**ACHIEVEMENT OF HOME OWNERSHIP
AMONG POST-WAR AUSTRALIAN COHORTS**

Max Neutze & Hal L. Kendig

URU Working Paper No. 16
September 1989

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ABSTRACT

There has been concern for many years that it has been becoming more difficult for people to afford to buy a home. Despite this, the proportion of home owners among Australian households has remained much the same for some twenty years or more. In part, this is probably because the long-term rewards from being a home owner have increased at the same time as the costs of becoming an owner. This paper examines in some detail the factors which have affected the ability of people to become owners. It uses a unique set of data which were gathered in a survey which collected retrospective information about the experience of women and men aged 20 to 60 over their adult life.

The paper shows that more recent cohorts of women have become owners at younger ages than earlier cohorts. There is limited evidence that, in recent years, women who worked for a longer time after marriage, and men with higher incomes and higher occupations, were able to become owners more quickly. This may point to home ownership becoming increasingly confined to those on higher incomes, whether from high individual incomes or from having two incomes in household.

ACHIEVEMENT OF HOME OWNERSHIP AMONG POST-WAR AUSTRALIAN COHORTS¹

by

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1. INTRODUCTION

This paper analyses the achievement of first home ownership among cohorts of women and men who have become adults since the second world war. It examines the impacts of the state of the housing market and home ownership policies on the ability and incentive to achieve home ownership. It also examines the impact of decisions about marriage and children and workforce participation. Several different approaches have been taken to explaining differences in the housing situations of individuals and households.

1. *An equilibrium approach* uses cross-sectional data, often at different times such as censuses, to discover the housing situations of people with different characteristics.
 - (a) Using *aggregate data* the impacts over time of changes in market conditions which are reflected in affordability and in expectations of future costs, and the impacts of policies which affect home ownership can be assessed. Section 5 of this paper takes this approach.
 - (b) Using *individual data* the impacts of social class or socio-economic status can be assessed by comparing the housing situations of different social groups, as in Section 6.

¹ Acknowledgements: This paper is based on data from the 1986-87 Family Survey carried out by the Australian Family Project of the ANU Research School of Social Sciences. We wish to thank Michael Bracher, who directed the survey and collaborated with the second author in developing the housing component and Judith Yates for valuable suggestions. Yvonne Pittelkow and Neal Anderton carried out most of the data analysis and provided helpful comments.

2. A *life-course approach* emphasises the impacts of experience and decisions at a particular time on the housing situation over the whole life course.

(a) Using *aggregate data* the impact of differences in the demographic and employment experiences of different cohorts on their achievement of home ownership is explored in Section 7. This section also compares ownership achievement between some groups within each cohort whose experience differed. In particular, it examines the effect of women working after marriage, and of migrating to Australia at different ages.

(b) Analysis using *individual data* can assess the impact of a number of different kinds of experience on achievement of ownership. This approach will be taken in a subsequent paper.

The next three sections outline the conceptual approach adopted and survey the literature (2), describe the data and research approach (3), and discuss the measurement of the achievement of home ownership (4).

The main hypothesis tested in the paper is that the increasing difficulty of affording to *become* a home owner (which we shall call 'accessibility' to distinguish it from 'affordability' over a long time period) has resulted in strategies such as women postponing having children and working longer, and has resulted in home ownership being increasingly concentrated among those with higher incomes. The data provide some support for this hypothesis and the concluding section of the paper speculates on why home ownership has remained high despite the apparently increasing difficulty of accessibility to ownership.

There was a large increase in home ownership in Australia during the early post-war years of rapid economic growth. The proportion of households who owned their own home rose from about half to about 70 per cent between 1947 and 1961 (Kendig, Paris, and Anderton, 1987, p.16; Neutze, 1981). The same period saw the development of a small public sector which has housed approximately 4 to 5 per cent of households since the 1960s. Tenure patterns subsequently remained relatively stable (Jansen and Temby, 1987), even though interest rates and real house prices have risen,

real incomes have increased less rapidly and unemployment has increased (Kendig, Paris, and Anderton, 1987). There is growing concern that access to home ownership among recent cohorts of young adults may have increasingly become restricted to those with high incomes, and that tenure patterns may become more polarised along class lines in the future (Yates, 1988).

