
4 Demand side factors influencing part time work

The previous Chapter identified cohort effects (or changes in part time employment within age groups) as the main factor explaining the longer term increase in part time employment. That is, it has been longer term generational changes that have been the primary reason for the increasing level of aggregate part time employment. This Chapter explores some of the reasons used to explain these changes. These reasons fall into two broad categories — those that focus on the decisions of workers to work part time (supply side theories) and those that focus on the creation of part time jobs by employers (demand side theories).

Labour supply and demand considerations interact and are difficult to disentangle. Labour supply can respond to changes in labour demand, for example, through the ‘discouraged worker’ effect — some unemployed persons may give up the search for part time employment and thereby leave the labour force when demand for labour declines and employment prospects deteriorate. Conversely, demand can respond to supply. The increased supply of women and young people willing to work part time has enabled employers to redesign workplace arrangements to accommodate the increased supply of these workers.

While any discussion of ‘demand side’ or ‘supply side’ theories is, therefore, likely to be partial and incomplete it does provide a convenient classificatory device towards understanding the forces underlying the growth in part time employment. The theories need to explain not only the growth in part time employment over time but also the relative levels of such employment across the labour market at any point in time. That is, age has been identified, in Chapter 3, as having a strong influence on the level of part time work. Part time employment was also shown, in Chapter 1, as varying considerably across industries, suggesting industry specific factors are important.

When discussing these theories, it is important to acknowledge that while today’s workplaces are able to respond freely to supply and demand requirements with respect to part time work, in the past this was not always the case. The industrial relations systems across federal and state jurisdictions have influenced the level and conditions of part time work.

Most workers, including part time workers, were covered by state or federal award systems. In the past, these systems placed restrictions on the level of part time work in terms of individual hours of work, the aggregate share of part time workers employed in enterprises, as well as the processes required to establish part time positions. These restrictions have been gradually lifted with the move away from the centralised awards system towards more decentralised bargaining arrangements.

When discussing the historical growth of part time employment it is appropriate, therefore, to understand the role of changes in workplace relations systems in this regard.

4.1 The gradual lifting of institutional constraints

Employment in Australia occurs within legal and institutional frameworks determined by state and federal workplace relations systems. Workplace relations systems have been the main mechanism by which the parties to the system such as employers, governments and unions, as well as, industrial tribunals have sought to influence the level and nature of part time employment.

In the early 1990s, around four-fifths of the workforce was covered by awards (Wooden et al. 1994). Awards are legal instruments established by the various industrial tribunals covering workers' pay and conditions in industries, occupations or sectors of the economy. Even where actual pay and conditions were the outcome of collective or individual bargaining, minimum pay and conditions were set under each award.

The industrial parties had quite different views of part time work during the 1970s and 1980s. Unions generally opposed the introduction of part time employment, which they saw as a threat to full time employment. Employers during this time attempted to increase the flexibility of working hours by applying to the tribunals to liberalise access to part time employment arrangements. In response, industrial tribunals allowed part time employment provisions in awards where they were seen as meeting the needs of industries and not undermining full time employment (Romeyn 1992).

The awards system in the 1970s and 1980s was quite prescriptive with regard to part time employment. For example, awards could include (Romeyn 1992):

- setting allowable ratios of part time workers to full time workers in the workplace;
- upper and lower limits on hours worked by part timers;

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- requirements for employer and union consent to the creation of part time positions; and
 - employment benefits such as recreation leave, sick leave to be received by part time workers.

Other clauses operated to explicitly discourage the growth of part time employment, including requirements that:

- part time employment must have union agreement; and
- part time employees only to be engaged when full time employees could not be found or if there were no unemployed union members available to work full time.

Part time work and casual employment

Another issue impacting on the expansion of part time employment is its association with casual employment. Indeed, it is often perceived that part time workers are casual workers. The term ‘casual’ employment, however, has no precise or fixed meaning in law. At common law, casual employees, unlike permanent employees, do not have an ongoing contract of employment of unspecified duration (Romeyn 1992). That is, casuals have only an occasional or irregular connection with the workplace and there is no formal expectation of an ongoing working relationship. They can be engaged on an hourly or daily basis.

Awards provide little guidance on this matter as there are no standard clauses defining casual work. Many awards simply define casual workers as those that are employed on that basis. Casual employees are often defined by reference to their lack of some work entitlements associated with the continuity of employment such as paid recreation and sick leave. A complication blurring the distinction between permanent and casual employment is that some awards provide casual employees with a paid annual leave entitlement.

Casual workers receive a wage premium or loading which varies for most awards between 15–25 per cent of the wage, but there are some awards where the loading is 50 per cent or more (Award Review Taskforce 2006). The range of casual loadings reflects their award by award establishment and historic rationale. The loading was established to compensate for non-entitlement to annual leave and sick leave, but some of the higher loadings also reflected penalties to discourage casualisation of the workforce.

As noted above, permanent and casual employment do not display a rigid dichotomy. One of the usual approaches is to utilise a distinction made by the ABS with its surveys of forms of employment, which focuses on whether or not there is an entitlement to paid leave. On this basis, in 2006, 57 per cent of part time employees were employed as casuals, compared with 11 per cent of full time employees. Overall, two-thirds of casual employees worked part time (ABS 2008a, table 2). Thus, while there is substantial overlap between casual and part time work, they should not be seen as synonymous.

Awards prescribed casual employment levels and arrangements as well as part time employment which, given their association, is likely to have also influenced the growth of part time employment. As well as the casual loading, some of the more notable provisions included:

- conversion of casual to permanent status after a period of time;
- maximum days per year that a worker could be employed on a casual basis; and
- ratios of casual to permanent workers (Romeyn 1992).

The approach taken in this paper is to concentrate primarily on part time employment (including both casual and permanent workers). The increased importance of casualisation of the workforce, of course, is relevant to the growth of part time employment given their strong association. Where relevant this connection is examined in this paper, but to keep the analysis manageable the discussion of part time employment together with these other forms of employment is kept to a minimum.¹

Gradual liberalisation of workplace relations laws

Over the last two decades, a number of changes have been made to the workplace relations systems with the common theme of freeing up the process and ability of employers to create part time and casual positions. Some of the more significant changes commenced with the introduction of the Two Tier Wage system in 1987 following the National Wage Case decision of that year. The first tier provided for a general wage increase and the second tier provided for additional increases if productivity enhancing arrangements were made. Many second tier wage agreements included the use of part time and casual employment as a means of improving productivity.

