

# **Income Mobility of Australian Families: Evidence from the NLC Panel, 1996/7 - 2000**

**(Work-In-Progress: Not for Citation or Quotation)**

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## FORWARD: ECONOMICS OF THE LIFE COURSE

The attached paper is essentially the introductory chapter to our planned book on *The Economics of the Life Course*.<sup>1</sup> It sets out the basic descriptive material on the income variables – eg: the treatment of the data; definition of income; construction of derived income variables; problems and operational resolutions – these are then held constant for the analyses presented in other chapters. The work on the income variables by Ackland<sup>2</sup> and Breusch & Mitchell will become the recommended version of the income data to be used by other researchers using the NLC data in order to keep analyses using the NLC income data consistent.

Because current income and labour market participation are closely inter-connected, it makes sense for us to tackle the labour market variables. Thus, the second chapter of the book functions in a similar fashion to the introductory chapter on income i.e: setting out the basic descriptive material on the labour market variables from the two waves of data and the retrospective labour market panel; discussion of the associated derived variables; problems and associated operational resolutions.

Once these baseline descriptions and discussions are dealt with in Part I, the subsequent chapters of the book move onto selected analytical areas to show the contribution that panel data can make to [a] important public policy and theoretical debates; [b] methodological issues. The current outline of the book is shown below with a brief discussion of Chapters 2-7. Chapter 1 will basically follow the attached work-in-progress paper.

### **PART I: INCOME AND LABOUR MARKET DATA IN THE NLC**

Chapter 1: Income Mobility of Australian Families: Evidence from the NLC Panel Data.

Paper attached

*Chapter 2: Labour Force Histories of the NLC Panel.*

This chapter basically aims to deal with two aspects of the NLC labour market data: [i] to give a basic picture of the change of labour force status of the respondents and

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<sup>1</sup> Provisional title and chapter contents.

<sup>2</sup> Ackland (2002). Paper to be presented at NLC Workshop, 18 May 2002.

(where applicable) their partners between the two waves of data. More importantly, [ii] to analyse the retrospective labour market data panel and describe/discuss the derived variables set up by the authors from this sub-section of panel data.

## **PART II: APPLICATION OF THE NLC DATA TO KEY PUBLIC POLICY ISSUES.**

### *Chapter 3: Impact of Labour Market Legislation on Australian Women.*

The NLC panel includes three cohorts of women who have been subject to major policy shifts affecting [i] their ability to participate in the paid labour force and [ii] the conditions and remuneration they can expect from this participation. The cohorts can be roughly described as:

- Those who entered the labour force prior to equal pay legislation and the legislated removal of the ‘marriage bar’ (Commonwealth Legislation, 1972 and 1974);
- Those who entered the labour force after equal pay legislation and prior to affirmative action/equal employment opportunity legislation (Commonwealth Legislation AA/EEO, 1987);
- Those who entered the labour force after AA/EEO.

This chapter will seek to establish the relative impact of each of these policy changes on the labour force decisions/histories of each cohort. It will also be set against the impact of other policy/social changes such as changing educational attainments of women and provision of publicly funded child care.

### *Chapter 4: Australia’s Low Income Families*

An enduring question for Australian social policy-makers concerns the nature and level of income support for the unemployed and working poor. This chapter will build on the basic income mobility picture presented in Chapter 1, examining the characteristics of:

- Those individuals/families who were at the bottom of the income distribution in wave 1 of the data and remained there in wave 2;
- Those individuals/families who exited from the low income population in wave 2 and the life course and/or labour market events associated with this change; and

- Those individuals/families who entered the low income population in wave 2 and the life course and/or labour market events associated with this change

*Chapter 5: Working Hours: Models of Participation Strategies of Australian Couples.*

A substantive analysis of the NLC data on working hours of respondents (and partners) is being carried out by a doctoral student associated with NLC project.<sup>3</sup> The aim of this chapter is to [i] theorise the labour force participation strategies of Australian couples as they move through their life course; and [ii] compare these models with the empirical data.

