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**POVERTY, CAPABILITIES & AUSTRALIA’S (COAG’S)
NEW HUMAN CAPITAL REFORM AGENDA***

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*The views expressed are those of the author and do not represent the views of the Department of Family and Community Services and Indigenous Affairs, which commissioned the HILDA Survey. Preliminary calculations are based on a HILDA pilot study conducted in mid-2005.

POVERTY, CAPABILITIES & AUSTRALIA'S (COAG'S) NEW HUMAN CAPITAL REFORM AGENDA

Abstract

National measures of poverty are usually based only on low income. But this is conceptually incorrect. Measures of poverty should also take account of household consumption and wealth. To be poor is to have a low material standard of living – involuntarily. So if a household has an adequate level of consumption or a reasonable amount of wealth (net worth), it should not be classified as poor, even if its current income is low.

Using data from the HILDA Panel Survey, a new measure of poverty is proposed which combines indicators of low wealth, low income and low consumption. The measure results in estimated poverty rates considerably lower than those given by income-based measures. The new measure is shown to be strongly related to low human capital (low capabilities) as defined in Australia's (COAG's) Human Capital Reform Agenda, adopted in 2005. Suggestions are made for the development of a set of *progress indicators* for assessing achievement of the aims of the Agenda and also for poverty reduction. It is pointed out that progress could be monitored on an annual basis via the household accounts provided by the HILDA (Household, Income and Labour Dynamics Australia) Panel Survey.

The HILDA Survey is run by the Melbourne Institute for the Department of Family, Community Services and Indigenous Affairs. A sample of about 15,000 individuals in 7,000 households has been interviewed annually since 2001. Everyone in sample households aged 15 and over is interviewed.

Introduction

In mid-2005 the Council of Australian Governments (COAG) embarked on a 'third wave' of economic reform (COAG, June 2005). The first wave, beginning in the early 1980s, involved opening up the economy to international forces. The dollar was floated, foreign banks were allowed to open for business in this country and tariffs were largely abolished. The second wave of reform was marked by the adoption of the NCP – National Competition Policy – which had the aim of making a wide range of Australian industries, including some which had previously been monopolies, more productive and competitive. The third wave of reform is concerned with enhancing human capital (capabilities, skills) and improving standards of physical and mental health. Human capital reform is seen as essential to increased workforce participation and productivity in

a 'knowledge-based' economy. A National Reform Initiative Working Group and the COAG Reform Council have been set up to assist and advise COAG with the reforms. Several policy announcements have been made in 2005-06 which begin the implementation process (COAG, February, 2006; COAG, July 2006).

The purpose of this paper is to suggest that it would be valuable to link human capital/capabilities reform to the aim of *reducing financial poverty*. Many of the specific targets set out by COAG involve reducing the low capabilities which are associated with poverty. So it would make sense, at the same time, to adopt poverty reduction targets. This approach – that is, combining human capital reform with poverty reduction targets – has quite explicitly been implemented by the European Union since the Laeken European Council of December 2001 (European Commission, 2000).

A key point is that, if Australia is to adopt poverty reduction targets, we need an improved concept and improved measurement of financial poverty. In Australia, and historically in most other Western countries, poverty has been defined and measured solely in terms of low income. In Australia the most commonly used poverty lines – the Henderson poverty lines and OECD 50% of median household income poverty line – are solely income-based. But conceptually this makes almost no sense. To be poor is to have a low material standard of living – involuntarily. So it is essential to take account of *household consumption* – that is, standard of living directly measured – and also household wealth (assets minus debts) in assessing poverty.

The paper begins with a brief summary of the aims of the COAG Human Capital Agenda. Then an improved measure of financial poverty is proposed. Using data from the HILDA (Household, Income and Labour Dynamics Australia) Panel Survey, it is then shown that the proposed measure of poverty is statistically more strongly linked to low human capital/low capabilities than previous income-based measures. The paper concludes by suggesting some specific *progress indicators* – indicators applicable to different stages of the life cycle - and also *timelines* which could be included in the COAG Agenda. It is noted that the HILDA and LSAC (Longitudinal Survey of Australian Children) Panel

Surveys, in combination with ABS cross-sectional surveys, could provide the necessary data for monitoring progress in relation to the COAG Agenda.

