Contributed Article

The Likely Effects of Ageing on Women's Involvement in the Paid Workforce

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Abstract

This paper explores the potential effects of an ageing population on the paid work opportunities of women in Australia over the next half century. Demographic change is producing changes in Australia's labour supply characteristics that will cause women's employment to become increasingly important. Population ageing is likely also to produce additional demands for the type of labour that women have traditionally supplied. All this suggests that there will be strong pressure on female participation rates and hours of work. Women may welcome this change as a means of providing additional financial, economic and personal security and independence. However, to ensure that increased involvement in paid work doesn't come at the cost, for example, of lower levels of fertility, there is a need for institutional support for both men and women as they attempt to combine increasing levels of paid work involvement with their other roles in the family and community.

Introduction

This paper explores the potential effects of an ageing population on the paid work opportunities of women in Australia over the next half century. The effects of demographic change on future labour supply are examined and he role increased participation and hours of work by women in meeting future labour demand is explored.

The paper is divided into a number of sections. In the following section recent studies of the likely pattern of demographic change are summarised to provide a context for our study. Section 3 outlines a conceptual framework to link these demographic changes to possible labour market adjustments, whilst Section 4 explores the particular importance of women's labour supply to the nature of these labour market changes. Sections 5 and 6 of the paper discuss the capacity of women to respond to the economic opportunities that are likely to become available for them in coming decades. We highlight the importance of institutional support for women attempting to combine work, family and community responsibilities to both the nation's ability to respond to the challenges posed by demographic change and women's future well being. Section 7 is a conclusion.

Overview of Demographic Change in Australia and Predicted Economic Consequences

This section draws largely on the findings of three key studies of demographic change in Australia, namely a report on 'Ageing: the Social and Demographic Dimensions', prepared by Peter McDonald and Rebecca Kippen for the Productivity Commission conference on ageing in 1999 (hereafter McDonald and Kippen, 1999); the forecasts of population and labour force change prepared by the Federal Government's Retirement and Income Modelling (RIM) taskforce (hereafter Bacon, 2000); and the Australian Bureau of Statistics' population projections (ABS, 2000).[1]

These reports describe the ageing of Australia's population as being the result of three trends:

a) The reduction of fertility rates experienced in the latter half of the twentieth century and expected to continue over foreseeable decades. The number of births per woman fell from a peak of 3.6 in 1961 to 1.78 in 1997. This number is projected to fall further, to 1.75, in 2006, at which time it should stabilise (ABS, 1999);

b) Falling death rates, whereby the expectation of life at birth is forecast to grow by 5 to 7 years over the period to 2051 (ibid);[2] and

c) The ageing of the 'baby boomer' generation (those born between 1946 and 1960).

Together these trends point to a shift in the age structure of the Australian population from the traditional 'pyramid' age distribution to a 'bee-hive' distribution, with relatively few younger people and a large older population. As is shown in Table 1, the proportion of the population in the 0 to 14 year age group is expected to decline by about one third, from 20.7% in 1999 to 14.4% in 2051. The proportion of the population aged 65 years and over is projected to rise from 12.2% in 1999 to 26.1% in 2051. A slowdown in these changes is expected by 2030 (ABS, 2000).

Table 1: Population Projections, 1999 to 2051

Year	*Age Group*						*Total Population*
	0-14	*%*	*15-64*	*%*	*65+*	*%*	
1999	3,922,089	*20.7*	12,722,717	*67.1*	2,321,982	*12.2*	18,966,788
2010	3,788,433	*17.9*	14,377,868	*68.1*	2,948,300	*14.0*	21,114,601
2020	3,697,891	*16.2*	14,976,343	*65.8*	4,098,168	*18.0*	22,772,402
2030	3,748,144	*15.5*	15,083,003	*62.5*	5,313,402	*22.0*	24,144,549
2040	3,704,549	*14.8*	15,115,475	*60.5*	6,158,985	*24.7*	24,979,009
2050	3,647,052	*14.4*	15,141,595	*59.7*	6,592,204	*26.0*	25,380,851
2051	3,646,399	*14.4*	15,133,720	*59.6*	6,628,397	*26.1*	25,408,516

Source: ABS (2000).

Dependency Ratios

The debate on the possible economic effect of these demographic changes has centred on something known as dependency ratios. In its most basic form, a dependency ratio compares the number of citizens aged over 65 years and under 15 years to the number of citizens aged between these two ages. As is shown in Table 2, the above population forecasts imply that this ratio will climb strongly over coming decades; from 0.49 in 1999 to 0.68 by 2051.

Table 2: Forecast Changes in Basic Dependency Ratio,1999 to 2051

Year	*Dependency ratio*			*Change in working age population*[a]
	Youth[b]	*Aged*[c]	*All*[d]	
1999	0.31	0.18	0.49	1.00
2010	0.26	0.21	0.47	1.13
2020	0.25	0.27	0.52	1.18
2030	0.25	0.35	0.60	1.19
2040	0.25	0.41	0.65	1.19
2050	0.24	0.44	0.68	1.19
2051	0.24	0.44	0.68	1.19

Source: ABS (2003b).

Notes: a) Relative to 1999 working age population; b) 0 – 14 years age group as a proportion of 15 – 64 years age group; c) 65+ years age group as a proportion of 15 – 64 years age group; d) 0 – 14 years age group and 65+ years age group as a proportion of 15 – 64 years age group.

These basic ratios are useful in providing an indication of the likely future trends in demands for public welfare, health and pension systems and have been widely used to guide public policy. For example, in 1994 the World Bank issued a report recommending that countries review their social payments system in the light of the ageing problem (Johnson, 1999). The OECD also, in recognition of increasing fiscal and social burdens, emphasised the need for forward planning by OECD countries to ensure economic viability (OECD, n.d.). Johnson (1990) advanced similar arguments in the Australian context.

A limitation of these ratios, however is their implicit assumption that all those aged between 15 and 64 are 'non-dependent', in the sense of making a *financial* contribution to the meeting of community needs. The reality, of course, is quite different, as levels of labour market participation in this population sub group are less than 100%. Thus, the balance between the part of the population that is able to make a *financial* contribution and those who might be dependent on financial transfers will be different from the pattern indicated in the above table.[3]

It is important, therefore, to consider something known as a *labour force dependency ratio*, which compares the total number of people who are not in the labour force to the number of people in the workforce. Currently, this ratio in Australia is equal to 1 (McDonald and Kippen, 1999: 59).