2. APPROACHES TO THE STUDY OF OWNERSHIP ATTAINMENT

The greater ability of richer people to afford more and better housing can be readily shown from cross-sectional data (Smith, Rosen and Fallis, 1988). Applied to changes over time this observation explains a major part of the rise in home ownership after the war.

Cross-sectional data such as Figure 1 derived from the 1981 Census of Australia, suggest, but do not demonstrate, that most of the heads of households who ever become home owners do so by the time they reach 30 to 35 years of age. Cross-sectional data from household expenditure surveys also suggest one reason why home ownership is popular: it results in much lower housing costs in later life.

Age differences in housing tenure, however, reflect the effects of both progress through a life span and the different historical periods experienced by different cohorts (Kendig, forthcoming). They do not show people's characteristics and experience during the critical early adult years when they are most likely to become owners. Nor do they include people who have achieved, but subsequently left, owner occupancy.

It is easy for people to change from day to day or month to month the amount and type of many goods and services that they use. In these cases, variations in their consumption reflects their financial means, the cost of goods and their demands at a particular time. However, when people buy housing they try to anticipate their demands over a number of years. They commonly buy on extended terms and take into account their expected ability to meet future payments. In these cases, the level of consumption at any time will reflect in part their financial means and preferences at an

FIGURE 1: Variations in Housing Type and Tenure with Age of Household Head

Note: Excludes household heads with age, tenure or dwelling type not stated.

Source: 1981 Census

earlier time. In addition, purchase of housing provides a very convenient form of investment as well as a form of consumption.

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Becoming a home owner is one of the milestones in the early part of the life course of most Australians. Some people inherit wealth which makes it easier to become an owner. Most people, however, have to save a sizable deposit and have a sufficiently high and secure income to make substantial mortgage payments. The result for many people can be a substantial financial squeeze during an early stage in their employment careers at a time when the costs of establishing a household are at their peak.

The developing field of housing demography (Myers, forthcoming) is devising ways to distinguish life-span and market influences on housing attainment. Australian research, for example, has shown that over 85 per cent of the present generation of older people have bought a home at some time (Kendig, 1984). This was less common among the working classes, never-married women, and people born in earlier cohorts. In Britain, retrospective fertility surveys have been analysed to show that buying a home before marriage, or at the time of marriage, has become more common over recent decades and is increasing home ownership rates (Murphy, 1984).

In the United States, analyses of repeated rounds of the Annual Housing Survey examined the effects on tenure attainment of recent rises in house prices and interest rates. Myers (1981, 1985) suggests that these changes have led to fewer purchases by first time buyers, and that women's earnings have become increasingly important. Rudel (1987) found that those who could afford to buy were more likely to do so while less wealthy families or those with more children may have been prevented from ever being able to buy. The Annual Housing Survey does not, however, examine the housing experience of individuals over time.

The existing literature thus provides valuable insights into a variety of separate influences on housing tenure. Very few studies, however, examine the effects on home buying of *both* individual life span experiences and changes in market conditions. The life history data used in this article permits such an integrated analysis. Secondary data on housing affordability as determined by incomes, house prices and mortgage interest rates, are related to survey data on the employment and family influences on young people's capacities to save deposits and meet mortgage payments. Given the strong ethos of home ownership and its privileged policy

treatment in Australia, it is assumed that the 'failure' to become an owner occupant is explained more by the press of financial constraints than by preferences for renting (Kendig, 1984). Changes in market expectations also have changed the financial attractiveness of home ownership.

Cross-sectional studies suggest that there is little increase in home ownership rates after heads of households reach 30 years of age (Kendig *et al.*, 1987: 33). The Family Survey, with its information on the life-long experiences of individual women, suggests that tenure experiences in mid-life are not as stable as aggregate figures suggest. The chance of having ever bought a home continues to rise, albeit at a slower rate, through mid-life (Figure 2). The rates of late entry to home ownership were lowest among the first of the post-war cohorts. Some no doubt, found a permanent niche in the public rental sector which expanded rapidly in the first decade after the war. Around 90 per cent of each of the first five cohorts had become home owners by the time of the survey.

