An Overview of Demographic Change in Victoria and its Possible Consequences for the Employment Prospects of Victorian Women

By

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WiSER
Women in Social & Economic Research

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Women in Social & Economic Research (WiSER)

Women in Social & Economic Research (WiSER) has recently changed its name from the Women's Economic Policy Analysis Unit (WEPAU) to reflect the broader scope of academic and consultancy research into women's experiences of the ***social*** and economic policies that permeate their lives.

WiSER is a research program that spans two divisions of Curtin University: the Curtin Business School (CBS) and the Division of Humanities. WiSER was founded in April 1999 in response to a growing void, both within the Australian and international contexts, in the gendered analysis of the economic and social policy issues that confront women. As such, WiSER is committed to producing high quality quantitative and qualitative research on a broad range of issues which women identify as impeding their ability to achieve equity and autonomy. The gender perspective generated through the work of WiSER has provided a number of key opportunities to inform the policy debates within numerous government departments. WiSER seeks to further its commitment to providing a meaningful gender analysis of policy through pursuing further research opportunities which focus on women's experiences of social and economic policies within the Australian context. The broad objectives of WiSER include:

- To identify the cases and causes of women's disadvantaged social and economic status and to contribute to appropriate policy initiatives to address this disadvantage;
- To demonstrate the way in which social factors, particularly gender, influence the construction of economic theory and policy;
- To extend current theory and research by placing women and their social context at the centre of analysis;
- To contribute an interdisciplinary approach to the understanding of women's position in society. In turn, this should enable the unit to better reflect the interrelatedness of the social, economic and political discourses in policy and their consequent implications for women;
- To foster feminist research both nationally and internationally;
- To expand linkages with industry;
- To establish and support a thriving Curtin University of Technology post-graduate research community with a common interest in feminist scholarship.

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Introduction

This report explores the demographic changes currently underway in Victoria and their possible implications for the employment prospects and challenges of Victorian women. The effects of population ageing on both the composition of labour demand and that of labour supply are explored. It is shown that the likely future pattern of labour demand, together with projected changes in the size and composition of Victoria's working age population, will raise the importance of older women's participation in the paid workforce.

The report is divided into a number of sections. In the following section data on likely patterns of population change in Victoria over the coming decades is summarised. Section 2 examines, in general terms, the possible economic consequences of demographic change, focusing especially on the possible implications for the size and age composition of the future Victorian labour force. The intra-state variations in population trends are examined in Section 3. Particular focus is given here to the trends in the population of Victorian women and to variations across the Victorian regions. Section 4 presents important information on the relationship between demographic change and labour market adjustments through participation rates. Information on current participation rates is assembled together with a detailed analysis of a range of possible scenarios for future rates. In Section 5 we examine the trends and characteristics of Victorian women's participation rates. Together with the analysis, provided in Section 6, of the trends in women's employment across industry sectors, this provides a framework that can be used to assess the potential for future growth in participation rates. A brief summary and conclusion is in Section 7.

1. Overview of Demographic Change in Victoria

A number of studies have been conducted, largely by the Federal government, with a view to establishing the likely future pattern of population growth in Australia. The most important of these is the Australian Bureau of Statistics' Population Projections (ABS, 2003a), which outlines the likely trends in natural rates of population change and net overseas migration over the period to 2100 and identifies the implications of these trends for population outcomes[1]. The following discussion of population trends in Victoria is based on these ABS projections.

As is commonly understood, demographic change in Victoria (and Australia) is causing an ageing of the population and has two main features:

a) Fertility rates have fallen substantial over recent decades and this trend is expected to continue over foreseeable decades. Nationwide, the number of births per woman fell from a peak of 3.6 in 1961 to 1.75 in 1999. Victoria has traditionally been characterised by lower fertility rates, and metropolitan areas across the nation typically record lower fertility rates than other areas. In 1999-2001, Victoria's total fertility rate was 1.63; the rate in Melbourne was 1.56 and the rate in the balance of the state was 1.88. According to the ABS's medium projection[2] for the 2011-2051, the total number of babies per woman is expected to reach 1.51 statewide. This figure is expected to reach 1.45 in Melbourne and 1.75 in the remainder of the state by 2011. These figures compare with a projection for Australia as a whole of 1.56;
b) Death rates have also fallen substantially over recent decades and are forecast to fall further in coming years. According to the ABS's 'medium' population projection scenario, Australian women's average life expectancy at birth is expected to increase from 82.4 years in 2001 to 87.7 years in 2051; whilst for men average life expectancy over the same period is expected to rise from 77.03 to 84.2 years. (ABS, 2003a)[1].

1 Population forecasts are also summarised in McDonald & Kippen, (1999) and Bacon, (2000)

2 The 'medium' forecast is based on an assumption that the total fertility rate will fall to 1.6 babies per woman by 2011 and then remain constant; life expectancy will increase to 84.2 years for men and 87.7 years for women by 2050; and annual net overseas migration will increase to 100,000 by 2005-6 (ABS, 2003a: 5)

The ageing of the 'baby boomer' generation (those born between 1946 and 1960), together with the drop off in fertility rates and Australians' increased longevity is contributing to a rapid increase in the proportion of the population aged 65 and above. The median age is expected to rise from 29.6 to 35.4 years (Victorian Department of Treasury and Finance, 2003: 5). As is shown in Table 1, the proportion of the Victorian population in the 0 to 14 year age group is expected to decline by 5 percentage points, from 19 per cent in 2005 to 14 per cent in 2050. The proportion of the population aged 65 years and over is projected to more than double over the same period, from 13 per cent in 2005 to 27 per cent in 2050. These changes are virtually the same as those predicted for Australia as a whole (see Austen and Giles, 2003 and ABS, 2000).

Table 1: Population Projections, Victoria, 2005 to 2050

Year	Age group						Total population
	0-14	%	15-64	%	65+	%	
2005	954,482	19	3,394,534	69	678,296	13	5,027,312
2010	920,666	18	3,551,959	68	765,500	15	5,238,125
2020	880,664	16	3,688,969	65	1,049,311	19	5,618,944
2030	889,869	15	3,696,670	62	1,350,776	23	5,937,315
2040	871,081	14	3,683,036	60	1,570,561	26	6,124,678
2050	843,509	14	3,668,232	59	1,684,712	27	6,196,453

Note: These projections are based on the ABS's 'series B' or medium forecasts with regards to natural population change and net overseas migration.
Source: ABS (2003b), Projections of the Population of Australia 2002-2051, Data Cube

2. The Economic Significance of Demographic Change

2.1 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 in Victoria over coming decades: from 0.48 in 2005 to 0.69 by 2050. Once again, these forecast changes parallel those predicted for Australia as a whole.

Table 2: Forecast Changes in Basic Dependency Ratios, Victoria, 2005 to 2050

Year	Dependency ratio			Change in working age population[a]
	Youth[b]	Aged[c]	All[d]	
2005	0.28	0.20	0.48	1.00
2010	0.26	0.22	0.47	1.05
2020	0.24	0.28	0.52	1.09
2030	0.24	0.37	0.61	1.09
2040	0.24	0.43	0.66	1.08
2050	0.23	0.46	0.69	1.08

Source: ABS (2003b), Projections of the Population of Australia 2002-2051, Data Cube

Notes:

a) Relative to 2005 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.

b) These projections are based on the ABS's 'series B' or medium forecasts with regards to natural population change and net overseas migration

Data on trends in dependency ratios have been used widely by policy makers in their attempts to assess future demands for public welfare, health and pension systems. For example, the recent Productivity Commission report on demographic change recommended that emphasis be given to increasing the cost effectiveness and productivity of Australia's health system by providing appropriate health and aged care services and by funding and managing these services efficiently and equitably (Productivity Commission, 2004: xliv).

Globally, key organisations, such as the OECD, have emphasised that planning by governments for their future health and pension needs is required to ensure future financial viability (OECD, n.d.).

2.2 Changes in the Size of the Labour Force

The projected changes in population also have important economic implications because they point to likely reductions in the size of the labour force, and, thus, a decrease in the ability to generate economic growth. The labour force of an economy is traditionally defined as the non-institutionalised population aged between 15 and 64 years. This definition reflects established notions of the ages at which men and women can contribute their labour to the formal economy and, thus, contribute to economic growth prospects.

The figures in Table 1 and 2 demonstrate that, according to the ABS's medium projections of population change in Victoria, the size of the labour force is likely to grow only slowly over the period to 2030 and then fall from this level over the remainder of the study period.

2.3 Changes in the Composition of the Labour Force

Population ageing is also forecast to result in a change in the age composition of the Victorian labour force. As is shown in the following table, the proportion of the working age population aged over 50 years is forecast to rise from 25.3 per cent in 2005 to 31.8 per cent in 2050. This change will be largely matched by a fall in the proportion of the labour force aged under 40 years.

Table 3: Labour Force Projections, Victoria, 2005 to 2050, percent of total population aged 15-64 in each age category

Year	Age group					
	15-19	20-29	30-39	40-49	50-59	60-64
2005	9.9	20.7	22.3	21.7	18.5	6.8
2010	9.8	20.6	21.0	21.3	19.0	8.3
2020	8.9	20.2	21.1	20.6	20.0	9.2
2030	8.4	19.0	21.5	21.3	20.1	9.7
2040	8.6	18.7	20.4	21.8	21.0	9.6
2050	8.5	19.0	20.0	20.8	21.5	10.3

Note: these projections are based on the ABS's 'series B' or medium forecasts with regards to natural population change and net overseas migration

Source: ABS (2003b), Projections of the Population of Australia 2002-2051, Data Cube

3. Intra-State Variations

Before the broader labour market implications of these projected changes in the Victorian population are discussed further, it is important to consider the projections for two important sub-groups within the population; namely women (as compared to men), and regional Victoria (as compared to Melbourne).