Projected Changes in Participation Rates and Labour Force Dependency Ratios

Projections of labour force dependency ratios incorporate forecasts of demographic change but also rely on predictions of changes in labour force participation. The projections of labour force participation rates that have been developed in Australia thus far place particular emphasis on expected changes in participation rates of older workers. For example, McDonald and Kippen (1999: 59) work with an assumption that participation rates amongst men aged between 60 and 64 years will rise from 46.0 per cent in 1998 to 76.0 per cent in 2018. Participation rates for women in this age roup are forecast to rise from 20.0 to 40.0% over the same period.

These particular forecasts are based, first, on the likely effect of baby boomers (who are characterised by relatively high participation rates) moving increasingly into their sixties (see ABS, 1999). They also reflect a belief that recent trends towards early retirement can be reversed by government policies that reduce the incentive workers have to leave the labour market before they turn 65. Examples of these policies include the recently announced changes to the social security arrangements for workers who 'retire' before 65 years. The Pension Bonus Scheme for retirees who delay their retirement beyond the age of 65 to a maximum of 75 years creates an incentive for workers to further extend their working lives.

Although a full analysis of the large issue of possible changes in participation rates is outside the scope of this paper, it is worth noting that there are some good reasons to question the forecasts of dramatic increases. For example, Quiggin (2001) asserts that the decline in the institution of lifetime employment and the increased use of redundancies as a tool of labour market adjustment are undermining the employment chances of older Australians. He claims further that these changes in the labour market will actually contribute to rising dependency ratios.

On the other hand, Herz (1995) notes, in the context of the United States experience, that the propensity of older workers to seek work is affected by the real value of pension income or benefits, health care costs, job opportunities, the health status of older people and the use of defined contribution retirement plans (which unlike defined benefit plans do not create an incentive to retire as early as possible). Longer working lives will also be promoted by change in the nature of work from work reliant on physical power to work reliant on cerebral strength (Caudron, 1997). The Organisation for Economic Cooperation and

Development has also placed particular emphasis on the potential for changes in participation rates amongst older workers (OECD, 1998).

The forecast changes to other participation rates made by McDonald and Kippen and Bacon are not as dramatic. The participation of women aged 15-59 years is forecast to grow, but only along the trend line established over recent decades. The details of these projections are shown in the table below.

Table 3: Projected Female Labour Force Participation Rates, Australia, 1998-2048 (per cent)

Age group	*1998*	*2003*	*2008*	*2013*	*2018-48*
15-19	55.0	55.0	55.0	55.0	55.0
20-24	77.0	77.8	78.5	79.3	80.0
25-34	69.0	70.5	72.0	73.5	75.0
35-44	71.0	72.0	73.0	74.0	75.0
45-54	70.0	71.3	72.5	73.8	75.0
55-59	43.0	47.3	51.5	55.8	60.0

Source: McDonald and Kippen (1999: Table 4.3: 58)

In contrast to the forecasts made of older worker's participation rates, these forecasts are based on an assumption that the factors affecting female participation rates are the product of 'slowly moving trends'. Moreover they do not incorporate any analysis of how women's participation in the paid workforce might respond to changes in the labour market caused by ageing. As the Federal Government's Retirement Incomes Taskforce Report on fertility, population and economic growth (Bacon, 2000: 5) explains

> There is no short-run behavioural response in LFSMOD (the taskforce's model of labour force status), the model simply runs off the observed underlying long-run movements of key, and hopefully stable, parameters.... Apart from these time-varying parameter matrices, the model's only exogenous inputs are population projections from a population model... and aggregate unemployment rates for males and females.

Despite this, it is important to note that even the agreed conservative estimates of changes in participation rates for women over coming decades point to their increased involvement in paid work. Female participation rates are expected to increase to 80 per cent amongst women aged in their early twenties and to 75 per cent amongst women aged between 25 and 54 years. These rates converge toward male participation rates, which are anticipated to be 86 per cent in the 20-24 year age bracket and approximately 95 per cent in the 25-54 year bracket (see also Bacon, 2000: 7; McDonald & Kippen, 1999: 58).

The analysis in Sections 4-6 of this paper focuses on several questions relating to these forecast trends in female participation rates. First, might the changes in women's participation in the paid workforce exceed the levels predicted in existing studies? Second, might there be some other effects on women's labour supply stemming from demographic change? And, third, what might be some of the possible economic and social consequences for women and their families of these changes.

Before we proceed to this analysis, however, it is important to consider the implications of existing forecasts of changes in participation rates for the labour force dependency ratio in Australia over coming decades. As is shown in the following table, if these forecasts are realised then the ratio will in fact decline over the period to 2018, before climbing again over the years to 2048.

Table 4: Projected Labour Force Dependency Ratios, Australia, 1998-2048

Year	*Dependency Ratio*[a]
1998	1.00
2003	0.95
2008	0.91
2013	0.89
2018	0.87
2023	0.91
2028	0.95
2033	0.98
2038	1.01
2043	1.02
2048	1.03

Source: McDonald and Kippen (1999: Table 4.4: 59)

These figures serve to highlight the importance of changing participation rates to the economic response to prospective demographic change and the need to be clear about the linkages between demographic change, changing participation rates and the prospects for economic growth.

Labour Market Implications of Demographic Change: A Conceptual Overview

The basic model of the relationship between economic growth and employment, as reflected in Okun's Law[4] and neatly summarised by Burgess and Green (1997), provides useful insights into the broad nature of the effects of demographic change on labour market outcomes. In the following paragraphs we first outline this model before applying it to the issue of demographic change.

It is expected that in a growing economy growth in real GDP will be translated into employment growth. However, over the longer period of time, the actual relationship between growth in real GDP and employment will depend, first, on any change in the level of capital intensity in the economy; and, second, on changes in average hours of employment. Factors such as an increase in the real cost of labour relative to capital may reduce the number of new jobs generated

by GDP growth; as might a shift in the industry structure towards capital intensive sectors, labour augmenting technical change, or an increase in average hours of employment.

