<table>
<thead>
<tr>
<th>Title</th>
<th>Dark Corners in a Bright Economy; The Lack of Jobs for Unskilled Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author(s)</td>
<td>Gregory, Robert G.</td>
</tr>
<tr>
<td>Citation</td>
<td></td>
</tr>
<tr>
<td>Issue Date</td>
<td>2010-12</td>
</tr>
<tr>
<td>Type</td>
<td>Technical Report</td>
</tr>
<tr>
<td>Text Version</td>
<td>publisher</td>
</tr>
<tr>
<td>URL</td>
<td><a href="http://hdl.handle.net/10086/29193">http://hdl.handle.net/10086/29193</a></td>
</tr>
</tbody>
</table>
Center for Economic Institutions
Working Paper Series

No. 2010-6

“Dark Corners in a Bright Economy; The Lack of Jobs for Unskilled Men”

Robert G. Gregory

December 2010
Dark Corners in a Bright Economy; The Lack of Jobs for Unskilled Men

Robert G Gregory¹
Australian National University

Abstract
This paper discusses the large reductions in full-time employment among unskilled Australian males that began in the 1970’s and continued over the next three to four decades. Over this period, each recession led to large falls in the male full-time employment-population ratio and during each economic recovery the employment ratio failed to move back to previous levels. Unemployment fell during each output recovery, not in response to employment gains, but in response to large scale withdrawals from the labour market into the welfare system.

The loss of unskilled jobs for men has been associated with falling marriage rates and increasing use of the welfare system by single women. The paper concludes by briefly assessing some of the impacts of the new resource boom on these long run labour market and welfare trends and discusses the potential for different labour market outcomes emerging across mineral and non-mineral states.

Key Words: Employment, Unskilled jobs

¹ Professor Emeritus, Research School of Economics, Australian National University and Adjunct Professor, Queensland University of Technology, and Professorial Fellow, Victoria University, Melbourne. The paper was completed during a visiting appointment at the Institute of Economic Research, Hitotsubashi University, Tokyo, Japan.
Contact: bob.gregory@anu.edu.au
1. Introduction

Between World War 2 and 1970, the Australian labour market could be thought of as a unified whole. When the economy did well everyone did well. When the economy slumped everyone shared the burden. This description, of course, is not absolutely correct - there were always some groups that did better than others at different times - but it is a reasonable generalization. On average, income per capita grew by about 2 per cent per annum and almost everyone shared in the growth, one way or another. The employment-population ratio of men 15-64 years, was between 85 and 90 per cent and subject to little change. Female employment was low but this was expected and was not thought to be a matter of concern. The unemployment rate, with the exception of one year, was under 2 per cent. High marriage rates and low unemployment ensured that the incidence of welfare payments for the working age population was extremely low.

Over the next three decades, however, a second epoch emerged with two male labour markets developing as employment inequality increased substantially and employment opportunities declined for the unskilled. The widening full-time employment divide between skilled and unskilled men has been substantial and its effects have flowed out from the male labour market into the economic well-being of their potential female partners to increasingly create two societies. One society is relatively affluent with high levels of male and female full-time employment, high income and relatively stable marriage patterns. The other society has falling male full-time employment, falling marriage rates and a high incidence of female lone parenthood. As a result reliance on welfare has increased to unanticipated levels.

During the last half decade, it appears as though a third labour market epoch may be emerging, although its exact nature is not clear. There has been a remarkable change in the Australian economy, and a widely held belief is strengthening among commentators that the economy had embarked on a new bright path of unprecedented wealth generated by the rapid growth of Chinese demand for Australian raw materials.

China led growth is having a profound effect. For example, three years ago, at the beginning of what the IMF has labeled as the most serious global economic downturn since the great depression of the 1930s, the Australian Treasury forecast in the 2009/10 budget that there would be a two year slowdown before GDP growth
rates would return to 4.6 per cent. Unemployment was forecast to peak at 8.5 per cent (Australian Treasury, 2009). The forecast recession was regarded as so serious that Australia introduced the second largest stimulus packages in the OECD (2009).

Two years later, however, Australia is booming again and there was no substantial downturn, primarily because of the “China effect”. Unemployment increased but only reached a peak of 5.8 per cent. Indeed, Australia now has tight monetary policy and is moving rapidly towards fiscal tightening and many commentators argue that the economy is close to full capacity and potentially subject to a lift in inflation. The governor of the Reserve Bank has described current outcomes as the biggest resource boom since the 1850’s gold rush that had such a fundamental effect on Australia’s economic future.2

So the question arises as to whether the new resource led economy, with its large investment in infrastructure and mines, will change the nature of the labour market divide, begin to bring skilled and unskilled outcomes closer together, and lead to substantial reduction in welfare incidence among the unskilled. Perhaps it is too early to detect any significant impact, but it appears that there is a new and different labour market divide beginning to emerge. The new labour market divide that is attracting increasing attention is the phenomenon of a two speed economy, not one in which skilled and unskilled labour have very different and changing outcomes proceeding at different speeds, but one in which some geographical regions of Australia, and their labour markets, grow much quicker than others. To this point, however, it is not clear whether the skill/unskilled employment divide among men will narrow or widen further in the economy as a whole, or whether the skilled/unskilled divide will begin to narrow in mineral resource states and widen further in non-mineral resource states.