Calculating ownership rates as a proportion of *households* can be misleading, especially when propensities to form independent households are changing at different rates among different demographic groups. Household data also can obscure the different influences on the probability that men and women will buy (Munro and Smith, 1989). It is better to analyse the experience of individuals, and include the propensity to form households and income units as variables rather than ignoring them by using households as the unit of observation.

Surveys of the experience of individuals permit a better understanding of the influence of life span variables on tenure. They show that home ownership is much higher after marriage, increases with age, and is higher among two-income and high income family units (e.g., Kendig, 1984; Clark and Onaka, 1983; Griffen-Wulff, 1982). Munro and Smith's study of access to home ownership among young adults in Britain (1989) identifies the lower level of home ownership among young single women than young men. The cross-sectional surveys on which much of this literature is based are limited in two ways. First, they typically record respondents' characteristics at the time of the survey with little attention to the aspects of personal histories that affect their opportunities to accumulate wealth.

Second, they seldom take into account the differing affordability and assistance available at different times or in different housing markets.

3. DATA AND RESEARCH APPROACH

The analysis is based on a national life history survey conducted in 1986-87 (Bracher, 1987). Unless otherwise stated, this is the source of the data used in each of the following figures. Retrospective data on individuals permits assessment of the effects on tenure attainment of socio-economic status, employment and family experiences of husbands and wives and conditions in the housing market in their early adult years. There may be causal effects in the opposite direction: housing affordability and goals may well influence decisions about leaving home, marriage, employment and child bearing. This paper, however, concentrates on the effects of family and employment histories on achievement of home ownership.

The survey was of 2,547 women aged 20 to 59 years of age and 2,182 men (of whom only the 2,129 aged 20 to 59 are included in the following analyses) conducted in 1986-87 by the Australian Family Project at the Australian National University (Bracher, 1987). The clustered, area probability sample excluded the 4.4 per cent of individuals in non-private housing (primarily institutions and boarding houses) and the 1.4 per cent of people who lived in sparsely populated rural areas. In the interview survey of women an average response rate of 75 per cent was achieved—slightly higher in rural areas and small towns than in urban areas. The response rate from the men, who were asked to complete a self-administered questionnaire, was 60 per cent. There were no significant differences between the age distribution of respondents and that in the 1986 Census.

Apart from the sections that specifically examine the housing experience of migrants, the paper excludes the 308 women and 295 men who migrated to Australia after their 20th birthday because it was believed that their housing experience in Australia would be affected by their migration.

The sample analysed in this paper includes individuals born from 1926-1930 through to 1961-1965. The large baby boom cohorts compared with the small numbers of births during the depression explain why the respondents are on average relatively young. Even the full sample does not fully

represent post-war housing experience because it excludes individuals who were older than 59 years in 1986, those who migrated out of Australia, and those who had died. It provides good coverage, however, of cohorts of young people who entered housing markets during the first four decades after the war.

The questionnaire concentrated on women's and men's life histories; their employment, marriage, and childbearing experiences. In the women's questionnaire, the calendar year and month when these experiences started and ended was recorded, which made it possible to identify quite accurately durations in particular 'states,' inter-relationships in their timing, and age at occurrence. Additional information was gathered on the characteristics of each husband (or partner in consensual unions) as well as extensive information on women's personal backgrounds. The men's questionnaire collected rather less detailed information and identified only the year in which events occurred.² In the housing section, it placed special emphasis on the financial arrangements of first home purchases. Because of the greater detail in the questionnaire and the larger sample size, more data are reported from the women's questionnaire. Where the data for men and women gave similar results, only the latter are reported.

Achievement of home ownership was measured by the response to a question which asked 'Have you ever owned or been paying off a home of your own (in Australia)?' It was defined as the first purchase or inheritance of a home by the respondent alone, joint purchases with a husband or wife, or moves by a wife (husband) into her husband's (wife's) home on marriage. The analysis in this paper does not examine any subsequent moves out of owner occupancy.

Independent variables were developed to indicate likely influences on individuals' and couples' capacities to buy a home. The variables indicate opportunities to save, capacities to meet mortgage payments and (to a limited degree) influences on the intensity of preference to buy. Some of the variables were defined by length of time in a particular state, for example the number of years of work before and after marriage. Some of

² For some analyses, the month in which an event occurred for men was simulated by a random allocation of an event which occurred in a particular year to a month in that year.

them, such as years of employment by the wife immediately following marriage, may relate to experiences after the time the first home is purchased, but nevertheless may affect ability to become a home owner and meet its continuing costs.