Whether or not the employment growth produced by an increase in real GDP results in a reduction in the unemployment rate depends on a further set of factors. Of crucial importance is the rate of growth in the labour force as compared to the growth in new jobs. Labour force growth derives from a number of sources, including population growth, changes in participation rates and immigration. Unemployment rates will only fall if growth in the labour force is less than the growth in employment. Furthermore, those workers who are currently unemployed will only benefit from economic growth if they are more successful in competing for new jobs than new entrants to the labour market.

Working backward through this theoretical framework lets us identify the key determinants of the effects of demographic change in the labour market. The first, obvious point that can be made is that the magnitude and nature of such effects will hinge on future growth in real GDP. That is, if real GDP stagnates as the population ages then labour shortages and, thus, demands indicate upward pressure on participation rates will not eventuate.

However, importantly, if real GDP growth does occur then the likely demographic change rules out one major source of labour force growth to fill any new jobs that might be created. Furthermore, *if* immigration continues to be constrained by political considerations, then the jobs generated in coming decades will need to be filled from two main sources: a rise in participation rates or a reduction in unemployment rates[5].

However, the above analysis also indicates that there are a number of other adjustments that could accommodate a growth in real GDP, such as an increase in the level of capital intensity in the economy and a rise in average hours of work.

Demographic Change and the Labour Market Opportunities of Australian Women

A number of features of women's involvement in the paid workforce in Australia can be linked to the above framework to generate broad predictions about likely future trends in women's employment opportunities. In particular, as we demonstrate in the remainder of this section, the current relatively low rates of participation amongst women and their relatively high levels of involvement in part-time work makes it reasonable to expect that any labour

market adjustment will be focused on the female sector of this market. Furthermore, the likely future orientation of the economy towards the services sector and rising educational attainments of women, imply that women's labour will be in particular demand.

Participation Rates

The gender and age characteristics of Australian participation rates, as summarised in Table 5, are such that the greatest 'numeric' potential for labour force growth is in the participation rate of 'prime age' women (that is, women aged between 25 and 54 years), and in the older and younger segments of the labour market. The figures for 2002 show that women aged 25-54 comprise 34.1 per cent of those working age Australians who are currently not employed. Older working age women (that is women aged between 55 and 64 years) also account for a relatively high proportion (14.5 per cent) of the group of non-employed working age Australians.

The figures in the table also serve to emphasise the point that, whilst the focus of policy attention has been on increasing the paid work contribution of older, especially male, workers, levels of non-employment are currently much higher among prime-age women.

Table 5: Distribution (%) of the Non-employed[a] by Gender and Age Group, 2002

	Males	*Females*	*Total*
15 -19	9.0	8.2	17.3
20 – 24	4.2	5.0	9.2
25 – 34	5.1	12.3	17.4
35 – 44	4.7	11.8	16.5
45 – 54	5.3	10.0	15.3
55 – 59	4.2	6.7	10.9
60 – 64	5.6	7.8	13.4
Total	38.2	61.8	100.0[b]

Source: ABS (2003d)

Notes: a)Non-employed consists of persons who are either unemployed or not in the labour force. b) N = 4,010,000

A comparison of the Australian figures for 1995 and the equivalent data for the UK and Europe (see Table 6) serves to emphasise further the importance of prime age female labour supply to the size of the Australian labour force. In 1995 (the latest date for which comparable data are available), the proportion of non-employed working age Australians who were female and aged between 25 and 54 years was substantially higher than in either the UK or the group of 15 European countries. A comparison of the Australian data in Table 5 and 6 reveals, however, that there was some convergence in the characteristics of the non-employed groups in Australia and Europe over the 1990s.

Table 6: Distribution (%) of the Non-employed by Gender and Age Group, Australia-Europe Comparison, 1995

	Male				*Female*			
	15-24	*25-54*	*55-64*	*Total*	*15-24*	*25-54*	*55-64*	*Total*
UK 1995	13.8	15.7	10.4	39.8	14.2	31.1	14.9	60.2
E15 1995	14.7	11.7	10.8	37.2	16.1	30.7	16.1	62.8
Australia 1995	11.5	10.3	9.5	31.2	12.8	38.7	17.3	68.8

Source: UK and E15 data are from Rubery et.al (2001); Australian data are from ABS (2003d).

The current numerical significance of the group of non-employed women itself indicates that this group could be a major source of future labour supply. There are also prospective changes in the economic and social environment, associated with demographic change (discussed in Section 4.d below), that suggest that this particular 'pool' of potential labour will be drawn on to serve the community's economic needs over coming decades. Thus, there is a strong possibility that participation rates amongst 'prime age' women will increase strongly in the first half of the new century.

Hours of Work

A further potential labour market adjustment to the type of demographic change forecast for Australia is an increase in average hours of work. Here, again, it is likely that the adjustment will affect women more than men.

A high incidence of part time employment is an important feature of the female labour market in Australia, as is shown clearly by the figures in Table 7. In each age group, the rate of part time work amongst women is substantially higher than amongst men, and these differences are especially pronounced in the 'prime age' group of 25-54 years.

An international comparison of rates of part-time work reinforces this conclusion. Expressed as a share of total employment in 1996, female part time employment was 18.3% in Australia, as compared with 12.4% in the United States, 10.3% in Canada and 14.2% in Germany. The United Kingdom is one the few countries where the ratio of female part time employment to total employment was higher than in Australia (at 19.0%) (data derived from Tables 1 and 3 in Bolle, 1997).

Table 7: Rates of Part Time Employment by Age Group and Sex, 2003

Age group	Male	Female
15-19	55.4	75.6
20-24	21.4	34.9
25-34	8.1	33.9
35-44	6.9	47.7
45-54	8.0	43.1
55-59	14.4	49.3
60-64	21.0	59.3

Source: ABS (2003c)

In summary, the above figures imply that the joint pressures of economic growth and restricted labour supply alternatives in Australia also have significant potential to cause an increase in women's (as opposed to men's) average working hours.

The relative importance of low participation rates and high levels of part time work to the size of the pool of non-employed labour

An indication of the importance of the two alternative sources of additional labour supply, increased participation rates and increased hours of work, by each age and sex group, is provided in Table 8. The figures are based on a somewhat complex set of calculations. We started by identifying the total potential labour supply, expressed in hours per week. This was accomplished by multiplying the population in each age and sex group by full time hours (40 hours). The amount of non-employed labour in each category was then estimated by a) multiplying the number of non-employed in each category by 40 hours; and b) multiplying the number of part time employees in each category by (40-16) hours (we assumed that part time workers worked 16 hours per week). The figures thus derived were then expressed as a share of the total amount of non-employed labour.