COAG's Human Capital ('Third Wave') Reform Agenda

Human capital is given a very broad definition in the COAG Agenda. In economics textbooks it is often defined just as the skills developed by education, job training and work experience. COAG has in mind a wider range of 'capabilities' and explicitly includes physical and mental health (Victorian Department of Premier and Cabinet, 2005, chapter 5). In referring to capabilities, and including health, it is drawing on the ideas of the 1998 Nobel Laureate in economics, Amartya Sen, who is primarily famous for his work on poverty. Sen actually defined poverty as a lack of freedom - freedom of choice - caused by low capabilities, including lack of education, poor health and inadequate social capital (Sen, 1999).

In this paper, I prefer to keep the concepts of financial poverty and low capabilities separate. Low capabilities are a prime cause of poverty and it seems valuable to analyse the relationship and to develop a set of progress indicators to monitor changes in both sets of variables. In adopting this line, I am diverging from the approach taken in an earlier Melbourne Institute project, which followed Sen in defining poverty as low capabilities (Headey, 2006). Either way, the concept of capabilities can be thought of as a broadened definition of human capital.

The COAG Agenda actually covers three main areas: health, education and training, and work incentives. In regard to health the aim is reduce the proportion of the population not in paid work due to illness and disability. A sub-text is to reduce the number of people receiving Disability Support Payments; the fastest growing benefit type in recent years. It is noted that, in general, the health of working age people has improved in the last few decades, with reductions in early deaths from heart disease, strokes and cancers. But obesity and Type 2 (adult onset) diabetes are on the rise. So one aim of the Agenda is

to reduce the prevalence of risk factors for these two problems; the risks include poor diet and lack of exercise.

Mental health is recognised as a particularly serious concern. The Western world is facing what is often termed an 'epidemic of depression' with large numbers of teenagers, young adults and retirement age people being diagnosed as clinically depressed. In its most recent national mental health survey, the ABS found that about 15-20% of the population had experienced mental health problems in the past year, and of these only 35-40% had received treatment, and then mainly from GPs rather than from psychologists or psychiatrists (ABS, 1997). Young adults were found to be at the highest risk of mental ill-health but were *least likely* to receive treatment; this despite the fact that treating younger people has a high success rate (Seligman, 1995).

A National Action Plan on Mental Health 2006-11 has been adopted and efforts are being made to provide easier and cheaper access to psychologists (COAG, July 2006). In October 2006 it was announced that new item numbers were being introduced into the PBS (Pharmaceutical Benefits Scheme) to enable GPs and other doctors to refer patients with specific mental health problems, including depression, to psychologists. The psychologists will be reimbursed under Medicare. This change may be of great long term importance, since one would predict that its effect will be greatly to expand the supply of psychologists. However, for this to happen, the universities will need to train many more clinical psychologists; at present, the supply appears to be limited by tight student intake quotas, which are partly imposed because universities find it hard to recoup the high costs of clinical training.

The second target area of the COAG Agenda is education and training. The Agenda has a strong and relatively new focus on early childhood (including pre-school) education. In this it is influenced by the work of the Nobel Laureate, James J. Heckman, who in recent years has produced convincing evidence that giving priority to early childhood education is the most cost-effective strategy for improving national educational outcomes (Cunha, F., Heckman, J., Lochner, L. and Masterov, D., 2005). Another priority is to improve the

literacy and numeracy standards of schoolchildren and working age adults. This too is a welcome development in that it moves away from sole reliance on indirect proxy measures of educational performance (e.g. numbers completing Year 12, or completing tertiary education) and towards direct measurement of achievement. In this context, it may be noted that the ABS Survey of Literacy (1996) grouped people into five levels of literacy and numeracy, using standards determined by Statistics Canada and the Educational Testing Service (U.S.) and found to be internationally replicable. About 45% of Australians had only a Level 1 or Level 2 standard of literacy and numeracy, which meant, for example, that they were not able to read a medicine label and determine situations in which a doctor should be consulted, and were not able to calculate the difference in kilometers between the length of two journeys (ABS, 1996). Australians were by no means the worst of the populations tested, but fell a long way behind the best – Sweden and the Netherlands. The key point, however, is that Level 3 standards of literacy and numeracy appear to be what is needed to have good employment and income prospects (ABS, 1996, esp. pp73-79). So Level 3 targets should be set by COAG in developing its progress indicators.

