



Centre of Full Employment and Equity

Working Paper No. 05-16

Skills shortages in Australia: concepts and reality

William Mitchell and Victor Quirk¹

November 2005

Centre of Full Employment and Equity
The University of Newcastle, Callaghan NSW 2308, Australia
Home Page: <http://e1.newcastle.edu.au/coffee>
Email: coffee@newcastle.edu.au

1. Introduction

In recent times, the public has been made aware by our politicians of the risk posed to our economy by current and prospective skills shortages (Nelson, 2004). Whether this claim is based in fact is yet to be seen. But what is based in fact is that there are approximately 1.7 million Australians without sufficient work (see Keating, 2005). Some have no work at all while others are forced into working fewer hours than they desire at going wages. This phenomenon is largely disguised by official use of persons-based measures of labour force participation that fail to detect underutilisation in our highly casualised labour market. Data for the August 2005 quarter illustrate the point: When hours of underutilised labour are taken into account to augment the official persons-based measure, the official unemployment rate of 5.03% unemployment becomes a labour underutilisation rate of 9.63% (CLMI, 2005). Nearly 10% of our available labour power is idle.

Assuming for argument sake there is a skills shortage, what are we to make of this seeming paradox? Why haven't we trained people to meet these shortages? Despite the denials of Government, any degree of skill shortage and the persistent unemployment and underemployment of the past 30 years represent two-sides of the same coin. They both reflect a lack of governance at the Federal level. At the top of the growth cycle, this lack of governance manifests as skill shortages with persistently high unemployment, whereas at other times it takes the form of very high labour underutilisation and rising long-term unemployment. Both manifestations are the result of erroneous Federal Government macroeconomic policy.

Mass unemployment of the type we have endured in Australia since the mid-1970s is the result of a lack of aggregate spending. The prime responsibility for ensuring there is enough spending rests with the Federal Government. When private spending is insufficient to provide work for all, as it always is, the spending gap has to be filled by the Federal Government via budget deficits. However, discretionary monetary and fiscal policy decisions by the Federal Government - characterised as an obsession with budget surpluses - have systematically prevented the Australian economy from creating enough jobs in recent decades to match the preferences of the labour force, and enough hours of work to match the preferences of those who are employed.

The maintenance of mass unemployment may be thought to facilitate the supply of affordable skilled labour, by undermining the bargaining position of skilled workers and enabling selective avoidance of the less skilled. However, the absence of full employment, and the demise of public sector employment (the principle cause of prolonged unemployment in this country), have both contributed to an erosion of skills formation, atrophy of underutilised skill, and deterioration in the private sector's willingness and ability to integrate less skilled people into their workplaces.

The paper is organised as follows: Section 2 introduces the concept of skill and the factors influencing employer estimation of 'employability'. Section 3 provides analysis of the extent of skill shortages. Section 4 examines how skills shortages are explained by the government and industry, and considers alternative explanations. Section 5 considers the role of the state, which extends into the recommended policy approaches of Section 6.

2. Introducing the concept of skill

2.1 What is skill?

The term 'skill' refers to a specific ability, and is generally used where the ability is assumed to have been in some sense *developed* through experience or training. 'Skill' is one of several terms used to express the concept of 'ability', the mental or physical power to do something, that variously distinguish how the ability was acquired, and to what standard. For example, 'aptitude' implies an inherent capacity for acquiring ability, whereas 'talent' often infers ability is inborn. 'Competence' generally suggests an ability to do something satisfactorily but not outstandingly. 'Proficiency' suggests significant competence. 'Skills' are also often classified according to the *method* of their development, as 'formal' (derived through a process of structured training and documented assessment), 'non-formal' (training was structured but no certification issued) or 'informal' (obtained through practice, experience, self-education, etc).

Not everything that people learn to do can be considered a 'skill' (for example, bad habits). The presumption is that skill enables the performance of a useful undertaking, raising questions such as 'useful to whom and how?' 'Skills shortage' is raised almost exclusively in relation to 'marketable' skills, which are those that employers require in employees in order to profit from employing them.

2.2 Marketable skills

It is usually assumed that when employers speak of a 'skills shortage' they are referring to an absence of technical proficiency, but more broadly, they mean a range of worker capabilities and behaviours that contribute to their profitability. This is reflected in the definition of *Skills Shortages* adopted by the Department of Education, Science and Technology (DEST), as being when

employers are unable to fill or have considerable difficulty in filling vacancies for an occupation, or specialised skill needs within that occupation, *at current levels of remuneration and conditions of employment*, and reasonably accessible location (DEST, 2002: 3).

In other words, 'skills' are defined relative to the perceived needs of the employers. This means that a broader range of qualities is typically included in the vector of characteristics than might be manifest in technical training courses. To show this, Figure 1 is based on training material provided to staff in the former Commonwealth Employment Service (DEIR, 1985).

It provides a schematic representation of the way in which hiring decisions and skills interact. Employers have basic productivity concerns when they hire workers in terms of the speed at which the new entrant will attain acceptable performance standards and the length of time they remain at the firm.