Panel data from the UK and US have shown that the birth of a child is a critical life course event that affects the labour force participation of the parents. Usually, a decrease in mother's participation and an increase in the father's participation. However, following on from the findings in Chapter 3, public policies relating to paid maternity leave, child care provision and more generally, improved economic motivation for women's participation due to educational attainment and changed aspirations, may have changed these traditional patterns.

Economic theory views participation from an individual perspective, where individual maximisation strategies predominate. For couples prior to the birth of a child, the pursuit of individual maximisation of labour market income probably holds. However, the birth of a child changes the participation possibilities for most couple-headed families both in the short and long term. Depending on the human capital resources of each parent, access to child care etc, different strategies maybe adopted across the parenting phase of the life course. Possible models to be investigated include:

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<sup>3</sup> Van Wanrooy (2002). Paper to be presented at NLC Workshop, 18 May 2002. The aim of this chapter is model-building and testing, rather than the analysis of hours to be conducted by Van Wanrooy.

<b>Life course stage</b>	<b>Model</b>	<b>Strategy</b>
Couple, no birth	Individual maximisation	Short-term, hours independent
Couple with child/ren	Local joint maximisation	Short-term, hours constrained for secondary earner
Couple with child/ren	Global joint maximisation	Long-term, investment approach Equality, sequencing of human capital maintenance
Couple, empty nest	Individual maximisation	Revert to short-term decision? Path dependent outcome?

### **PART III: METHODOLOGICAL INSIGHTS FROM THE NLC PANEL.**

#### *Chapter 6: Does a panel study tell us more than a quasi-cohort study?*

In theory, the data from panel studies are argued to improve our knowledge about important empirical issues and public policy debates. In practice, we can observe that some analyses based on panel data provide only marginal improvements to information from cross-sections. If we treated the income and labour market information from Wave 1 of the NLC data as a cross-section and created synthetic or quasi-cohort data from the first wave, how accurate would these data be in predicting the actual outcomes for the individual/families in the panel for Wave 2?

This chapter will compare predictions and outcomes between the two waves for a selected set of income and labour market variables.

#### *Chapter 7: Robustness of foregone earnings studies.*

Following on from Chapter 6, this chapter re-visits the foregone earnings of women with children estimated by Chapman, Gray and Mitchell (2001) from Wave 1 of the NLC data. There are numerous studies from the US and UK that estimate womens' foregone earnings, but we are unaware of any studies that have re-visited these estimates to assess the robustness [accuracy] of the modelled predictions. A number of questions will be addressed by this chapter, for example:

- A comparison of the Wave 1 predictions of Chapman, Gray and Mitchell with actual outcomes for women in the Wave 2 data;

- Short-term behavioural responses to policy shifts may affect the reliability of models/predictions based on cross-sectional data;
- Modelling based on the pooled information of both waves of data.

## CHAPTER 1

### Introduction

[i] The focus of this analysis is income mobility, not social mobility. There is often a confusion/close identification in people's minds between social mobility and an indicator such as income.<sup>4</sup> While long term levels of income often have a close association with social mobility – for example, by determining the ability to access good quality health care, education at upper secondary and tertiary levels, stable housing etc – parental profession(s), values and attitudes can play an equal role in social mobility. Wider environmental influences also play a part – the degree of openness in a society, relative emphasis on meritocracy vs class background are also held to play an important part in determining social mobility of individuals. The other problem is what kind of mobility. We can distinguish three types of mobility in the literature:

Intergenerational mobility – to what extent does the current generation maintain the social and economic status of the parental/grandparental generation?

Life course mobility – to what extent does the current panel change their social and economic status over their life course?

Cohort mobility – to what extent does a particular cohort show the effects of a markedly different social, economic or political environment (eg: a severe economic downturn during labour market entry years; a radical policy shift such as equal pay; a major change in political institutions)?

The work to be undertaken for this volume will focus primarily on life course mobility, although Chapter 3 will specifically take a cohort mobility perspective.