The COAG Agenda does not shift entirely away from proxy indicators and towards direct measures of achievement. It also advocates (but does not yet directly set targets) increasing the proportion of Australians who complete Year 12 and also those who complete vocational and post-school qualifications. It notes the high levels of unemployment and absence from the labour force of those who did not complete Year 12 (Victorian Department of Premier and Cabinet, 2005; COAG, Feb. 2006).

In October 2006 a *Skills For The Future* package was announced by the Prime Minister mainly to fund literacy, numeracy and vocational training (including apprenticeships) for individuals who have not completed Year 12. The total annual outlay was announced as \$837 million, with the main cost being \$407 million for the provision of vouchers for working age adults (25-64) to undertake vocational courses leading to a Level 2 Certificate. The vouchers are to be worth up to \$3000 per person. The Government

announced that it expected that up to 30,000 people would receive vouchers each year. On the face of it, this program seems small scale.

The third aim of the Agenda is to increase workforce participation by improving work incentives. This aim does not fit all that comfortably into a human capital reform agenda and appears to reflect longstanding Government concerns with work disincentives built into tax-transfer and retirement provisions. In any event these issues will be dealt with in other papers at this conference and can be set aside here.

An improved understanding of poverty

In order to assess whether a household is poor or not, it is essential to know about its level of consumption and wealth, as well as its income. In most Australian and Western research poverty is defined and measured solely in terms of low income. But to be poor is to experience a low material standard of living, and to do so involuntarily. So poverty should be primarily conceptualised as low consumption. Defining poverty as having an income below a certain poverty line (whether that line relates to 50% or 60% of mean or median household income, or to average weekly earnings) really involves using an indirect or proxy measure, instead of directly measuring consumption. Knowing a household's income gives an indication of its potential command over resources, but does not tell us how much it actually consumes.

The distinction between direct and indirect measures of poverty was first clearly formulated by Stein Ringen (1987, 1988). He pointed out that national household expenditure surveys commonly show that many households appear to consume more than they earn, and that economic theory – permanent income theory – would lead us to expect ‘consumption smoothing’ (Friedman, 1957). That is, households would be expected to have a more stable level of consumption than income, because they would smooth their consumption to take account of their long run income expectations. To cover periods when they were consuming more than they earned, they might borrow or run down savings. Other households might receive subsidies in cash or in kind from relatives or

friends, which should be recorded as income (as inter-household transfers) but in practice often get omitted when income is recorded in surveys.

Ringen pointed out that someone who has a low current income but an adequate level of consumption cannot accurately be said to be poor right now. Conversely, someone who has a high income but low consumption is a miser, or perhaps an ascetic; either way their low standard of living is voluntary. So Ringen proposed that to be defined as poor one must live in a household which has both a low income and a low level of consumption. Here I would like to add that the household must also have a low level of wealth (net worth; assets minus debts). In principle, if not always in practice, a household with a reasonable level of net worth could maintain its standard of living during a period of low income by running down its assets, or borrowing against them.

Distinctions between low net worth, low income and low consumption would not matter much if the same households ranked high or low on all three measures. It appears that in some countries they more or less do, but in others they don't. Ringen (1988) reported a big overlap between the distributions of income and consumption in Ireland, but considerable divergence in Sweden.¹ On the face, Australia seems likely to be a country with relatively divergent distributions, given that the ABS household expenditure surveys regularly find that about half of all households – mostly in the bottom half of the income distribution – spend more than they earn.