The figures in the table support our earlier observations by showing, first, that women are a key source of potential labour, comprising fully 64.3 per cent of total non-employed labour in 2003. Increases in female participation rates to 100 per cent would reduce the total amount of non-employed labour by 44.06 percentage points, whilst an increase in the working hours of women who are currently working part time to 40 hours would reduce the total amount of non-employed labour by 20.20 percentage points. For men the corresponding percentages are 28.31 and 7.42.

The figures also show that women aged between 25 and 54 years account for a relatively high proportion of the potential labour that is currently not employed. Low participation rates amongst these women account for 24.52 per cent of total non-employed labour, whilst the high rate of part time work in this group contributes a further 13.26 per cent of total non-employed labour.

Table 8: Composition of Non-Employed Potential Labour in the Australian Labour Market, 2003 (% of total non-employed labour)

	Not in the Labour Force		*Part Time Employment*		*Total*	
	Male	*Female*	*Male*	*Female*	*Male*	*Female*
15-19	6.29	5.51	2.04	2.89	8.33	8.40
20-24	2.84	3.14	1.28	1.90	4.12	5.05
25-34	4.09	9.03	1.10	3.53	5.18	12.55
35-44	3.81	8.26	0.94	5.30	4.75	13.56
45-54	4.02	7.23	0.97	4.43	5.00	11.66
55-59	3.17	5.22	0.63	1.46	3.80	6.68
60-64	4.09	5.67	0.46	0.70	4.55	6.37
Total	*28.31*	*44.06*	*7.42*	*20.20*	*35.74*	*64.26*

These figures can be compared to the amount of non-employed labour associated with workers aged between 60 and 64 years (who are the focus of the government's current attempts to increase labour supply). Together, the low participation rates by men and women in this age group comprise 9.76 per cent of non-employed labour, whilst part time work in this group accounts for only 1.16 per cent of the total amount of non-employed labour.

Industry characteristics of women's employment and the likely characteristics of the future demand for labour

Partly as a result of ageing, economic growth is anticipated to accentuate past trends and occur especially in the service sectors of the economy (see, for example, DEWR, 2002; and Meagher, 1997). The significance of this pattern of economic development for women's employment opportunities lies in the fact that the service sectors of the economy have traditionally favoured the employment of women. It is also worth noting that in these sectors of the economy the potential for the introduction of labour saving technologies is relatively small and, thus, growth is most likely to be labour intensive.

Table 9 elaborates on these points. It shows the industry composition of total employment in Australia, rates of growth in total employment by industry over the period 1984-2002, and the female share of full time employment in each industry.

The industries that recorded rates of employment growth substantially above the 'average' for the labour market as a whole (43.3%) over the 1984-2002 period included property and business services (166.60%), culture and recreational services (109.97%), accommodation, cafes and restaurants (106.03%), health and community services (75.46%), and personal and other services (74.60%). These 'high growth' industries also featured relatively high rates of female employment. Compared to the female share of full time jobs in

the labour market as a whole, of 33.67 %, the female share of full time jobs was 37.28% in the property and business services industry, 40.49% in culture and recreational services, 44.75% in accommodation, cafes and restaurants, 69.97% in health and community services, and 38.39% in personal and other services. Furthermore, the female share of full time jobs increased in many of these industries over the 1984-2002 period. (For example, women's share of full time employment in the cultural and recreational services industry increased from 34.9% to 40.49%). This implies that women secured the majority of the new jobs created in these growth industries over the period.

It is also interesting to note that the rate of female employment was relatively low in the industries that experienced either negative or poor rates of employment growth over the 1984-2002 period. Industries where employment fell included: electricity water and gas (-49.20% change in total employment); agriculture, forestry and fishing (-11.35%); and mining (-4.68%). The large manufacturing industry group recorded employment growth of only 0.07%. The female share of full time employment in each of these industries, other than mining, was only approximately 20% in 2002. (In mining, women comprised only 7.96% of full time employees).

Further inspection of the figures in Table 9 reveals a final important pattern: the industries that decreased total employment numbers over the 1984-2002 period also featured a rise in the share of total full time jobs going to women. For example, the female share of full time employment in electricity, gas and water increased from 7.08 to 19.51% over the period, at the same time as total job numbers fell by 49.20%. This suggests that apart from women benefiting from increased job opportunities in the growth sector of the economy, they were less likely than men to lose their jobs in the industries that declined. Most likely, this pattern reflects the occupational characteristics of women's employment in each industry. Thus, whilst blue collar (typically male) jobs were shed in industries such as electricity, gas and water, new job opportunities were created for, for example, clerical and administrative workers (more commonly female) in these and other industries.

Table 9: Industry and Gender Characteristics of Australian Employment: 1984-2002 (Original Figures)

Industry	Share of total employment November 1984 (%)	Share of total employment, November 2002 (%)	Female share of full time industry employment November 1984 (%)	Female share of full time industry employment November 2002 (%)	Employment Growth, 1984-2002 (%)
Agriculture, fishing & forestry	6.28	3.89	14.57	19.93	-11.35
Mining	1.43	0.95	6.92	7.96	-4.68
Manufacturing	17.43	12.18	21.95	20.74	0.07
Electricity, gas & water	2.17	0.77	7.08	19.51	-49.20
Construction	6.78	7.63	4.88	6.09	61.27
Wholesale trade	6.26	4.71	23.85	24.46	7.78
Retail trade	13.63	15.38	39.11	37.03	61.65
Accom., cafes and restaurants	3.40	4.89	38.92	44.75	106.03
Transport & storage	5.20	4.27	12.69	17.93	17.64
Communic. Services	2.20	1.77	19.34	23.43	15.07
Finance & insurance	3.98	3.69	46.18	45.13	32.86
Property, & business services	6.14	11.42	33.58	37.28	166.60
Government, admin. & defence	4.85	4.62	31.21	41.08	36.28
Education	6.86	7.08	53.24	61.71	48.00
Health & community services	8.27	10.13	64.81	69.97	75.46
Table 9 cont:					
Cultural & recreational services	1.75	2.57	34.90	40.49	109.97
Personal & other services	3.36	4.05	41.53	38.39	74.60
TOTAL	100.00		29.39	33.67	43.26

Source: ABS (2003a)

These patterns and trends are not unique to Australia. Goodman (1994) describes how women filled the majority of the jobs added in the US recovery of 1992-93 and in each of the recovery periods since 1975. At the other end of the US business cycle, job losses apparently were concentrated in the male segment of the labour force. Goodman, Antezak and Freeman (1993: 26) explain that "men lost at least 9 times as women did" over the five recession periods

between 1969 and 1992. The resilience of employment in the services sector during the recession periods and the long-term decline in agricultural and manufacturing employment were attributed important roles in explaining the changing gender composition of the US workforce.

