

Investment in training and public policy - a review

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Abstract

Many governments in developed economies have subsidised training or introduced policies aimed at encouraging increased investment in training, evidently on the belief that the market, if left to itself, will result in an underinvestment in training. This paper intends to review the literature dealing with the decision to invest in training. It is shown that there are many reasons why market failures may result in an underinvestment in training and that different causes of this market failure may have different policy responses.

1 Introduction

There is a widespread belief across many developed countries that the labour market, if left to itself, will result in an underinvestment in training. This belief is made evident by the amount of publicly funded training that has been, and continues to be provided by Governments throughout the developed and developing world.

According to the Australian Bureau of Statistics (see ABS 2003), in the 2001-2002 financial year, a total (gross) of \$4018.2m was spent for structured vocational training. This translates into approximately \$579.1 per employee. Further, in 1996 the amount spent on training in Australia was \$2518.1m (or \$545 per employee). The same data source indicates that in Queensland in 2001-02 direct training expenditure was \$629.6m.

Another estimate of industry training expenditure is provided by the NCVER (see, for example, NCVER 2004). Estimates by the NCVER indicate that nationally, \$30 billion per year is invested in employer based training, with the employer contribution to this being about \$16 million per year. These estimates differ from the ABS estimates in that they include costs for trainers' gross wages and salaries, training equipments and facilities, and all other necessary expenses on structural training and so are not directly comparable.

The following section of this document provides an outline of the human capital explanation of investment in education and training. This theory can be used to provide an analysis of the decision to investment in training and also who will pay for the training. This is followed in section 3 by an outline of some of the limitations/criticisms of this framework or more specifically the reason that markets may fail, while section 4 looks at a number of policy responses to the underinvestment in training resulting from market failures. It is shown that these responses ultimately depend on the nature of the market failure implying that there is no *'one policy solution fits all'* response to the problem of the underinvestment in training. Section 5 discusses some case studies of market failures within the context of the Queensland labour market and attempts to identify the likely causes of these market failures and their appropriate policy response.

2 Human Capital Theory

Human capital theory was introduced by Becker (1962), and is a widely used approach to understand human capital investment, in particular educational and vocational training investment. Becker (1962) identified two distinct types of training, i.e. general and specific. General skills are skills that have a productive value in many different firms. Reading is clearly a general skill; others, such as typing, bricklaying, and managing a shop, are also general in the sense of being useful to many employers, although they are less general than reading. In contrast, specific skills are valuable only when the person with these skills is employed in a particular firm. These skills will include familiarity with a particular work practice and group of colleagues, knowledge of the features of the production process within a firm, i.e. any knowledge specific to a particular firm.

In the analysis of Becker (1962) the distinction is important because it affects the nature of the market for the skills, which, in turn, determines who receives the benefit from the investment in training. For general skills there are many potential employers, meaning that the market for these skills will be competitive. In this situation, the employee will be paid their marginal product from additional training. Thus there can be no undersupply of general skills in Becker's analysis because, in a competitive market the incentive exists for the employee to undertake this additional training.

For specific skills on the other hand, there may only be one potential employer. These types of skills have no value in the external labour market; the employer does not necessarily have to pay a specifically skilled worker a wage equal to his marginal product. Becker (1962) suggests that the wage would lie below the marginal product and above the external labour market wage, so that the worker and the firm would share the benefits of specific training.

Stevens (1999) provides a third type of skill, those that are transferable. For this type of skill the labour market is imperfectly competitive. In this case the skills are of value to more than one firm, and there is competition between firms to employ the worker, but competition is not sufficiently fierce to ensure that the wage is driven up to its marginal product. Imperfect competition may arise for a number of reasons: first skills themselves may be of value only to a small number of firms, perhaps because they are linked to the use of specialised technology or to a good that is produced by a small number of firms. Transferable training differs from both general and specific training in that the benefits may be shared more widely, with relative shares determined by the degree of competition in the skilled labour market.

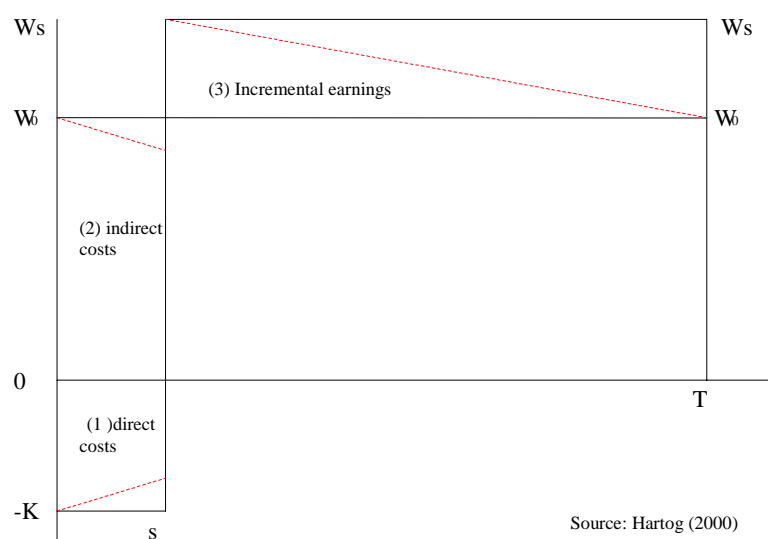
2.1 The decision to invest in or undertake training

The decision to invest in training is easily analysed within the human capital framework. Within human capital theory, a person will decide to invest in training after weighing up the benefits and costs of this investment. Figure 1 shows the barest possible analysis of an individual's decision to invest in education within this framework.