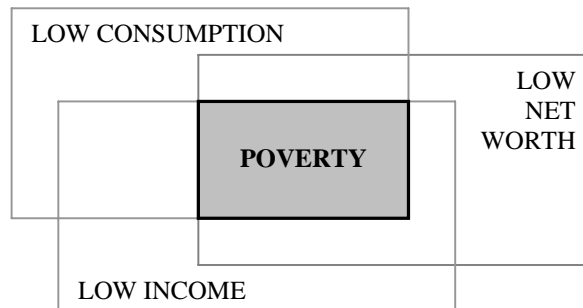
So it is suggested that: -

Poverty = low income AND low consumption AND low net worth

¹ That was in the 1980s. In Ireland now there is considerable divergence between measures of income poverty and measures of consumption deprivation. Ireland is unusual, possibly unique, in having adopted what is termed a measure of 'consistent poverty', which combines low income with consumption deprivation indicators. See Nolan et al (2000). It may also be noted, that in the absence of adequate detailed evidence on household expenditures, the main approach adopted by academics in seeking to measure consumption has been to focus on specific indicators of deprivation (e.g. lack of adequate heating, unable to afford a warm waterproof coat – examples come from the Irish consistent poverty measure). The consumption deprivation approach was pioneered by Townsend (1979).

Figure 1

Redefining poverty: intersection of low income, low consumption & low net worth



As Figure 1 indicates, poverty should be viewed as the overlap or intersection of low income, low consumption and low net worth. One further conceptual point needs to be made. Poverty matters much more in the medium and long term than the short term. Most published measures of poverty are cross-sectional; they tell us how many people are estimated to be poor at one moment in time. But from a public policy and humanitarian point of view, what matters is how many people are poor for a period of several months or years, not how many are poor at a given moment. Panel studies around the world – and this is true of the HILDA panel in Australia – have regularly shown that most poverty is short term, but that substantial minorities suffer medium or long term poverty (Goodin et al, 1999; Headey, Harding and Warren, 2006).

Can an understanding or definition of poverty based on consumption and wealth, as well as income, be implemented in practice? A practical problem is that measures of household expenditure/consumption are rarely found in the same sample survey as measures of income and wealth. And they are even less likely to be found in panel surveys which alone can tell us about medium and long term poverty. The main difficulty lies in measuring household expenditure/consumption. It has generally been believed that the only valid way to measure expenditure is to get household members to fill in weekly 'shopping diaries' of the kind used in most national household expenditure surveys. The general view has been that asking survey respondents to remember how much they spend on goods and services (without the assistance of a diary) yields data

which are insufficiently unreliable. But recent work in Canada has shown that shown that, in fact, some items of expenditure are more accurately reported in standard surveys than a diary, and that total expenditure can be accurately estimated from these items (Browning, Crossley and Weber, 2003). The official Canadian statistical agency, Statistics Canada, now regularly uses standard survey methods to collect expenditure data. It should be noted, however, that the instrument they use appears too long for inclusion in a panel survey.

In the HILDA panel survey, we are trying to develop a set of questions to validly measure a wide range of household expenditures. Our approach is to divide expenditure items into weekly, monthly and annual items. It seems natural or at least sensible for some items (e.g. groceries, public transport and taxis) to ask how much is spent in 'a typical week'. For other items (e.g. motor vehicle fuel and telephone calls) we ask how much is spent in 'a typical month', and for a third set of items (e.g. holidays, costs of education) we ask about 'a typical year'.

Household expenditure measures were first tested in a HILDA pilot survey in mid-2005 (N=1138). Most consumption items were included, plus housing. Other durables (besides housing) were omitted, but will be attempted in 2006. The way to assess measurement validity is to make an adjustment for inflation and benchmark results against the latest ABS Household Expenditure Survey, which was conducted in 2003-04. It transpires that in HILDA we appear to have recorded accurate measurement (to within plus or minus 10%) of close to 60% of total household expenditure on goods and services. Indeed the total expenditure figure for the HILDA items diverges by only about 1% from the HES figure for the same items, after adjusting for inflation. A key point is that the putatively validly measured items correlate about 0.80 with total household expenditure (correlation supplied by ABS). Further, approximately the same correlation was found for low income households.