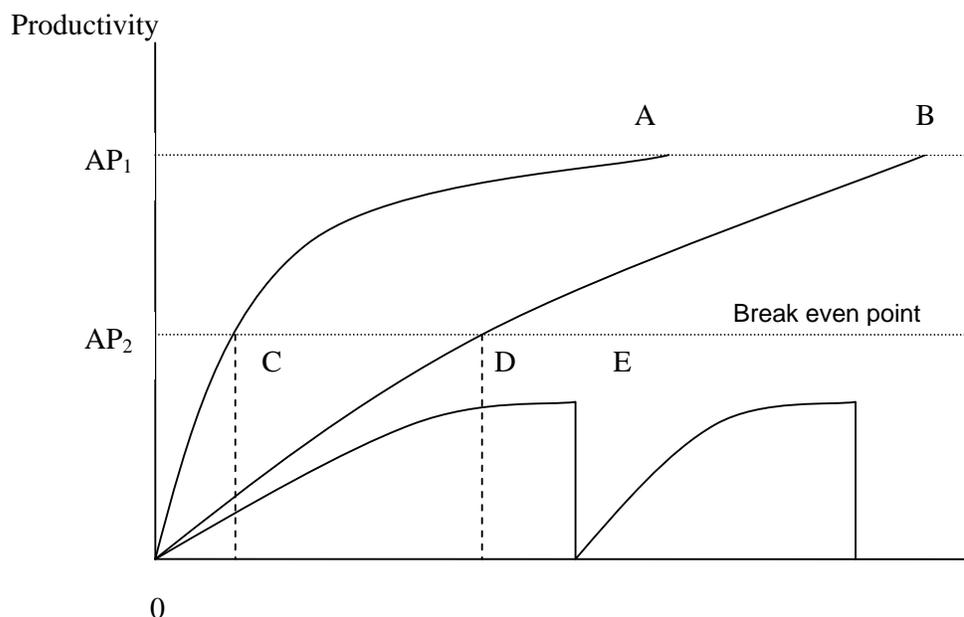
AP_1 represents average productivity of the firm's workforce; whereas AP_2 is the productivity below which the worker's contribution to the firm's revenue equals the cost of employing them (economists may think in terms of a marginal product-cost relation although we do not invoke diminishing marginal returns in this conception). We assume for the plant as a whole there are constant returns.

Initially, all new workers are 0 productive (even negatively productive if someone else has to stop their work to orient them to the workplace). Curve OA represents a new worker who possesses or quickly acquires the skills required to perform the required work, rapidly

surpassing the break-even point and achieving average productivity and presumably keeping an on-going attachment with the firm. Curve OB represents a new worker with fewer skills or who more slowly acquires the skills needed to achieve average productivity. Firms will try to screen between work OA and worker OB in their hiring decision because the latter takes longer to reach AP_1 . These differences in economic contribution to the firm by OA and OB may be compensated with a wage subsidy. Line OE represents the situation where one new worker after another fails to achieve even break-even level of productivity, either because they are fired or quit before doing so. The presumption is that these workers lack the skills or application to become proficient in a reasonable time-frame, or to manage the social relationships encountered in the workplace. Clearly, employers seek workers such as OA, but in their absence may be persuaded to employ worker OB, particularly if offered the compensating inducement of a wage subsidy. While employers hope to minimise the initial period of negative income entailed in hiring a new worker, they understand this as an investment for which they will hopefully receive a steady return thereafter. Critically, the selection process is aimed at identifying and excluding worker OE, because a series of short-lived placements is a dead loss to the firm.

Thus, the determination of how quickly a worker will achieve a profitable level of productivity, and how long they are likely to remain with their firm, are of crucial significance to employers. Mitchell and Watts (1986) developed a critique of the narrowly constructed view of productivity based on the neoclassical efficiency concept. They distinguished between quantitative efficiency (the ahistorical and technical neoclassical input-output concept) and qualitative efficiency (which specifically recognises the power relations operating in the capitalist mode of production). Accordingly, an 'efficient' or 'productive' worker will have qualities that ensure the owner of the firm can extract as much surplus from the production (labour) process as is possible. While this may entail determining whether or not applicants possess certain technical skills and other personal characteristics, it necessarily must also reflect the employer's estimation of their firm's ability to integrate a worker with those skills and characteristics into their workplace. Skill concepts have to be broadened to reflect these significant social dimensions in addition to the narrowly defined technical requirements.

Figure 1 Training and productivity concerns of employers



2.3. Skills shortage and structural unemployment

The concept of a skills shortage is clearly a relative concept, implying some distance from an optimal state, which begs the question: according to whom (Green *et al.*, 1998: 165-166). Unsurprisingly, analyses of skills shortages by industry and governments invariably consider the issue from the perspective of business and profitability, which places the emphasis on containment of labour costs both in terms of wages and conditions, and hence, whenever possible, externalising the costs associated with developing the skills firms require in their workers.

Within this context the notion of structural unemployment arising from 'skills mismatch' can be understood as implying an unwillingness of firms to offer jobs (with attached training opportunities) to unemployed workers that they deem to have undesirable characteristics. When the labour market is tight, the willingness of firms to indulge in their prejudices is more costly. However, when labour underutilisation is high firms can easily increase their hiring standards (broaden the desired characteristics they demand from workers) and the training dynamism driven by labour shortages is lost. Then we observe, in a static sense, 'skill mismatches' which are really symptoms of a 'low pressure' economy.

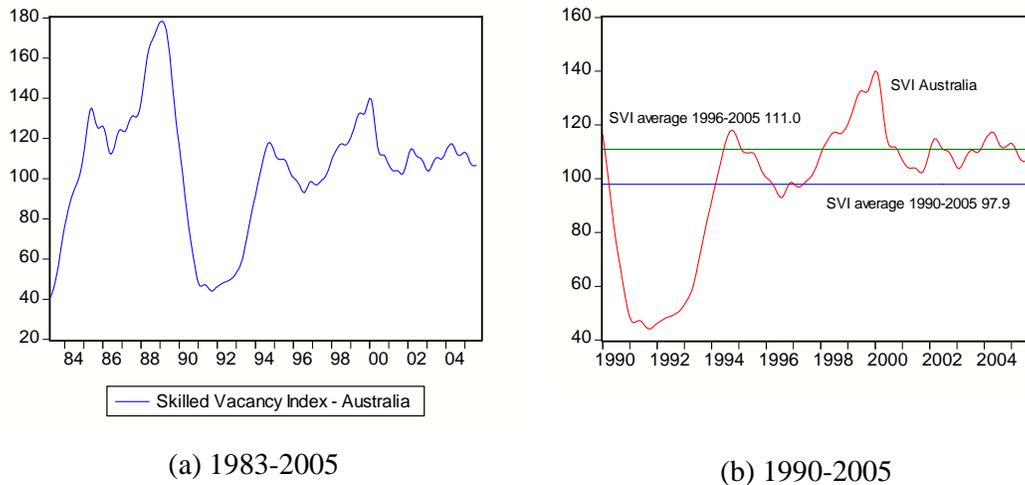
3. What is the extent of skills shortage in Australia?