[ii] Income mobility studies

One of the main motivations for the setting up of panel studies in the US and UK was the examination of income mobility. In the US in particular, the Michigan Panel Study of Income Dynamics (MPSID) was oriented towards the exploration of poverty

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<sup>4</sup> Social mobility analyses using the NLC data is being investigated by Prof. Frank Jones.

persistence – to test the very strong arguments that had been mooted in the later 70s and 80s concerning the existence of an ‘underclass’ or ‘culture of poverty’. The MPSID is geared towards intergenerational mobility issues, while the British Household Panel Survey (BHPS) and the NLC studies are geared more towards mobility over the life course.

Both the US and UK studies, found very early on – i.e. after two or three waves had been collected, over as many years – that there was a high level of income mobility, with relatively low proportions of those in poverty at any one time being subject to very long term poverty. As a corollary, studies from these two panels found that relatively larger numbers were experiencing poverty at some time in their lives, compared with cross-sectional numbers. Work on these two panels has shown that substantial income changes are related to major life course events such as marriage, divorce or childbirth, as well as movements in and out of the labour market.

These longer term findings cannot yet be replicated by the NLC, but we should expect that some of the more general findings will also hold for Australia. Because the NLC data are not collected every year – the aim is to collect data every three years – there has been sufficient time for some movement to occur between the two waves and these are the focus of this paper. Equally, the analyses to be presented in this volume will be concerned with the extent of stability in patterns and each chapter will include a discussion of these continuities. This has the advantage of throwing the more marked patterns of changes into sharper relief as well as highlighting the fact that stability and continuity are the norm for the vast majority of our sample – and probably most of the Australian population.

[iii] Advantages of panel studies in the Australian context.

- NLC is the first broad population panel. As a multi-purpose survey data collected is not as detailed as ABS surveys of income, so scope is restricted (see discussion on income variables in Section 2.)
- Advantages over cross-sectional studies: there is an extensive literature concerning the advantages of panel data over cross-sectional data, salient issues will be summarised in a future version of this paper. One of the advantages

already clear to the authors from working on the income data is the ability to deal with missing observations/refusals by comparing data between waves.

- Policy applications – eg: levels of income support. Policy approaches might be influenced by a better understanding of the duration of different groups on income support.

#### [iv] Structure of Chapter 1

In Chapters 1 and 2 the basic descriptive work on the income and labour market variables will be presented. These chapters will also include key steps taken to ‘clean-up’ the raw data; the assumptions made to operationalise various concepts and standardise measures; comments about recurrent patterns of non-response; and explicit identification of unresolved operational problems. Chapter 1 is structured around the following issues and related tables (some tables have empty cells, awaiting appropriate comparative ABS/other external data):

- Definition of income used and general discussion of the data, including treatment of problematic cases. General comparison of the NLC data with either ABS data: mean and median income by family type; sources of income; quintile distribution. (Tables 1-6).
- Quintile changes between Waves 1 and 2. (Table 7)
- Life course and labour market events associated with changes. (Tables 8 & 9)
- Changes in family income, absolute growth/decline (Table 10)
- Expectations and outcomes (Tables 11 & 12)

## **2. Income Data**

### [i] Wave 1

The income data for Wave 1 have needed a lot of detailed processing to be made useable. Much of the preliminary processing work has been carried out and

documented by Ackland (op cit). Further processing to correct individual cases was carried out as part of this study.

There are 2231 responses in the original file, but for 27 of these cases there is no income information at all. These observations are useless for any research that requires a measure of income.

Respondents were given the option of answering the wages or salary question in a number of ways, for example nominating gross or net income per week/month/year. Where necessary the observations were converted to gross annual income. The conversion from net to gross income was done using the income tax tables for 1996-97, on the (rather strong) assumption that the wage or salary income that is stated is the respondent's only income and that no income deductions are available in the calculation of liability to income tax. Again Ackland (op cit) covers the issues in detail.

Questions were also asked about other income sources, viz. business income; income from rents and dividends; child maintenance receipts; and government pensions or benefits. These are added to wage income to give a respondent total gross income. This variable is called 'rinc' (for respondent income) in our data set; the similar variable in the Ackland data set is called 'inc\_resp'.