Clearly we need to keep trying to improve our instrument, but arguably a correlation around 0.80 means that it is reasonable to extrapolate total household expenditure, or, as

is done in this paper, simply to assume that households are placed in correct ratio scale order for total expenditure on the basis of their consumption expenditures plus housing. If we do this, we can then proceed to estimate which households are *expenditure/consumption poor*. Here it needs to be conceded that the distinction being made between household expenditure and consumption is fairly crude. Conceptually, the difference is that expenditure is out-of-pocket expenses, whereas consumption also includes benefits in kind. In practice, in this paper, expenditure estimates are treated as equivalent to consumption, except in the case of owner-occupier housing.² Here the consumption benefit has been equated to a rental value set at 6% of the current value of the house if sold today (as estimated by HILDA survey respondents).³

Preliminary HILDA poverty results for FY 2004-05, taking account of household income, consumption and wealth

Some preliminary results based on the HILDA Survey are now given, comparing different measures of poverty. HILDA has of course measured individual and household incomes since inception in 2001. As mentioned, we first attempted to measure household expenditures in 2005, so the figures given here mainly relate to 2005. However, wealth was not measured in 2005; figures from 2002 are interpolated, solely to illustrate the possible difference which inclusion of wealth may make. It may be noted that in 2006 HILDA will, for the first time, include measures of household income, expenditure and wealth all in the same questionnaire.

We begin with conventional income-based measures and then see what difference it makes to also take account of consumption and then wealth (net worth). In order to present results, one or more *poverty lines* must be selected. The two lines most widely used in Western countries define individuals as poor if they live in a household with an income (i) less than 50% of median household-size adjusted (equivalent) income and (ii)

² This seems realistic, given the list of items accurately measured. Clearly it would not be realistic if more consumer durables, in addition to housing, were included.

³ 6% of current sale value is a fairly standard rule of thumb for the rent which a dwelling would be likely to attract. Clearly, however, actual rental values can differ quite widely from this guideline.

less than 60% of equivalent income. The former poverty line is normally used in OECD publications, and the latter is the official European Union (EU) line. Extrapolating from these income-based lines, we will also calculate consumption poverty using 50% and 60% poverty lines. One should note, parenthetically, that poverty lines depend on current community standards (or what Governments deem to be community standards)⁴, so there seems no reason to select different cut-off for income and consumption.

Selecting a wealth (net worth) cut-off for assessing poverty is more problematic. It makes no real sense to select a cut-off based on 50% or 60% of the household median. For present purposes, and purely illustratively, we shall deem that a household is excluded from poverty (for measures which include wealth) if it has a net worth of \$200,000 or more. Clearly, this figure is arbitrary but it was set bearing in mind the likely net worth of Australian owner-occupiers who own a modest home which they have lived in for several years and so have paid off part of the mortgage. It may be noted that more sophisticated measures of ‘asset poverty’ could be developed on the lines proposed by Caner and Wolff (2004).

Table 1
Measures of Poverty Based on (i) Income (ii) Income + Consumption and (iii) Income + Consumption + Net Worth^a

	Below 50% of median poverty line (OECD) ^b	Below 60% of median poverty line (EU) ^b
income poverty	13%	20%
consumption poverty	8%	15%
income poor + consumption poor	3%	7%
income poor + consumption poor + net worth poor	2.5%	6.5%

- a. Source: HILDA pilot study mid-2005 for income and expenditure/consumption and HILDA 2002 (wave 2) for net worth.
- b. These poverty lines apply to household income and consumption. A cut-off of less than \$200,000 was used as a household net worth poverty line.

⁴ A more critical view is that poverty lines are essentially arbitrary. While this is arguably the case, it is also true that public opinion, as reflected in surveys in many Western countries, deems that to have an income below about 50-60% of current median household income is to be poor (Citro and Michael, 1995).

It can be seen that in Australia the choice of whether to define and measure poverty in terms of income, or consumption, or both makes a big difference to how many people (and, as we shall see, which groups of people) are designated as poor. However, inclusion of wealth makes only a small difference. Fundamentally, this means that the distributions of household net income and consumption are somewhat different (the Pearson correlation was 0.45).⁵ It is also clear from Table 1 that choice of poverty line (50% or 60% of median disposable income) makes a large difference to estimated poverty rates.