It is evident that from their perspective, Australian businesses feel hamstrung by the present state of the labour market. The Australian Chamber of Commerce and Industry (ACCI) cite skills shortages as one of the most significant barriers to investment in Australia (EWRERC, 2003: 12). The Business Council of Australia (BCA) notes that the increasing average population age necessitates a range of training measures to head off future broad based skills shortages (EWRERC, 2003: 12-13). Although the labour market has tightened in recent years, there is still only anecdotal evidence that a 'skills shortage' is becoming a growth bottleneck.

Some data is available from the Skilled Vacancy Index (SVI) published monthly by the Department of Employment and Workplace Relations (DEWR) which would suggest a more modest claim with respect to skill bottlenecks is supportable. In Figure 2 (panel a) we show the SVI for Australia from the earliest available period (July 1983) to November 2005, and in panel (b) the same index since January 1990 to November 2005. The lower horizontal line in panel (b) is the average value over the 1990s (97.9) while the upper horizontal line is the average value over the 1990s (111.0). The charts provide no aggregate level indication that there has been a sharp rise in the demand for skills in the last several years.

More detailed examination of the SVI is available because DEWR break it down into States/Territories and also by professions, associated professions and trades. The picture gets a bit more interesting at this level.

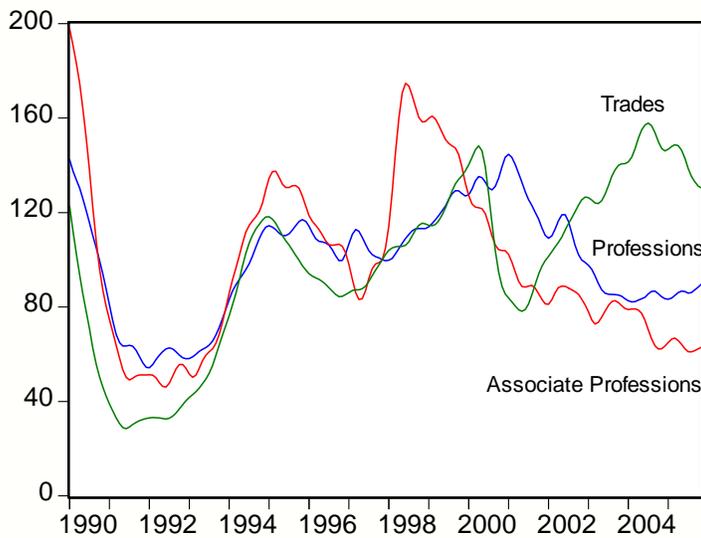
Figure 2 DEWR Skilled Vacancy Index, Australia, various periods



Source: DEWR, Skilled Vacancy Index.

Figure 3 shows the SVI for the Professions, Trades and Associate Professions. In the last 3 years following the recession, the SVI for tradespersons rose sharply although in the last 18 months it has been in decline overall. The Professions and Associate Professions declined uniformly since the recession although there is evidence of a slight recovery in the aggregate in recent months.

Figure 3 Skilled Vacancy Index by Trades, Professions and Associate Professions



Source: DEWR, Skilled Vacancy Index

To explore these trends more fully, we disaggregated the SVI for the three broad occupational groups. Table 1 shows the average annual compound growth in the SVI between 2000 and 2004 (Column 2) and the corresponding growth between November 2004 and November 2005, for the Trades, Professions and Associate Professions. The current pressure areas are relatively clear. For the Professions and Associate Professions, the health sector has experienced rapid growth in the SVI relative to recent past in the last year. A relevant issue is

the number of immigrants who have foreign nursing or medical qualifications who are not practising in this country as a result of local certification constraints (Hawthorne, L., 2001)

In the Trades, the recent trend is strongly down relative to the average annual growth in the previous four years. There is no evidence that the pressure is continuing to mount in these areas.

Table 1 Movement in DEWR Skilled Vacancy Index

	Average annual growth in Skilled Vacancy Index (per cent)	
	2000-04	Nov 2004-Nov 2005
Total Trades	5.1	-12.1
Chefs	2.8	-13.9
Metal Trades	23.6	-22.9
Automotive Trades	9.9	-8.3
Electrical and Electronics Trades	9.0	-4.4
Construction Trades	2.0	-4.0
Food Trades	2.5	2.8
Printing Trades	-8.0	-34.3
Wood and Textile Trades	1.6	-19.3
Hairdressers	0.0	-19.8
Total Professionals	-10.9	6.4
Science	-5.3	-4.2
Building & Engineering	-3.8	-12.1
Accountants and Auditors	-19.4	-9.1
Marketing and Advertising	-29.2	-7.1
Organisation and Information	-14.6	-20.9
Health	-4.9	21.2
Social	-15.7	14.5
Total Associate Professionals	-11.2	1.1
Medical and Science	-4.0	27.9
Building and Engineering	-5.6	-6.0

Source: DEWR, Skilled Vacancy Index. Note: average annual compound rate of growth for 2000-04 is computed. Column 3 is the annual growth from November 2004 to November 2005.