¹ Casual and other forms of employment are discussed in detail in the Productivity Commission Research Paper, *The Role of Non-Traditional Work in the Australian Labour Market* (PC 2006).

This was followed by the 1988 National Wage Case decision in which the Australian Industrial Relations Commission (AIRC) decided to build upon these initial steps. The AIRC introduced the process of award restructuring in the form of the Structural Efficiency Principle in 1988. This addressed elements of the workplace relations system that had operated to reduce potential productivity and efficiency. Examples of restructuring changes of relevance to part time employment were:

- insertion of the provision for part time and casual employment that did not previously exist in awards;
- the removal or relaxation of restrictions on part time and causal work; and
- the introduction of permanent part time provisions in some awards (Romeyn 1992).

Further liberalisation of awards came with the 1996 amendments to the *Federal Workplace Relations Act 1996* (the *WR Act*) designed to simplify awards. These amendments limited the AIRC's powers to deal with part time employment. The *WR Act* no longer privileged one form of employment over another and sought to have such matters determined at the workplace level. Similarly, under state jurisdictions workers and employers increasingly became able to determine such part time working arrangements.

It is difficult to determine the impact of the past restrictions and their subsequent liberalisation on the level and growth of part time employment. Indeed, it is not possible to estimate the extent of compliance with these award restrictions. This is especially the case with small firms where knowledge of awards could be limited (Pocock, Buchanan and Campbell 2004). Award restrictions limiting casual and part time employment were more likely to be breached than other conditions of awards, such as actual rates of pay (Wooden et al. 1994).

The changes in these institutional arrangements, moreover, should not be seen as representing a completely exogenous impact on the level and growth of part time employment. The workplace relations legal frameworks may rather be seen as responding, albeit with considerable lags, to the demographic and competitive pressures for greater workplace flexibility in the form of ease of availability of part time employment.

A number of conclusions can be drawn when considering the impact of workplace relations arrangements on the level and increase in the numbers of part time workers. Past workplace relations arrangements have operated, to some extent, to reduce the level of part time employment. The liberalisation of these working arrangements during the 1990s operated to encourage or, at least, facilitate the growth in part time employment. But it has not been possible to estimate the likely magnitude of these effects. Indeed, the high level of part time employment in Australia and the expansion of part time employment during the period of workplace restrictions suggest that institutional impediments were not strictly binding.

4.2 Demand side theories used to explain the level and rise in part time employment

A number of demand side theories have been used to explain the level and growth of part time employment. These theories attempt to explain the increasing share of workers employed part time as a consequence of the increased attractiveness of part time workers to employers. This increased attractiveness can arise from a number of sources such as the lower cost of employing part time workers compared to full time workers, and the flexibility offered by part time workers in arranging the operations of the business. This can be either in the short run in response to downturns in demand or the longer run in response to developments in consumer markets or technological change.

Reducing labour costs

Over the past three decades, Australian businesses have faced increased competition from reductions in border protection (tariffs and import quotas), financial and capital market liberalisation and growth in international trade associated with the growing globalisation of the world economy. These pressures have provided employers with strong incentives to reduce costs, including labour costs.

Profit maximising employers will hire part time or full time workers on the basis of a comparison of their relative productivity/cost ratios. That is, how much output each type of worker generates per dollar spent on their employment (this includes wage costs and non-wage costs such as sick leave, annual leave, staff administration, training, etc).

Whether part time workers have higher or lower effective cost per hour worked depends upon their terms and conditions, fixed costs per employee (such as

training) and their level of productivity. In some other countries, such as the United States, employers can treat part time workers differently from full time workers. In the United States, employers can provide their part time workers with less favourable non-wage benefits lowering their overall employment costs (see, for example, Euwals and Hoyerbrugge 2004). However, the long term shift to part time workers in Australia is difficult to attribute simply to cost savings strategies. Awards provided permanent part time workers with pro-rata wages and conditions.

That said, the casualisation of the workforce over the past three decades is sometimes seen as contributing to the growth in part time work with over half of the part time employees employed on a casual basis. Casual employees are not entitled to the same non-wage benefits (such as annual and sick leave) as permanent workers which reduces labour costs. But they do receive a casual loading as compensation for loss of such benefits. As noted above, most casual loadings range between 15–25 per cent.

Whether or not the casual loading fully compensates for the loss of entitlements is a matter for debate. For example, Watson (2005) has found that female part time casuals earn around 10 per cent less than female part time permanents, after controlling for the differing characteristics of casual and permanent workers and taking into account the relevant loadings.

It is generally easier to change a casual employee's hours of work. This can reduce labour costs for a business by maximising the utilisation of staff (see below). But any cost advantage in the employment of casual part time employees does not appear to have been associated with the relative increase in their employment. Casual part time employees have been a declining share of part time employees — dropping from 66 per cent of part time employment in 1992 to 57 per cent in 2006 (ABS 2008a).²

Also, part time workers can have the same fixed costs as full time workers, (for example, recruitment and training costs and staff administrative costs) but work fewer hours to enable the employer to recover those fixed costs. They may also require more supervision than full time workers given their less intensive contact with the businesses operations.

In general, a simple cost reduction strategy does not appear to have been the major driver of the growth of part time employment over the past two decades.

² The ABS does not use the terms 'casual' and 'permanent' employees but reports on 'employees without/with paid leave entitlements' respectively. In this paper, 'permanent' employees are deemed to be those 'with paid leave entitlements' and 'casual' employees are those 'without paid leave entitlements'.

Short term business flexibility

Other demand side explanations for the growth in part time work are based on the desire of employers to offer part time work as way of increasing the flexibility of their business operations. These changes can be either short term in response to upswings and downturns in the business cycle, or a longer term strategy in response to growing competition and changing service requirements, notably peak periods of demand.

