td>
<td>16.0</td>
<td>43.8</td>
<td>42.0</td>
<td>23.9</td>
</tr>
<tr>
<td>1994</td>
<td>35.1</td>
<td>38.1</td>
<td>33.4</td>
<td>64.6</td>
<td>27.6</td>
<td>16.0</td>
<td>43.8</td>
<td>42.0</td>
<td>23.9</td>
</tr>
<tr>
<td>1995</td>
<td>32.9</td>
<td>35.7</td>
<td>29.4</td>
<td>57.8</td>
<td>30.5</td>
<td>14.1</td>
<td>39.0</td>
<td>36.6</td>
<td>22.3</td>
</tr>
<tr>
<td>1996</td>
<td>31.3</td>
<td>34.0</td>
<td>28.1</td>
<td>55.5</td>
<td>24.1</td>
<td>13.6</td>
<td>37.4</td>
<td>34.7</td>
<td>21.9</td>
</tr>
<tr>
<td>1997</td>
<td>29.8</td>
<td>32.2</td>
<td>26.8</td>
<td>54.2</td>
<td>22.9</td>
<td>13.0</td>
<td>35.8</td>
<td>33.1</td>
<td>21.1</td>
</tr>
<tr>
<td>1998</td>
<td>28.0</td>
<td>30.1</td>
<td>25.4</td>
<td>52.5</td>
<td>21.4</td>
<td>11.9</td>
<td>33.8</td>
<td>31.2</td>
<td>19.7</td>
</tr>
<tr>
<td>1999</td>
<td>26.2</td>
<td>28.0</td>
<td>23.9</td>
<td>50.1</td>
<td>20.0</td>
<td>10.5</td>
<td>31.9</td>
<td>29.4</td>
<td>18.2</td>
</tr>
<tr>
<td>2000</td>
<td>24.8</td>
<td>26.5</td>
<td>22.9</td>
<td>48.2</td>
<td>19.2</td>
<td>9.5</td>
<td>30.5</td>
<td>27.9</td>
<td>17.3</td>
</tr>
<tr>
<td>2001</td>
<td>24.0</td>
<td>25.5</td>
<td>22.2</td>
<td>47.2</td>
<td>18.6</td>
<td>9.0</td>
<td>29.6</td>
<td>26.9</td>
<td>17.1</td>
</tr>
<tr>
<td>2002*</td>
<td>23.4</td>
<td>24.7</td>
<td>21.9</td>
<td>46.9</td>
<td>18.1</td>
<td>8.8</td>
<td>28.9</td>
<td>26.1</td>
<td>17.1</td>
</tr>
<tr>
<td>2003*</td>
<td>22.9</td>
<td>24.0</td>
<td>21.7</td>
<td>46.7</td>
<td>17.6</td>
<td>8.6</td>
<td>28.4</td>
<td>25.5</td>
<td>16.8</td>
</tr>
<tr>
<td>2004*</td>
<td>22.8</td>
<td>23.8</td>
<td>21.7</td>
<td>46.6</td>
<td>17.5</td>
<td>8.5</td>
<td>28.3</td>
<td>25.4</td>
<td>16.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>NSW</th>
<th>Vic</th>
<th>Qld</th>
<th>SA</th>
<th>WA</th>
<th>Tas</th>
<th>NT</th>
<th>ACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988</td>
<td>42.4</td>
<td>42.4</td>
<td>39.9</td>
<td>45.9</td>
<td>37.2</td>
<td>52.5</td>
<td>37.0</td>
<td>39.8</td>
</tr>
<tr>
<td>1989</td>
<td>41.4</td>
<td>41.4</td>
<td>38.6</td>
<td>45.3</td>
<td>36.0</td>
<td>52.1</td>
<td>38.0</td>
<td>39.4</td>
</tr>
<tr>
<td>1990</td>
<td>40.5</td>
<td>41.2</td>
<td>38.6</td>
<td>44.7</td>
<td>35.9</td>
<td>52.0</td>
<td>39.5</td>
<td>39.7</td>
</tr>
<tr>
<td>1991</td>
<td>39.6</td>
<td>41.2</td>
<td>38.2</td>
<td>44.5</td>
<td>35.6</td>
<td>51.6</td>
<td>39.9</td>
<td>39.7</td>
</tr>
<tr>
<td>1992</td>
<td>38.6</td>
<td>40.4</td>
<td>37.0</td>
<td>44.4</td>
<td>36.0</td>
<td>49.9</td>
<td>38.5</td>
<td>38.9</td>
</tr>
<tr>
<td>1993</td>
<td>37.0</td>
<td>37.8</td>
<td>35.1</td>
<td>43.3</td>
<td>33.3</td>
<td>47.0</td>
<td>35.0</td>
<td>37.2</td>
</tr>
<tr>
<td>1994</td>
<td>35.5</td>
<td>35.3</td>
<td>34.0</td>
<td>42.1</td>
<td>30.1</td>
<td>44.2</td>
<td>30.6</td>
<td>35.9</td>
</tr>
<tr>
<td>1995</td>
<td>34.3</td>
<td>33.6</td>
<td>33.7</td>
<td>40.8</td>
<td>27.7</td>
<td>42.7</td>
<td>28.1</td>
<td>35.2</td>
</tr>
<tr>
<td>1996</td>
<td>33.3</td>
<td>32.4</td>
<td>33.2</td>
<td>38.7</td>
<td>26.1</td>
<td>41.5</td>
<td>28.0</td>
<td>34.0</td>
</tr>
<tr>
<td>1997</td>
<td>31.8</td>
<td>30.4</td>
<td>31.1</td>
<td>35.5</td>
<td>24.3</td>
<td>39.1</td>
<td>28.8</td>
<td>31.6</td>