The paper is structured as follows. Part 2 describes the post 1970 evolution of a gap between two labour markets. We discuss the loss of male unskilled full-time jobs and the increasing male reliance on income from the welfare system.

Part 3 documents the changing access of women to full-time employment. We show, unlike men, that the female full-time employment-population ratio has not

---

2 In two years, during the 1859s gold rush, the population of Victoria increased from 77,000 to 540,000. Today’s mineral boom has also been accompanied by a large population increase, but, relative to the 1850’s change, the population growth has been minor.
fallen but, despite this, women have substantially increased their access to welfare payments at about the same rate as men. Today, one woman in five with dependent children is not in a couple relationship and, as a lone parent, is primarily reliant on income support from the welfare system. Women have responded to the decreased employment opportunities for unskilled men not by increasing their full-time employment but by turning away from marriage and increasing their reliance on the welfare state.

Part 4 discusses some of the reasons why the labour market for the unskilled has deteriorated so much. Part 5 focuses on the new “China led” economy and looks forward to conjecture about future outcomes. Part 6 offers concluding comments.

2. Welfare Reliance and Full-time Employment Among Men

Figure 1 plots male full-time employment as a proportion of the male population 15-64 years over the period 1966 to 2010\(^3\) (line A). There has been an amazing loss of full-time employment. Male full-time employment, as a proportion of their population 15-64 years of age, fell 25 per cent between 1970 and 2001 and then recovered marginally. One full-time job in four has disappeared. This is the largest employment fall ever in Australia’s recorded history of official labour statistics.

The loss of male full-time employment appears to be the outcome of long run trends which began four decades ago. During the 1970’s, male full-time job loss occurred at a fairly steady pace but, during the 1980’s and 1990’s, the job loss was primarily associated with major recessions at the start of each decade, followed by no noticeable employment–population recovery. The inability of male full-time employment to recover from these recessions is one of the major unsolved puzzles of the Australian economy.

Since the recession in the early 1990’s, and until 2008, there was a strong economic boom as unemployment fell from around 10 to 4 per cent. Yet, as is evident in Figure 1, there was little growth in full-time male employment, relative to their population. In 2008, the male employment-population ratio peaked marginally above the depths of 1991-1993, the deepest labour market recession in the post World War 2 period, and then declined again to an historic low. On the basis of these data there

\(^3\) Source; ABS Labour Force Survey, August, Cat No 6203.0. The income support data are from numerous unpublished sources.
appears to be plenty of scope for employment expansion, despite the general belief among commentators that the economy is close to full employment.  

Given twenty-five percent loss of full-time jobs since the 1970’s, how is it that the unemployment rate has fallen so much? Why has the job loss not produced an unemployment rate around 25 per cent? The answer lies in the remarkable supply side adjustments that have occurred.

Figure 1 also includes an estimate of the full-time male labour supply, defined as full-time employment plus those seeking full-time employment all divided by the male population 15-64 years (line B). The gap between line A and line B is unemployment divided by the population.

Figure 1 suggests that the history of the three decades following 1970 can be described as follows; recessions reduce the number of male full-time jobs (line A falls), the loss of jobs create unemployment (the gap between Line A and Line B widens) and subsequent supply side adjustments (the continual fall in line B) reduce unemployment (the gap between line A and line B narrows). Male full-time employment does not bounce back from each recession but remains fairly flat until the next downturn. It was only recently, just before the end of the last boom, that there was any evidence of the possibility of a sustained upturn in the full-time employment-population ratio, but, in the event that upturn was rather weak. It is also noticeable, at the same time, that the full-time labour supply responded and begun to marginally increase, mitigating the unemployment fall.

However, the recent economic slowdown, mild as it was, generated behaviour qualitatively similar to previous recessions. The full-time employment-population rate fell again, to reach its lowest level ever. Unemployment did not increase much because labour supply, as is usual in downturns, moved in tandem with the employment-population ratio.

How is the increasing number of men without full-time jobs supporting themselves? The answer is clear. Most of the full-time job loss has been associated with men moving into welfare payments other than unemployment benefits. The

---

4 Over the last eighteen months there has been exceptionally strong full-time employment and population growth, fuelled by record immigration inflows for the state of the economic cycle. The population growth has outstripped full-time job growth hence the full-time employment ratio has not increased.
proportion of men receiving welfare payments for their weekly income is indicated by the gap between line A and line C. Welfare payments for income support typically provide income equal to about 35 per cent of average male full-time ordinary earnings for a single person and 60 per cent for an unemployed couple.