As noted above, profit maximising employers will seek to employ labour up to the point where the new worker can produce enough output to cover the additional costs of employment. That is, where the marginal revenue generated by the worker equates to the worker's marginal cost to the business. When demand for labour changes, employers would be indifferent between varying the hours worked per worker or varying the number of workers if the cost of employing workers was only the wage rate. For, example, if demand for the firm's output fell then employers could reduce the hours worked per person or the number of workers to achieve the same reduction of the firm's output. That is, changing the number of hours worked per person or the number of workers are perfectly substitutable strategies for varying the productive size of the workforce.

However, the wage rate is not the only cost of employing labour and changing the number of hours worked per person may have implications for productivity. That is, changing the number of hours worked per person or the number of workers are not perfectly substitutable strategies for the employer.

There are costs of varying the number of workers — there can be redundancy payments associated with laying-off workers and recruitment and training costs associated with engaging additional workers when business conditions improve. There may be time delays in laying off workers which leads to unproductive down time. Delays in recruitment mean that profitable business opportunities may be lost because of the inability to quickly increase production in the face of an expansion of demand. The use of part time workers can enable working hours to be more quickly tailored to business activity levels reducing these time related costs.

There may also be productivity differences between full and part time workers. A reduction in working hours may increase productivity due to reduction in fatigue and boredom. Alternatively, a reduction in hours may lower productivity as non-productive activities such as meal breaks, setting up and shutting down times will represent a larger proportion of the overall working day. Also, part time employees may be subject to the same cost overheads, such as staff administration and ongoing training, as full time employees but with fewer hours to spread those costs. Profit maximising employers will decide to employ part time or full time

workers taking into account these and other factors and ascertaining the effect upon their relative productivity to labour costs.

The relationship between the growth in part time employment and business conditions was examined by looking at the quarterly movements in the share of part time employment in total employment and quarterly changes in the demand for labour as measured by changes in the aggregate hours of employment over 1984–2007. Details of the bivariate analysis are at table C.1 in Appendix C. Over the entire period there is a negative but statistically insignificant relationship between movements in the part time share and aggregate hours. But there appears to be a structural break in the relationship around the mid to late 1990s.³ The data for the mid 1980s to mid 1990s show a positive relationship between movements in aggregate demand and the share of part time employment — but this is statistically insignificant (figure C.1). From the mid 1990s, however, there does appear to be a significant inverse relationship between the changes in demand and the share of part time employment. This suggests that part time employment has been increasingly used as a swing workforce mechanism to respond to changes in aggregate demand.

In the short term, this strategy of employing part time workers can be a way of spreading the employment adjustment in response to an economic downturn in terms of hours worked rather than reductions in the number of employees. Such a strategy may be adopted when employers expect a downturn to be of a short but unpredictable length, and they wish to maintain contact with their current staff to enable a quick response to the subsequent increase in demand.

If this explanation is to be confirmed, it would be expected that part time employment would be relatively less responsive to the business cycle than full time employment (it may even be countercyclical). Also, that there would be an increase in the share of part time workers wanting to work more hours during economic downturns.

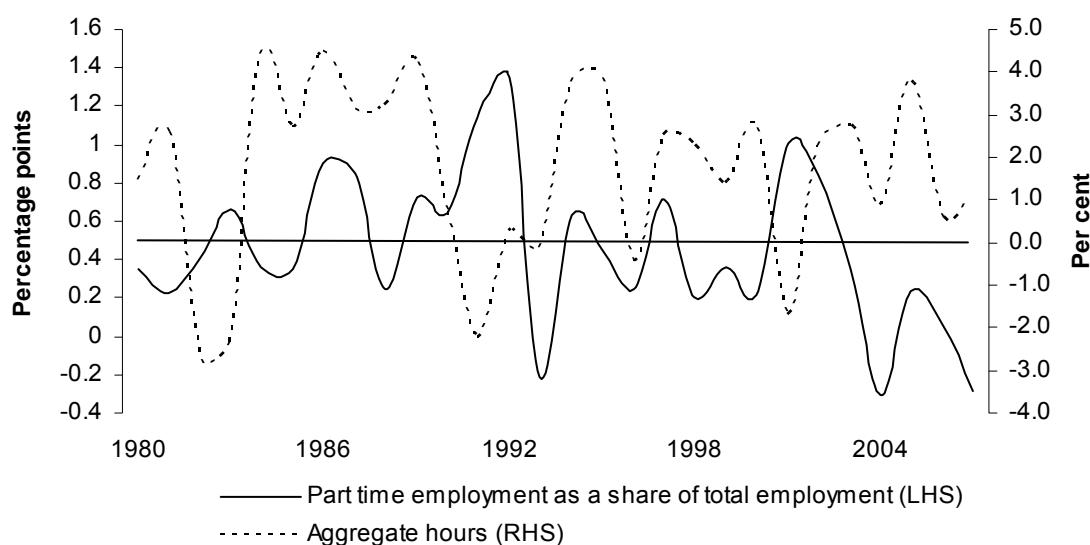
The OECD (1995) found that the institutional arrangements and policies that businesses and workers can use are the main determinants of whether it is employment or hours that bears the main response to the fall in demand for labour. For example, temporary layoffs are more common in the United States than in Europe where partial unemployment benefits exist and reductions in working hours are the more common adjustment mechanism.

³ The Chow breakpoint test indicates a structural break in the relationship around the mid to late 1990s (table C.2).

Lester (1999) found that, in Australia, the main response to a change in labour demand occurs through changes in the number of persons employed. However, around one-quarter of the cyclical change in labour demand occurs through changes in average hours. Lester found that the change in hours of full timers and part timers varied less than that for average hours as a whole. Therefore, much of the change in average hours came about from changes in the share of part time and full time workers.

The share of part time employed in total employment increases during downturns. As can be seen from figure 4.1, growth in the share of workers in part time employment since the 1980s has fluctuated considerably from year to year. Labour demand is measured by aggregate hours worked and varies with changes in output or economic activity through changes in the number of persons employed and the average hours worked.⁴

Figure 4.1 **Changes in aggregate demand for labour and composition of employment, 1980–2007**



Data source: ABS, (*Labour Force, Australia detailed — electronic delivery*, Cat. no. 6291.0.55.001 table 1 and table 9).