Income poverty lines give higher and also more volatile estimates of poverty than consumption lines (see also Barrett, Crossley and Worswick, 2000). This is what permanent income theory would predict. Many households appear to engage in consumption smoothing, maintaining their standard of living during putatively temporary periods of low income. If poverty is defined as low income combined with low consumption, then poverty rates are lower still – about a third of the rates given by an income measure. Adding in wealth (net worth) then reduces estimated poverty rates a little more.

Quite clearly, if the logic behind these revised measures of poverty is accepted as sound, it also has to be accepted that existing income-based measures are seriously in error. They are much too high. Saying this does not in any way diminish the importance of financial poverty as a public policy issue. The point is to define and measure poverty more accurately to provide improved evidence for public policy intervention.

Who is income poor but not consumption poor – and vice-versa?

Given that the groups diverge, it is valuable to ask ‘Who is income poor but not consumption poor – and vice-versa?’ The largest set of people who lack income but whose consumption levels appear adequate are those who own their homes outright. Many are of course older people who have retired. Younger well educated people are

⁵ The observed correlation in HILDA between household net worth and household net income in 2002 was 0.40.

also quite likely to be income poor. They may be borrowing to consume, or perhaps living partly off a parental subsidy.⁶ Their decisions to spend more than they earn may be quite rational in so far as they have high earnings expectations down the track. Single women are particularly likely to have higher levels of consumption than earnings, and may perhaps receive some subsidies from boyfriends and partners, in addition to borrowings and possible parental subsidies. In general, households headed by individuals or couples of prime working age (25-54) are less likely than households headed by younger or older people to be income poor but still have adequate levels of consumption.

It proved harder to identify specific groups who are consumption poor but not income poor. However renters who have low incomes and pay a high proportion of what they do earn in rent are one such group.⁷

Validity evidence – do the new measures improve understanding of poverty?

How can we assess whether poverty measures based on consumption and wealth as well as income improve our understanding of poverty and are more valid than income measures alone? One approach is to reconsider the COAG Agenda. If the new measures have greater validity than the old, one would expect that they would have stronger statistical relationships with measures of human capital/capabilities. In other words, economic theory would lead us to expect fairly strong relationships between human capital and measures of poverty, and the stronger these relationships the more confidence one may have in the measures. In methodological jargon, we can conduct *construct validity tests* which compare the different poverty measures.

It transpires that poverty measures based on consumption and wealth, as well as income, have (Pearson) correlations about 50% higher with measures of educational attainment, and with physical and mental health than measures based on income alone. The multidimensional measures also correlate much more strongly with a measure of self-

⁶ As noted earlier, parental subsidies should be recorded in surveys as inter-household transfers but are, in practice, often omitted as a source of income.

⁷ It is not really clear why. In some cases they may be saving a lot; e.g. to buy a house.

assessed poverty/prosperity included in HILDA.⁸ To make the same point slightly differently: regression analyses indicate that measures of human capital and health account for considerably more variance in multidimensional poverty measures than in measures based on income alone.

The COAG Agenda: including measures of poverty in a set of progress indicators

A next step in relation to the COAG Agenda is to suggest *progress indicators* for assessing changes in poverty to set alongside indicators for improvements in human capital/capabilities. COAG has itself outlined a conceptual framework for assessing progress, although so far as I am aware specific targets and timelines have not yet been set (see Attachment D, National Reform Agenda, COAG, July 2006). The concept of *progress indicators* is valuable and, while of course not new, marks a break with a tradition in Government of claiming that the aim is abolish some undesirable state. Historically, some Governments and international organisations have claimed that they aim to abolish poverty or wipe out disease. It seems more sensible to accept that total success will never be achieved and to set targets and timelines for making progress.