Australian income support is available without time limit and is paid at a base rate, subject to income and asset tests. It is not an insurance type system where welfare payments are related to previous income levels. If eligible, an individual, in principle, can receive income support all their adult life. Policy has not changed time limits but governments have begun to make access to welfare income and continuing payment more difficult by adopting increasingly stringent eligibility requirements that involve “working for the dole”\textsuperscript{5}. Tighter eligibility requirement appear to have reduced welfare numbers marginally but do not seem to have encouraged the growth of male full-time employment.

Increased welfare reliance in response to full time job loss extends well beyond unemployment benefits. For example, approximately 7 per cent of males of workforce age is now receiving a disability pension. The typical entry into a disability pension occurs after an extensive period of unemployment (Cai and Gregory, 2005). Thus, a major factor reducing unemployment after each recession is not job creation but a movement out of unemployment benefits into a disability pension.

There has been extensive use of disability pensions, especially among older males and the number of males receiving disability pension has exceeded the number receiving unemployment benefits for quite some time. If unutilised labour resources were to be defined as all males of workforce age who are receiving government income support as their primary source of personal income the unutilized labour rate would be around 17 per cent, rather than the current unemployment rate of 5.5 per cent, as measured by the official Labour Force Survey.

It is interesting that the broader definition of male full-time labour supply — full-time employment plus income support - has more or less followed the same steady downward path over the four decades. The increase in the proportion of males not in this broader full-time labour force has increased from around 11 per cent in the mid sixties to 18 per cent today, an increase of 7 percentage points. This adjustment is
about half the movement onto income support, 15 percentage points. It follows,
therefore, that the non income support adjustments, in response to full-time
employment falls in terms of increasing attendance at education institutions, or
increasingly retiring early on private income, or being excluded from income support
because of income and asset tests applied on a family basis, have been less important
than the movement onto income support.

Now that the proportion of men relying on income support is approximately
one man in seven it is particularly important to ask how is welfare reliance shared
among the male working age population? The answer is that it is shared very
unequally. In general terms, welfare recipients tend to be the same people who rotate
in and out of the welfare system and tend to stay on welfare for a long time. To
illustrate this, Figure 2 plots the inflow of men, aged 20 to 53 years, onto
Unemployment Benefits and Disability Payments in 1996 and follows these
individuals over the next eleven years. These relationships show the proportion of
the 1996 inflow that is on income support each two week period. They do not
represent the length of a welfare spell. Individuals from our initial inflow sample may
leave welfare and return. Among those who enter unemployment in 1996 just over 30
per cent are receiving some form of income support payment eleven years later.
Among those who inflow into disability during 1996 the proportion receiving income
support eleven years later is much higher, at around 80 per cent. The major exit route
from a disability pension is death. The second most important exit route is a switch to
an age pension (Cai and Gregory, 2005).

The 17 per cent of males who are currently reliant on welfare income as their
main source of personal income are disproportionately drawn from the unskilled, the
group of males that have experienced the greatest job losses over the last three
decades (Gregory, 1993). This is clearly evident in Census data which can be used to


6 We chose the age group 20-53 years to exclude the very young who are just settling into the labour
market and to exclude the older age groups to ensure that they do not exit income support to an age
pension.

7 There are a number of ways to document this. We could analyse full-time employment loss by
occupational classifications, arranged by skill levels, or we could document full-time employment loss
by different levels of an individual’s years of completed schooling. Each method has its own
advantages but the general trend towards increasingly lower full-time employment for unskilled male
workers is evident whichever method is used.
measure skill characteristics by post-school qualification attainment.\(^8\) We have divided Census data into three skill groups; those with higher and bachelor degrees are placed in the high skilled group, those with Diplomas, Certificates or Vocational qualifications are placed in the middle skill group and those without formal qualifications are placed in the unskilled group. In 1981, the proportion of males in each group is 9, 30 and 61 per cent respectively. In 2001, the proportions are 24, 40 and 36 per cent. Education up-skilling of the labour force is noticeable.

To keep the analysis clear and simple Table 1 presents full-time employment-population ratios for the two extremes of the male skill job distribution for each census year between 1981 and 2006. We also narrow the focus to the male age groups 25-34, 35-49 and 50-59 years, to avoid the large changes that are occurring in education attendance among the younger groups and early retirement among the older groups.

There has always been a positive relationship between higher skill levels and higher rates of full-time employment. In 1981, among males 25-34 years of age, there is a 4 percentage point full-time employment margin between the skilled and unskilled. Among men 50-59 years of age there is a 16 percentage point full-time employment skill gap.