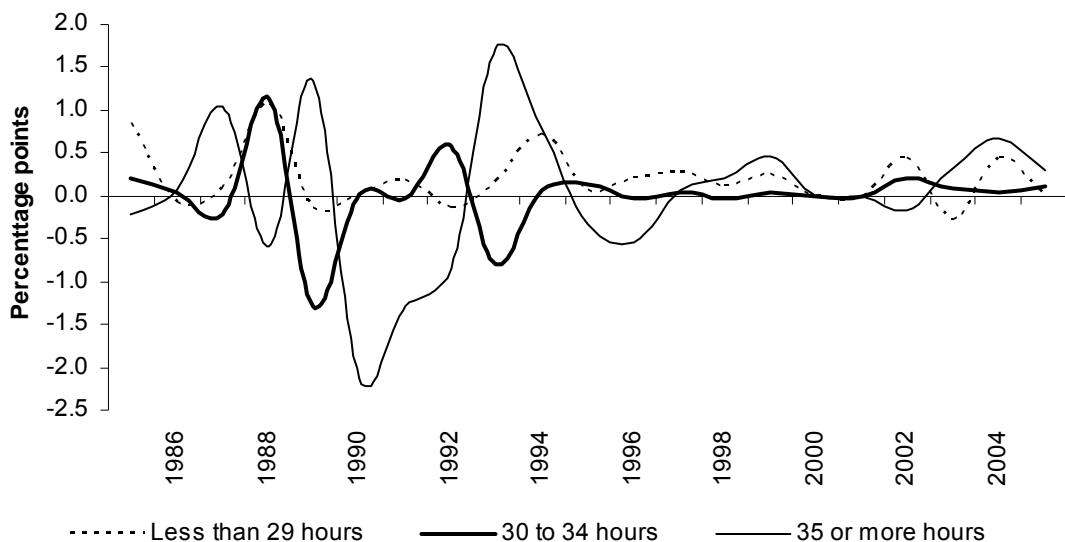
⁴ Labour demand is more completely represented by employment plus unfilled job vacancies. For ease of exposition unfilled vacancies have not been included. This should not materially affect the analysis as unfilled vacancies are very small compared to employment numbers and vary procyclically thereby reinforcing movements in aggregate hours as a measure of aggregate demand.

Growth in part time employment in terms of shares of total employment quickened during periods of weak labour demand in the early 1990s and 2000s. The number of part time employed as a share of the working age population also continued to increase during these periods — that is, there was an expansion in the absolute number of part time employed persons. During the year prior to recoveries in labour demand following the downturns, the share of part time employed fell significantly. The part time employment to population share also fell during these periods. That is, there is a movement back to full time employment immediately prior to strong growth in aggregate labour demand.

The nature of the adjustment process can be explored by looking at the changes in the hours worked by part time workers during economic downturns. Growth in the number of workers working longer part time hours would be consistent with a downshift in the hours worked by previously full time workers.

This labour market adjustment process is confirmed when the pattern of working hours within part time employment is examined (figure 4.2). Full time employment for men and women fluctuates markedly more than part time employment of either short duration (less than 30 hours per week) or longer duration (30–34 hours per week).

Figure 4.2 Movement in hours worked per week — change in employment population ratio, 1986–2006



Data source: ABS Data source: ABS, (*Labour Force, Australia detailed, Quarterly*, Cat. no. 6291.0.55.003, Table 13).

Bivariate regression analysis was undertaken on the relationship between movements in hours worked per week. It was found that movements in the percentage of the working age population employed varied inversely between full time and part time employment (30–34 hours). A one-percentage point fall in the full time employment to population ratio was associated with a 0.3 percentage point rise in the part time employment (30–34 hours) to population ratio (table C.3 in Appendix C). This implies that full time and part time employment are in part substitutes.

No relationship was found between full time employment and shorter durations of part time employment. The relationship between part time employment of differing durations was found to be positive, that is part time employment, 30–34 hours per week and less than 29 hours per week, moved broadly together. Thus, part time employment of varying intensities are similarly affected by labour market conditions.

In summary, the findings are consistent with some loss of full time employment and increased part time employment during downturns in demand as a result of working hours being reduced. This is unwound during subsequent periods of recovery in demand.

Industry use of part time employment

The previous section indicated that the aggregate share of part time employment tended to rise during periods of downturn in labour demand. It is unclear whether this change in part time employment is the result of employers across a range of industries reducing their workers' hours or demand changes falling disproportionately on those employers employing full time employees. This section examines these issues at the industry level to gain a fuller appreciation of the factors underlying the changes in part time employment.

The relative contributions of growth in part time employment within industries and the changing employment mix across industries can be isolated by decomposing changes in part time employment. Details of the methodology employed for this task are at box 4.1.

Box 4.1 Decomposing the aggregate change in part time employment

The aggregate change in the part time share of employment is given as:

$$PT / E = \sum_{i=1}^n \left(\frac{PT_i}{E_i} \times \frac{E_i}{E} \right)$$

$$\Delta \left(\frac{PT}{E} \right) = \sum_{i=1}^n \left(\left(\Delta \left(\frac{PT_i}{E_i} \right) \times \frac{E_i}{E} \right) + \left(\frac{PT_i}{E_i} \times \Delta \left(\frac{E_i}{E} \right) \right) \right)$$

Where, PT/E is the aggregate share of part time employment, PT_i / E_i is the share of part time employment in industry i and E_i / E is the share of aggregate employment (E) in industry i . The aggregate share of part time employment is thus the weighted average of the industry shares.

The term, $\Delta(PT/E)$ is the change in aggregate share of part time employment, the second term $\Delta(PT_i / E_i) \cdot E_i / E$ is the change in the aggregate part time share due to changes occurring within industry i with its share of employment held constant and the last term $PT_i / E_i \cdot \Delta(E_i / E)$ is the change in share due to the changing industry i share of aggregate employment with the part time share of employment in industry i held constant — called the change in industry structure.

The estimated effects are presented in figure 4.3. For example, in 1991, the aggregate part time employment share increased by just over 1.2 percentage points. One percentage point of this increase arose from industries generally increasing the share of part time employment in their workforces. The remainder arose because the employment gain was disproportionately experienced by those industries with workforces with higher shares of part time employment.