3.1 Population Forecasts for Victorian Women

The figures in the following table show that the trend in the population profile of Victorian women is similar to that for the population as a whole (and, thus, for men). Currently, the proportion of all Victorian women aged over 65 years (at 15 per cent) is higher than that recorded for Victorian men (at 12 per cent). This is likely to reflect the effect of the war years on the size of the male population. By 2050 the gender difference in the proportion of the population aged 65 and over is expected to fall to 1 percentage point. However, by 2050 there are still forecast to be 15 per cent more women aged over 65 years than men.

Table 4: Population Projections, Victorian Women, 2005 to 2050

Year	Age group						Total population
	0-14	%	15-64	%	65+	%	
2005	464,807	18	1,705,968	67	377,705	15	2,548,480
2010	447,623	17	1,786,315	67	419,981	16	2,653,919
2020	427,800	15	1,850,404	65	566,670	20	2,844,874
2030	432,275	14	1,849,167	61	726,010	24	3,007,452
2040	423,115	14	1,836,398	59	844,875	27	3,104,388
2050	409,678	13	1,826,715	59	900,959	29	3,137,352

Note: These projections are based on the ABS's 'series B' or medium forecasts with regards to natural population change and net overseas migration.

Source: ABS (2003b), Projections of the Population of Australia 2002-2051, Data Cube

The projected changes in the age composition of the group of women aged between 15 and 64 years (and, thus, within the labour force as it is traditionally defined) are also similar for the population as a whole. The proportion of women in this age group and aged over 50 years is forecast to grow from 25.5 per cent to 30.9 per cent over the 2005 – 2050 period. As is the case for the forecasts for the State as a whole, these changes are expected to be matched by a fall in the share of the working age population accounted for by women aged under 40 years.

Table 5: Labour Force Projections, Victorian Women, 2005 to 2050, percentage of total population aged 15-64 in each age category

Year	Age group						Change in working age population
	15-19	20-29	30-39	40-49	50-59	60-64	
2005	9.7	20.6	22.5	21.8	18.7	6.8	1.00
2010	9.5	20.5	21.1	21.4	19.1	8.4	1.05
2020	8.6	20.1	21.1	20.6	20.2	9.4	1.08
2030	8.2	18.9	21.4	21.4	20.2	9.9	1.08
2040	8.4	18.6	20.4	21.8	21.1	9.7	1.08
2050	8.5	18.7	20.5	21.9	21.2	9.7	1.07

Note: These projections are based on the ABS's 'series B' or medium forecasts with regards to natural population change and net overseas migration

Source: ABS (2003b), Projections of the Population of Australia 2002-2051, Data Cube

3.2 Regional Variations

There a variety of factors contributing to different population trends across the State. As was mentioned in the opening paragraphs of this report, fertility rates are lower in Melbourne than in other parts of the State. The current age distributions of populations living in metropolitan and non-metropolitan areas also differ, and the expectation is that the majority of new overseas migrants will locate in Melbourne (rather than other parts of the State) (ABS, 2003a). Given this, the future age distributions of metropolitan and non-metropolitan areas is likely to differ substantially, and this will also produce different patterns of dependency ratios.

The data in the tables below indicate clearly that the challenges associated with an ageing population are likely to be most pronounced in regional Victoria. Of particular importance to the current study is the prediction that the size of the working age population in non-metropolitan areas will begin to fall after 2010 and that by 2050 this potential workforce will be only 85 per cent of its 2005 level. In Melbourne, by contrast, the working age population is forecast to continue to grow throughout the period (albeit at a relatively slow rate), and by 2050 it is predicted to be 16 per cent larger than its 2005 level.

Table 6: Population Projections, Melbourne and the Rest of Victoria, 2005 to 2050, percentage of *total* population

Year	Age group						Total population (No.)	
	0-14		15-64		65+			
	Melb.	ROV	Melb.	ROV	Melb.	ROV	Melb.	ROV
2005	18	21	69	65	13	15	3,649,643	1,377,669
2010	17	19	68	64	14	17	3,827,434	1,410,691
2020	15	17	68	60	17	22	4,157,217	1,461,727
2030	15	16	64	57	21	28	4,449,349	1,487,966
2040	14	15	63	54	24	31	4,656,326	1,468,352
2050	13	14	62	53	26	33	4,782,971	1,413,482

Note: These projections are based on the ABS's 'series B' or medium forecasts with regards to natural population change and net overseas migration

Source: ABS (2003b), Projections of the Population of Australia 2002-2051, Data Cube

Table 7: Forecast Changes in Basic Dependency Ratios, Melbourne and the Rest of Victoria, 2005 to 2050

Year	Dependency ratio						Change in working age population[a]	
	Youth[b]		Aged[c]		All[d]			
	Melb.	ROV	Melb.	ROV	Melb.	ROV	Melb.	ROV
2005	0.27	0.32	0.19	0.24	0.45	0.56	1.00	1.00
2010	0.25	0.29	0.20	0.26	0.45	0.55	1.05	1.03
2020	0.23	0.27	0.26	0.36	0.49	0.63	1.11	1.02
2030	0.23	0.28	0.33	0.49	0.56	0.77	1.14	0.96
2040	0.23	0.27	0.39	0.57	0.61	0.84	1.15	0.90
2050	0.22	0.27	0.42	0.61	0.64	0.88	1.16	0.85

Source: ABS (2003b), Projections of the Population of Australia 2002-2051, Data Cube

Notes:

a) Relative to 2005 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 projections are based on the ABS's 'series B' or medium forecasts with regards to natural population change and net overseas migration

The age composition of the labour force is also forecast to become increasingly different between metropolitan and non-metropolitan Victoria. Over the period 2005 to 2050 the proportion of the working age population aged over 50 years is expected to increase from 24.0 per cent to 30.4 per cent in Melbourne, whilst it is expected to grow from 29.1 per cent to 37.2 per cent in the rest of the State.

Table 8: Labour Force Projections, Melbourne and the Rest of Victoria, 2005 to 2050, percentage of total population aged 15-64 in each age category

Year	Age group											
	15-19		20-29		30-39		40-49		50-59		60-64	
	Melb.	ROV	Melb.	ROV	Melb.	ROV	Melb.	ROV	Melb.	ROV	Melb.	ROV
2005	9.5	11.1	22.1	16.8	23.1	20.2	21.3	22.9	17.6	21.1	6.4	8.0
2010	9.4	11.0	21.9	16.7	21.9	18.5	21.1	21.6	17.9	22.0	7.7	10.1
2020	8.5	10.0	21.3	16.8	21.9	18.3	20.6	20.3	19.2	22.7	8.4	11.8
2030	8.1	9.6	20.1	15.4	22.1	19.2	21.4	21.1	19.4	22.6	9.0	12.1
2040	8.3	9.9	19.7	15.0	21.1	17.8	21.8	21.9	20.3	23.5	8.9	11.9
2050	8.2	9.7	19.9	15.1	20.7	17.4	20.8	20.6	20.7	24.3	9.7	12.9

Source: ABS (2003b), Projections of the Population of Australia 2002-2051, Data Cube

Note: These projections are based on the ABS's 'series B' or medium forecasts with regards to natural population change and net overseas migration

4. Demographic Change and the Labour Market

The discussion thus far has highlighted some of the broad implications of demographic change for the labour market. For example, it has shown how the forecast changes in Victoria's population are likely to result in both a fall in the size of its potential labour force by 2050 and an ageing of this labour force.

It must be noted, however, that the figures presented thus far are only based on population trends and traditional definitions of concepts such as the labour force and dependency. To get a better picture of how demographic change might affect the Victorian labour market over coming years – and how this might affect patterns of 'dependency' and 'contribution' – it is necessary to consider more disaggregated data on the labour market.

4.1 Demographic Change and Participation Rates

The statistics that have been used thus far to discuss the possible labour market consequences of demographic change have related only to the size of the potential labour force (currently defined as all people aged between 15 and 64 years). The size of the actual labour force (both now and in the future) is likely to be quite different for two main reasons: a) only a fraction of all the people in the large population group aged between 15 and 64 years participates in the paid workforce[3]; and b)

3 A labour market participant is someone who is either in paid employment or actively seeking paid work.

some people in the other age groups (especially the group aged over 65 years) are also engaged in the world of paid work.

These observations also have relevance for the discussion of dependency ratios. For one, they carry the implication that many people within the working age population should also be classified as 'dependent', in the sense that they are not engaged in paid work and, thus, are likely to be financially dependent on other individuals. It is also important to keep in mind that, under the standard definitions of dependency ratios, all people aged over 65 years are assumed to be 'dependent'. The reality, of course, is quite different, with there being many older Victorian who are not financially dependent on others and who make important financial and other contributions towards the community's needs.

One implication of these observations that has particular relevance to the current study is that changing participation rates within the working age population is a potential response to the economic challenges created by demographic change. That is, an increase in participation rates has the potential to increase the size of the *actual* Victorian labour force and to reduce the *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 actual labour force.

This point has been acknowledged by a range of researchers and policy makers both in Australia and around the globe (see McDonald and Kippen, 1999; Austen and Giles, 2003; Victorian Department of Treasury and Finance, 2004: 54). As is discussed extensively in Austen and Giles (2003), higher participation rates are also an important way in which an effective future supply of labour can be secured and, thus, they have significance for Victoria's future economic growth.

In the following sub-sections we examine, first, the current pattern of participation rates across age/sex groups and across the different Victorian regions. This information is used to establish a profile of the *actual* Victorian workforce and to identify the potential sources of change in participation rates. Following this, we analyse recent trends and sources of difference in Victorian women's participation behaviour.