The independent variables distinguish between the characteristics and experiences of women and men, particularly employment of women during different periods of family life. The analysis ignores the effect of marital dissolution.

The only measures of socio-economic status that were collected were individuals' incomes and occupations at the time of interview. But these need not be closely related to economic resources in early adulthood. Educational attainment was the only direct measure of potential earnings during early adult years. Very low and high levels of education are closely associated with the upper and lower bounds of occupations, but the majority of Australians have some high school education and are employed in a wide range of occupations. Examination of the correlation between education and income at the time of the survey for males in cohorts aged 25-34 showed corrected R^2 s of less than 0.1.

Current occupation and income of men were used in selected analyses of their housing experience. The 1986 ASCO 4 digit code of the Australian Bureau of Statistics was used to recode the occupations into the 14 category Treiman code of social status, following Kelley and Evans (1988). These were collapsed into four categories based on associations with current incomes. The four categories were termed 'high' (higher professionals and managers) 'middle' (lower professions, and higher clerical and sales workers), 'working' (higher service, higher and middle production, and farmers), and 'lower' (lower levels of clerical, sales, service, and production and farm workers).

4. MEASURING THE ACHIEVEMENT OF HOME OWNERSHIP

Two measures of the achievement of home ownership are of interest. One is the proportion of any particular group who ever become home owners. That can be assessed only for people who have reached at least middle age.

FIGURE 2: Proportion of Women in Each Cohort Who Had Achieved Home Ownership by Each Year of Age.

(a) Ages 15-25

(b) Ages 25-60

Figure 2—which excludes the second, fourth and sixth cohorts in the interest of simplicity—shows that small numbers become home owners for the first time at least into their 50s. The data used in this study are not suitable for analysing the determinants of this variable as only the oldest cohorts had come close to completing their careers of achievement of home ownership.

A second measure is how quickly home ownership is achieved. In an earlier unpublished paper, Kendig and Pittelkow used the percentage who had become home owners by the age of 30 as the main dependent variable. In Figure 2 this can be illustrated by comparing cohorts as they are intersected by a vertical line at age 30. At that age, there was a clear difference between the first three cohorts and the next three. (Only the first six cohorts had reached 30 years of age by 1986.)

An alternative measure, used in this paper, is the median age at which members of a group first become home owners. This can be illustrated by comparing cohorts where a horizontal line at 0.5 intersects Figure 2. This shows a rather less clear distinction between the first three and the next three. Both of these measures are ways of simplifying the full profiles of achievement of home ownership such as those shown in Figure 2. They are better representations of the whole to the extent that individual cohort lines do not cross. Most of the crossing in Figure 2 occurs before women turn 23. Other points of the distribution could be studied and would enrich the analysis, though at higher percentiles only the older cohorts can be included. The median (or some other percentile) age at which an event occurs is a useful measure given a population of varying age, only some of whom have experienced the event. The average age cannot be used because for many the age of achievement is unknown.

For the same reason, medians were used also for measuring independent variable such as age at marriage. Another dependent variable used to a limited extent is the median period from marriage to first home ownership.

Medians can be misleading for cohorts where many individuals have not yet experienced an event. For example, a cohort aged 20 to 25 at the time of the survey may have a median age at marriage of 23. To measure the median, it has to be assumed that all who were not married at the time of the survey

will have a high age of marriage (99 years, for example). But some unmarried members of the 20-25 cohort will marry at less than 23 years and therefore reduce the final median age at marriage. This problem explains some aberrant results for the youngest cohorts. The most obvious case in this paper occurs in Figure 9 where the time worked by men before marriage appears to jump among the youngest cohort.