The figure shows that it has been the change in part time employment shares within industries that has been the main determinant of changes in aggregate part time employment shares particularly, in relation to the short term variations. Over the longer term, the differential growth in employment across industries (change in industry structure) has added little to the growth in the share of part time employment. Indeed this contribution has been slowly declining over time.

The figure also sheds light on the reason for growth in part time employment during periods of reduced labour demand particularly in 1991 and 2001. While the downturn in demand was biased slightly against those industries that employed more full time workers, the main reason was the expansion of part time employment across industries in general.

Figure 4.3 Contributions to the aggregate change in part time employment shares, 1986–2007



Data source: ABS, (*Labour Force, Australia detailed, Quarterly*, Cat. no. 6291.0.55.003, Datacubes EO5_nov84 and E06_aug94).

The flattening of the growth in the share of part time employment in total employment since 2004 has been largely due to the reduction in part time employment share within industries. The changing industry structure has also operated to reduce the aggregate part time share in recent years but has been a minor factor.

Table 4.1 presents the components of the change in part time employment over the period 1986–2007 for both men and women. Over this period, the share of men working part time increased by 8.6 percentage points with most of this change (7.3 percentage points) arising from industries generally employing more men on a part time basis. Only 1.3 percentage points of the increase resulted from the stronger employment growth of those industries which have a relatively large share of their male workforces employed part time, that is from the industry structure change.

The overall growth of the share of part time employment for women and the broad components of this growth were very similar to that for men. Two industries with already relatively high shares of part time employment, retail and health and community services, contributed almost half of the increase of the within industry effect.

Table 4.1 Change in the share of part time employment 1986–2006
Percentage point change

	<i>Men</i>	<i>Women</i>	<i>Total</i>
Change within industries	7.3	6.5	7.7
Change in industry structure	1.3	1.0	2.4
Total change^a	8.6	7.3	10.1

^a The average of the effects for men and women are less than the total effect because, over this period, the share of women in the workforce has increased. As a higher proportion of employed women work part time than men, this shift in the gender balance of the workforce also contributed to the rise in part time employment both within each industry and, in particular, the effect of the changing industry share of employment. Those industries that employ more women that have generally grown the fastest.

Data source: ABS (*Labour Force, Australia detailed, Quarterly*, Cat. no. 6291.0.55.003, Datacubes E05_nov84 and E06_aug94).

In general, the change in industry structure contributed 24 per cent (2.4/10.1) of the change in the share of part time employment since 1986. Dawkins and Norris (1995) came to a similar conclusion when examining the growth in the incidence or share of part time employment over an earlier period 1978–93. They found that only about 20 per cent of the growth of the share of part time employment was explained by the change in industry structure.

Thus, the long term growth in the share of part time employment has been mostly associated with broad changes in the manner by which employers manage their workforces across all industries. That is, the growth of service industries that employ large numbers of part time workers explains little of the growth in part time employment. But the service sector industries are the largest employers of part time workers and the working arrangements in these industries may explain the high level of part time employment in those industries. It is useful, therefore, to examine the factors which have caused the part time share to grow within industries as well as the demand side reasons for the relatively high levels of part time employment in the service sector.

Longer term business flexibility

Over the past three decades, there has been an increasing requirement for businesses to become more flexible to respond to consumer demands. The introduction of new technology to monitor sales and stock levels has allowed businesses to more accurately schedule their labour requirements (Johnston et al. 2000). For example, the use of scanners and computers in retailing has produced greater knowledge of the ebb and flow of sales enabling the more accurate alignment of labour needs. Part time workers can then be recruited to meet identified peak periods in demand. The requirement for increased organisational flexibility has been identified as a factor

underpinning increased part time employment by Euwals and Hogerbrugge (2004) using Dutch data.

Importantly, the liberalisation of retail shopping hours has resulted in opening hours no longer conforming to the standard working week. In response, various service industries, especially retailers and the hospitality sector more generally, have restructured their operations and increased the number of workers employed on weekends and non-standard hours (Johnston et al. 2000). This has increased the demand for part time workers — a case study of a major supermarket chain in Australia by Price (2004) confirms that a key aspect of their organisational flexibility has been the employment of part time workers. Dawkins and Norris (1995) note that increased working hours flexibility has increased the productivity of part time workers compared to full time workers in some service industries.

Dawkins and Norris (1995) also note that part time employment has been encouraged by technological change in the Australian and United Kingdom finance and banking industries. Firms are able to undertake ‘back office’ work in central locations, and at different times of the day. For example, most routine data entry work is undertaken in the evenings, usually by female part time workers.

These changes represent examples of increased workplace flexibility. Workplace flexibility can be conceptualised as the capacity to quickly move staff resources to match operational requirements. But it is difficult to measure directly. It is possible to develop proxy measures by looking at the changes in the nature of work and the shift away from standard working arrangements. Contained in table 4.2 below are several measures of workplace flexibility related to working arrangements other than the standard working day and week. The table also separates permanent from casual employees to isolate this confounding effect when comparing full time and part time employment.

Working part time independently of whether the work is permanent or casual is associated with increased likelihood of non-standard working arrangements, that is working other than only Monday to Friday. It is also associated with working arrangements which vary in terms of the days worked. As shown in the table, an increase of non-standard working arrangements — less Mondays to Fridays worked and more variation in the days worked — from permanent full time to casual full time, to permanent part time and finally to casual part time.

Table 4.2 **Types of flexible working arrangements, 2003**

Per cent of workers

	<i>Full time permanent</i>	<i>Full time casual^a</i>	<i>Part time permanent</i>	<i>Part time casual^a</i>
Working day flexibility:				
Worked usually Monday to Friday	74.3	55.9	28.2	16.6
Days worked vary on a weekly or monthly basis	10.0	12.5	17.3	27.6
Other ^b	15.7	31.6	54.5	55.8
Hours flexibility:				
Start and finish times are fixed	67.3	54.0	75.9	61.8
Start and finish times vary daily	22.7	30.6	15.8	20.6
Start and finish times vary but not on a daily basis	10.0	15.4	8.3	17.6

^a Defined as those not entitled to paid holiday and paid sick leave. ^b 'Other' is 'usually works weekdays only', 'usually works weekends only', and 'works some weekdays and some weekends'.