In terms of the regional distribution, data is only available from this source at the level of States/Territories. Table 2 shows that skilled vacancies growth in Australia continues its 5 year decline. Both NSW and Victoria reveal worsening trends and the growth areas of Queensland and Western Australia are now negative (QLD) and flat (WA). Figure 3 charts the SVI for states relative to national average from 1983 to 2005. A positive (negative) observation demonstrates above (below) average SVI values. In recent year, NSW has plunged well below the national average while Victoria never really recovered from the 1991 recession and has also deteriorated in recent years. The smaller states of Queensland and Western Australia have experienced solid growth in employment over the 1990s and beyond and also strong labour force growth. Any mismatch between labour force and vacancies would signal poor regional development policies from the Federal and State governments. Interestingly, South

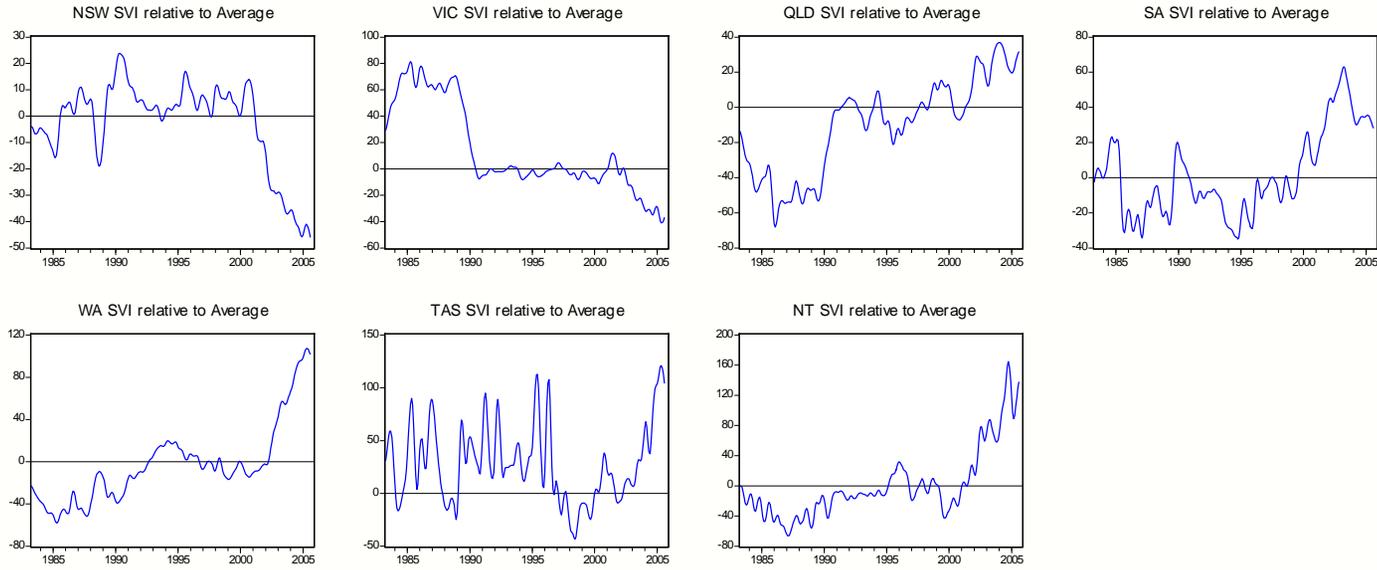
Australia which has experienced very poor employment growth since the 1991 recession is now revealing above average SVI values. Any shortages of skilled labour that may be present there would reflect the fact that the economy has been slow and little skill development has been undertaken by either the private or the public sectors. Skilled labour has also likely migrated to the stronger economies in search of scarce employment opportunities.

Table 2 Movements in Skilled Vacancy Index by State and Territory

	Average annual growth in Skilled Vacancy Index (per cent)	
	2000-04	Nov 2004-Nov 2005
Total (Australia)	-2.7	-5.2
NSW	-13.3	-14.9
VIC	-8.5	-10.7
QLD	3.5	-0.3
SA	1.0	-8.3
WA	13.2	1.7
TAS	6.5	18.6
NT	22.1	-5.5

Source: DEWR, Skilled Vacancy Index

Figure 3 State Skilled Vacancy Indexes relative to national average, 1983-2005



Source: see Figure 2. The charts depict the State SVI minus the national average.

The data available in the SVI is unable to pinpoint localised shortage 'hot spots'. DEWR data stretching back to the 1980s show that, while the major recessions of the early 1980s and the early 1990s eliminated skills shortages in nearly all occupations, and other shortages arise and diminish with the business cycle (for example, most building trades and engineering) some occupations have been experiencing scarcity fairly consistently over the past 20 years (for example, electrical trades, motor vehicle trades, wood and furniture trades, chefs and pastry cooks (DEST, 2002; EWRERC, 2003).

In September 2004, the Australian Industry Group (AIG) reported that while there were 130,000 apprentices in training, there were between 18,000 and 21,000 unfilled vacancies for tradespersons in manufacturing, and this was despite the industry running below capacity (AIG, 2004: 5-7). There were also 21.8 vacancies per 1,000 manufacturing workers.

It would be reasonable to assume a pro-business government would have made it a priority to resolve what appears to be such a significant problem for business. The fact that the problem has persisted for nine years under the Howard government points to its origins in fundamental misconceptions about the nature of the labour market.

4. Causes of skill shortages

4.1 Official explanations

The Federal Government's policy position on this duality – skill shortages and persistent unemployment - is confused and unacceptable. They articulate a vision of high skills and high participation but fail to provide the necessary macroeconomic policy conditions that will ensure both. While there has clearly been a shortage of jobs, the Government has persistently vilified the economically disadvantaged. Instead of recognising that it is their own macroeconomic policy stance (budget surplus obsession) that has caused the persistent unemployment, they established pernicious compliance regimes to ensure the 'victims' (the unemployed) were blamed.