By 2001, this situation has changed markedly and the full-time employment gaps across skill levels have become larger. Among those 25-34 years of age, the full-time employment-population gap between the skilled and unskilled is an extraordinary 17 percentage points. After adjusting for the changing population of the unskilled there has been one unskilled male job loss in five over the two decades. Unskilled employment falls of similar magnitudes extend across all age groups.

These large employment falls among unskilled men have produced 2001 full-time employment-population ratios that are extremely low – 60, 62 and 52 per cent – for the age groups 25-34, 35-49 and 50-59 years respectively. About forty per cent of unskilled males in Australia are not employed full-time.

---

\(^8\) By confining the analysis to the last two decades we are not addressing the full extent of male job loss over the longer period since much of the job loss occurred between 1971 and 1981. The pre-1981 censuses, however, are not available on unit record computer files. Nevertheless, there is still a substantial job loss to be explored since 1981. The full-time employment population rates for males fell 16 per cent between the 1981 and 2001 Census dates.
Such low full-time employment rates among males might be expected to have a range of important economic and social effects. The depressed income levels of this group, and lack of stable employment, may have a large impact on marriage rates and family break-ups and, in this way, the depressed employment conditions for unskilled males may extend directly into the lives of women and children. To provide a brief indication of this we quickly look at employment outcomes for women and the changing patterns of marriage (Birrel, Rapson and Hourigan, 2004, Blackburn, 1999).  

3. Welfare Reliance and Full-time Employment Among Women

Over the last three decades, full-time employment outcomes for women have been so much better than that of men. But, for women too, employment gains might be thought disappointing, relative to expectations. Despite increasing levels of education, changing social attitudes encouraging women to enter paid employment, falling birth rates and increasing part-time involvement in the labour market, the growth of female full-time employment is only marginally above that of population growth (Figure 3). In 1966, the full-time employment ratio for women was 32 per cent. Today, it is 37 per cent. It is remarkable that there has been so little change over the last four decades. But, at least, the full-time employment-population ratio has not fallen, as it has in the male labour market.

There is also no obvious bias against full-time employment among unskilled women (Table 2). For example, among unskilled women, 25-34 years of age, the full-time employment-population ratio increased by 3 percentage points over the 1981-2001 period. Among their unskilled male counterparts this employment ratio fell 16 percentage points. All the loss of unskilled full-time employment has fallen upon men and not upon women. This differential full-time employment pattern is found throughout the age distribution. It is also surprising that full-time employment

---

9 Another major impact of the reduced employment of unskilled men has been the increase in jobless families with children (see Gregory, 1999).

10 The very different employment trends among men and women have had very significant effects with regard to the economic balance between the genders – men have lost full-time jobs but women have maintained them. By 2001, skilled women 25-34 years of age, have marginally higher full-time employment rates than unskilled men in this age group. For skilled women and unskilled men in the 50-59 year age group the employment-population ratios are now about the same. The full-time employment gap between unskilled men and women has changed from 31.7 percentage points to 2.2 percentage points over the three decades, a remarkable change.
among highly skilled women has not increased very much. For women there is little relative change in the full-time employment patterns across skill levels.

Since women have not lost full-time employment is their pattern of welfare use different from their male counterparts? Figure 3 indicates that the answer is clearly no. The increase in welfare use among women 15-64 years has also been extraordinary. Today, one in every five women of workforce age is dependant on the welfare system. Four decades ago the ratio was one woman in twenty.

Men and women have increased their reliance on welfare to a similar degree. For men there is a close relationship between full-time employment losses and increases in welfare. For women there is no relationship between their increase use of welfare and their changing pattern of full-time employment. Their increase in welfare use is closely associated with unskilled job loss among men. The lack of associations between large increases in welfare reliance among women but no full-time job loss for unskilled women, is as remarkable as the strong associations between the increase in welfare reliance of women and the full-time job loss for men.

Although the growth of welfare use is similar for men and women they tend to access different welfare programs. Men have increased their reliance on unemployment benefits and disability pensions. Women have increased their use of lone parent pensions and, more recently, disability pensions. Both men and women who access welfare income are reliant on welfare income for a very long time, primarily because they rotate in and out of the welfare system.

The changing patterns of marriage are an integral part of the mechanism that carries reduced employment opportunities for unskilled men into increased female reliance on income support. There are strong positive associations between depressed employment conditions for unskilled men, reduced marriage rates and the growth of women on lone parent income support.

Table 3 lists the male and female marriage rates by age for 1981 and 2006. In 1981, the marriage rates for unskilled men, relative to high skilled men, were marginally lower for the older age groups and marginally higher for the younger 25-

11 It is remarkable that the full-time employment-population ratios for prime age skilled women have not increased significantly over the last two decades. It seems that the full-time skilled labour market
34 group but, by the end of the data period, the pattern has changed substantially. Unskilled men currently exhibit marriage rates that are very low in relative terms. Thus, relative to skilled males, the marriage rates for unskilled males are 12, 18 and 11 percentage points lower for the 25-34, 35-49 and 50-59 age groups. The same changing marriage pattern is observed among women. At the beginning of the period, unskilled women had marriage rates well above skilled women but, by the end of the data period, their marriage rates have fallen to be below that of their skilled sisters.