4.2 Victorian Participation Rates

The following table outlines the participation rates of Victorian women and men in each of the key age groups, as of January 2005. Later sections of this report will provide details on the range of factors influencing these rates but for now it is important to note that a) women's participation rates are substantially lower than men's in each age group other than the 15-19 year age group; and that b) women's participation rates change substantially over the life course, while men's remain close to 90 per cent between the ages of 20 and 54 years.

Table 9: Labour Force Participation Rates, Victoria, 2005 (per cent)

Age group	Male	Female
15-19	56.7	59.4
20-24	85.6	79
25-34	92.5	74
35-44	90.8	70.1
45-54	88.5	74.5
55-59	75.7	53
60-64	54.9	30.9

Source: ABS (2005) Labour Force, Australia, Data Cube

The data in the next table shows the age/sex profile of the *actual* Victorian labour force, as at January 2005. The figures are a combination of the data on participation rates (from Table 9) and the data on population (from Tables 1 and 3). They show that currently, for both men and women, the mid-age groups (between 25 and 54 years) account for the majority of labour market participants. However, among women, the younger age groups (less than 25 years) account for a relatively large share of the actual labour force, while the opposite is true for the older age groups (over 55 years).

Table 10: Actual Victorian Labour Force by Age and Sex, 2005

Age group	Male		Female	
	Participants ('000)	% of actual labour force	Participants ('000)	% of actual labour force
15-19	97.8	3.9%	99.3	3.9%
20-24	157.2	6.2%	142.4	5.6%
25-34	332.3	13.1%	270.3	10.6%
35-44	335.5	13.2%	265.7	10.5%
45-54	296.1	11.7%	256.0	10.1%

55-59	111.9	4.4%	79.4	3.1%
60-64	61.9	2.4%	34.9	1.4%

Another way of viewing the information on Victorian participation rates that has particular relevance to the current investigation is to consider the age and sex characteristics of the group of people who currently don't participate in the labour market. This type of data gives a clearer indication of the characteristics of the 'pool' of individuals who could be the target of policies aimed at increasing participation rates in the future.

Table 11: Non-Participants in the Victorian Labour Force by Age and Sex, 2005

Age group	Male		Female	
	Non-Participants ('000)	% of all non participants	Non-Participants ('000)	% of all non participants
15-19	74.7	8.9%	67.9	8.1%
20-24	26.4	3.2%	37.8	4.5%
25-34	27.1	3.2%	95.1	11.4%
35-44	34.1	4.1%	113.5	13.6%
45-54	38.4	4.6%	87.8	10.5%
55-59	35.9	4.3%	70.4	8.4%
60-64	50.9	6.1%	78	9.3%

Source: ABS (2005) Labour Force Australia Data Cube and ABS (2003b) Population Projections data cube

The figures in Table 11 indicate that the large majority (65.8 per cent) of the group of people that currently do not participate in the labour market are women. Furthermore, women aged over 34 years (a group that is especially important in this study) account for almost 42 per cent of all non-participants. Thus, they would seem to be a logical group to look to if the policy intention is to raise participation rates in the future.

4.3 Forecast Changes in Participation Rates

The most influential Australian studies of future prospects for participation rates are those conducted by Peter McDonald & Rebecca Kippen (1999) and Bacon (2000). Both these studies forecast that the largest changes in participation rates will occur among older workers. As is outlined in the following table, McDonald & Kippen (1999: 58) estimate that the participation rate of Australian women aged between 60 and 64 years will rise from 20.0 per cent in 1998 to 40.0 per cent in 2048. The participation rate of Australian men in this age group is forecast to rise from 46.0 to 76.0 per cent over the same time period.

Table 12: 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
60-64	20.0	25.0	30.0	35.0	40.0

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

These particular forecasts are based, first, on the likely effect of the baby boomer cohort (which is characterised by relatively high participation rates) moving increasingly into their sixties (see ABS, 2000). They also reflect a belief that recent trends towards early retirement by men can be reversed by government policies that reduce the incentive workers have to leave the labour market before they turn 65 years[4].

4 O'Brien (2000-2001: 210) provides a useful overview of some of the policy changes affecting older workers. He cites federal government initiatives that increase access to training; provide financial encouragement for older workers to accept part-time and casual work; and expand the work for the dole scheme. Of particular importance are the moves to restrict older worker's access to social security pensions. The Mature Age Allowance, which was specifically designed for unemployed workers close to the age of retirement but with few job prospects, is being gradually removed. Eligibility rules for the Disability Support Pension are also being tightened. Previously access to this pension was available to workers age 55 years and over if they were deemed to be 'untrainable'. According to O'Brien's (2000-2001, Table 2) calculations, 16 per cent of men aged between 55 and 59 years, and 25 per cent of men aged between 60 and 64 years were recipients of such pensions in 1997. Equivalent figures for women are not provided.

The forecast changes in the labour force participation rates of women in other age groups over coming decades are less dramatic (see the above table). The labour force participation rate is expected to increase to 80 per cent for women aged in their early twenties and to 75 per cent for women aged between 25 and 54 years by 2020. These rates make some movement toward male participation rates, which by 2020 are anticipated to equal 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 question of the likelihood of these forecasts being realised is, of course, the subject matter of the central parts of this research project. A full discussion of the matter of the determinants of older women's participation rates will be provided in latter stages of the project. However, for now, it is useful to examine the possible implications of the forecast changes in participation rates for the future Victorian workforce.

The following table outlines the changes that would occur in the size and age distribution of the actual *female* labour force in Victoria under three alternative scenarios for age-based female participation rates over the 2005-2050 period;

a) The rates remain at their 2005 levels. That is, the participation rate remains at around 80 per cent for women in their twenties; 72 per cent for women aged between 30 and 50; 53 per cent for women in their fifties; and 31 per cent for women aged between 60 and 64 years (the 'low' scenario)

b) The rates increase in line with McDonald and Kippen's forecasts. That is, by 2020 participation rates increase to 80 per cent for women in their twenties; 75 per cent for women aged between 30 and 50; 60 per cent for women in their fifties; and 40 per cent for women aged 60-64 years (the 'medium' scenario)

c) The rates increase in each age group other than the 15-19 year age group by 10 percentage points more than McDonald and Kippen's forecasts from 2020 onwards. That is, by 2020 participation rates climb to 90 per cent for women in their twenties; 85 per cent for women aged between 30 and 50; 70 per cent for women in their fifties; and 50 per cent for women aged 60-64 years (the 'high' scenario).

Table 13: Forecast Changes in the Actual Victorian Labour Force, Women Only, 2005-2050

	Scenario A ***(No Change in LFPRs from their 2005 level)***						
	15-19	**20-29**	**30-39**	**40-49**	**50-59**	**60-64**	**Actual female labour force ('000)**
Year	% of actual female labour force						
2005	8.7%	24.7%	25.2%	23.1%	15.0%	3.2%	1,125,338
2010	8.7%	24.9%	24.0%	23.0%	15.5%	4.0%	1,163,945
2020	7.9%	24.6%	24.2%	22.3%	16.6%	4.5%	1,196,127
2030	7.6%	23.2%	24.6%	23.3%	16.6%	4.8%	1,182,359
2040	7.8%	22.9%	23.5%	23.8%	17.4%	4.7%	1,179,511
2050	7.8%	22.9%	23.5%	23.7%	17.4%	4.7%	1,179,419

	Scenario B ***(LFPRs change in line with McDonald and Kippen's forecasts)***						
	15-19	**20-29**	**30-39**	**40-49**	**50-59**	**60-64**	**Actual female labour force ('000)**
Year	% of actual female labour force						
2005	8.7%	24.7%	25.2%	23.1%	15.0%	3.2%	1,125,338
2010	7.9%	24.4%	23.5%	23.8%	16.1%	4.4%	1,188,007
2020	7.0%	23.7%	23.3%	22.7%	17.8%	5.5%	1,257,627
2030	6.7%	22.3%	23.7%	23.7%	17.9%	5.8%	1,245,105
2040	6.8%	22.0%	22.6%	24.2%	18.7%	5.7%	1,243,058
2050	6.9%	22.0%	22.6%	24.1%	18.7%	5.7%	1,242,806

	Scenario C ***(LFPRs change beyond McDonald and Kippen's forecasts)***						
	15-19	**20-29**	**30-39**	**40-49**	**50-59**	**60-64**	**Actual female labour force ('000)**
Year	% of actual female labour force						
2005	8.7%	24.7%	25.2%	23.1%	15.0%	3.2%	1,125,338
2010	8.4%	24.0%	23.5%	23.8%	15.9%	4.4%	1,203,065
2020	6.6%	23.3%	23.1%	22.6%	18.2%	6.1%	1,433,756
2030	6.3%	22.0%	23.5%	23.5%	18.3%	6.4%	1,420,290
2040	6.5%	21.7%	22.5%	24.0%	19.1%	6.3%	1,418,059
2050	6.5%	21.7%	22.5%	24.0%	19.1%	6.2%	1,417,695

The figures in the table show, first, that under each scenario the total size of the actual female labour force will increase until 2020 and then fall over the rest of the period to 2050. This result is the product of two factors: a) the projected changes in

the Victorian population (see Table 4 above); and b) the assumption that the changes in participation rates will be accomplished by 2020.

Despite this similarity, which largely serves to demonstrate the overarching significance of the projected population changes in the determination of the size of the labour force, outcomes do vary substantially across the three different scenarios. Under the medium scenario, by 2050 the actual female labour force will be almost 120,000 larger than its current level. The actual female labour force in 2050 will also feature a substantially larger number of older women workers. By 2050, close to 50 per cent of all women participating in the labour market will be aged over 39 years. In 2005 this proportion is only 41.3 per cent. Under this scenario the actual number of women participating in the labour market aged under 40 years would fall compared to current levels.