Importantly, given that these historic trends towards the growth of employment in the services sector of the economy are anticipated to continue, and may in fact be accentuated by population ageing, women's employment over the business cycle is likely to receive further impetus.

Skill Levels

An additional factor that will promote the employment of women in coming decades is the rapid growth in their level of qualifications. As Table 10 shows, the number of women with bachelor degrees increased by 132.7% over the period from 1991 to 2001, as compared to an increase in the number of these degrees held by men of 66.2%. Indeed, by 2001 women were more likely to hold a bachelor degree than men.

The data in Figure 1 adds to the conclusion that women will be a key source of skilled labour in coming decades by demonstrating that, across skill levels, the group of working age individuals who are currently not employed (and, thus, under-utilised *but potentially* available for work) is dominated by women. At all levels of education, the proportion of non-employed persons who are female is much greater than 50%. This proportion ranges from 60.6% of non-employed persons with a medium level of education to 69.1% of non-employed persons with a low level of education.

Table 10: Levels of Qualifications Among Male and Females, Australia, 1991-2001

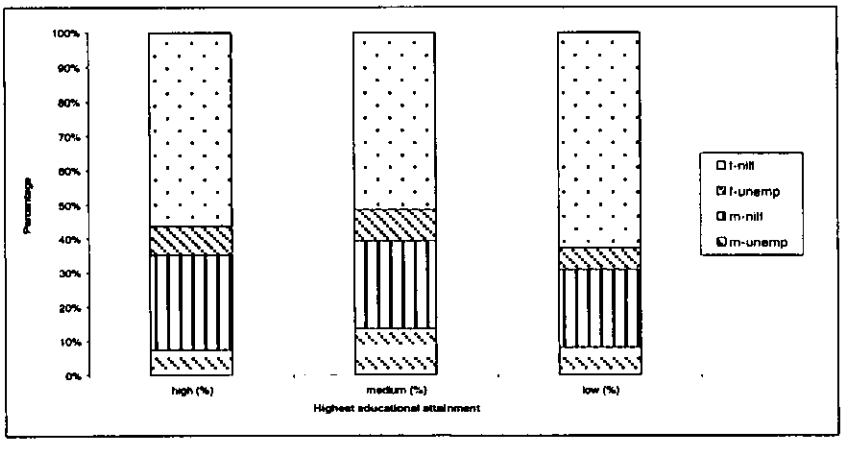
	Higher degree[a]		*Bachelor degree*		*Other degree*[b]	
	Male ('000)	*Female ('000)*	*Male ('000)*	*Female ('000)*	*Male ('000)*	*Female ('000)*
1991	136.8	112.9	402.3	334.1	1,600.9	850.3
1996	196.3	177.6	537.8	539.1	1,782.2	946.1
2001	242.0	231.2	668.5	777.4	2,067.2	1,167.1
Growth (1991-2001) %	76.9	104.8	66.2	132.7	29.1	37.3

Source: ABS (2001a)

Notes: Postgraduate degrees, graduate diplomas and graduate certificates

Advance diplomas, diplomas and certificates

Figure 1: Distribution (%) of the Non-employed by Gender and Highest Level of Educational Attainment, 2001



Source: ABS (2001b)

Notes: a) High = postgraduate degree, graduate diploma/graduate certificate, bachelor degree; Medium = advanced diploma/diploma, certificate, year 11, year 12; Low = year 10 or below, never attended school. b) Persons with level not determined are excluded. This applies to 4,500 (1.3%) unemployed and 11,900 (1.5%) not in the labour force males and 1,500 (0.6%) unemployed and 20,700 (1.1%) not in the labour force females. c) Excludes persons at school; includes persons who are studying at a place other than a school e.g. TAFE.

Whilst these trends suggest that the job chances of young women will be especially improved, it is also worth noting that the employability of older women might also be enhanced given the association that is often made between age and interpersonal skills. These skills are likely to become more important in an economy with an expanding services sector.

Summary of Demographic Change and Female Labour Market Opportunities

The above analysis leaves us with the conclusion that changes in participation rates and hours of work among women are likely to continue to occur over coming decades. The large numbers of women who are currently not employed, or are working relatively few hours, are becoming an increasingly significant source of the type of labour that is likely to be needed in the new century. Changes in the labour market associated with demographic change are likely to create additional incentives for women to enter the paid workforce or

extend their hours of work. The increase in skill levels amongst older women in the workforce, and past evidence on women's ability to secure the new jobs created in the economy, suggests that higher female participation rates and hours of work are a more likely future scenario than low rates of unemployment.

How Might Women Respond To Changing Labour Market Opportunities?

The possibility that rates of labour market participation and/or hours of work by women will increase will only become a reality if the 'supply side' aspects of women's participation and hours of work decisions are also conducive to such an increase. Women's ability to respond successfully to labour market opportunities will depend on factors such as their family and community commitments. In turn, this implies that the resolution of issues such as the gender division of unpaid labour, as well as the level of institutional support for women's participation in paid work through facilities such as child and elder care, and the availability of parental and other forms of paid leave, will be important determinants of actual levels of participation and hours of work.

The fact that predicted demographic change is associated in part with falling fertility rates suggests that one of the most significant constraints on women's labour force participation and hours of work – namely the presence of young children – will ease in coming decades. Numerous studies of women's involvement in the paid workforce demonstrate a strong negative link between the presence of children and both participation and working hours (see, for example, Chapman, Dunlop, Gray, Lui, & Mitchell, 2001; and Scutella, 2000/2001). Thus, the projected fall in fertility rates can be reasonably expected to contribute to rising rates of involvement amongst women in the paid workforce over coming decades.