The labour market for skilled and unskilled men, and the spill-over into marriage rates, is a major under researched area in Australia. Often researchers have focussed on marriage rates among younger cohorts, but the importance of the interactions among employment for unskilled, marriage rates and utilization of the welfare system is also evident among older age groups. The need to understand these links is increasing, as is evidenced by Figure 4. This figure, for married and single men and women, shows the proportion of the 45-59 year age group, without dependent children, that is receiving welfare. The contrast between the two groups is stark. Among single men and women the proportions relying on welfare in 1995 was 40 and 45 per cent respectively. Almost one in every two single people were receiving their income this way. For married couples the welfare reliance was a high 19-13 per cent, but very much lower than for singles.

Welfare reliance has been falling for older men and women over the last decade but the falls have been only marginal, especially for singles, and today the welfare proportions remain at a high 37 per cent for single men and 40 per cent for single women. These rates of welfare reliance, among older groups, and the concentration of welfare receipts among the least skilled are extra-ordinary and not well known. The proportion of single individuals in the population is increasing quite quickly in these age groups and, in this way, further adding to welfare reliance in the population as a whole.

4. Explanations of Employment Disadvantage among Unskilled Men

has largely been isolated from the large changes in technology and social attitudes towards women’s involvement in the labour market.
Why are there persistent dark corners in the bright economy? There are no widely agreed answers to this question. We offer three conjectures as to where part answers may lie.

First, in the US, Australia and across most developed economies in Europe, there has been decreasing demand for unskilled male labour which has often been attributed to skill biased technical change (Autor, Katz and Kearney, 2008). In the US, the effect of this bias against unskilled labour has mainly taken the form of decreased unskilled wages which, among some groups, have been very large.

In Australia and Europe, the adjustment to the emergence of increased skill biased technical change has primarily taken the form of lower unskilled employment levels (Blanchard, 2006). The wage differential between skill and unskilled labour has not changed very much in these economies. The exact nature of this technological change, its origins, why it has been biased against unskilled male labour and its relative importance, however, are still subject to some debate (Autor et al 2008). There is no Australian consensus, but some of the issues are canvassed in Frijters and Gregory (2006).

Second, over the last few decades, Australia has embarked on considerable economic reform of the labour market. This reform has weakened centralized wage bargaining and the role of the trade union movement. Many economic commentators thought, given the considerable supplies of unutilized labour that we documented above, that labour market reform would be associated with relative wage falls for the unskilled and, in this way, lead to higher employment levels. This has not occurred. While labour market reform may well have led to productivity and wage increases across-the-board, it appears, at least on the surface, to have reduced employment levels of the unskilled and not impacted on relative wages. It is as though a considerable part of the across-the-board productivity increases were “paid for” by reducing employment levels of the least skilled. Perhaps this is not surprising, since reduced employment of the least productive members of the work force was the short-run intended effect of the policy reform. Government spokesmen and official advisors kept arguing that wage increases should not be paid at the firm level unless they were matched by productivity increases at the firm level, often to be achieved by reducing employment of the least skilled. Firms were encouraged to re-organize employment structures and actively engage in enterprise bargaining with productivity gains to play
a central role. The basic idea was that the least productive workers would lose their existing jobs but find new ones as the reforms contributed to a more dynamic labour market and stronger economic growth. Unfortunately, as unskilled workers were separated from their jobs the stock of unutilized unskilled has not moved to new employment opportunities. Hence, the history of employment losses observed in Figure 1 and the long durations of welfare receipt observed in Figure 2.

Third, much of the employment loss among the unskilled has been associated with a very marked decline in manufacturing employment. There have been two factors at work here.

At the beginning of the 1970’s, Australian manufacturing production was highly protected against imports. At 1970, the average effective tariff rate for manufacturing production was 34 per cent. Today it is 4 per cent. The Australian government has been very successful at reducing tariffs, and, in response, the price of imported goods has fallen in relative terms. But one implication of this successful reform strategy has been that male unskilled employment in previously protected manufacturing has fallen. Total employment in manufacturing reduced from 25 per cent of all jobs in 1970 to below 10 per cent today. While technological changes within manufacturing have also played an important part in reducing unskilled employment requirements the new evolving structure of the economy has failed to generate sufficient demand for unskilled men. Most new jobs have gone to women who work full or part-time. Part-time employment has been particularly important. Part-time employment accounts for 29 per cent of all employment in Australia and has accounted for more than 40 per cent of the employment growth since 1978. The full-time employment growth of men accounted for only one job in each four new jobs. Part-time employment, in general, is not undertaken by unskilled men and they do not combine part-time employment with income support.