Note that the measure of respondent's income is not quite the respondent's contribution to the family or household income (if indeed such a concept can be defined at all!). For one thing the child maintenance figures include any payments made on behalf of the partner's children as well as those for the children of the respondent. A possible confusion in the responses arises with the classification of business income, particularly when marriage partners are also business partners. There is also evidence that family allowance payments are "women's business", with many instances of ignorance by male respondents of the nature and amount of such payments, and several cases where the government benefit appears to be attributed to the (female) partner as being her income instead of being declared as a government benefit to the respondent (as the questionnaire assumes it would be).

In a 33 cases (additional to the 27 cases of total income refusal noted above) the respondent initially refused to answer the question about wages and salary, and they were not asked further questions about their own sources of income, but later they gave an informative answer to the supplementary question about their total income in a range (q249). Respondent income has been estimated in these cases by a representative value in the given range, as explained in detail in Ackland (op cit). No information is available in these cases to enable the respondent income to be split into into wages and salary, business income, government benefits, etc. As a result there are more cases of missing data for the components of respondent income than for respondent income as a whole.

Partner income was requested in a range, and the assumption is made that these responses refer to gross income. As with respondent income that was supplied in a range, partner income has been estimated in these cases by a representative value in the given range, again as explained in detail in Ackland (op cit). Partner income is called 'inc\_part' in the Ackland data set and 'pinc' in our data set.

The main difference between Ackland's and our measures of respondent and partner income is that we have attempted to recover income data in the 227 cases for which a component of family income is missing. (These are in addition to 27 cases where nothing is available on income and the 33 cases where respondent income is available in total but not in its components.) In many of these cases where something is missing or appears to be missing, a reasonable judgement can be made about confusion by the respondent regarding the classification of income components. In some other cases, given the information we have about other components of family income and the demographic structure of the household, reasonable estimates can be made for some missing items, particularly where "don't know" is the response and family allowance is the benefit category. Some of these corrections to the data required assumptions and judgements that perhaps might be reviewed when time and resources permit, but we have been able to turn 199 of the 227 partially missing cases into plausible records. Thus only  $55=27+28$  observations have unusable partner or respondent income (and hence unusable family income).

Our family income variable is called 'finc' (=rinc+pinc) and differs from the variable 'faminc' described in Ackland (op cit) because ours excludes the imputed rent of an owner occupied dwelling.

The usable sample size in Wave 1 is  $2231-55=2176$ .

Despite what may be considered as fairly heroic assumptions in the data treatment to rescue observations with missing income components, some of the tables shown in Section 3 indicate that the resulting gross income estimates stand up to reasonable comparison with ABS Income Distribution Survey data (ABS Catalogue No: 6523.0 for 1996-97 and 1999-00). As Tables 5 and 6 illustrate, the greatest source of disparity is in the tails of the distribution and these probably relate to the point estimates of partner/respondent incomes in these ranges. Alternative point estimation procedures will be investigated by the authors.

#### [ii] Wave 2

In Wave 2 the NLC income questions were more tightly worded and respondents with business income were asked to give their income according to their income tax returns. This should have the advantage of better distinguishing wages and business income for the self-employed, but the coding of these responses is confusing and needed a certain amount of disentangling; see Ackland (op cit) for the details. Unlike Wave 1, wage and salary income was clearly requested gross of personal income tax.

Also unlike Wave 1, if the respondent refused to answer the question on wages and salary the questions on other components of respondent income were not skipped. However there was no follow-up question in Wave 2 corresponding to the one in Wave 1 about total respondent income in a range for those who refused to give wage and salary information.

Partner income was again collected in ranges and treated in a similar fashion to the other variables in ranges to obtain point estimates. This is the variable 'pinc' in our data set. The family income measure 'finc' is derived by adding respondent and

partner incomes, and is distinguished from the Ackland measure 'famine' by the absence of imputed rent.

Of the 1768 responses in Wave 2, there are 320 in which some component of income is missing. This is an increase on the 254 cases of partially or totally missing income data in Wave 1, and given the attrition from Wave 1 to Wave 2 it represents a larger potential loss of data (18.1% compared to 11.4% earlier). A preliminary review of the individual observations indicates that approximately 227 of these cases might be able to be rescued to the precision that was applied in reviewing the Wave 1 data, which leaves  $1675=1768-93$  usable cases of both respondent and partner income (and hence family income).