Despite this, the level of support provided to the involvement of women with children in the labour market, both at an institutional and a workplace level, will still be important in generating change in women's labour supply *without sacrificing population growth*. Policies such as the provision of paid maternity leave, parental leave and high quality, and subsidised childcare across a range of working hours are likely to be increasingly seen as economic imperatives (as opposed to social benefits) if shortages of labour develop[67].

Whilst falling fertility rates might serve to reduce the conflicts between women's paid and unpaid roles, the other aspect of demographic change - population ageing – is likely to create 'new' issues for many women. In 1998, women comprised 72.2 per cent of the group of individuals involved as primary carers[8] of people aged over 65 years (ABS, 1998). The care of aged people also has some special characteristics that make it especially difficult to combine with paid work. As PSM (1999) summarise:

> ...care for dependent aged people is likely to become a larger issue for employers than child care because aged care can last much longer than child care, ... can involve more employees than child care (i.e. employees without children), and ... involves issues of dignity, rights and choices for both the aged relative and employee which are not as pronounced as in child care.

Thus, an important constraint on women's economic integration in coming decades is likely to be the roles they take on in caring for elderly parents and other family members. The availability of leave provisions and working time arrangements that accommodate the caring roles that both men and women have in this regard, as well as the availability of high quality elder-care facilities, will be directly important to women's future labour supply.

Will the Forecast Changes in Women's Employment be Positive for Women?

An important remaining question is whether the predicted increases in women's involvement in the paid workforce will constitute progress for women? This is a difficult question to answer. On the one hand, a woman's involvement in paid work can be seen as fundamental to her financial independence and, thus, her autonomy. As Burke and Redmond (2002: 3) explain, participation in paid work is an important way in which a woman can increase her 'capacity to make choices about important issues, such as the nature of (her) relationship with partner, family, ... and other institutions in society'. Thus, women's ability to achieve improvements in their economic, political and social status will be advanced by the prospective changes in the Australian labour market (that is, there is a possible convergence of feminist ideals related to equality of access and outcomes with tight labour market conditions).

However, as Burke and Redmond (2002: 19) demonstrate using the evidence on outcomes for women from past episodes of expanding workforce involvement, women's wellbeing is not secured by paid work. For example, the exercise of employer power (as promoted by deregulation of the labour market) and the trend towards casualisation may have worsened the conditions under which many women work in recent decades. The limited access casual workers have to leave for family related reasons also casts doubt on the amount of institutional support that will be available for a growth in women's involvement in the paid workforce in coming decades.

A further important issue concerns the reallocation of paid and unpaid roles with the household and the community as women's participation and/or paid

working hours expand. As is discussed in detail in Austen and Birch (2002), despite the rapid growth in female participation rates in recent decades, Australian women still perform most of the household tasks of their families. In 1997, Australian women spent, on average, 3 hours per day performing household duties (such as meal preparation, laundry and housework), an amount that was almost double the time spent by their male counterparts (ABS, 1997). Furthermore, recent changes in the gender distribution of unpaid work have been marginal at best. As is shown in Table 11, between 1992 and 1997, the time spent each day on housework by women fell, on average by just 8 minutes per day, and men only took some of this work up. (See also Bittman, 1999: 30)

Table 11: Changes in the Time Spent on Housework by Australian Men and Women, 1992 to 1997 (in minutes per day)

	Men			*Women*		
	1992	*1997*	*Change*	*1992*	*1997*	*Change*
Food & preparation	24	26	+2 min	71	69	-2 min
Laundry & clothes care	4	5	+1 min	34	33	-1 min
Other housework	9	9	0	42	37	-5 min
Total housework	37	40	+3 min	147	139	-8 min

Source: ABS (1997)

There are two perspectives on the issues raised in this section. The first of these is that the roles that women currently take in their families and communities will limit their ability to fully participate in the paid workforce. In turn, this may limit the prospects for economic growth. The second perspective, which focuses more directly on the well being of women, is that without a greater sharing of unpaid roles in families and the community, women who do expand their paid work roles are likely to face increasing burdens and conflicts in the various roles that they seek to perform. From either perspective institutional support for women *and men* to help them combine paid and unpaid working roles is warranted.

Conclusion

This paper has assembled a range of information that indicates that the employment opportunities of women will expand significantly over coming decades. Demographic change is producing changes in Australia's labour supply characteristics that will cause women's employment to become increasingly important. Population ageing is likely also to produce additional demands for the type of labour that women have traditionally supplied.

All this suggests that there will be strong pressure on female participation rates and hours of work over the first half of this century at least. Women may welcome this change as a means of providing additional financial, economic and personal security and independence. However, for the benefits of the change to be maximised, and to ensure that increased involvement in paid

work does not come at the cost, for example, of lower levels of fertility, there is a need for institutional support for both men and women as they attempt to combine increasing levels of paid work involvement with their other roles in the family and community.

As a final comment, it must be acknowledged that, as is the case with any extrapolation, it is possible that the forecast labour market patterns wont eventuate. We cannot be 100% certain that the changes in industrial and occupational structures that have occurred in recent decades will continue. Nor can we be certain about the future direction of technological change, and how this will affect the type and amount of labour needed in the future economy. In summary, at best, we can only guess with some confidence that women's involvement in paid work will continue to grow and, most likely, approach the participation rates that currently characterise men's employment in the Australian economy.

Endnotes

1 Interested readers are directed to these references for the details of the methodologies used in the population forecasts.
2 McDonald and Kippen (1999: 47-48) make the remarkable observation that if birth and death rates were the same in 1999 as they were in 1973, the number of births in 1999 would have been 40 per cent higher and the number of deaths would have been 60 per cent higher.
3 A further limitation of dependency ratios is the implicit assumption that, for example, those aged over 65 years are dependent on public and private transfers for their wellbeing, and that this group does not make transfers to other sections of the community. Again, of course, the reality is quite different. For example, as McDonald and Kippen (1999) note, older Australians do not rely on private transfers of income.
4 This law summarises the general empirical relationship between GDP growth above the growth in the labour force and reductions in the unemployment rate (Okun, 1970).
5 ABS (1999) forecast that net overseas migration would fall from 78,000 per year to 70,000 by 2051. They also note that changes in levels of immigration are unlikely to greatly affect the population structure. For example, if immigration levels fell to zero the median age would rise by only 3 years.
6 Hugo (2000) makes the important observation that countries that are least supportive of women's involvement in the paid workforce are also those with the lowest rates of fertility. (Also see McDonald, 2000).
7 A full range of policy options to address this issue is provided in Barbara Pocock's recent book 'The work/life collision: What work is doing to Australians and what to do about it', Federation Press, Melbourne, 2003.