The other factor that relates to declining manufacturing employment opportunities for the unskilled has been higher Australian exchange rates generated by the growth of the mineral sector, and the periodic increase in mineral prices (Gregory, 1976).

Each of the forces discussed above has impacted adversely on the full-time employment of unskilled men. Each has increased in importance over the last three
decades and it is very difficult to find any positive forces that may have helped the unskilled group. Of course, government has adopted various policies to mitigate these adverse outcomes but they have been of limited effectiveness.

One policy response has been to increase education attainment to reduce the supply of young unskilled men. There have been significant improvements in high school completion rates over this period but, to date, the reduced supply of unskilled men has failed to offset the more powerful reduced employment demand.

The other significant policy response has been to change the immigration policy towards a stronger focus on labour market skills so that today, immigrants, on average, have more formal education endowments that the local population. This policy has clearly helped immigration integration into the labour market, which is not a serious problem in Australia, but the effect on the labour market outlook for unskilled males is not at all clear.

5. Will the Mining Boom increase the Demand for Unskilled Male Labour and reduce Welfare Reliance?

The rapid increase in the value of Australian mineral exports, generated by the fast growing Chinese economy, has had a large income effect in Australia and has led to a demand for labour considerably higher than would have been expected during a Global Financial Crisis. This strong income effect has been a positive force in the labour market for unskilled men, although its effect to date appears muted.

However, the rapid increase in the value of mineral exports, which has operated largely through increased export prices, has led to a large increase in Australia’s terms of trade which, in turn, has increased the Australian exchange rate. At each link in this price chain – commodity prices- terms of trade- exchange rate- the price increases have been quite extraordinary. The relative price effect, operating through a higher exchange rate, is having a strong effect on the relative demand for labour in different industries with different labour skill requirements. The relative price effect appears to be biased against the unskilled, although, a thorough analysis of the rapidly changing situation is yet to be done.

The change in relative prices is so great, and likely to have such a profound effect on the Australian economy, that it is worth presenting the basic data. Figure 5
presents the Australian commodity export price index since 2000. There was little change until 2004 and then the price change was quite dramatic increasing three hundred per cent in three years, There was a price dip at the beginning of the global crisis but, once again, the price index is back to 300 per cent of its level of 2004. As might be expected, such a large increase in prices will bring forth a substantial supply response as mines are developed in Australia and other mineral supplying countries. Whether this supply response will be sufficient to meet the growing demand remains to be seen. But it is clear that mineral price changes, responding to the imbalances between world mineral demand and supply, are becoming of increasing importance and relevance for Australia.

Figure 6 presents the terms of trade. Their increase has been less than the commodity price change (Figure 5), because not all exports are minerals. Nevertheless, the terms of trade have risen sixty to seventy per cent over the decade. These terms of trade increases have been matched by similar changes in the real exchange rate.

The impact of such a large change in the terms of trade on Australian economic well-being, over the last two decades, is shown in Figure 7. The growth in Gross National Income and Gross Domestic Product is virtually the same over the nineties, both increasing about 30 per cent. Over this period, all the growth in Australian hourly income was generated by increases in productivity, and changes in the terms of trade made no contribution. Over the last decade, however, the pattern has been quite different. The level of productivity per hour increased by 7 per cent, one third of the increase of the previous decade. The changes in the terms of trade, however, have added another 15 per cent to Gross National Income per hour, an extraordinary change.

Mineral resource endowments are different by states, being concentrated in Western Australia and Queensland. Hence the rapid growth in mineral prices, and their effects on the exchange rate, may produce a strong geographical bias in the allocation of national income gains. The mineral states benefit from high mineral prices and development of new mines. Economic growth in the non-mineral states may lag behind as the higher exchange rate subjects their production to increased competition from cheaper imports and they receive lower prices for their exports.
There is a concern that a two-speed economy may emerge with a disproportionate effect on the demand for labour which may grow quickly in mineral states and grow more slowly elsewhere. Under these circumstances, unskilled labour may continue to do badly in the employment market.

To consider one piece of evidence for the emergence of two-speed economy in the male labour market we recalculate Figure 1 and Figure 3 by grouping the Australian states into two – the mineral exporting states of Western Australia and Queensland in one group and the remaining states in the other.

Over the two decades following 1970, the large fall in the male full-time employment-population ratio was much the same across both groups of states (Figure 8). It is only over the last two decades that there are signs of a divergence. After the 1990 recession, employment in the mineral states recovered more strongly, but, by the downturn at the beginning of 2000, their male full-time employment–population ratio had slipped back to the same level as in the other states. Then, starting with the increases in mineral prices five or six years ago, the employment-population ratio of the mineral states began to increase quite markedly, but not enough to return it to the levels prevailing before the 1990 recession. Then, once again, the recent slowdown brings the ratio down to levels close to those reached in the 1990 recession. Although the strong boom has added 12-13 per cent to national income (Figure 7) it has had only a modest positive effect on the proportion of the male working age population employed full-time in the mineral states.