Source: ABS (*Working Arrangements Australia*, Nov 2003, Cat. no. 6342.0).

However, working part time is not associated with greater flexibility with regard to daily working arrangements, that is, start and finish times. Thus, it appears that part time work provides the opportunity of a limited type of flexibility involving 'programmable responses' to predictable labour requirements regarding days of the week to work. Full time positions provide the daily flexibility to working arrangements in response to more short term contingencies. Casual jobs whether full or part time provide greater hours flexibility than their permanent equivalents.

This differentiation of the nature of flexibility offered by full time and part time workers is consistent with the characteristics of the persons working under these respective arrangements. For instance, many part time workers combine work with other activities, such as education or child raising and may not have the flexibility to change their daily hours of work on a short term basis. These workers are more able to work weekends or vary the days of the week that they work.

Segmented labour markets and labour force gross flows

The theories discussed above point to part time work being used strategically within firms or industries as a means to meet changing business requirements. Under this approach it was implied that, the characteristics of full time and part time jobs are essentially the same, except the hours worked by individual workers vary.

Another set of demand side theories views the labour market as segmented. This set of theories can be traced back as far as the classical economists of the 19th century, such as John Stuart Mill, who saw the labour market as composed of non-competing groups on account of barriers to mobility (these can be educational, social or geographic) operating to make it difficult for workers in one part of the labour market to move to another (de Marchi 2008).

The literature regarding segmented labour markets theories is extensive, with many variations on broad themes. It is not proposed here to comprehensively cover this literature, but rather to simply provide an outline of the key common arguments and relate these to possible explanations for the level and growth of part time employment. Under this broad group of theories, part time jobs and workers are seen as largely existing in different labour markets from full time jobs and workers.

The various labour market segmentation theories address different areas of interest (for example, pay or job mobility/stability) and different types of labour market segmentation (for example, job, race, age, gender) (McNabb and Ryan 1990). A common theme is that of a hierarchy of work organisation with little mobility across levels of work. Dual labour market theories can be seen as restricted versions of the segmented theories in that the labour market is only divided into two segments — the primary (core) and secondary (periphery) labour market.

A key feature of these theories is that conditions in the product market influence the nature of business' relationships with their workforces. These theories posit a division between businesses and industries which cater for stable markets and those that service unpredictable markets. Larger businesses, or certain industries, are seen as generally facing more stable goods and service markets which allows them to develop strategies to face the competition on non-price grounds. This, combined with the increased labour specialisation within businesses, leads to the valuing of firm specific skills and the development of internal labour markets to generate greater worker commitment to the business.

Moreover, the performance of workers in the primary segment can be difficult to monitor and such workers are paid higher than the market clearing wage to encourage loyalty and reduce shirking by increasing the potential costs of dismissal. These jobs are high paying, permanent, highly skilled and career oriented. The resultant excess supply of workers to the primary labour market leads to job rationing.

Smaller businesses or industries in the secondary labour market have less influence over competitive pressures, with their workers having fewer firm specific skills or indeed even general skills. The secondary or periphery labour market is characterised by low paying, low skilled and insecure jobs. Workers' performance

in this market is more easily monitored with less emphasis on dismissal threats to maintain performance. Therefore, wages tend to be set at the market clearing level.

Even within businesses, there may be a core and secondary labour market operating. This can occur within the firm as some activities are seen as not requiring skill or commitment to the firm. Jobs are created to attract individuals who will be willing to work under those terms.

A key proposition of the dual labour market approach is that there is a separation between the labour sub-markets with little flow of workers between them. In that theory, productivity is seen as a function of job characteristics rather than worker characteristics, comparable workers can receive different levels of remuneration. Many secondary workers are seen as capable of performing in the primary labour market, but rationing of access to good jobs denies them this opportunity. Without this separation, differences in wages and conditions would normally be competed away. The theories of labour market segmentation underpin (even if only implicitly) the view that part time employment provides inferior wages and conditions.

Such labour market duality is seen as the result of the characteristics of the job not the workers. But there can be a parallel duality in the characteristics and attributes of many of the workers who may be attracted to or offered these jobs. Workers who may be expected to have lower commitment to the firm and lower skill levels tend to make up workers in the secondary labour market. These workers may include younger workers, married women with family responsibilities and members of disadvantaged groups. Thus, the supply side of the labour market can play a role in explaining the creation of secondary jobs but it is less important than the demand side in explaining the instability of such jobs.

In the Australian context, dual labour market theories do not provide a strong or persuasive explanation for the level and growth in permanent part time work. Rodgers (2004), using Wave 1 HILDA data and controlling for the different worker and job characteristics, found no difference between full and part time hourly wages. Booth and Wood (2004), using Wave 1 and 2 HILDA data, found an hourly wage premium in favour of part time workers.

Nonetheless, concerns remain that, in particular, casual part time jobs are inferior in terms of training, conditions, mobility and security (Pocock, Buchanan and Campbell 2004). These problems are seen as spilling over from casual to permanent part time jobs. Indeed, permanent part time workers are seen as vulnerable to hours and earnings that vary at short notice.

Tilly (1991), looking at the US labour market expanded the segmentation theories. He suggested that there are three kinds of part time employment, differentiated according to whether supply or demand forces are the prime motivators:

- Short time part time work occurs simply where there is a temporary downturn in demand and employers reduce workers' hours;
- Retention part time jobs are those which have the characteristics of 'good jobs' in terms of pay, career development and conditions and are provided by employers to retain or attract valuable employees who may wish to work part time; and
- Secondary part time jobs are considered 'bad jobs' in terms of low pay, high turnover and poor career paths. They are provided to attract employees who will accept such working arrangements and created in parts of the organisation where workplace flexibility is most important.

Thus part time jobs are not confined to the secondary labour market and the distinction between 'good' and 'bad jobs' breaks down to a range of jobs of varying characteristics. Indeed the distinction between full time and part time casual and permanent jobs fits within Tilly's classificatory structure.