Under the 'high' scenario (that is, if women's participation rates can be increased by a further 10 percentage points beyond McDonald and Kippen's forecasts), the labour force in 2050 will comprise almost 300,000 extra women. Under this scenario, the actual number of women participating in each age group other than the 15-19 year age group would increase. However, the fastest growth would occur in the older age groups. As a result, the high scenario is also associated with an ageing of the actual female labour force. In 2050, the proportion of women in the labour force aged over 40 years would be about the same as it would be under the medium scenario (that is, close to 50 per cent).

Under the 'low' scenario (that is, if women's participation rates stay at their current levels), the female labour force in 2050 will be only around 54,000 greater than its current level. The number of women aged under 40 years participating in the labour force would be almost 21,000 smaller. However, because under this scenario participation rates amongst older women also do not change, by 2050 the proportion of women in the labour force aged over 40 years would be slightly less than under the other scenarios – at 46 per cent.

One way to assess the significance of the projected changes in the actual female labour force is to compare the projections to outcomes forecast in the male labour

force. If McDonald and Kippen's projections relating to men's participation rates are realised over the coming half century (and participation rates climb to 92 per cent for men in their twenties; 95 per cent for men aged between 30 and 60 years; and to 76 per cent for men aged 60-64 years), the number of men participating in the paid workforce in 2050 would be close to 210,000 more than current levels. This is figure is substantially higher than the forecast increase in the number of women participants under Scenario B (based on McDonald's and Kippen's forecasts) but significantly less than the increase that would be achieved if women's participation rates increased by a further ten percentage points (as in Scenario C).

The significance of the projected changes in the actual female labour force can also be assessed with reference to the other main potential source of future labour supply, namely net overseas migration. According to the medium assumption in the ABS's Population Projections (ABS, 2003a: 25), net overseas migration to Victoria will equal 25,221 per annum over the 2005-2101 period[5]. The ABS makes the assumption that the age distribution of this group will be the same as for the population as a whole. Thus, the net increase in the working age population (that, those aged between 15 and 64 years) due to migration is anticipated to be 17,150 per annum. Making an additional assumption that the labour force participation rate of migrants will be the same as for the resident population (that is, approximately 70 per cent), gives an estimate of the increase in the actual labour force associated with overseas migration of 12,005 per annum[6].

Comparing these figures on annual net migration to the forecast changes in the actual labour force associated with changing participation rates involves the making of some additional assumptions. Specifically, in order to estimate the difference in the size of the Victorian labour force in 2050 produced by the assumed annual flow of migrants, we need to take account of the fact that only a fraction of the migrants that arrive in Victoria in each year from 2005 onwards will still be in the labour force

5 This figure is based on an assumption that Victoria's share of Australia's net overseas migration will be approximately 25%. The Victorian Government's Skilled Migration Strategy includes a similar assumption (Victorian Government, n.d.).

6 Given that the State government aims to target skilled migrants, the participation rate may be higher than assumed here.

in 2050. In a very simple analysis – which is conducted solely with the aim of getting some 'feel' for the magnitude of the 'migrant effect' - we assume that the proportion of the actual migrant workforce is evenly distributed across each age year (that is, the same number of new workers are aged 15 as are aged 64). We also assume that workers retire at 65. Thus, of all the new workers who arrive in Victoria in 2005 only 10 per cent will still be in the labour market in 2050. Of all the new workers who arrive in Victoria in 2049, 98 per cent will still be in the labour market in 2050.

These assumptions, together with the figures on the projected annual net overseas migration produced by the ABS indicate that the Victorian workforce in 2050 will be approximately 300,000 larger than it is in 2005 due to the effects of migration. It is important to note that these figures are similar in magnitude to those predicted for the effects of a relatively large increase in the participation rate of Victorian women (Scenario C).

5. Women's Labour Force Participation Rates in Victoria: Current Trends & Characteristics

The above discussion leaves open the key question: what is the most likely scenario for women's participation rates over coming decades? In this sub-section we present information on the current trends in Victorian women's participation rates, together with additional data on how participation rates vary across groups of women in the State. This information indicates that participation rates have increased strongly over recent decades. Furthermore, these changes have been associated with changes both in the composition of the workforce and the economy that are expected to continue in coming decades. In total, the trends outlined in this section give some support to scenarios, such as Scenario C, which are based on relatively high participation rates for women.

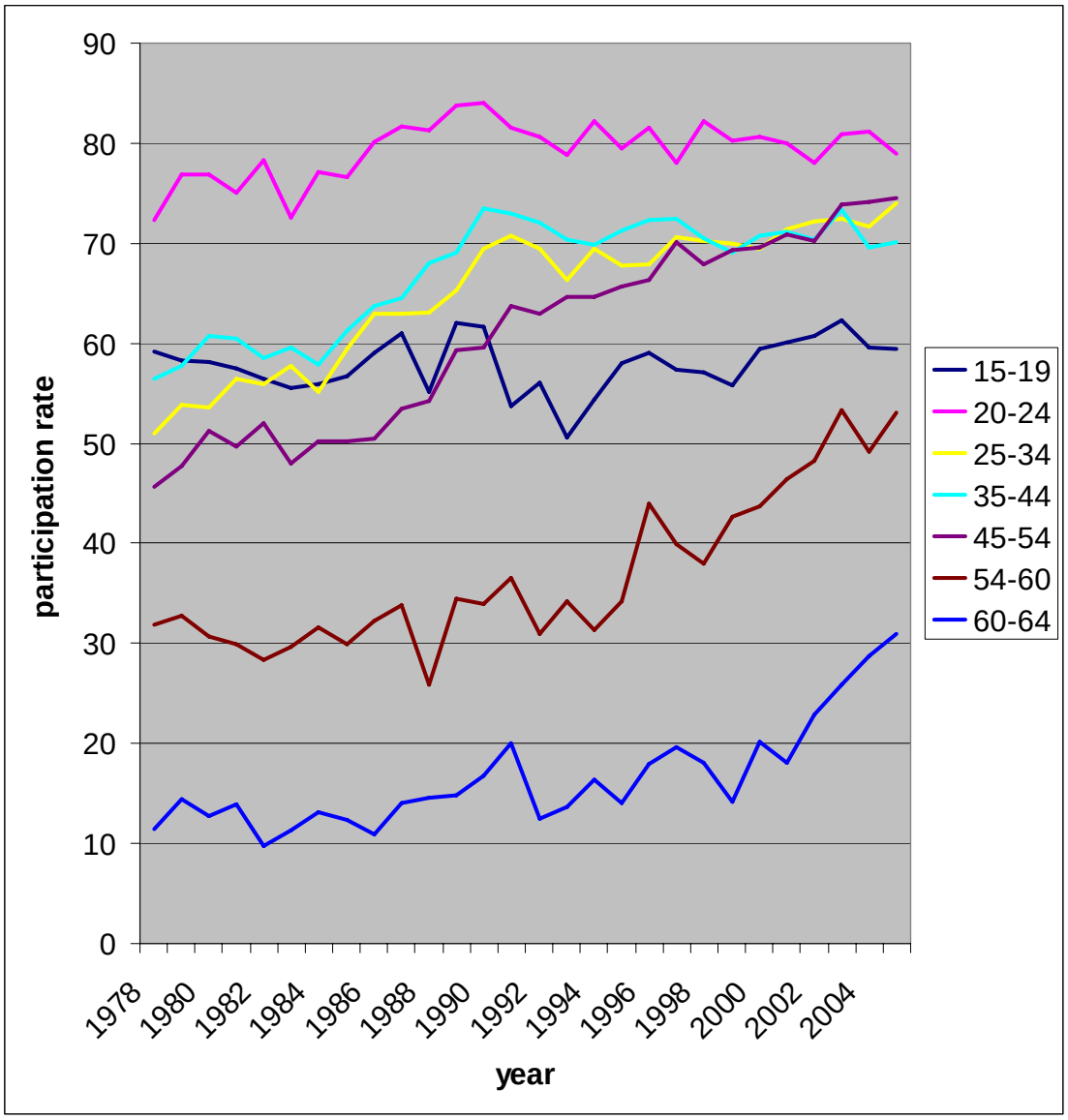
5.1 Trends in Age-based Participation Rates

The figures in the following chart demonstrate that labour force participation rates have increased strongly over recent decades in most age groups. The most dramatic changes in women's labour force involvement have occurred in the mid and older age groups. For example, among women aged between 25 and 34 years the

participation rate rose from 51.0 per cent in 1978 to 74.0 per cent in February 2005. Among women aged between 35 and 44 years the change over the same period was from 56.4 per cent to 70.1 per cent. Among women aged between 45 and 54 years the labour force participation rate rose from 45.6 per cent in 1978 to 74.5 per cent in 2005; whilst among women aged between 55 and 59 years the participation rate increased from 31.8 per cent to 53.0 per cent.

It can be noted that, in each of the age groups other than the 35-44 year age group, the labour force participation rate of Victorian women in 2005 exceeded those forecast for Australian women in 2008 by McDonald and Kippen (please refer to Table 12).

Figure 1: Participation Rates, Victorian Women by Age Group, 1978-2005



Note: Data for February of each year.