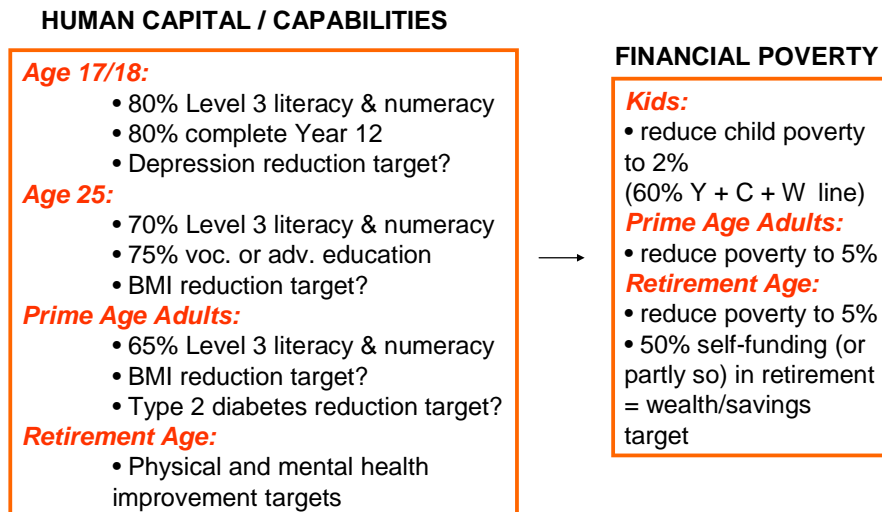
Another sensible feature of the COAG framework is its *life cycle approach*. The idea is that different targets/progress indicators are appropriate for people at different stages of the life cycle. For example, different literacy, numeracy and educational and attainment targets are to be set for children of different ages, for young adults, for prime age adults and so on.

Figure 2 illustrates and somewhat extends – but is certainly not intended to be comprehensive – the COAG approach. Poverty reduction has been added as a policy objective and specific *quantitative targets* and *timelines* have also been added.

⁸ Respondents are asked to rate their own prosperity, given their current needs and financial responsibilities, on a 6-point scale running from ‘prosperous’ to ‘very poor’.

Figure 2

**Possible Progress Indicators Relating To Human Capital/Capabilities & Poverty –
Target Date 2010 (illustrative only)**



These targets (progress indicators) have been set for 2010. As the years passed, it would be sensible to keep revising targets upwards as they were met, and also as international standards – the standards of our commercial and welfare state competitors and peers – rose.

It should be stressed that the specific markers of progress shown in Figure 2 were not precisely calculated on the basis of what is feasible. Perhaps some are in the right ballpark, but they were inserted purely to illustrate the type of framework which COAG should perhaps have in mind, and probably does, even though it has not yet committed to specifics. So, for example, the target of 80% of 17 and 18 year olds achieving Level 3 (or better) literacy and numeracy by 2010 seems in the right ballpark, given an ABS estimate of around 60% in 1996. Similarly, to give a second example, a target of 75% of 25 year olds having vocational or advanced education by 2010 seems reasonable, given a 2005 figure of around 65%. In the same way, the poverty reduction targets proposed in the second column of Figure 2 – targets based on a revised income/consumption/wealth

definition of poverty – imply moderate reductions in current poverty rates. The final target in Figure 2 relates to wealth and, to be fully elaborated, would need savings targets for people to be self-funding in retirement.

Conclusion: monitoring progress with panel surveys

The HILDA Panel Survey should soon be in a position to monitor progress in relation to all COAG indicators relating to teenagers (15+) and adults. The LSAC Panel Survey can similarly contribute to monitoring the progress of Australian children. So together the two panels, in conjunction with ABS cross-sectional surveys, should be able to do a good job in providing annual evidence of changes in human capital, health and financial poverty.

Specifically in relation to HILDA, it is worth previewing that in 2006 we will collect data on household wealth, income and consumption in the same survey.⁹ Income will then certainly continue to be collected in detail every year, and presumably consumption will be if the measures prove to be reasonably reliable and valid as a longitudinal series, as well as cross-sectionally. We also plan to try and develop – or extract from the current long battery - a short battery of items which could measure household net worth on an annual basis. These measurement efforts will allow HILDA to estimate the conceptually and empirically sounder definition of financial poverty suggested in this paper.

Combining data sources, researchers and policy-makers will have access to vastly improved evidence on annual, medium and (eventually) long term changes in related dimensions of human capabilities: - human capital, health and financial poverty.

⁹ In principle, one could measure any two of these variables and calculate the third. This follows from the accounting identity: $\text{Change in Wealth} = \text{Income} - \text{Consumption}$. However, in practice, given measurement error in all three variables, it makes more sense in surveys to measure all three.

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