Tilly's segmentation of the labour force into different types of part time workers appears to be consistent with the Australian case study on a supermarket chain carried out by Price (2003) and a survey of retailers by Scully and Brosnan (2002). Price found that permanent workers, whether full time or part time, were treated as core workers while casual part time workers were largely peripheral. However, the development of internal career paths within the business, whereby, workers recruited as casual part time workers can become permanent and then full time workers is not consistent with rigidly segmented working arrangements.

Scully and Brosnan found that part time workers were employed for a variety of reasons ranging from those related to peripheral aspects of employment, such as to replace permanent staff on leave and to meet daily fluctuations in demand to keeping valued employees who wanted to work part time.

Trends in employment transitions

The previous section raised the question of whether workers move between part time and full time employment. Such movements would suggest that labour markets are not segmented — at least between aggregate part time and full time employment.

The ABS Monthly Labour Force Survey collects data on the gross labour force flows. These data describe the monthly movements of people between full time employment, part time employment, unemployment and not in the labour force status.

The gross labour force flows reflect decisions of individual persons and employers responding to idiosyncratic factors. As a consequence of these individual decisions there are ‘high baseline’ or background flows between labour market states which are relatively stable through time. But the labour force gross flows also respond to broad economic and social changes. The flows are relatively large compared to labour force stocks and demonstrate that only small changes in gross flows can underpin the sometimes large shifts in the labour force stocks of employment and unemployment.

The changes in the gross flows over the past three decades were investigated to see whether any changing patterns have emerged regarding the flows into and out of part time employment. This helps to address questions about the mobility between part and full time employment, as well as the process of workforce adjustment to economic downturns and the stability of part time employment.⁵

The trends in monthly transition probabilities between 1980–2007 are shown in figure 4.4. These transition probabilities show the likelihood of a shift in employment status in any given month, for example, how likely it is for a woman to move from part time to full time employment each month, or for a man to move from non-employment to full time employment. The time series are adjusted to remove seasonal and irregular factors.

Figure 4.4 shows trends between 1980–2007:

- Men and women employed part time were less likely to change their employment status than those employed full time. In 2007, around 83 per cent of women and 72 per cent of men remained in part time employment each month. This compares with 90 per cent of women and 95 per cent of men remaining in full time employment each month.

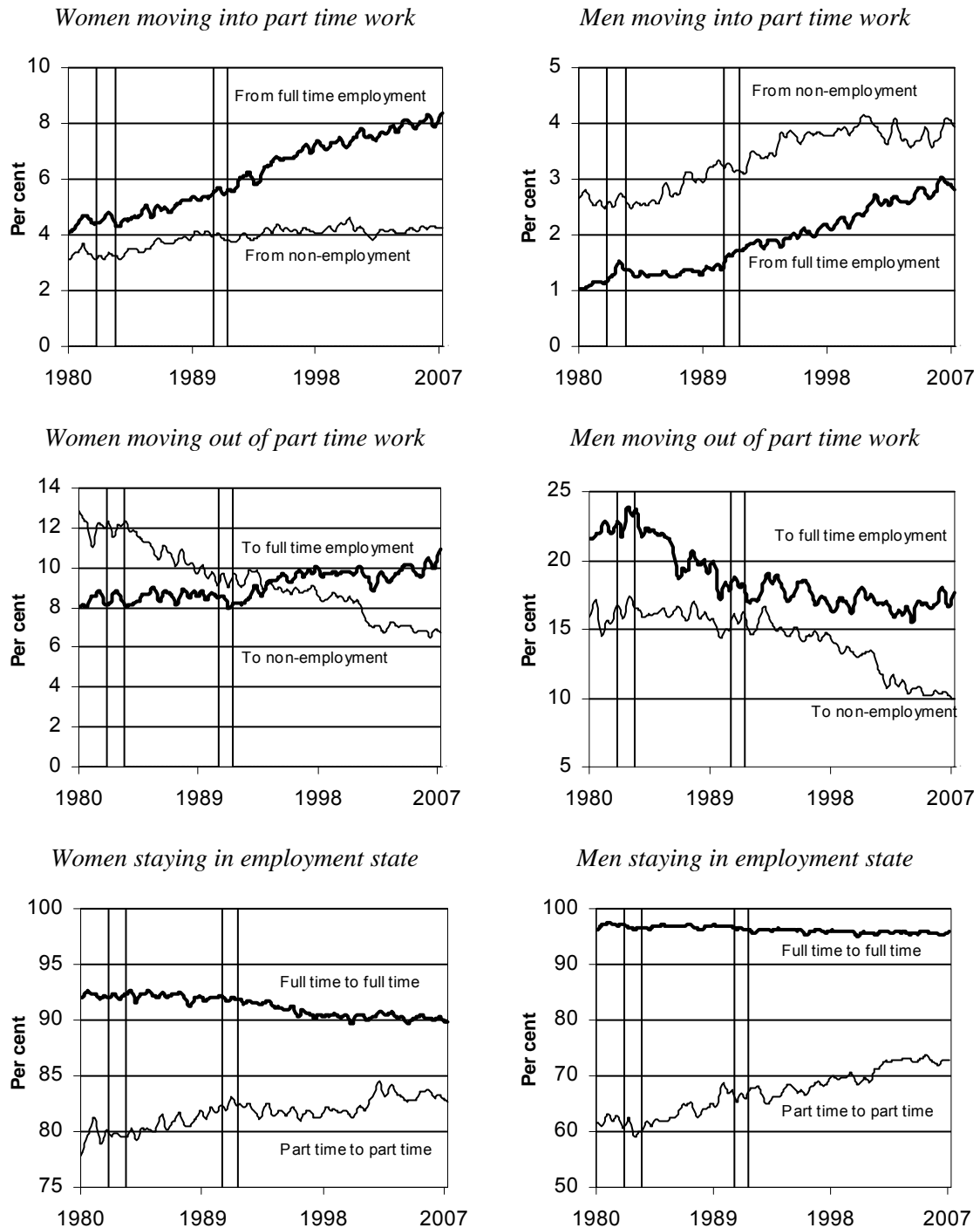
⁵ The gross flows data and the associated probabilities will overstate the movement between full time and part time jobs. In addition to people actually moving from a part time job to a full time job, some of the gross flows between part time work and full time work include people working part time jobs who have worked enough overtime in the reference week to be counted as full time workers. In addition, when these workers return to their normal hours of work, they will also be included in the flows from full time work to part time work. These issues only affect flows between part time and full time work rather than flows to or from unemployed and not in the labour force.