</tr>
<tr>
<td>1998</td>
<td>29.4</td>
<td>27.6</td>
<td>28.2</td>
<td>31.8</td>
<td>22.0</td>
<td>35.4</td>
<td>27.4</td>
<td>28.7</td>
</tr>
<tr>
<td>1999</td>
<td>27.2</td>
<td>25.4</td>
<td>25.8</td>
<td>28.7</td>
<td>20.6</td>
<td>32.5</td>
<td>24.2</td>
<td>25.7</td>
</tr>
<tr>
<td>2000</td>
<td>26.2</td>
<td>24.4</td>
<td>24.1</td>
<td>27.2</td>
<td>19.8</td>
<td>31.2</td>
<td>22.2</td>
<td>23.5</td>
</tr>
<tr>
<td>2001</td>
<td>25.2</td>
<td>23.7</td>
<td>23.4</td>
<td>26.3</td>
<td>19.4</td>
<td>30.7</td>
<td>21.6</td>
<td>22.2</td>
</tr>
<tr>
<td>2002*</td>
<td>24.4</td>
<td>23.0</td>
<td>23.1</td>
<td>25.6</td>
<td>19.2</td>
<td>30.3</td>
<td>21.8</td>
<td>22.1</td>
</tr>
<tr>
<td>2003*</td>
<td>24.0</td>
<td>22.2</td>
<td>22.8</td>
<td>24.6</td>
<td>19.0</td>
<td>29.9</td>
<td>22.5</td>
<td>22.4</td>
</tr>
<tr>
<td>2004*</td>
<td>24.1</td>
<td>22.0</td>
<td>22.6</td>
<td>23.7</td>
<td>18.8</td>
<td>29.8</td>
<td>22.5</td>
<td>22.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Agriculture</th>
<th>Mining</th>
<th>Manufacturing</th>
<th>Electricity, gas &amp; water supply</th>
<th>Construction</th>
<th>Wholesale &amp; Retail</th>
<th>Accommodation, cafés &amp; restaurants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>10.9</td>
<td>44.5</td>
<td>40.2</td>
<td>65.8</td>
<td>32.3</td>
<td>14.8</td>
<td>23.0</td>
</tr>
<tr>
<td>1995</td>
<td>9.6</td>
<td>44.0</td>
<td>39.7</td>
<td>66.1</td>
<td>31.8</td>
<td>14.8</td>
<td>22.9</td>
</tr>
<tr>
<td>1996</td>
<td>8.0</td>
<td>42.2</td>
<td>38.4</td>
<td>65.7</td>
<td>31.1</td>
<td>14.4</td>
<td>22.7</td>
</tr>
<tr>
<td>1997</td>
<td>7.0</td>
<td>39.5</td>
<td>36.6</td>
<td>62.4</td>
<td>29.7</td>
<td>13.2</td>
<td>22.0</td>
</tr>
<tr>
<td>1998</td>
<td>6.5</td>
<td>36.7</td>
<td>34.6</td>
<td>57.1</td>
<td>27.8</td>
<td>11.8</td>
<td>20.5</td>
</tr>
<tr>
<td>1999</td>
<td>5.9</td>
<td>34.3</td>
<td>32.9</td>
<td>52.5</td>
<td>25.8</td>
<td>10.7</td>
<td>18.7</td>
</tr>
<tr>
<td>2000</td>
<td>5.4</td>
<td>32.1</td>
<td>31.4</td>
<td>49.8</td>
<td>25.2</td>
<td>9.7</td>
<td>17.4</td>
</tr>
<tr>
<td>2001</td>
<td>5.3</td>
<td>31.4</td>
<td>29.6</td>
<td>49.3</td>
<td>26.2</td>
<td>8.8</td>
<td>17.0</td>
</tr>
<tr>
<td>2002*</td>
<td>5.3</td>
<td>28.9</td>
<td>27.6</td>
<td>49.9</td>
<td>26.3</td>
<td>8.1</td>
<td>16.9</td>
</tr>
<tr>
<td>2003*</td>
<td>5.0</td>
<td>25.5</td>
<td>26.3</td>
<td>51.2</td>
<td>25.8</td>
<td>7.8</td>
<td>16.8</td>
</tr>
<tr>
<td>2004*</td>
<td>4.9</td>
<td>22.7</td>
<td>25.9</td>
<td>52.4</td>
<td>25.0</td>
<td>7.9</td>
<td>16.8</td>
</tr>
</tbody>
</table>
1994 50.7 65.6 39.6 14.9 52.4 53.0 35.9 24.8 31.6
1995 50.0 65.1 38.0 14.1 50.3 51.5 35.3 24.9 29.6
1996 48.7 62.9 35.7 12.4 47.3 49.9 34.6 24.5 27.5
1997 46.7 59.4 33.3 10.9 45.0 48.9 33.6 22.9 27.1
1998 43.4 53.6 30.7 10.1 43.3 47.9 32.8 20.2 28.2
1999 39.8 47.0 27.6 9.6 41.5 46.0 31.7 18.2 28.7
2000 37.4 41.0 24.3 8.5 39.9 44.4 30.9 16.7 29.0
2001 37.2 36.8 21.4 7.5 39.0 43.1 30.5 15.6 28.6
2002 37.5 33.6 19.1 7.0 38.7 42.5 30.1 14.7 28.2
2003a 37.2 31.1 17.9 6.8 38.2 42.6 29.7 14.5 28.6
2004a 36.9 29.7 17.8 6.8 37.8 43.1 29.5 15.4 28.9

See text for explanations and caveats.
a Trend estimates for 2002-2004 are subject to revision in later years.

References