8 A primary carer is a person who provides the most informal assistance in terms of help or supervision to a person with one or more disability. The assistance has to be ongoing or likely to be ongoing for at least 6 months and be provided for one or more 'core activities' (that is, communication, mobility or self-care).

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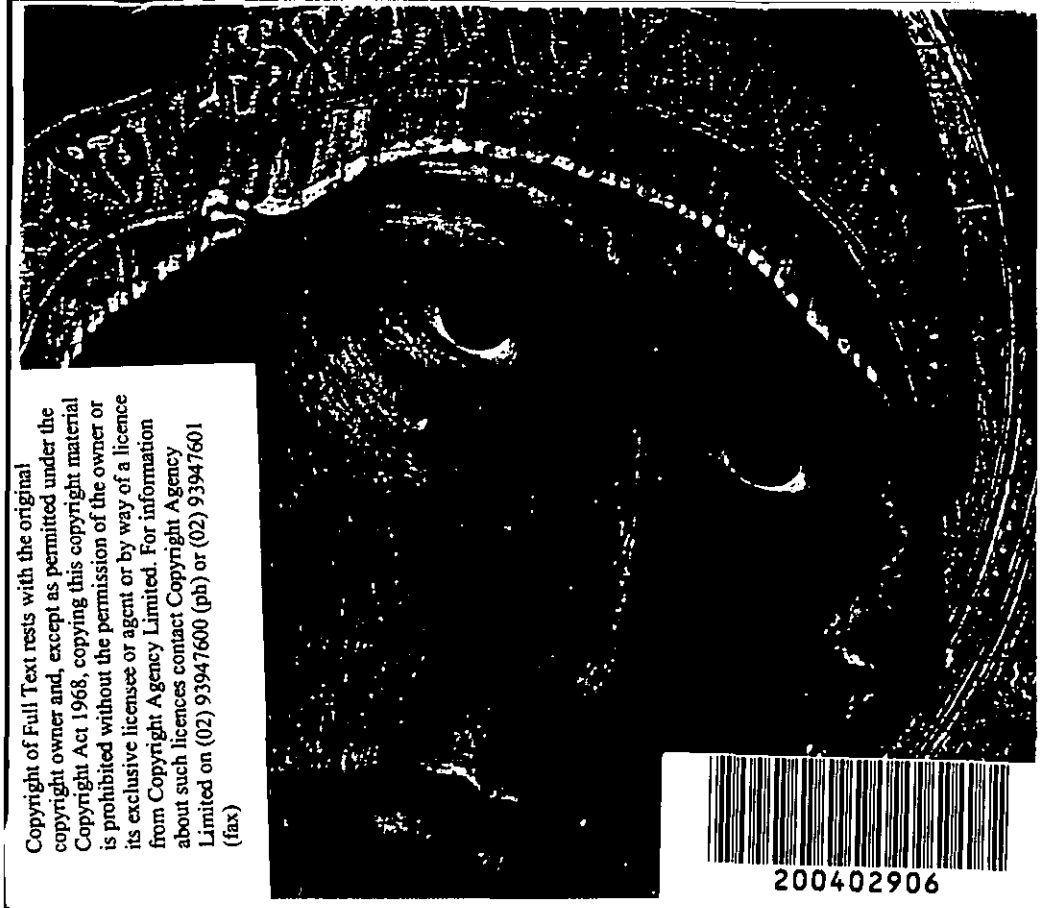

Picture: The Magdalene. Detail from a polyptych by Simon Martini, 1320. Museo Dell' Opera del Duomo.

Hallelujah: schools unite on religion and values

The PM's comments on values education in schools have encouraged some healthy debate. Are religious schools at odds with their state counterparts? Can you really describe state schools as 'values neutral'? And the biggest question: what, after all, is the purpose of education? By STEVE HOLDEN.

Ask anyone in Australian schools about religion and values and you'll quickly find you've touched a nerve. Values are everywhere. Educators say that the agenda always addresses educational purpose; that students want to ask about the meaning of life; that values like respect, fairness, cooperation and tolerance come up everywhere from the school assembly to the canteen queue. Call schools values neutral? Impossible, say educators. You get the message: they have them – values.

What's striking is the degree to which educators have engaged in the current public religion and values debate, kickstarted by Prime Minister John Howard back in January. 'The elevation of education as a front-runner in the current political agenda and pre-election debate, is a desirable thing for the education sector,' says George Sears, Principal of Craigmore Christian School, a small Brethren primary and secondary school in South Australia. But the interesting thing about the current debate, Sears points out, is that values like tolerance, justice, respect, fair play, integrity, and the like remain as much a part of the educational agenda as they've ever been. 'They are universal values espoused by all schools and school systems,' he says. 'So what's changed?' The answer, he argues, is that the context in which values germinate has shifted in some schools, and in some schools more than others, but the same kinds of values – respect, fairness, cooperation, tolerance – remain dominant. Think of today's school as a Mini Cooper: it looks like the old 'Sixties model, but the engineering is way different. Many schools have moved from a Judeo-Christian chassis to a secular Humanist one. In a truly religious school, says Sears, values emerge from a consideration of a divine authority. '"Thus says the Lord" is the reason . . . behind the values that emerge, not social consensus or enlightenment. The belief in a divine presence superintending the affairs of humanity represents an absolute authority on issues of practice and belief. This clearly is not the wide-spread influence in many schools today, or the wider society to which these schools belong. Thus it is that while the values that emerge may not be at variance with past values, the reason for them will be.' It's the changing context that makes the difference. Sears again: 'This difference will be the inevitable product of a multi-cultural society where different traditions of belief and practice may in fact underpin the same values.'