#### [ii] Recurrent problems

In both waves government benefits for children were often missing, particularly when the respondent was male. In these cases, where respondents said "yes" they received a family allowance, parenting payment, etc – but didn't know the amount – an estimated attribution was made.

Male respondents were more likely to refuse to give income details. Many female respondents answered "don't know" to partner income. Most of these cases had to be excluded from the income analysis because of the likelihood that the partner income represents a significant proportion of the family income.

As noted above, in the Wave 1 data it is often difficult to distinguish between the wage and business income of the self-employed, so a combined 'market income' measure is used in some comparisons below. In Wave 2 these distinctions were made easier through the use of tax return data (once the confusion in coding has been resolved).

The final version of this chapter will include an analysis of the refused, missing, questionable income data for both waves.

### 3. Cross-sectional Comparisons of NLC data with ABS data

The basic aim of this section is to establish the extent to which the NLC data reconciles with the ABS Income Distribution Surveys for 1996-97 and 1999-00. The tables below present an interim set of comparisons, using easily accessible published data. Empty cells indicate that a direct comparison is not possible from these sources. At a later date, the relevant ABS Unit Record Files will be analysed to: [a] provide direct family type and/or life course category comparisons; [b] more detailed decile comparisons.

**Table 1: Average gross family income by household type (1996-7)**

<i>Family type:</i>	Mean gross income		Median gross income	
	ABS	NLC	ABS	NLC
Single – U'25	334	342		233
Single – Retired/NILF	304	..		
Single – Other (U'35)			395	414
Single - Sole Parents	432	716	354	457
Couple - No children U'25 / U'35	935 / 1091	962 / 1300	1085	1192
Couple – Children under 5yrs	839	1114	749	959
Couple – Children over 5yrs	1050	1207	1044	1049
Couple - No children 55-64 yrs	684	..	533	..
Couple - Retired	479	..	348	..

**Table 2: Average gross family income by household type (2000)**

<i>Family type:</i>	Mean gross income		Median gross income	
	ABS	NLC	ABS	NLC
Single - U'25	374	503		481
Single - U'35	473	655	451	577
Single – 55-64 years	453	776		751
Single - Other	600			
Single - Sole Parents	509	699		572
Couple - No children	1327	1393	1211	
Couple – Children under 5yrs	1030	1345	915	1289
Couple – Children over 5yrs	1202	1469		1279
Couple - Children not at home	840		632	
Couple - Retired	526	574	373	556

Because the NLC panel was restricted to 18-54 year olds in Wave 1, we would expect that the income of the panel will [on average] be larger than the general population. The NLC panel concentrates on the prime earning years, as the panel ‘ages’ the gap between population income means and medians and those of the NLC panel should, in theory, decrease.

As shown the results at this level of detail are fairly mixed. In some instances the NLC data has only a few cases that match with some of the published ABS life course groups and/or are influenced by significant outliers. For other groups, the definition of the income unit may not match the ABS definition very well.

**Table 3: Wave 1 Share of family income by source (%)**

	Market income		Social Security		Other income	
	ABS	NLC	ABS	NLC	ABS	NLC
<b>All families</b>						
<i>Family type:</i>						
Single - U'25						
Single - Retired						
Single - Other						
Single - Sole Parents						
Couple - No children						
Couple - Dependent children						
Couple - Adult children at home						
Couple - Children not at home						
Couple - Retired						

**Table 4: Wave 2 Share of family income by source (%)**

	Market Income		Social Security		Other income	
	ABS	NLC	ABS	NLC	ABS	NLC
<b>All families</b>						
<i>Family type:</i>						
Single - U'25						
Single - Retired						
Single - Other						
Single - Sole Parents						
Couple - No children						
Couple - Dependent children						
Couple - Adult children at home						
Couple - Children not at home						
Couple - Retired						

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Tables 5 and 6 assign the NLC sample to quintiles based on ABS data – in other words they are not quintiles of the sample income data. This approach is taken here because the sample is not a normal population sample and this would render the comparison meaningless. This is reflected quite well in Tables 5 and 6 where the NLC means and medians are generally higher than in the ABS data. Although not shown, less than 10% of our sample in both waves would be found in the bottom quintile of a normal population sample. Conversely, our sample is disproportionately over-represented in the top quintile.