5. POST-WAR CHANGES IN THE AFFORDABILITY OF HOME OWNERSHIP

Two distinct aspects of housing affordability are important. The first, used by Bethune (1977), Bethune and Neutze (1987) and others, is affordability on average over the period a dwelling is owned and is usually measured as the user cost of housing. Affordability, in this sense, measures the relative attractiveness of owning and renting. The second, which is the main focus of this paper, is ability to be able to *become* a home owner, which we call accessibility. Changes in accessibility can have an especially heavy impact on young adults aspiring to buy homes even though they have little direct effect on those who already own. Accessibility to home ownership in the period when respondents were in their mid-twenties has a particularly strong influence on buying opportunities.

There are two related financial constraints on accessibility to home ownership: ability to save the necessary deposit, and ability to meet the cost of mortgage payments. If the fraction of the purchase price needed as a deposit is constant, the ratio between house prices and income measures the affordability of a deposit. Figure 3 shows wide fluctuations, but at most a slow rise in the number of years earnings needed for a deposit. In the early period, when interest rates were low and credit was rationed, ability to save a deposit was a very important constraint, and mortgage payments were reasonably affordable. Personal loans and second mortgages were used by those who could afford to service them, to ease the deposit gap.

With increases in interest rates in the 1970s, mortgage payments became an increasingly important constraint. With the deregulation of financial markets in the early 1980s the deposit constraint almost disappeared: the proportion of value lenders were willing to lend was constrained only by the security of the loan. The level of mortgage payments relative to average

FIGURE 3: Years of Average Income Needed to Purchase a Median-Priced House: 1950-85

Note: Median house prices as reported by BIS Shrapnell divided by nominal disposable income for a married couple with no children and a single income equal to average earnings (Social Security Review, 1986; Inquiry into the Cost of Housing, 1977, Vol.1, p.177). In 1950 income is measured as average male earnings with an added adjustment for income tax. Adelaide figures relate to 1967 rather than 1965.

earnings became a much more important constraint. Under these circumstances, a larger deposit became a direct substitute for higher mortgage payments and changes in interest rate affected the deposit home buyers needed.

The mortgage affordability index in Figure 4 shows the burden of interest and repayments in the initial years of buying. Accessibility falls in times of high expected inflation and hence high interest rates because, as long as borrowing is on a credit foncier loan with constant nominal periodic payments, the real cost of home buying is shifted towards the early years. Of course, the same inflationary expectations which bring forward the costs of home buying also increase the expected gains from being a home owner after the first few difficult years: affordability has increased while accessibility has fallen. The emergence of high real interest rates late in the

1970s would, if expected to continue, reduce the attractiveness of becoming a home owner with a large loan-to-value ratio. There is not much evidence that ownership has become less popular. Figure 4 shows that, since the mid-1950s, it has become increasingly difficult for single-earner households to become home owners. In response, lending agencies have increasingly been willing to take wives' incomes into account in assessing whether mortgage repayments are affordable. It follows that average weekly earnings has become less appropriate and the income of an income unit more appropriate for measuring accessibility. Lenders have made low-start mortgages available, but relatively few low-start loans have been made.

FIGURE 4: Affordability of Mortgage Payments: 1950-85

Note: The index of affordability is average earnings as a percentage of the income necessary to meet payments on a 25-year credit foncier mortgage at prevailing interest rates on savings bank home loans on 75 per cent of a median priced house, assuming that 25 per cent of income can be used for payments.

Post-war governments have given high priority to increasing access to home ownership. Through the War Service Homes Scheme and State Government lending for home purchase they have provided low interest loans to a large number of buyers. Furthermore, low interest rates on bank

loans and subsequent rationing resulted directly from controls imposed by the Reserve Bank (Neutze, 1978). While tax deductability of mortgage interest payments generally has not been allowed (except on a limited basis in the 1970s), governments have encouraged home ownership by excluding from taxation both imputed rent from, and capital gains on, owner occupied housing (Flood and Yates, 1987). Also, they have made generous allowance, to the benefit of home owners, in the account they have taken of the value of a home in setting means tests for pensions (Kendig *et al.*, 1987). These policy measures contribute to the well-founded perception that home ownership is financially advantageous in Australia.