The skill development capacity inherent in a strong public sector maintaining full employment was abandoned as unemployment rose. Industry and government now both seem reluctant to acknowledge the responsibility of employers to invest in the planning and development of the skills they require in their workers. For example, the Australian Government's National Skills Shortage Strategy currently cites the following causes of skill shortage:

- strong economy with low rates of unemployment;
- growth of new industries with few ready-skilled tradespeople available;
- relocation of new industries into different regions with a different skills base;
- lack of interest in particular industries among potential job seekers;
- location of industry, or project-based work, in rural or regional areas with a small skills base;
- technology changes within an industry, especially production, resulting in new methods and therefore skills needs; and
- changes in underpinning skills needs to successfully undertake trade training for example, Year 12 maths for technology trades (DEST, 2005).

Under-investment in the training of workers by industry is not mentioned. Notwithstanding this glaring omission, there are also oversights in the reasons advanced.

4.2 Misleading labour market statistics

The low unemployment claim misrepresents labour market data, in that persons-based measures of labour market status classify people as 'employed' if they work for one hour per week and thus obscure the underemployment endemic in our highly casualised labour market (BLMR, 1986; Mitchell and Carlson, 2002; CLMI, 2005). If Australia adopted the German standard of counting someone 'employed' only after they work 15 hours per week, instead of just 1 hour, the Australian unemployment rate would be considerably higher. Keating (2005) estimates around 1.7 million Australians are without enough work or hours of work. The question that arises is: why have these people not been trained to meet these 'skills shortages'?

The question is highly relevant given that the overwhelming policy emphasis has been to shunt people into a series of active labour market programs within the privatised Job Network structure. The stated aim has been to improve the 'employability' of young and long-term unemployed people (for example, Kemp, 1996). There is substantial evidence now available to show that this strategy has been largely ineffective. The poor employment outcomes for participants in programs like Work for the Dole and Intensive Assistance point to the futility of preparing the unemployed for jobs that are not there (Mitchell and Cowling, 2004; ACOSS, 1999; Carson *et. al.*, 2003; Borland and Tseng, 2004; Productivity Commission etc)

What has not been answered by the Government is the following: if there is indeed a skills shortage now, what has the billions of dollars that has been pumped into the Job Network been doing? The recognition of the former amounts to a substantial failure of the latter. All the evidence suggests that the supply-side strategy lauded by the OECD has not been effective in increasing the employability of disadvantaged workers (OECD, 1990). The poor results are to be expected in the absence of policy measures designed to increase the quantum of jobs.

In isolation, supply-side measures merely re-shuffle the jobless queue. The clear danger of this kind of zero-sum redistribution is that policies achieve tentative or short-term reattachments to the labour force at the expense of deepening employment insecurity. Labour market instability, poverty, and welfare dependency are not solved by such measures; they are simply redistributed amongst the same at risk groups.

4.3 Attitudes

It is often argued that young people are lured away from the trades by the emphasis on higher education. DEST (2002: 1) said "... most industries felt that the skilled trades had an image problem in terms of their appeal to young people thinking about potential careers. All industries felt a bias on the part of school parents and the media towards university education and the professions." The implication is that such attitudes are not founded on a realistic assessment of the attractiveness of trades occupations. However, trades training commencement and completion data from the National Centre for Vocational Education Research (NCVER), reveal that around 50 per cent of those commencing trades training do not complete, which casts doubt on the assertion that the young and those advising them are misguided, since half of those who do undertake trade training are either sacked or decide to leave (NCVER, 2005).

In any event, it is likely that employers are receiving applications for apprenticeships but not from applicants that they deem of sufficient quality. Certainly in regions such as the NSW Hunter region, where youth unemployment is significantly high, the numbers of applicants per apprenticeship vacancy range from around 30 to 1 to 120 to 1 (Williams, 2004).

4.4 Cost shifting

Both industry and government seem reluctant to acknowledge that a significant cause of industrial skill shortages is the unwillingness of industry to invest in sufficient skill formation. We argue that the private sector has a long history of cost shifting its training responsibilities onto the public sector, reflected in the acknowledgement of the gap that emerged with the demise of the public sector as an employer.

The private sector's habitual externalisation of its training costs was less of a problem when the public sector took leadership in training (and thus implicitly 'accepted' the cost shifting). Public sector enterprises were the largest trainers of apprentices in Australia (Gospel, 1993:13-14). At any time there were tens of thousands of apprentices trained in the large public utilities and within government departments (AIG, 2005: 3). Throughout the period of Australia's economic and industrial development, driven by public infrastructure developments and industry protection and assistance, much of the private sector relied on poaching skilled workers from other employers as a first strategy. Clearly the pressures of full employment also forced the private sector to develop their own skill building capacities, but the public sector was a significant net contributor to the national skills pool.

With the privatisation of public utilities, the downsizing of public sector workforces, and the widespread adoption of private sector practices in the public sector, the skill building role was abolished with little consideration as to the impact this would have on the maintenance of adequate levels of skill development. Belatedly, and coyly, both government and industry recognise that the demise of the public sector as an employer and trainer has left a large gap in the nation's training infrastructure. For example, the National Skills Initiative Engineering Working Group reported:

“On the supply side, privatisation of public utilities has reduced the traditional training ground and supply of skilled labour for engineering trades, and large companies are typically more focussed on training for their own skill requirements.” DEST (2002: 8).

Similarly, the Senate Employment, Workplace Relations and Education References Committee report 'Bridging the Skills Gap' (EWRERC, 2003: 17) notes:

“The major factors are the decline in trades training associated with the privatisation of public utilities and 'mean and lean' strategies of large private enterprises, which previously provided a steady pool of skilled labour for small and medium enterprises.”