Employment outcomes in the mineral states might be thought to be disappointing, but employment outcomes for the non-mineral states, however, are very disappointing. There is no evidence of a persistent recovery in male full-time employment from the 1990 recession and, furthermore, the current mild slowdown was sufficient for the full-time employment-population ratio to fall to the lowest level ever. There seems little evidence, therefore, that the situation has improved much for the majority of Australian men seeking full-time work. Consequently, the decline in the welfare rolls to this point has been modest, and it might be expected that the employment situation for unskilled males has not improved.

For women the story is different, Figure 9. There were significant increases in their full-time employment-population ratios towards the end of the 1980’s, heavy
falls during the recession and over the next decade there has been a “clawing” back of the employment losses. With the new mineral stimulus, however, all states have experienced a lift in their female full-time employment-population ratios but, overall, they remain low.

There is, however, a clear geographical pattern emerging. The non-mineral states have increased their female full-time employment-population ratios substantially. But, over the longer term, it is noticeable that the non-mineral states have lagged.

6. Concluding Comments

Over the last four decades, unskilled men have done particularly badly at finding jobs in the Australian labour market and they have responded by increasing their take-up rate of welfare income support. The welfare take-up rate for women has increased in much the same way, despite the very different and more favourable full-time employment outcomes for them. An important link between the depressed employment levels of unskilled men and the high welfare take-up rate for women has been through the marriage market. Marriage rates for unskilled men have fallen dramatically and unskilled women have moved increasingly onto lone parent income support.

Australia has avoided the adverse effects of the Global Financial Crisis and embarked on an ambitious investment program fuelled by Chinese demand for minerals. Employment growth seems to be accelerating and it is probable, in the absence of any future large economic downturn, that employment growth will spread into the unskilled labour market and welfare reliance of men and women will begin to fall. The trends of the past four decades may begin to be reversed.

However, if there is a noticeable lack of strong employment growth among the unskilled in the current bright economy, their poor employment outcomes may be increasingly interpreted as supply-side behaviour, that is an unwillingness to find and take-up employment on their part. If poor unskilled employment outcomes are interpreted in this way, policy will adjust to make welfare access more difficult.

To some extent this is already happening. Over the last two to three years, there have been a number of policy decisions that reflect the beginnings of a new and
much harder attitude towards welfare income support. For example, there have been no increases in the real level of unemployment benefits, as unemployment benefits have been indexed by the CPI rather than nominal wages. As a result, relative to real wages, unemployment benefits have fallen by as much as 20 per cent over the last twelve or so years. The unemployed were also the one welfare group that did not participate in the initial allocation of cash grants to most of the population to stimulate the economy. There have also been further restrictions placed on the young taking-up unemployment benefits unless they are actively engaged in education programs. Finally, there has been tightening of access to lone parent and disability pensions and a movement of the welfare system from family entitlements to individual entitlements (Gregory, Dunlop and Bray, 2010).

Under a tighter and less generous system, welfare take-up may fall substantially without an increase in employment. It is even more important than in the past that the decline in employment among unskilled men be reversed. Hence the hope that the brightness of the Australian economy, lit by the powerful mineral boom, will increasingly extend into these dark corners.

The resource boom, and the stimulus package in response to the global financial crisis, have been such positive forces to date that Australian economic policy settings are now being tightened with very high interest rates by world standards and increasingly tight budgets. So there is considerable scope for a reversal of policy if the Australian outlook should suddenly deteriorate, an outcome that is not expected.12

---

12 Growth forecasting is a hazardous business. The IMF forecasts eighteen months ago for 34 countries, lists Australia as likely to be the least affected by the global financial crisis in 2009, along with Greece and Cyprus (Table 2.1, p65, IMF, 2009). The Australian forecast to date looks good. The Greek forecast was very bad.
References


IMF (2009), World Economic Outlook, Crisis and Recovery, April, Paris

OECD (2009), Economic Outlook, Interim Report, March

Australian Treasury (2009), 2009-10 Budget Papers
Table 1 Males, Percent Employed Full-time by Skill Level and Census Years

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>25-34</td>
<td>76</td>
<td>71</td>
<td>63</td>
<td>62</td>
<td>60</td>
<td>63</td>
</tr>
<tr>
<td>35-49</td>
<td>79</td>
<td>73</td>
<td>67</td>
<td>65</td>
<td>62</td>
<td>64</td>
</tr>
<tr>
<td>50-59</td>
<td>69</td>
<td>62</td>
<td>56</td>
<td>53</td>
<td>52</td>
<td>56</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>25-34</td>
<td>80</td>
<td>82</td>
<td>79</td>
<td>78</td>
<td>77</td>
<td>76</td>
</tr>
<tr>
<td>35-49</td>
<td>87</td>
<td>84</td>
<td>81</td>
<td>82</td>
<td>80</td>
<td>82</td>
</tr>
<tr>
<td>50-59</td>
<td>85</td>
<td>78</td>
<td>70</td>
<td>74</td>
<td>73</td>
<td>72</td>
</tr>
</tbody>
</table>

**Definitions** -
Skilled is education level, bachelor degree or higher, Unskilled is no qualifications.
Full-time is working more than 35 hours per week.