Source: ABS (2005), Labour Force, Australia, Data Cube

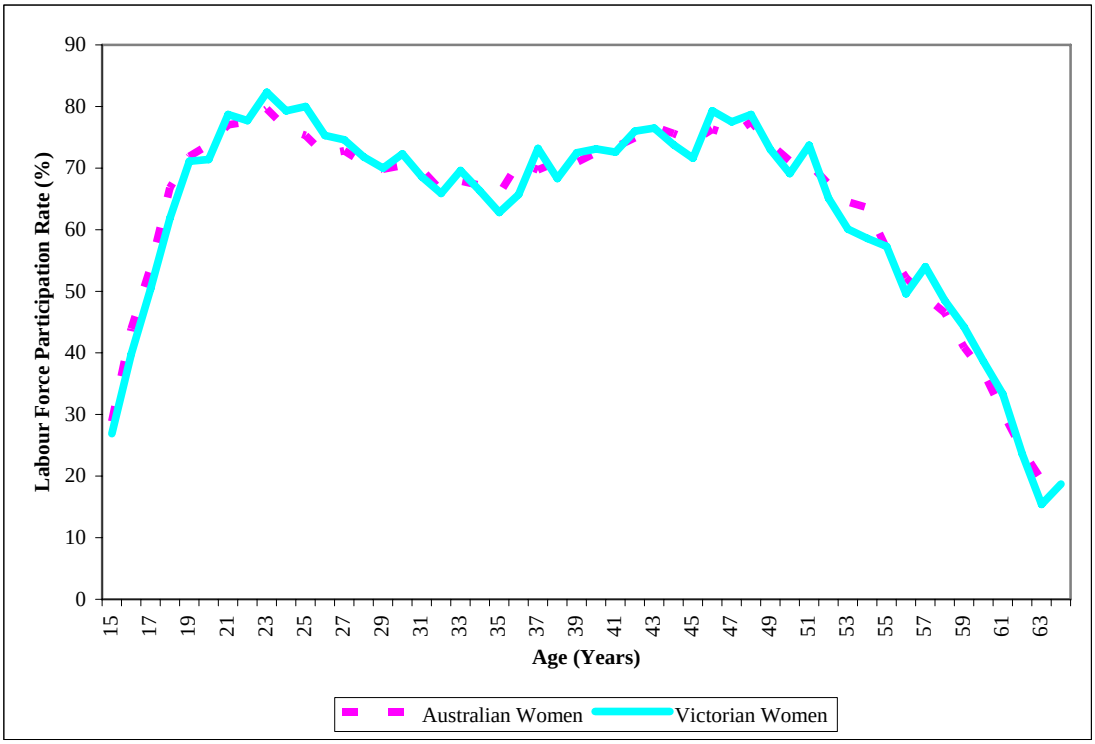
5.2 Age-based Differences in Participation Rates

The data in the above chart also indicate the large differences in women's participation rates associated with age. In January 2005 the labour force participation rate of women aged in their early twenties was almost 50 percentage points higher than that recorded by women in their early sixties!

The more disaggregated data (taken from the 2001 Census results) contained in the following diagram conveys similar information and shows how women's participation rates vary over the life course. The impact that having a child has on the chances of a

woman being involved in the paid workforce is apparent in this data, with the participation rate of women aged between 25 and 45 years (and, thus, in the key childbearing years) being lower than that for women aged either in their early twenties or in their late forties.

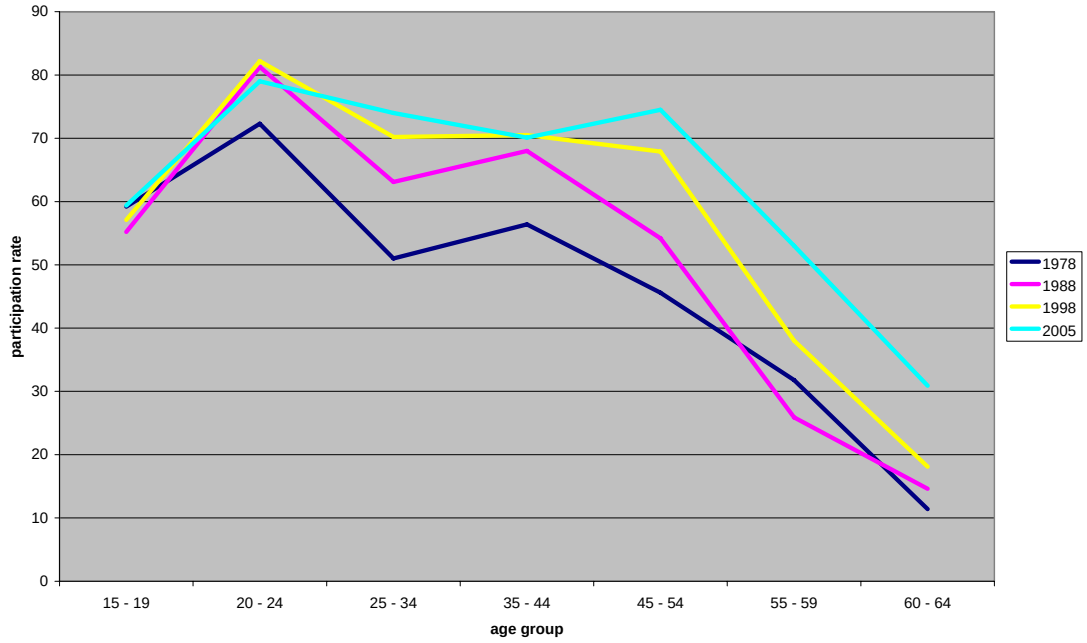
Figure 2: Labour Force Participation Rates for Women by Age: Victorian and Australian Women, 2001



Source: ABS (2001).

The relationship between age and participation behaviour, however, has changed substantially over recent decades. As is shown in the figure below, there has been a substantially lessening of the drop in the participation rate for the 25-44 year age group. This has been associated with a number of factors that include: an increase in the age at which women, on average, have their first child; the fall in fertility rates; and changes, across generations, in education and attitudes to mothers' involvement in paid work. Later parts of this study will provide a full analysis of these important cohort effects and their implications for likely future patterns in older women's participation behaviour.

Figure 3: Participation Rates, Victorian Women by Age Group, Various Years

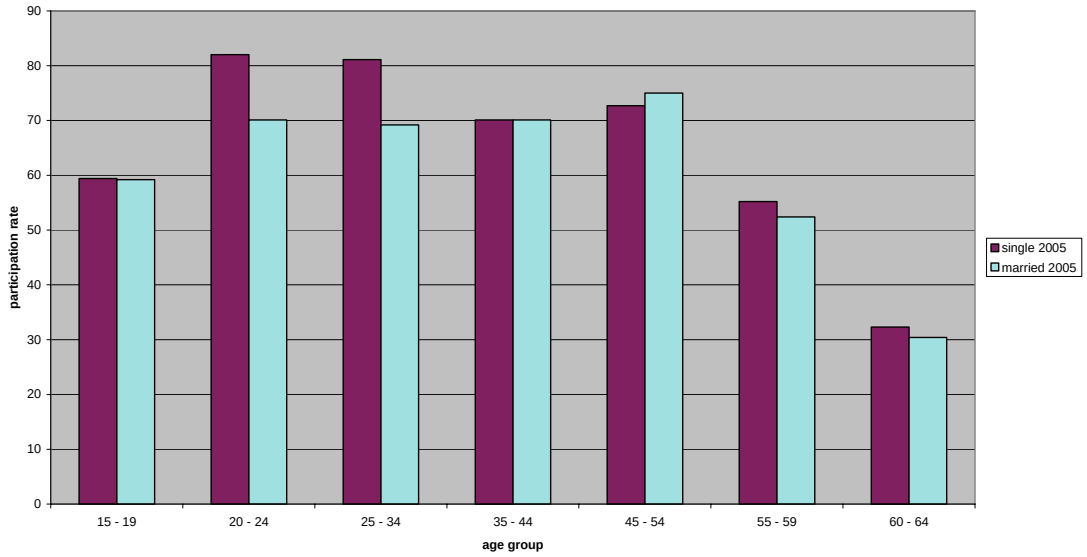


Source: ABS (2005) Labour Force, Australia, Data Cube

5.3 Marital Status

Several factors other than age are also associated with differences in participation behaviour among Victorian women. For one, the participation rate of married women is lower than that of single women, as is shown in the following chart. However, as was the case for age-based differences in participation rates, the significance of this factor has fallen in recent decades. For example, whilst the participation rate of single women was 15.1 percentage points higher than married women's rate in 1978, this difference had fallen to only 4.4 percentage points in 2005. A similar pattern of change occurred across each of the age groups, other than the youngest age group, over the period 1978-2005.

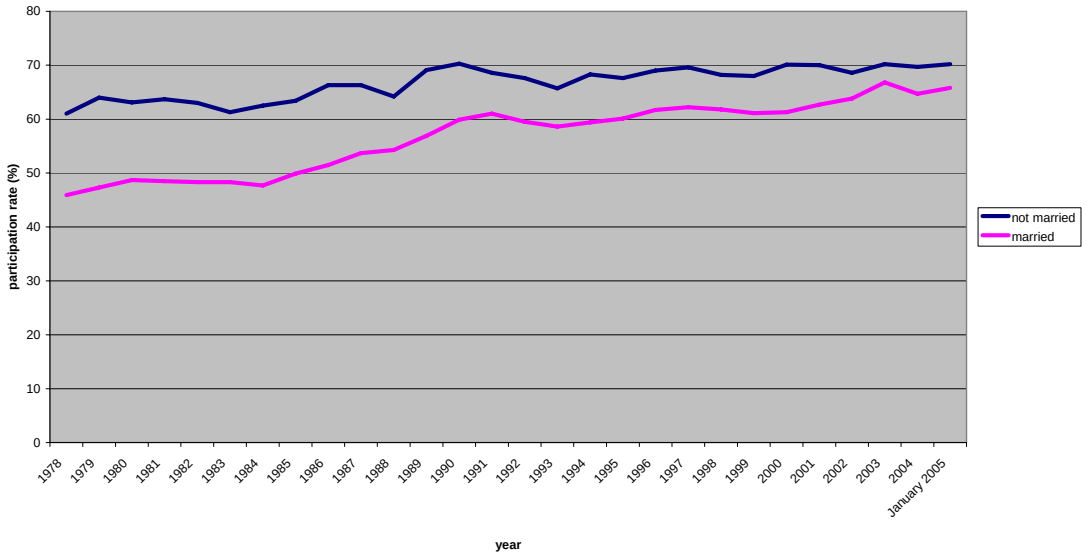
Figure 4: Participation Rates, Victorian Women by Marital Status and Age Group, 2005



Source: ABS (2005) Labour Force, Australia, Data Cube

One important implication of these figures is that the largest increases in participation rates occurred amongst married women – a point that is born out in the figures presented in the next chart. They show that, between 1978 and 2005 the labour force participation rate of married women in Victoria increased from 45.9 per cent to 65.8 per cent. The change in the rate for not married women over the same time period was from 61.0 to 70.2 per cent.