Why has the market failed? There are two major reasons. First, the persistent excess supply in the Australian labour market over the last 30 years has provided industry access to a broad supply of 'ready-made' skills and taken the pressure off firms to tailor their jobs (and training) to suit the available workforce. We contend that this has reduced the incentive and competence of employers to adequately orient, supervise and train people with significant training needs, such as young people who may have

performed poorly at school, or others suffering skills deficits due to long term unemployment.

Second, there is an endemic free rider problem. Training is costly and can only be justified by subsequent profitability. An employer who makes such an investment understandably hopes it will enhance the productivity of their workforce. However, a worker who acquires more marketable skill through training may discover they are worth more in the labour market, putting pressure on their employer to pay more to retain their services. The degree to which the skill development is firm-specific thus influences the extent to which firms will engage in training. Where skills are more general, employers will under invest in training and the economy as a whole suffers skill shortages. Prima facie, this free rider problem provides an economic rationale for public intervention, and its solution has exercised the minds of policy makers around the world (Smith and Billett, 2003).

5. The role of the state

5.1 Encouraging employers to train their staff

The Hawke Government attempted to address the free-rider problem through its Training Guarantee Levy, established in July 1990. The scheme imposed a requirement on firms with payrolls over \$200,000 to expend the equivalent of 1 per cent of their payroll on training. Those that failed to make this investment during the course of a year had to either remit the balance to the tax department or donate it to a non-profit training provider, such as SkillShare. The scheme was abused by employers (Dwyer and White, 1993) and also imposed obligations on employers who could see no training need. It was finally abolished by the Howard Government in July 1996 (Ireland and Winter, 1996). This coincided with the abandonment of a raft of labour market programs, such as JobTrain (that provided funding for TAFE and other programs). Whereas the Howard government claims that training has increased under its education and training policies, by their own admission this is evidently insufficient to stem the skills shortages that Australian industries perceive they face.

5.2 The role of immigration in alleviating skills shortages

The present government has embraced skilled migration as a significant part of the skills shortages solution. It might appear attractive to industry since it allows Australian industry to 'poach' workers that have been trained abroad. There is clearly a debate that is beyond the remit of this paper about the ethics of advanced countries poaching the skilled people from countries which made an investment in their education and training. However, the question of relevance here is whether it is economically sensible to increase the labour force with skilled immigrants when there are such high rates of labour underutilisation already present in the Australian labour market.

Skilled immigration provides business with a low cost and relatively rapid solution to impending specific labour shortages. However, this is myopic thinking. Consider the plight of the thousands of unemployed foreign trained engineers, who having been encouraged to migrate to Australia in the 1990s were unable to find work because local employers were unimpressed with their skills, suspicious of the quality of their training, and unaccommodating of their cultural and language differences (Hawthorne, 1997). As recently as July 2005, Victoria's Employment and Youth

Affairs Minister launched a program to improve the marketability of foreign trained engineers saying:

Victoria has a shortage of engineers, but some of our overseas-qualified engineers have trouble finding jobs because their qualifications are not understood by employers, or because they face cultural or racial barriers ...

We know there are at least 430 overseas-qualified engineers in Victoria who are ready to work following assessment of their qualifications and English language skills, yet engineering is named by both the Federal and State Government as a skill in demand. (Allan, 2005).

In seeking skilled workers off-shore, policy makers overlook the tacit and cultural skills and knowledge that people born, raised and educated in Australia already possess, skills that take the average school leaver 17 years to accrue. Many employers know this, with relatively few expressing an interest in off-shore recruitment (AIG, 2004).

We contend that the state does have a role in to play in getting employers to act in their collective interest (and that of the nation), and that the way to encourage them involves improving the governance of the labour market as a whole, beginning with the establishment of full employment.

5.3 The imperative of full employment

Full employment should be a major macroeconomic goal of the Australian Government. A 'high pressure' economy not only maximises output but also enhances labour force participation and provides strong incentives for employers to tailor training and paid-work opportunities to attract scarce labour. When labour is in excess supply (high unemployment) employers lose this incentive and the dynamic skill-building process falters.

From 1945 to the mid 1970s, Australia, like most advanced western nations, maintained very low levels of unemployment (rarely above 2 per cent). This era was marked by the willingness of governments to maintain levels of aggregate demand that would create enough jobs to meet the preferences of the labour force, given labour productivity growth. Governments used a range of fiscal and monetary measures to stabilise the economy in the face of fluctuations in private sector spending.

Were there shortages of workers in this period? Between September 1966 and December 1974 the average number of unemployed for each registered vacancy was 0.96. That is, there were more vacancies over this period than there were unemployed ready to fill them. The unemployed-vacancy ratio in December 2004 was 3.9 (3 unemployed for every vacancy). Since December 1974 it has averaged 10.3. Since March 1996 it has averaged 6.9.

The sustained full employment forced employers to compete for workers as they sought to expand market share. The upshot was that for every job that was offered a corresponding training opportunity was also created (Thurow, 1976).

Moreover, it was a central feature of the infrastructure established by the 1945 White Paper on full employment that the Federal and State governments invested heavily in apprenticeships and maintained 'manpower planning' capacities to forecast likely new skill requirements so that policies could be forward-looking (Coombs, 1994)

Since 1975, successive Federal regimes have progressively jettisoned their responsibility to maintaining full employment. This failure is also directly responsible for the under-investment in Australia's skills which now reveals itself as 'skill shortage' as the business cycle improves (see Mitchell, 2001). The paring back of the public sector, driven by ideological zeal rather than any economic logic, has not only reduced the number of public sector jobs available on demand to the most disadvantaged workers, it also led to the decimation of the apprenticeship 'institution' which was one of the most effective ways to introduce young people into the paid workforce (BLMR, 1983).