**Table 5: Wave 1 Distribution by quintiles of gross family income**

Quintile	Mean gross income		Median gross income	
	ABS	NLC	ABS	NLC
Lowest	121	110 (-9%)	168	126 (-25%)
2nd	294	301 (+2%)	295	303 (+3%)
3rd	476	482 (+1%)	477	481 (<1%)
4th	752	767 (+2%)	746	762 (+2%)
Highest	1485	1665 (+12%)	1307	1377 (+5%)

Source: ABS Catalogue No: 6523.0, 1996-97.

**Table 6: Wave 2 Distribution by quintiles of gross family income**

Quintile	Mean gross income		Median gross income	
	ABS	NLC	ABS	NLC
Lowest	136	148 (+9%)	177	177 (0)
2nd	327	343 (5%)	322	350 (+8%)
3rd	541	548 (+1%)	536	550 (+3%)
4th	866	887 (+2%)	856	895 (+4%)
Highest	1765	2106 (+19%)	1524	1657 (+9%)

Source: ABS Catalogue No: 6523.0, 1999-00.

#### 4. Family income dynamics

The aim of this section is to map the individuals/families in the NLC to gross income quintiles in the ABS data for Waves 1 and 2 and then examine the extent to which these individuals/families have moved over time. Table 7 summarises the changes for the 1662 respondents who were present in both waves of data (for this analysis 99 cases were excluded until their income data is thoroughly scrutinised.)

Table 7 reports what may appear at first sight to be a quite surprising degree of income mobility in the NLC sample. However, these results are not dissimilar to the BHPS (or MPSID) for changes over three or four years, especially among the lower quintiles (Jenkins, 2000). It confirms that in Australia, like many other OECD countries, only a minor proportion of very low/no income earners experience this state for prolonged periods. For our sample (especially in Wave 1 where there were no retirees on government age pensions) we would expect a considerable degree of upward mobility – especially among the under 30s entering the labour market, early partnering (but before the birth of children) and the first burst of wage growth as careers become established.

At the other end of the distribution is the extent to which those in the top quintile in Wave 1 remained there in Wave 2. Again, this finding is similar to the early results of the BHPS where 80% of Decile 9 and 86% of Decile 10 remained in these deciles (Buck et al, 1994: 91)

**Table 7: Change in gross income quintile position between waves**

<i>Wave 1 Quintile</i>	<i>Wave 2 Quintile Change</i>								
	<i>Negative change in quintile position</i>				<i>No change</i>	<i>Positive change in quintile position</i>			
	<i>-4</i>	<i>-3</i>	<i>-2</i>	<i>-1</i>	<i>0</i>	<i>+1</i>	<i>+2</i>	<i>+3</i>	<i>+4</i>
Lowest N=130					23.8	23.8	21.5	16.2	14.6
2nd N=120				11.7	22.5	30.8	21.7	13.3	
3rd N=248			4.8	13.3	32.7	33.9	15.3		
4th N=401		0.7	5.0	12.0	47.4	34.9			
Highest N=763	1.4	1.4	3.8	13.6	79.7				

In the following section (Tables 8 and 9) we will look at some of the life course and labour market events that are generally associated with major changes in income. On the positive side, partnering, leaving study or unemployment for employment are associated with increased income. While on the negative side – retirement, separation and divorce; or leaving the labour force to have children – are associated with decreased income.

Apart from observing the extent to which Australia conforms to these international trends there are other areas to explore that reflect issues specific to Australia. For example, the impact of casualisation of the labour force and the recent rapid growth in self-employment. These changes may disrupt the normal age-related ‘progress’, with the economic environment having a greater impact on mobility than normal life course events.

The NLC panel will also allow other specifically Australian social patterns – such as the ‘empty nest’ impact on the labour force participation of Australian women over 55 years – to be considered in detail.<sup>5</sup>

## **5. Life course and labour market transitions**

Following on from the previous section, this section examines the life course and labour market events associated with changed position in the income distribution.