Figure 5: Participation Rates, Victorian Women, by Marital Status, 1978-2005



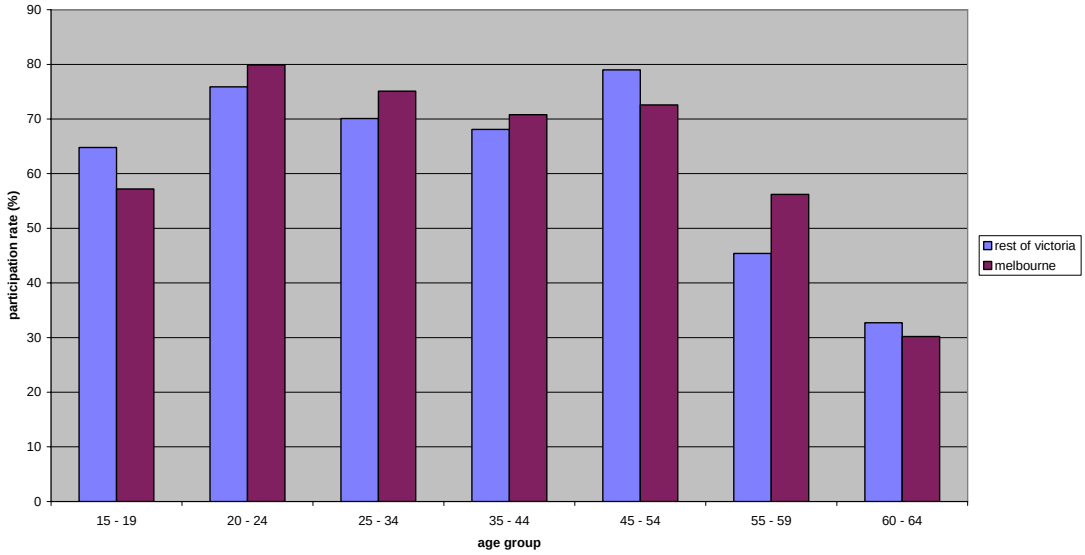
Note: Data for February of each year

Source: ABS (2005) Labour Force Data Cube

5.4 Region

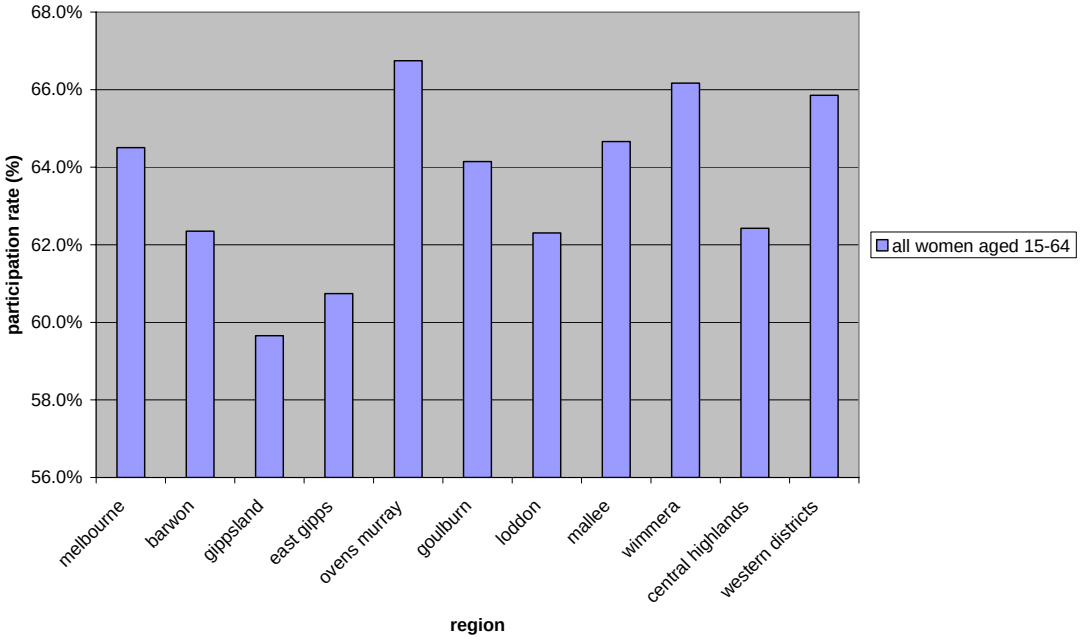
There are also regional differences in participation behaviour. The following chart shows that, in most age groups, participation rates are marginally higher in Melbourne than in the rest of the State. Across all age groups, the female labour force participation rate in January 2005 was 68.1 per cent in Melbourne and 66.2 per cent in the rest of the State.

Figure 6: Participation Rates, Women in Melbourne and the Rest of Victoria, 2005



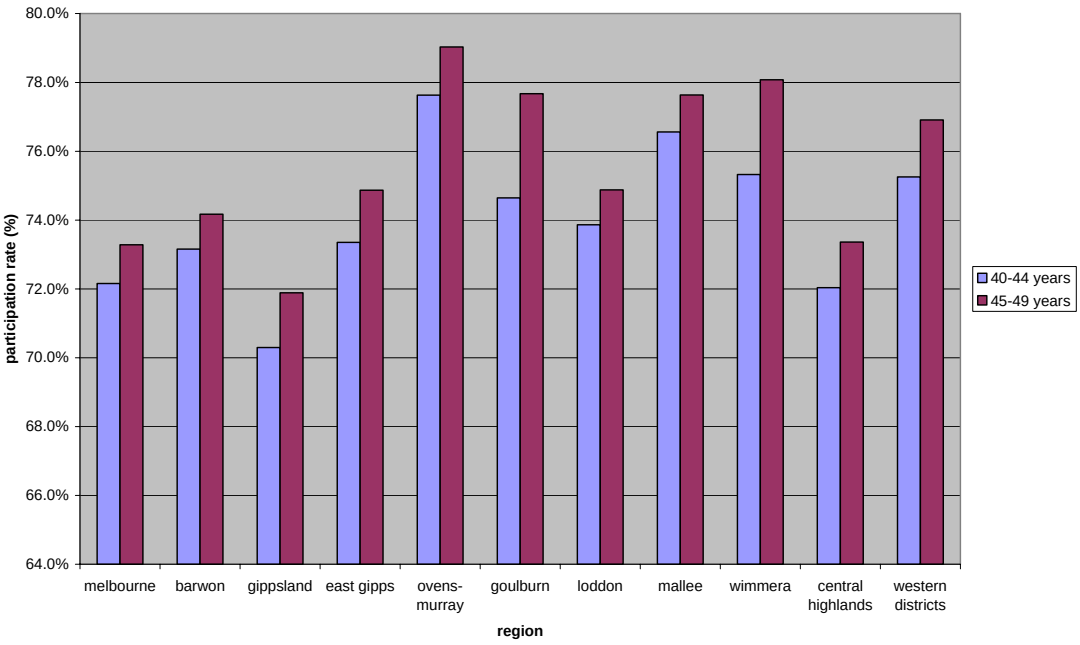
However, across regional Victoria there are some differences in women's involvement in the paid workforce. The 2001 census data used in the tables below indicate that the Ovens Murray, Wimmera and Western Districts regions had relatively high female labour force participation rates, whilst the Gippsland and East Gippsland regions featured relatively low participation rates. These patterns generally persist when the comparison is made of women aged in their forties living in the different Victorian regions. East Gippsland is one exception, as it featured a relatively low general female labour force participation rate, but participation rates for women in their forties were close to the State average.

Figure 7: Participation Rates, Victorian Women by Region, 2001



ABS (2001)

Figure 8: Participation Rates, Victorian Women in their Forties, by Region, 2001

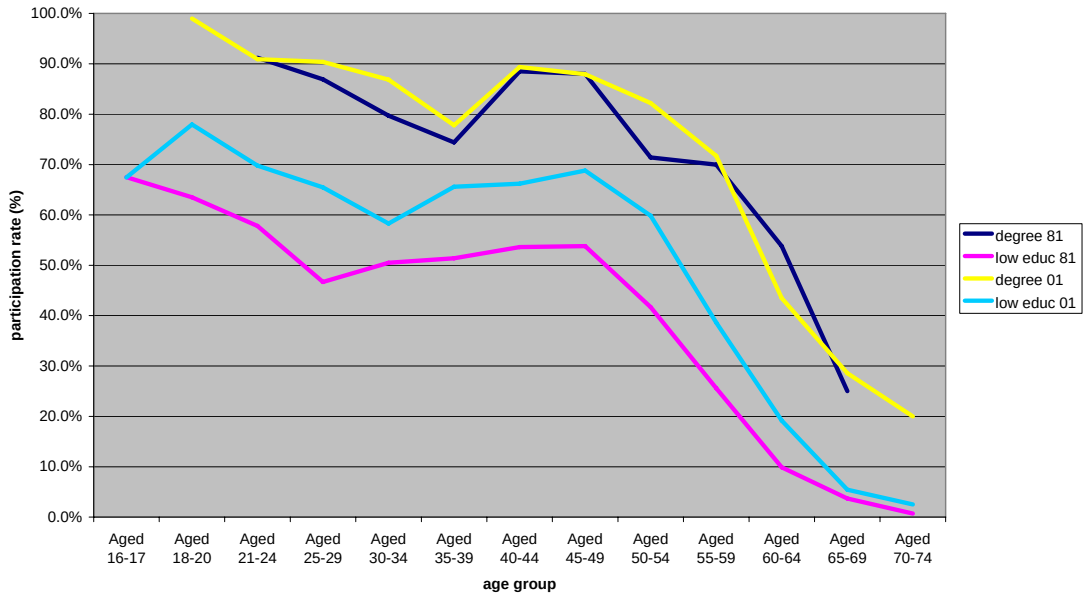


5.5 Education

A further important source of variation in the participation behaviour of Victorian women is the different levels of eduction within the community. Improvements in the average level of qualifications within the community are also likely to have contributed to the increased rates of participation observed in several of the above tables.