5.4 Labour market intermediation

The propensity of business to externalise its costs is one factor undermining investment in skills development. From the other side of the labour market is the difficulty of unemployed and working people to anticipate what skills they could profitably acquire, as this entails anticipating developments in commerce and industry of which they generally have insufficient knowledge. Apart from interviewing, counselling, and general occupational & industrial knowledge this requires, those providing this information need to understand the condition of the local labour market through research and open sharing of information. There is also the challenge of determining *how* skills are to be acquired, both in terms of locating sources of specialised training and support and the means of paying for it. While this was core business for the CES, the 'marketised' Job Network, by contrast, is designed to avoid anything that uses its resources without generating an income. This largely precludes investing in the skills and knowledge of its own staff (Goddard, et al, 2001) and even the sharing of information, on competitive (Eardley, 2000) and 'commercial in confidence' grounds (Crossland, 1999; Quirk, 2002). The Howard Government actually discourages unemployed people from undertaking training by making its provision conditional on their first participating in its compliance program, known as 'work-for-the-dole'.

Efforts to emulate the role of the CES with business dominated Area Consultative Committees and management-only industry working groups fail because these don't offer solutions that balance the needs of both workers and business. They do not have the independence that occasionally emboldened CES managers to suggest to employers they could find better staff and fill their vacancies faster if they provided better pay and conditions. Such an obvious suggestion would never be made by a Job Network agency, or an industry dominated board. The independence of the CES, and its capacity to monitor and authoritatively respond to trends at the local level enabled it to temper the self-interest of the private sector. The Job Network, by being disjointed, poorly skilled, over-dependent on employer patronage and narrowly focused is incapable of imposing a coordinated approach to resolving skills gaps and shortages.

The failure of the Federal Government to maintain viable labour market services, including the capacity to anticipate emerging skills shortages at the local level and organise local solutions is symptomatic of the way its ideological obsessions have undermined Australia's economy. This failure is reflected in its economic policy framework which erroneously extols the virtues of running budget surpluses. The persistence of high levels of labour underutilisation and the identification of skill shortages in certain occupational groups are manifestations of this lack of

macroeconomic policy leadership. They are two-sides of the same coin – a failure of governance.

6. The way ahead

Most of the underutilised workers in Australia have relatively low education and skill levels (Mitchell and Bill, 2005). Several points need to be made in this regard. First, maintaining a buffer stock of public sector jobs provides work for all irrespective of their skill levels and also allows paid-work opportunities to be structured into training and career development paths. In this way, while the person may initially have low skill levels, over time, under some circumstances, they can advance. But at any rate, they always have work and are freed from welfare dependence.

Therefore an essential component of restoring full employment is to introduce a Job Guarantee along the lines advocated by the Centre of Full Employment and Equity. This requires the Federal Government to maintain an unconditional offer of work to anyone who cannot find employment elsewhere at the minimum wage. This underpins the fully employed economy and maintains the dynamic pressures discussed earlier. It also allows two chronic problems to be solved. On the one hand, Australia is wasting our experienced (skilled) aged workers who have been driven out of the labour market by the lack of employment possibilities. Many lost their jobs in the last major recession and have been idle since, some outside of the labour market on disability support pensions. On the other hand, we have high youth unemployment. This group desperately need paid work-training pathways and supervision. The two cohorts could be embraced by public job creation programs to mutual benefit.

Second, the Federal and State Governments must renew its commitment to adequately fund our public schools and universities. The recent press covering the parlous plight of our public universities and the uncertain future of ‘export’ education highlights the need for a solid public spending response. A renewed commitment to trades education is also required. The public cutbacks in this area are indefensible and we have seriously underprovided in this area over the last thirty years.

Public policy must also set in place safety-net structures for the youth who leave school early as a matter of top priority. Every person under 20 years of age should be in education, training or a paid job. The Government has claimed success for its ‘New Apprenticeship’ scheme while acknowledging (in the launch of a National Skills Shortage Strategy) that insufficient ‘real’ trade skills are being developed within this policy framework to meet the needs of industry. A strong public commitment to providing employment and integrated apprenticeship opportunities with a revitalised TAFE sector is necessary.

Ultimately, investments in human skills and capacity are the only durable strategy and if you don’t spend now on education and job creation the lack of investment will reduce our opportunities (and wealth) in the future.

Third, occupational planning capacities must be reintroduced to ensure that the apprenticeship and training programs are targeted in areas of regional and industrial need.

Fourth, by maintaining full employment, the private employers are forced by competition to take a major responsibility for training and skill development of our workforce.

7. Conclusion

Overall, the major failing of macroeconomic policy has been the Federal Government's pursuit of a growth path which is unsustainable. By running surpluses the only way that growth in spending could underpin economic growth was by the increasing private deficits. The private sector, particularly the household sector is now negatively saving overall and the debt burden has hit record levels (RBA, 2005:11). Ultimately a correction will come as the private sector tries to restore their balance sheets by saving. At that point, the folly of running public surpluses and the fiscal drag they introduce will become apparent to all in the form of sharp rises in unemployment.

What is needed is a rejection of this strategy and a realisation that persistent labour underutilisation not only generates massive losses to the society and to specific individuals but it also undermines our future capacity. The Federal Government has to take responsibility in this regard and ensure that its net spending meets the demands of the workforce for jobs now and the requirements in the future for an on-going supply of high skilled and productive workers.