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<sup>5</sup> Cross-sectional evidence has shown that Australian women are quite unlike their OECD counterparts in this respect (Whitehouse, 1995; Mitchell 2000).

**Table 8: Life course events associated with changes in gross income quintile**

	<i>Wave 2 Quintile Change</i>								
	Negative changes in quintiles				No change	Positive changes in quintiles			
<b>Lifecourse event</b>	4	3	2	1	0	1	2	3	4
No Change									
Birth only									
Child leave home									
<i>Join with Partner</i>									
Men									
Women									
<i>Separate/Divorce</i>									
Men									
Women									
<i>Death of partner</i>									
Men									
Women									
More than 1 event									

**Table 9: Labour market events associated with changes in income quintile position**

	<i>Wave 2 Quintile Change</i>								
	Negative changes in quintiles				No change	Positive changes in quintiles			
<b>Labour market</b>	4	3	2	1	0	1	2	3	4
No Change									
No paid workers in both waves									
<i>Additional workers:</i>									
1									
2									
<i>Fewer workers:</i>									
1									
2									

## 6. Stability vs change in family income.

To round off this chapter there are a number of possibilities.

- Table 10 aims to illustrate the growth/decline in income that an individual/family experiences between the two waves of data. This may give a sense of how different groups perceive their situation: are they moving forwards/backwards/standing still? This, in turn could be related to some of the attitudinal data on aspirations, job satisfaction, etc.
- Alternatively, the comparisons could be made on the basis of changes relative to growth in AWE, or some other external reference point. This would enable some 'objective' assessment of relative changes, as opposed to the respondent's individual experience.

**Table 10: Growth/decline in family income.**

<i>Family type (Wave 1):</i>	<b>Wave 2 income as a multiple of Wave 1 income</b>				
	<0.75	0.75-1.25	1.26-1.5	1.51-2.0	>2.0
Single - U'25					
Single - Retired					
Single - Other					
Single - Sole Parents					
Couple - No children					
Couple - Dependent children					
Couple - Adult children at home					
Couple - Children not at home					
Couple - Retired					
Other family types nec					

- Finally, it would be interesting to conclude this chapter by comparing one of the 'future expectations/plans' variables reported in Wave 1 with outcomes in Wave 2. There are two possible directions to go here.

[i] Looking at uncertainty – many life course/labour markets events maybe unforeseen or unplanned eg: sudden unemployment due to retrenchment; unplanned pregnancy, etc. Uncertainty is in itself a welfare loss to risk-averse individuals, and their desire to mitigate these losses is likely to be reflected in their observed behaviour. Understanding the extent of uncertainty surrounding financial well-being, and the ways in which people deal with it (eg: delaying children; not entering home ownership) is central to understanding the broader impact of uncertainty in individual welfare and the wider functioning of the economy. Some of the NLC data on fertility intentions, key economic or human capital investment plans might be valuable in exploring these issues.

Thus, the comparison of *ex ante* expectations and *ex post* outcomes can be compared and forecasting errors analysed between waves to gauge the extent to which unanticipated changes occurred. ***[Maybe in Wave 3 we should put in a question about whether people think they will be better off/worse off/same in three years? Earning more/less/same in real terms? employed/unemployed/changed jobs?]***

[ii] How do people form their expectations? Much of contemporary economic analysis proceeds on the assumption that expectations are ‘rational’ in the sense that individuals make full use of all the information available to them in their decisions. This *rational expectations hypothesis* has powerful implications for a range of economic issues, from the effectiveness of macroeconomic stabilisation policies to the microeconomics of consumption behaviour. Most attempts to test this hypothesis, however, have relied on aggregate data. Some of the NLC questions may be able to provide some leverage on this issue at the level at which it arises: that of the individual.

The essential implication of the rational expectations hypothesis is that individuals do not make systematic errors. *Unexpected* events may lead to errors in predictions, but these should average out over time, and observed prediction errors should not all be in the same direction. So, as more waves of data are collected a direct test of the hypothesis becomes possible, viz: an individual’s forecast errors should, over time, average out to zero. [with only two waves of data – this is not possible at present.]

## References

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