An indication of the role that education plays in influencing the participation behaviour of women is provided in the following chart, based on the ABS's Survey of Housing and Income Costs. In each age group and over both time periods the group of women who had a Bachelor's degree or higher qualification had a much higher participation rate than women with school-based qualifications or less (denoted in the graph as "low educ").

Figure 9: Participation Rates, Australian Women, by Age Group and Level of Education, 1981-2001



Source: ABS, Survey of Income and Housing Costs, 1981 and 2001

Although the figures in this chart indicate that the growth in participation rates over the 1981-2001 period were largest amongst women with relatively low levels of education, it must be kept in mind that, over this period, the number of women with degrees increased strongly (see the table below). This growth, together the higher

labour force participation rates of more educated women is likely to have made a substantial contribution to the growth in participation rates over past decades. As this trend towards higher qualifications among women appears to be a continuing one, these figures also suggest that education will be a factor promoting higher participation rates in coming decades as well.

Table 14: Levels of Qualifications among Women and Men, Australia, 1991-2001

Year	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 (2001)

Notes:

a) Post graduate degrees, graduate diplomas and graduate certificates

b) Advance diplomas, diplomas and certificates

6. The Characteristics of Women's Employment in Victoria

Thus far, most of the discussion of the changes in Victorian women's participation rates has focused on what economists term "supply-side" factors. These are individual-specific factors that are seen to influence either a woman's ability to achieve a rewarding job or the financial and other costs associated with her involvement in paid work. As is fully explained in the overview of the empirical literature (provided in Part 1), a set of "demand-side" factors also influence participation outcomes through their effect on the job opportunities available to women. These factors relate, especially, to the general economic conditions prevailing in the labour market and the types of skills required in this market.

The industry composition of labour demand has particular relevance for women's future employment prospects. 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.

The figures in Table 15 elaborate on these points. They show the industry composition of total employment in Victoria, rates of growth in total employment by industry over the period 1991-2001, and the female share of employment in each industry.

The industries that recorded rates of employment growth substantially above the 'average' for the labour market as a whole (of 21.4%) over the 1991-2001 period included property and business services (88.3%), cultural and recreational services (75.8%), accommodation, cafes and restaurants (51.9%), health and community services (31.3%), and construction (41.4%).

Many of these 'high growth' industries also featured relatively high rates of female employment. Compared to the female share of jobs in the Victorian labour market as a whole, of 45.3 per cent in 2001, the female share of total employment was 45.7 per cent in the property and business services industry, 48.2 per cent in cultural and recreational services, 55.7 per cent in accommodation, cafes and restaurants, and 79.3 per cent in health.

Table 15: Industry and Gender Characteristics of Victorian Employment: 1991-2001 (original figures)

Industry	*Share of total employment 1991 (%)*	*Share of total employment, 2001 (%)*	*Female share of full time industry employment 1991 (%)*	*Female share of full time industry employment 2001 (%)*	*Employment Growth, 1991-2001 (%)*
Agriculture, fishing & forestry	4.7%	3.8%	31.9%	31.8%	3.0%
Mining	0.4%	0.2%	17.6%	20.9%	-19.9%
Manufacturing	18.6%	16.0%	29.9%	28.1%	10.4%
Electricity, gas & water	1.7%	0.7%	11.8%	21.5%	-49.3%
Construction	6.3%	6.9%	14.3%	12.5%	41.4%
Wholesale trade	7.2%	5.8%	32.0%	33.1%	4.2%
Retail trade	15.6%	15.5%	50.7%	52.3%	27.6%
Accomm., cafes and restaurants	3.8%	4.5%	54.6%	55.7%	51.9%
Transport & storage	4.8%	4.0%	20.8%	24.6%	5.7%
Communication services	2.2%	2.1%	29.7%	34.9%	22.3%
Finance & insurance	5.4%	4.1%	53.3%	54.0%	-3.0%
Property, & business services	8.1%	11.8%	45.6%	45.7%	88.3%
Government, admin. & defence	6.1%	3.1%	39.4%	50.6%	-33.8%
Education	8.0%	7.5%	63.6%	68.3%	20.0%
Health & community services	10.0%	10.3%	77.0%	79.3%	31.3%
Cultural & rec. services	2.0%	2.7%	48.9%	48.2%	75.8%
Personal & other services	3.6%	3.5%	46.3%	46.2%	24.5%
TOTAL	100.0%		43.0%	45.3%	21.4%

Source: ABS (2001); Note: total excludes industries defined as "not classifiable economic units" and "not stated"

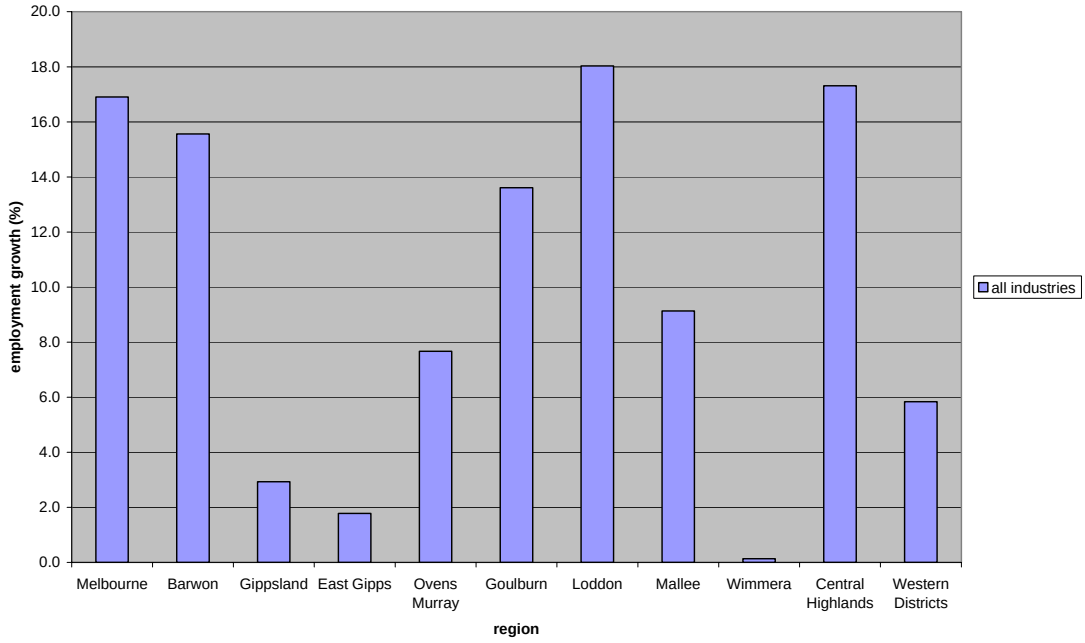
It is also interesting to note that the female share of employment increased in almost every industry group over the ten year period, including in those industries (such as government administration and defence) that recorded negative employment growth. As Austen and Giles (2003) note with reference to national and international trends in employment[7], it appears that women have benefited from increased job opportunities in the growth sectors of the economy, *and* they have been less likely than men to lose their jobs in the industries that declined. This latter feature of the changes in women's employment may reflect the occupational characteristics of their 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.

6.1 Regional Differences in the Pattern of Women's Employment

The following set of charts provides some information on the extent to which the Victoria-wide patterns of employment growth apply to the various regions of the State. The first figure shows the pattern of employment growth across the State over the 1991-2001 period. Clearly growth rates were far from uniform, varying from only 0.1 per cent in the Wimmera to 18.0 per cent in Loddon. East Gippsland and Gippsland were two other regions that recorded a low rate of employment growth over the ten year period.

7 Studies of similar trends in the United States include Goodman (1994) and Goodman, Antezak and Freeman (1993: 26).

Figure 10: Employment Growth, Victoria, by Region, 1991-2001

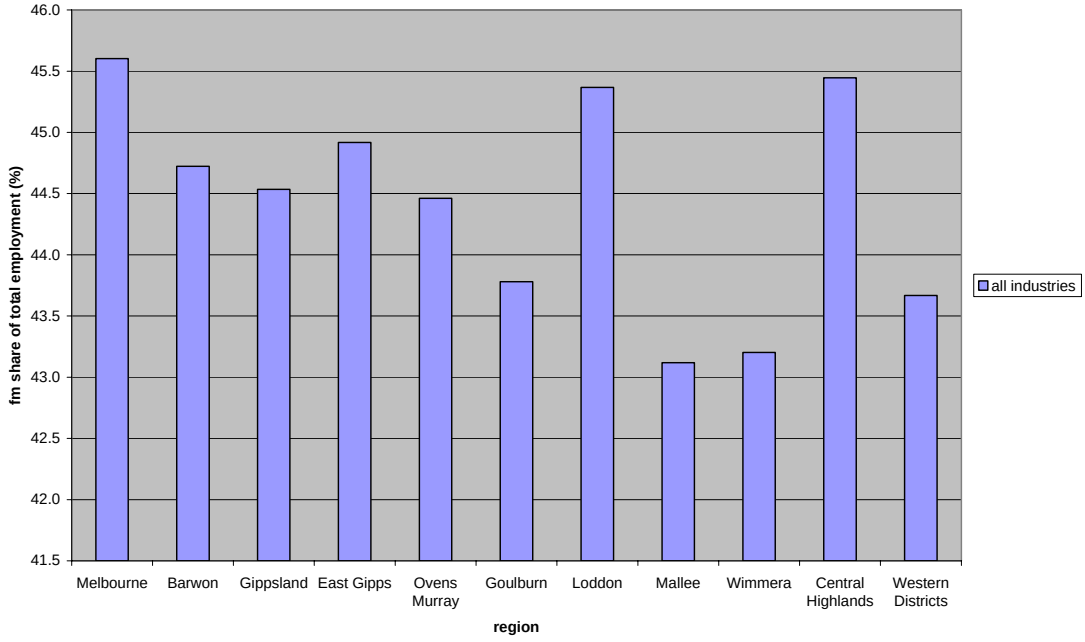


Source: ABS (2001)

Note: excludes multiple job holdings

The female share of total employment was more consistent across the Victorian regions. As is shown in the figure below, it ranged (in 2001) from a low of 43.1 per cent in the Mallee to a high of 45.6 per cent in Melbourne.