References

- ACOSS (1999) *Work for the Dole - Briefing Paper*, ACOSS Info 115, Australian Council of Social Services, Strawberry Hills, NSW.
- AIG (2005) *Contemporary Apprenticeships for the Twenty First Century*, July 2005. Australian Industry Group, available at: www.aigroup.asn.au
- AIG (2004) *Australia's Skills Gap: Costly, Wasteful and Widespread*. A report on the nature and depth of skills shortages in manufacturing, Ai Group Economics, Australian Industry Group.
- Allan, J (2005) Media Release from the Minister for Employment, Minister for Youth Affairs, July 14, 2005. Victorian Government.
- BLMR (1983) *Youth wages, employment and the labour force, Research Report No. 3*, Bureau of Labour Market Research, Australian Government Publishing Service, Canberra.
- BLMR (1986) *Unemployment and the Labour Market: Anatomy of the Problem* Bureau of Labour Market Research, *Research Report No. 9*, Australian Government Publishing Service, Canberra.
- Borland, J. and Tseng, Y.(2004) *Does Work for The Dole Work?*, Melbourne Institute Working Paper No. 14/04, Melbourne Institute of Applied Economic Research, University of Melbourne.
- Carson, E., Winefeld, A.H., Kerr, L.,(2003) 'Work for the Dole: A pathway to self-esteem and employment commitment, or the road to frustration?', *Youth Studies Australia*, 22(4).
- CLMI (2005) *CofFEE Labour Market Indicators*, Centre of Full employment and Equity, University of Newcastle. Available at: <http://e1.newcastle.edu.au/coffee/>
- Coombs, H.C. (1994) *From Curtin to Keating: The 1945 and 1994 White papers on employment: a better environment for human and economic diversity?*, ANU.
- Crossland, A. (1999)*The Party of the First Part*, Australian Broadcasting Commission, Radio National Background Briefing program Broadcast on Sunday

- 28/03/99. Transcript available at:
<http://www.abc.net.au/rn/talks/bbing/index/bbchronoidx.htm>
- DEETYA (1996) *Working Nation: Evaluation of the employment, education and training elements*, AGPS, Canberra.
- DEIR (1985) Initial Training Program, Training Section, Victorian State Office, Department of Employment and Industrial Relations, Melbourne.
- DEST (2002) *Nature and Causes Of Skill Shortages Reflections: From The Commonwealth National Industry Skills Initiative Working Groups*, DEST, Canberra.
- DEST(2005) National Skills Shortage Strategy website, available at:
<http://www.skillsinitiative.gov.au/skillshortage.htm>
- Dwyer, M and White, A. (1993) 'Training Rorts Crackdown', *Australian Financial Review* 21 July 1993, John Fairfax Group Pty Ltd
- EWRERC (2003)*Bridging the skills divide*, Employment, Workplace Relations and Education References Committee, Department of the Senate, Parliament House, Canberra.
- Goddard, R., Patton, W., Creed, P (2001) 'Psychological distress in Australian case managers working with the unemployed', *Journal of Employment Counseling*, June 2001, vol 38.
- Gospell, H. (1993) *Whatever happened to apprenticeship training?*, Working paper No. 28, Australian Centre for Industrial Relations Research and Training (ACIRRT), University of Sydney.
- Green, F, Machin, S, Wilkinson, D. The meaning and determinants of skills shortages, *Oxford Bulletin of Economics and Statistics*, 60, 2 (1998)
- Hawthorne, L (2001) 'The Globalisation of the nursing workforce: barriers confronting overseas qualified nurses in Australia', *Nursing Inquiry* 2001; Vol 8, No 4:213-229.
- Hawthorne, L (1997) 'The Question of Discrimination: Skilled Migrants' Access to Australian Employment', *International Migration*, Vol 35, No. 3, 1997.
- Ireland, I., Winter, G.(1996) *Education and Training Legislation Amendment Bill 1996*, Bills Digest, Department of the Parliamentary Library, Australian Parliament House.
- Keating, M. (2005) 'Increasing Employment Participation In Australia And How To Finance It Centre For Public Policy' paper presented at: *Transitions And Risk: New Directions In Social Policy* Conference, Centre for Public Policy, University of Melbourne, February 2005.
- Kemp, D. (1996) *Training for Real Jobs: The modern Australian apprenticeship and training system*, Ministerial statement by the Honourable Dr David Kemp MP, Minister for Schools, Vocational Education and Training, AGPS, Canberra.
- Mitchell, WF. and Carlson, E. (2002) *Labour underutilisation in Australia and inflation*. Coffee Working Paper No: 02-10, Centre of Full employment and Equity, University of Newcastle

Mitchell, WF, and Cowling S.(2003) False Promise or False Premise? Evaluating the Job Network. *Australian Journal of Labour Economics*, Vol 6, No. 2, June 2003, pp 207 – 226.

Mitchell, W.F. and Watts, M.J. (1986) 'Efficiency under Capitalist Production: A Critique and Reformulation', *Review of Radical Political Economics*, 17(1, 2), 212-220.

NCVER (2005) Australian vocational education and training: Apprentices and trainees, State and Territory tables. Available at: <http://www.ncver.edu.au>

Nelson, B. (2004) A New Approach To Tackling Skills Shortages In Trades, Media Release, The Hon Dr Brendan Nelson, Minister for Education, Science and Training, 6 / 4 / 2004.

Noonan, P.(2005) *Overview and Preliminary Analysis from National Industry Skills Reports*, presentation to DEST National Industry Skills Forum, September 16 2005

OECD (1990) *OECD Employment Outlook*, Organisation for Economic Cooperation and Development, Paris.

Quirk (2002) *Why the Job Network is not working*: Submission DR68 to Independent Review of Job Network, Productivity Commission, Canberra. Available at: <http://www.pc.gov.au/inquiry/jobnetwork/subs/sublist.html>

RBA (2005) Financial Stability Review, Reserve Bank of Australia.

Smith A & Billett S (2003) Making employers pay: how do they do it overseas? The sixth Australian VET Research Association Conference "The Changing Face of VET" 9-11 April 2003 Australian Technology Park, Sydney.

Thurow, L.(1976) *Generating Inequality*, MacMillan, London

¹ The authors are Professor of Economics and Director of Centre of Full Employment and Equity and Professor of Economics (Mitchell) and Research Officer, at the Centre of Full Employment and Equity (Quirk), University of Newcastle, Australia.