Between the second world war and the early 1980s over 200,000 dwellings built by state housing authorities were sold (data from Department of Community Services and Health, and State Housing Authorities' Annual Reports) to sitting tenants or to families who were eligible for public housing, generally at less than market value and on very favourable terms with low interest loans. This began soon after the states started to build housing on a significant scale, generally just before or after the war. In 1956 it became Australia-wide when the Commonwealth States Housing Agreement was amended to provide for sale of housing funded under the Agreement. It continued at a high level until 1977 after which it fell sharply, largely because of much less generous terms for the purchase of houses built under the Agreement. These sales have provided a route into home ownership for many families who could otherwise not have afforded it. Figure 5 shows the number of sales as a proportion of the number of marriages, an approximate index of the availability of this particular route to home ownership.

Governments also have directly influenced the price of housing and subsidised its purchase (Neutze, 1978). Rent control, introduced during the war and phased out during the 1950s, made it easier for some tenants to save a deposit and encouraged landlords to sell to sitting tenants at discount prices. Only in the 1960s, did governments begin to require developers to cover the cost of roads, footpaths and hydraulic services within their subdivisions and, in some cases, make contributions to headworks costs. Between a third and half of mortgages during the 1950s and early 1960s

FIGURE 5: Sales of Public Housing as a Proportion of the Number of Marriages, 1946-86

Note: The number of sales is incomplete in that dwellings built using state funds in some states are not included.

Source: Demographic statistics and data from the Department of Health and Community Services.

were provided through the War Service Homes Scheme or other government sources at well below the rates of interest that were charged by other lenders. Beginning in 1964, various forms of Home Savings Grants have offered assistance to first-home purchasers with limited means.

These forms of assistance have varied over time with rent control and low interest rates being of greatest value in the early years, sales of government housing and assistance to first home purchasers more important in the middle years and exemption from taxation of imputed rent and capital gains becoming more important in the 1970s and 1980s as expected rates of inflation rose. All but the last increase accessibility to home ownership, but the exemptions from taxation, which increase the affordability of home ownership, do not increase accessibility. In summary, it has become more difficult to become a home owner since the mid-1950s but the rewards from achieving ownership have increased also. Moreover, because those rewards depend on taxation advantages they are greater for those on higher incomes. Notwithstanding the massive changes in post-war housing markets, aggregate tenure patterns of households have remained relatively stable in

Australia since the rapid rise during the 1950s. If changes in household composition are taken into account there has been a slow increase in the propensity to be a home owner.

6. SOCIOECONOMIC STATUS

Because there is a minimum price for acceptable housing, people with lower incomes and fewer assets find it more difficult to become home owners even though they may be satisfied with lower-priced housing. While those with greater resources can start by buying a modest house or flat and later upgrade, this option is not open to those who at most aspire to owning a very modest dwelling. Moreover, people with little wealth, low incomes and low earnings expectation find it more difficult to borrow to finance the purchase. The tax benefits from ownership are much greater for those on higher incomes and those with greater equity in their housing.

It would be expected, then, that people with high incomes and wealth would become home owners at a younger age, and that this effect would have become more marked in recent years when achievement of ownership has become less affordable. Unfortunately, data on income, wealth or occupation in early adulthood, at the time when people normally buy for the first time, were not collected. Income and occupation at the time of the interview are used in this section. This analysis uses the men's data because it is likely that men's income and occupation are better indicators of income and wealth in early adulthood.

Figure 6 shows the variation between income groups in the median age at which men first become home owners. The results are complicated by the fact that income at the time of the survey is a better indicator of income in early adulthood for the more recent cohorts, and that men with higher incomes later in life probably entered the workforce and began saving later. Also, with inflation expected to be low, there was less advantage to the earlier cohorts in becoming a home owner very quickly or at all. As the expected levels of inflation rose, higher-income men increasingly took advantage of their situations to become owners at a younger age. In the 1956-60 birth cohort income appears to be an important influence.

FIGURE 6: Median Age at First Ownership Among Men With Different Incomes at the Time of the Survey

Figure 7 shows that men with the lowest level of occupation in each cohort generally became owners at a somewhat greater age, though there is less clear evidence of an increasing impact among recent cohorts than in the case of income. Only for the 1931-35 cohort was there a strong effect of the expected kind. This result may suggest that social class is a relatively stable indicator of the desire for home ownership while income reflects the financial incentives and constraints which vary over time with expected inflation and affordability.