Figure 11: Women's Share of Total Employment, Victoria, by Region, 2001



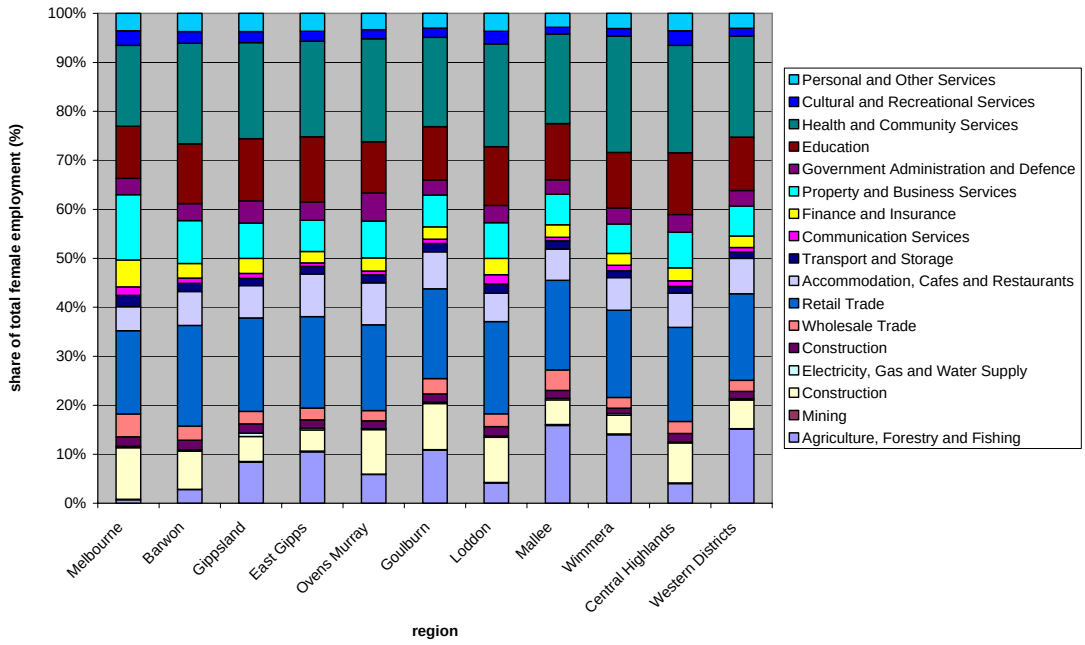
Source: ABS (2001)

Note: excludes multiple job holdings

An industry by industry breakdown of women's share of total employment in each region is presented in Table A.1 in the set of appendices to this part of the report. One interesting feature of this data is the higher representation of Melbourne women in industries that typically employ few women. For example, the female share of total employment in the Agriculture, Forestry and Fishing, Mining, Manufacturing, Electricity, Gas and Water Supply, Construction, Wholesale Trade, and Transport and Storage industries was higher in Melbourne than it was in the other regions. This may reflect a greater degree of diversity in the employment opportunities of Melbourne women.

Despite these differences, the industry composition of women's employment followed a similar pattern in each of the regions (see the Table below). As could be expected, agriculture and related industries were more important to women's employment in regional Victoria and finance and business services were more important in the make up of Melbourne women's employment.

Figure 12: Women's Employment, Victoria, by Industry and Region, 2001



7. Summary and Conclusions

This report has identified that demographic change is likely to cause the size of the Victorian labour force to begin to fall, and the labour force to age, by 2030. These changes are likely to be particularly large in regional Victoria, partly because this part of the State is not expected to benefit from increases in net overseas migration.

We also identified that increases in labour force participation rates are a potential labour market response to the economic challenges created by demographic change. Older women comprise an important part of the community where participation rates are currently low and, thus, they would seem a logical group for policy makers to look to if the intention is to raise participation rates in the future.

The effects of changing women's labour force participation rates on the size of the future Victorian workforce were estimated in this report. One scenario we examined was where, by 2020, participation rates climb to 90 per cent for women in their twenties; 85 per cent for women aged between 30 and 50; 70 per cent for women in their fifties; and 50 per cent for women aged 60-64 years. We estimated that this change would contribute an additional 300,000 workers to the Victorian labour force by 2050. In contrast, in a scenario where female participation rates remain at their current levels, the growth in the labour force between 2005 and 2050 is estimated to be only 54,000. Ageing of the female workforce occurs under both scenarios.

The importance of changes in female participation rates was also assessed in relation to two other 'options' for changing the size of the Victorian labour force, namely, increasing male participation rates and increasing the level of net overseas migration. We estimated that if male participation rates increased to 92 per cent for men in their twenties; 95 per cent for men aged between 30 and 60 years; and to 76 per cent for men aged 60-64 years, the size of the Victorian labour force would be 210,000 higher than its current level. If annual net overseas migration increased to 25,221 from 2005 onwards, we estimate that the Victorian workforce will comprise approximately 300,000 workers by 2050.

In summary, this section of our analysis demonstrated that increases in women's participation rates should be considered as a substantial, alternative source of labour supply in the State over coming decades.

The report also included a discussion of the likelihood that women's participation rates would rise over coming decades. Our findings here were generally positive. A number of features of women's involvement in the paid workforce in Victoria (summarised in the report) suggest that women's employment prospects will be favourable in coming decades. In particular, the likely future orientation of the economy towards the services sector, together with women's increasing levels of education and changing attitudes to women's involvement in paid work, imply that women's labour will be in demand.

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 won't 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. Policy interventions that address the barriers to women's participation in all age groups can play an important role in facilitating these changes and ensuring that increased participation in paid work proves to be beneficial for women and their families.

Appendices

Table A.1: Women's Share of Industry Employment by Region, 2001

	Melbourne	Barwon	Gippsland	East Gipps	Ovens Murray	Goulburn	Loddon	Mallee	Wimmera	Central Highlands	Western Districts
Agriculture, Forestry and Fishing	39.2	32.1	34.4	31.6	30.4	31.3	29.1	28.5	25.9	28.2	30.8
Mining	30.2	12.1	6.3	8.6	13.8	12.8	11.8	17.0	7.6	16.6	13.8
Manufacturing	29.4	21.1	20.2	21.9	25.1	26.5	28.3	24.7	21.1	24.2	21.5
Electricity, Gas and Water Supply	29.4	18.9	7.7	12.1	13.0	14.2	17.8	13.3	16.8	15.5	21.9
Construction	13.0	11.1	10.7	11.3	12.2	11.4	11.8	12.3	9.1	11.6	10.1
Wholesale Trade	34.8	28.2	25.3	28.1	24.7	28.4	27.1	30.7	20.2	26.2	23.3
Retail Trade	51.9	54.8	54.2	51.7	53.1	53.9	52.4	52.5	52.0	54.3	53.1
Accommodation, Cafes and Restaurants	52.7	59.9	64.4	64.2	58.0	63.2	62.4	64.0	66.5	62.7	65.4
Transport and Storage	26.2	20.6	21.7	21.0	21.5	19.1	21.6	19.6	16.8	17.9	17.7
Communication Services	34.3	32.5	39.5	33.2	35.0	35.1	40.9	33.3	44.4	32.6	42.5
Finance and Insurance	53.0	57.1	65.2	67.6	58.7	63.1	56.9	63.0	62.9	56.4	64.4
Property and Business Services	45.4	45.8	48.3	47.1	47.9	49.4	46.2	48.8	51.2	46.6	50.4
Government Administration and Defence	51.6	51.6	61.1	39.3	39.4	40.5	49.1	50.1	47.2	53.1	54.5
Education	68.6	66.7	68.6	71.9	65.2	70.2	65.8	70.7	71.9	67.1	67.1
Health and Community Services	78.6	81.0	82.8	80.5	80.1	83.8	79.1	82.5	81.6	78.3	81.9
Cultural and Recreational Services	48.4	48.3	49.7	49.5	44.7	46.4	48.1	44.4	42.2	48.6	49.0
Personal and Other Services	47.2	43.6	45.8	41.7	44.5	43.5	42.7	44.2	42.6	42.9	43.3
Non-classifiable economic units	44.3	42.5	38.4	33.7	44.3	41.1	45.9	42.0	57.3	36.4	42.8
Not stated	47.3	48.6	48.7	49.5	51.1	48.0	50.1	48.4	52.2	50.9	48.7
Total	45.6	44.7	44.5	44.9	44.5	43.8	45.4	43.1	43.2	45.4	43.7

Source: ABS, 2001

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