Table 2 Females, Percent Employed Full-time by Skill Level and Census Years

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>25-34</td>
<td>26</td>
<td>27</td>
<td>30</td>
<td>30</td>
<td>29</td>
<td>30</td>
</tr>
<tr>
<td>35-49</td>
<td>29</td>
<td>29</td>
<td>29</td>
<td>30</td>
<td>29</td>
<td>31</td>
</tr>
<tr>
<td>50-59</td>
<td>18</td>
<td>18</td>
<td>19</td>
<td>22</td>
<td>24</td>
<td>28</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Unskilled</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-34</td>
<td>51</td>
<td>53</td>
<td>51</td>
<td>57</td>
<td>55</td>
<td>53</td>
</tr>
<tr>
<td>35-49</td>
<td>44</td>
<td>46</td>
<td>47</td>
<td>48</td>
<td>46</td>
<td>45</td>
</tr>
<tr>
<td>50-59</td>
<td>37</td>
<td>42</td>
<td>47</td>
<td>49</td>
<td>46</td>
<td>48</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Skilled</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Definitions -
Skilled is education level, bachelor degree or higher, Unskilled is no qualifications. Full-time is working more than 35 hours per week.

Table 3 Marriage Rates, 25-59 by Sex, Age Group and Skill Level  
1981 and 2006 Australia Census

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Skilled</td>
<td>Unskilled</td>
<td>Difference</td>
<td>Skilled</td>
</tr>
<tr>
<td>Males -</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-34</td>
<td>63</td>
<td>66</td>
<td>-3</td>
<td>42</td>
</tr>
<tr>
<td>35-49</td>
<td>84</td>
<td>80</td>
<td>4</td>
<td>75</td>
</tr>
<tr>
<td>50-59</td>
<td>89</td>
<td>79</td>
<td>9</td>
<td>78</td>
</tr>
<tr>
<td>Total</td>
<td>74</td>
<td>75</td>
<td>-1</td>
<td>65</td>
</tr>
<tr>
<td>Females -</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-34</td>
<td>61</td>
<td>77</td>
<td>-17</td>
<td>48</td>
</tr>
<tr>
<td>35-49</td>
<td>75</td>
<td>84</td>
<td>-9</td>
<td>68</td>
</tr>
<tr>
<td>50-59</td>
<td>74</td>
<td>79</td>
<td>-5</td>
<td>64</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>80</td>
<td>-14</td>
<td>60</td>
</tr>
</tbody>
</table>

Definitions -
Skilled is defined where education level is bachelor degree or higher.
Unskilled is defined as having no qualifications.
Married implies legally married.
Source: Household 1% Sample, Australia Census 1981 and 2006.
Figure 1 Males 15-64, Labour and Income Support to Population 1966-2010

Ratio

FT E / Pop
A
B
C
A + (ABS FT U)/Pop
A + IS /Pop

Years
Figure 2 1996 DSP and UB Inflow
Percent on Income Support, Males 20-53

Disability Pension
Unemployment Benefit

Years since Entry Date
Percent
0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0
0.0 20.0 40.0 60.0 80.0 100.0
Figure 3 Females 15-64, Labour and Income Support to Population 1966-2010

Ratio

A: FT E / Pop
B: A + (ABS FT U)/Pop
C: A + IS /Pop

Years
Figure 4 Total Income Support Stock to Population 45-59 by Sex and Marital Status, percent
1995(1)-2010(1)*

* Spliced LDS, 1995(Jan)-2007(Jun), DEEWR 2007(Jul)-2010(Jan).
Figure 5 Commodity Prices

Commodity Prices
2001/02 = 100; based on 2008/09 weights

Source: RBA
Figure 6 Real Exchange Rate and Terms of Trade

Real Exchange Rate and Terms of Trade

Post-float average = 100

Sources: ABS; RBA
Figure 7: Australia productivity and income

Australia – Productivity and Income
Chain volumes; March 1990 = 100

Index
160
150
140
130
120
110
100

Source: ABS

GDI per hour worked
GDP per hour worked
Figure 8 Males Employed Full-Time to Population 15-64
1978-2010

Source - Austats, ABS Website, Data Cube LM1, 1978-2010 (Monthly to Oct 2010).
Figure 9 Females Employed Full-Time to Population 15-64
1978-2010

Source - Austats, ABS Website, Data Cube LM1, 1978-2010 (Monthly to Oct 2010).