And values are certainly there in our state schools, in spades. Speaking at the launch of 'Our Boys,' an ABC documentary about the PM's *alma mater*, Sydney's Canterbury Boys High School, Mark Latham, the Leader of the Commonwealth Opposition, said if John Howard tuned in to the program he'd see that values at Canterbury Boys remained strong. 'The teachers are always advising the students to work hard, to finish what they start, (teaching) values of tolerance and non-violence – good Australian values,' Latham said.

The problem for state schools, says Seamus O'Grady, Director of Religious Education and Curriculum at the Sydney Catholic Education Office, and the reason they might appear in the PM's spotlight as 'values neutral,' is that it's difficult to make explicit the basis for the values they espouse. 'In the case of Catholic schools, the basis for our values must be the Gospels and the Catholic community's understanding of the teachings of Christ through the centuries, which we call Tradition.' Yet all schools operate with some value structure and religious focus, O'Grady says, whether they're 'religious schools' or not. 'I don't believe that any school is "values neutral" because teachers have values which if not taught explicitly are implicitly imbibed by their students. Furthermore, the curriculum itself nowadays names values to be taught in the outcomes for each syllabus.'

Even so, there is an inclination for some to react to a more secularised Australian society, which helps to explain a renewed interest in religion-based schooling, Sears argues. 'Parents with such an inclination are, like Mr Howard, preferring the explanation and origin of values from religious tradi-

tions, and not those from a Humanist mindset and the secular worldview it produces,' Sears says. 'Recognition of this should not be a source of rivalry or animosity. Tolerance and acceptance should rule. After all, these are values espoused on both sides of the religion-secular divide.'

But what, exactly, is this 'religion-secular divide,' when religious students attend secular schools and *vice versa*? According to Adrienne Jericho, Executive Director of Lutheran Education Australia, the student profile of Lutheran schools has changed. 'From being 100 per cent Lutheran in 1950 it's about twenty-five per cent Lutheran at present; however, I don't believe this has made our schools any less religious. Of course, how we live out the mission of the Lutheran school has changed. The effectiveness of the mission of the Lutheran school is derived from the commitment of principal and staff to provide a quality education in which the gospel of Christ informs all teaching, programs and relationships.'

Beyond changing demographics within Lutheran schools, Jericho says more Lutheran children are now educated in state schools than Lutheran schools and, he says, 'We thank God for our public schools.' 'I'm continually amazed at the tremendous work being done in government schools through ecumenical chaplaincies and RE programs with limited resources,' he says. 'Over the years, state departments of education have supported the teaching of RE in ways that have not been fully acknowledged by the churches.' Despite that, Jericho says, religious schools remain best placed to provide effective RE and values education across the curriculum. 'Such an approach is more evident and, in fact, possible in faith-based schools. To be truly effective, in RE and values, however, schools need to realise that their efforts are limited. They work in partnership with parents and the church, and the community generally.'

Focus on all Australian schools and the big picture foreground is all curriculum. Damien Brennan, Director of Religious Education and Curriculum for Catholic Education in the Archdiocese of Brisbane, points out that the Adelaide Declaration, signed by all Ministers of Education and subscribed to by all education sectors, lists desired outcomes for students that contain a strong values base. Beyond that, Brennan says, many of the approved syllabi, like the Queensland Years One to Ten Studies of Society and Environment syllabus, consider values. 'In Queensland there's a unique "right of entry" legislation for RE to be taught by representatives of respective denominations within state schools. This is normally provided for thirty minutes per week in primary schools on a cooperative ecumenical basis using a common program developed jointly by the state and the churches. In most states at Years Eleven and Twelve there's a Study of Religion syllabus that provides credit for students like the other subjects.'

In Catholic schools, says Brennan, RE takes a discrete place in the curriculum alongside the other eight Key Learning Areas. 'Because we are clearly approaching education from within the context of the Catholic tradition, our challenge is to present that worldview within its historical development and to present respectfully other religious traditions and their values within their historical contexts,' he says. 'The challenge is to present appropriately the great religious traditions and show how they search for truth and for the divine whisper behind such truth.'

According to O'Grady, you'll find religious values woven finely through the weave of everyday teaching and learning. 'In Catholic schools, we claim that "every teacher is a teacher of Religious Education"! By accepting a position in a Catholic school, a teacher thereby promises to promote the mission of the school and its values,' O'Grady says. 'How they teach any subject reveals their values and we invite them to draw out values in keeping with the Gospel in their subject area. An approach to the curriculum in Sydney Catholic Schools has been developed to support this ideal, (called) "A Sense of the Sacred." For example, when teaching Legal Studies, we expect teachers to use examples of importance to their beliefs, like laws around reproduction, asylum seekers, business ethics, and so on.' To do that, points out Ernie Christie, Assistant to the Director of Religious Education and Curriculum for Catholic Education in the Diocese of Townsville, teachers need professional development that addresses their 'spiritual formation.' 'We allow teachers three or four days to spend time to work on their spiritual formation,' Christie says. 'You can't leave it to chance. (Education about religion and values) doesn't happen at the teacher training level. You need to work on it at the system and school level. You need to do good PD in religious and values education.'

So, okay, you'll find values like respect, fairness, cooperation and tolerance in the fine-grained life of schools, secular and religious. But just where are those values clearly evident? Social justice is not a bad place to start looking. Schools across the nation, large and small, rich and poor, religious and secular, have been active on a range of social justice issues. O'Grady says social justice is part and parcel of the mission for Catholic schools, and is keenly taken up by students. 'The school's fundamental role should be to inform students – with the truth. They do this by gleaning the most accurate sources of information and teaching students how to critique the mass media. This is extremely challenging in an era where information from authorities can be cleverly mediated to promote a certain point of view. The politicisation of the asylum-seekers debate has left most Australians in ignorance of the facts. Schools have a duty to rectify this situation.'

As Ernie Christie puts it, the social justice agenda means putting your money where your mouth is. 'How can you talk about tolerance and compassion without acting according to those values?' And the purpose of all this? 'Religion and values education is about the meaning of life, about compassion,' Christie says. 'It's dealing with the big questions of life. We want kids to get good results, but religious education is about the purpose of that. It underpins education. Why do it, why be educated? It's not just a commodity. If we don't ask the religious and values questions we ignore the meaning of education.'

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>
> ERNIE CHRISTIE