FIGURE 7: Median Age of First Ownership Among Men in Different Occupation Groups at the Time of the Survey

7. THE EXPERIENCE OF POST-WAR COHORTS

The employment and family experiences of aspiring home owners changed significantly over the post-war years. Real incomes rose through the mid-1970s, followed by a period of slow growth and increased unemployment. Expectations of continuing increases in real incomes became established in the 1950s and 1960s. In the 1970s, Australians began to expect high levels of inflation to continue and in the 1980s their expectations of increasing real incomes were revised downwards and unemployment became an accepted part of the experience of a significant minority. These expectations might be expected to have a profound effect on the desire to buy and the willingness to take on large mortgage commitments. They might also affect the willingness of financial institutions to lend and the people to whom they were willing to lend. These trends would suggest a sharp fall in ownership in the 1980s, but there is no evidence of such a fall.

Median age at marriage fell slightly across the cohorts until the cohort which turned 20 in 1975-80 in which the median age increased sharply

(Figure 8). The increase appears to have continued in the following cohort.³ Childbearing patterns appear to have changed more than marriage patterns. While 50 per cent of women in all cohorts had had children by the age of 25 (and of men by 28), the median age of women at which the first child was born rose steadily after the second cohort.

Median years from marriage to birth of the first child fell for parents of the baby boom of the 1950s, but then increased with successive cohorts. If access to home ownership depends heavily on savings during marriage, and if women's workforce participation after marriage depends heavily on the timing of childbearing, these trends should have increased the capacities of young couples to buy homes. Among the more recent cohorts, both women and men were able to become home owners at slightly younger ages, and sooner after marriage. It was common for couples in the early cohorts to have their first child before they bought their first home, but among more recent cohorts the two events have tended to occur at about the same time, or children have been deferred until after a home has been bought.

There has been considerable change also in the time spent working in early adulthood. Rising educational levels have resulted in later entry into the workforce (Figure 8) and higher earnings opportunities. While overall length of time in the labour force among young women has risen only slightly, Figure 9 shows that there have been substantial increases in the years of work after marriage and reductions in years of work before marriage.⁴ Few married women stop work immediately after they become home owners. Presumably their incomes help meet mortgage payments. One reason for the lack of popularity of low-start mortgages may be that they lock wives into working for a long time to meet the increasing mortgage payments.

³ Although the median is not shown for the last cohort, because less than half were married at the time of the survey, the age by which the first 25 per cent of women were married had continued to increase.

⁴ Men also work for shorter periods before they marry. The rise in the last cohort shown in Figure 9 is because of selection effects: only a little over half of the men in this cohort had married at the time of the survey and those who had not were *assumed* to have longer periods of work before marriage.

FIGURE 8: Median Age at Which Women Experienced Life Events.

Only half of women reaching adulthood before the mid-1950s worked full time after marriage, as compared to approximately 70 per cent of those who followed in the 1960s and 80 per cent in the 1970s. With equal pay legislation and greater access to more highly paid occupations, women's earnings as a proportion of men's rose from an average of 59 per cent through the 1960s to approximately 75 per cent from the mid-1970s onwards (Gregory and Duncan, 1981). These employment changes suggest that employment of married women became increasingly important in first time home buying over recent decades. (In turn, it probably helped to push prices up and reduced accessibility for single-income households). The median period worked by men before becoming home owners declined following the early post-war cohorts until the cohort that turned 20 in 1975-80 and for them, and for women in the same cohort, there was a rise. This is one of the few pieces of evidence from this study that declining affordability in the late 1970s may have affected access to ownership.

FIGURE 9. Period Working Before and (for Women) After Marriage.

The Impact of Work After Marriage on the Achievement of Home Ownership

One of the ways in which aspiring home owners might be expected have adjusted to declining affordability is for wives to continue to work, and work longer, after marriage. It is well known, as Figure 9 shows, that workforce participation rates among women, and in particular among married women, have increased since the second world war. This occurred for a number of reasons including increasing social equality between the sexes, equal pay legislation which resulted in higher rewards for working women, and more appliances at home reducing the time needed for housework. This section aims to test the hypothesis that continuing to work after marriage has become increasingly necessary to meet the increasing cost of becoming a home owner. The independent variable used is the length of time a woman worked continuously (without a break of more than six months) after marriage. The dependent variables examined are median age at which a woman first becomes a home owner and the median length of time from marriage to first becoming an owner.