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- The stability of part time employment increased, particularly for men. Conversely, the probability of remaining employed full time fell slightly for both men and women. There are two reasons for this increased stability of male part time employment. First, during the 1980s, men became less likely to increase their hours and move into full time work (down from around 20 per cent in the 1980s to 16 per cent per in 2007 per month); and from the early 1990's onwards, men became less likely to move from part time to non-employment (down from 15 to 10 per cent per month).
 - Part time work has also become more stable for women, but for different reasons. Part time employment has become more stable for women mainly because they are less likely to leave part time employment for non-employment (down from 12 to 6 per cent per month). Indeed, women employed part time are marginally more likely to move into full time employment at the end of the period compared to the early 1980s (up from 8 to 10 per cent per month).
 - Part time work has become a more common destination for men and women leaving full time work. Non-employed men are more likely to enter part time employment. This latter trend has plateaued in recent years.

These trends suggest that there is considerable dynamism in the labour market with large numbers of men and women changing their employment status over the course of a year. That is, the full time and part time labour markets, at the aggregate level, do not display segmentation.

But while part time employment remains an important transition state or stepping stone between non-employment and full time employment, this role has diminished over the period for men. Part time employment has increasingly become a more stable employment state with less monthly movement either to non-employment or full time employment.

Figure 4.4 Trends in transition probabilities^a of gross employment flows
 Per cent of men or women in employment category monthly flows, 1980–2007



^a Each transition probability is calculated as the flow in a month divided by the stock of its initial labour force state in the previous month. The trends are estimated using a method developed by the US Bureau of the Census, the X11 method, which involves applying moving averages to seasonally adjust the data. The vertical columns indicate periods of recession. In April 2001, there is a series break due to changes in survey questionnaire, although definitions of labour market states remained consistent.

Data sources: ABS (*Labour Force Australia detailed — electronic delivery*, Cat. no. 6291.0.55.001); ABS (*Labour Force, Australia*, Cat. no. 6203.0).

Sensitivity of employment transitions to macroeconomic changes

Labour force gross flows data provide information on the manner by which the labour market adjusts to macroeconomic changes. This can test whether a large share of the flows between the full time and part time labour markets responds to reversible short term changes and are not determined by longer term structural factors of the type identified by the segmented labour market school of theories. The dependent variables to be tested are the transition probabilities associated with part time work, full time work and non-employment. Cyclical labour demand is represented by the total hours worked in the labour market divided by the total working age population.⁶

The estimated transitional probabilities indicate that for women, a fall in labour demand reduces the probability that women will move from part to full time employment. Also flows from part time employment to non employment increase. When labour demand improves these flows are reversed and there are increased flows from non-employment to both part time and full time employment. However, the flows from full time to part time employment are not affected by the changes in labour demand.

For men the story is quite different. A fall in labour demand sees more full time employed men moving to part time employment. Also, there is increased flow from both part time and full time employment to non-employment. By contrast, a rise in labour demand sees an increase in the flow from non employed to full time employed but not an increased flow from part to full time employment. Nor is there an increase in the flow from non employment to part time employment.

Both men's and women's gross labour flows show that the labour market adjusts both in terms of numbers of workers and average hours worked per worker in response to macroeconomic shocks. The labour adjustment process is generally stronger for men's gross flows compared to those for women.

⁶ This removes the confounding effect of the overall growth of the labour force over the period. An ordinary least squares (OLS) regression approach was used initially. Where regressions showed significant evidence of autocorrelation, a Prais Winsten model was used. Complete results are included in table C.4 at Appendix C.

4.3 Summary

There are a large number of competing explanations for the level and growth of part time employment. None appear to fully explain or describe the varied and complex historical experience of part time employment. Indeed, the failure of any demand side theory to fully explain the growth of part time employment implies that the story of part time employment is likely to be a product of supply as well as demand factors.

Institutional factors, such as workplace arrangements, operating mostly through industrial awards, have acted to reduce the level of part time employment below the level it would have otherwise been, especially during the period prior to liberalisation of those arrangements in the 1990s.

But it is likely that their influence was secondary to broader market forces given the high and growing level of part time employment during this period. In any case, it is as likely that this liberalisation was a response to the market pressures to free up the workplace. Over the longer term, such institutional arrangements appear to have been more shaped by, than to have shaped, the nature of the workplace in the face of broader market forces.

Where institutional factors really come into play is the reduction on restrictions on business operations, particularly in the services sector. This opened up new opportunities for businesses with attendant demand for part time labour.

The segmented labour force school of theories do not explain the overall growth of part time employment in Australia well. Both the evidence from case studies and aggregate labour force gross flows data do not support the view that the labour force is segmented into part time and full time employment. The labour market demonstrates a high degree of integration at the aggregate level with many workers moving freely between part time and full time employment. This is not to suggest that there are not groups of part time workers for whom such mobility is much more restricted. Indeed, the issue of part time workers unable to obtain desired work of longer hours is discussed in Chapter 10.

Neither does the growth in part time employment appear to be primarily driven by simple labour cost cutting strategies as part time workers receive pro rata earnings of full time workers (if permanently employed) or a loading (if casually employed) which compensates for loss of non-wage entitlements such as sick and holiday leave. If anything part time employees appear to have a slightly higher effective costs per hour compared to their equivalent full time employee when fixed costs of employment are included.

Part time employment has been traditionally high in the service sector where the flexibility offered by such workers improves labour utilisation rates as labour supply can be matched to work loads. But the growth in the service sector does not explain the growth in part time employment. Part time employment has expanded across all industries. It has been increasingly used as part of a strategy by employers to improve workplace flexibility in response to short term movements in economic conditions. During downturns some full time employees are placed on shorter hours. This was most marked during the two periods of generalised downturn in the labour market — in the early 1990s and 2000. Without these changes, the outright loss of employment may have been greater than actually experienced.

Over the longer term, part time employment has been part of a strategy of matching employment to uneven operational requirements. The increased need for organisational flexibility has placed greater value on the role of part time employment across a range of industries.