FIGURE 10. Period of Continuous Work After Marriage and Median Age of Women at First Home Ownership.

The results of this analysis for successive cohorts are shown in Figures 10 and 11. The hypothesis would be supported if longer periods of continuous work after marriage have become increasingly significant as predictors of when people have been able to become home owners.

Figure 10 shows that an extended period of continuous work by women after marriage has become increasingly a predictor, especially among the two most recent cohorts shown, of women becoming home owners at a relatively young age. Among earlier cohorts there appeared to be a career-oriented group who worked more than five years after marriage and were perhaps less oriented to a family and home. The increased expected advantages of home ownership which became evident when the 1950-55 birth cohort became young adults in the early 1970s stimulated this group

FIGURE 11: Period of Continuous Work After Marriage and Median Time From Marriage to First Home Ownership Among Women.

into buying early. Figure 11 shows that working after marriage also appears to have become increasingly necessary for women to become home owners relatively soon after marriage.

Migration and Home Ownership

All of the previous sections of this paper exclude those who arrived in Australia after turning 20 years of age; those who arrive after the age when substantial numbers of the locals become owners have less chance of becoming home owners in Australia at an early age. This section compares the age at which migrants have become home owners with the age at which ownership was achieved by the Australian-born in the same birth cohorts. All of the data refer only to home ownership in Australia. Some of the older migrants may have been home owners in their country of origin before coming to Australia, and have had equity to transfer.

FIGURE 12: Median Age at Which Women First Become Home Owners by Migration Status.

Figure 12 shows the median age at which women who migrated at different ages became home owners and compares them with the Australian-born in the same cohorts. Migrants appear to have achieved home ownership relatively soon after arrival in Australia, and at ages that were not much greater than the Australian-born. In particular, those who came to Australia before they turned 20 became home owners at slightly younger ages than the Australian-born and those who migrated between 20 and 30 years of age were generally only two to five years older than their Australian-born peers. Even those who came to Australia at thirty or more years of age were not far behind. In most cohorts half of these women had become owners by the age of 40.

8. CONCLUSIONS

There is plenty of evidence that accessibility to home ownership has fallen in recent years but remarkably little evidence either from cross-sectional data or longitudinal data of the kind analysed in this paper that home

ownership is falling as a consequence. This paper uses the median age at which women and men first became home owners as the main indicator of the achievement of home ownership. Another indicator used was the median time after marriage that a person first became a home owner. In each case, there was evidence of home ownership being achieved sooner among more recent cohorts than among cohorts who became adults soon after the second world war. There is some evidence that this trend may have been reversed in the most recent cohorts surveyed but the evidence is not strong.

There are two hypotheses about the main determinants of achievement of home ownership. One is that socioeconomic status or social class is the main determinant. Using the very imperfect indicators of socioeconomic status collected in the Australian Family Survey, this influence did not appear to be very strong, but there was some evidence that it was becoming stronger as affordability declined. The second is that achievement of home ownership depends heavily on deferral of marriage and of child bearing and on wives working for extended periods after marriage. Again these factors did not emerge strongly but they were strengthening over time with falling accessibility.

Two possible explanations are offered for these interesting if negative findings.

1. The index of affordability measures the accessibility of home ownership, not affordability of home ownership as such. Since the early 1970s, high inflation has increased 'affordability' of, but reduced accessibility to home ownership. Over a lifetime, home ownership has not become more costly relative to income or relative to renting. People have been willing to assume very heavy burdens and take considerable financial risks to get access to home ownership to gain its advantages in later life. Furthermore, they have probably received much assistance from their families. (There is some evidence of this from the Survey). The recent emergence of high real interest rates, however, has reduced both affordability and accessibility.

2. In the early period after the war, many people were denied access to home ownership because of credit rationing rather than because they could

not afford to meet mortgage commitments. The effect of such rationing is not reflected in any of the indices of accessibility, including those presented above. Those constraints have been progressively relaxed and have now almost disappeared. The result has been that the decline in affordability has been at least partly offset.

Further analysis of the survey results will be carried out using multi-variate analysis to examine concurrently the effects of a number of factors on the achievement of home ownership.

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