A person faced with a decision to undertake an additional s years of training knows that after these s years they will earn an annual wage of W_s , from time s until retirement at time T . The alternative is to not undertake additional study and go straight into the labour force, earning W_0 from the time of the decision until retirement at time T .

If we assume that annual cost of the additional education is $-K$, then the total lifetime earnings of a person not participating in training is given by the rectangle bounded by the points W_0W_0T0 . On the other hand, the rectangle bounded by the points $W_sW_sW_0W_0$ represents the increment to income that can be attributed to the additional training. The costs of undertaking this additional training are given by the areas (1) and (2), being the direct costs (fees, books etc) and indirect costs (the income forgone during education). In reality the indirect costs generally outweigh the direct costs, with an estimate from the US suggesting that indirect costs account for 60% to 70% of the total cost of a college degree (see, for example, McConnell 1995). This is likely to be higher in Australia where there are relatively higher subsidies to post compulsory education.

Figure 1: Costs and benefits of additional education



Before valuing the decision of whether or not to undertake additional training it must be remembered that people tend to discount future earnings, i.e. an additional 100 dollars in a years time after completing study is not valued as much as an additional \$100 dollars now. If a person values a dollar next year at 90 cents now, their discount rate is 10%. For this reason, the value of the additional wages accruing from additional training must be discounted. This discounting is higher the further into the future these earnings accrue, leaving the benefits to further training looking like the lower triangle within $W_sW_sW_0W_0$ (3).

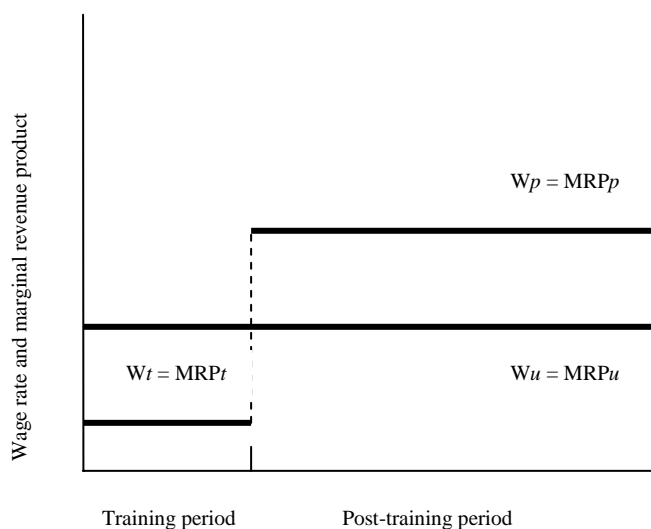
2.2 Who pays for skill acquisition?

As has already been noted, the distribution of training costs, or who pays for the acquisition of skills can also be studied using the framework provided by human capital theory. To begin the analysis it is assumed that markets are competitive. Human capital theory tells us that the person that bears the cost of the training will be the one that benefits from it.

In the case of general training, the cost will be borne by the employee, this is because, while this type of training may make them more productive to the employer, it also makes them more employable at a higher wage outside the firm. It is thus in their interest to acquire these skills. This does not mean that general skills will not be provided by the employer, they frequently are, but the cost is borne by the employee. These costs may be paid through a training wage which allows the employer to recoup the cost of the general training that they provide.

Figure 2 provides an example of just such a scheme, in this figure the marginal revenue product (MRP) represents the increase in an organisation's total revenue relative to the employment of a given worker. According to McConnell and Brue (1995), the higher the value of the MRP_p is, the more relevant the skills are to other organisations.

Figure 2: Wage rates and marginal revenue products for general training².



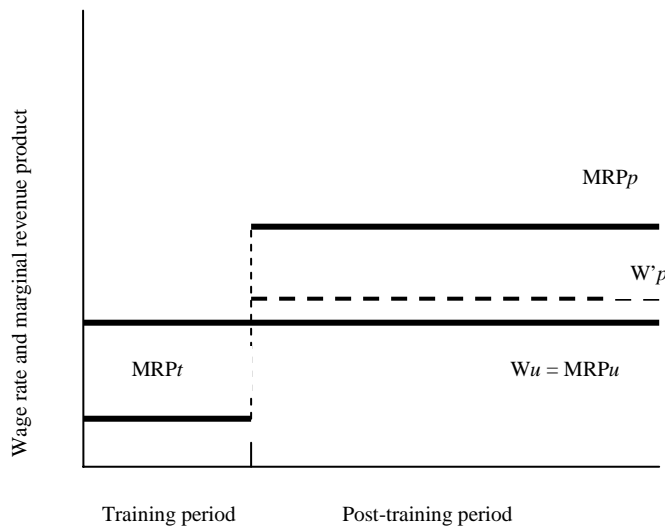
The apprenticeship system provides an example of this type of system. Apprentices in traditional trade occupations are generally employed as an apprentice for a fixed period. During this period much of the training that they receive, both on the job and through off site courses, is general in nature, applicable to employment in the particular trade at many worksites. During their apprenticeship, they are often paid a wage that is a proportion of the award rate for a fully qualified tradesman, this training wage and the fixed period of the apprenticeship allows the employer to

² Note. W = wage rate for a particular worker; MRP = marginal revenue product of a particular worker; u = untrained worker; t = during training period; p = post-training period.

recoup the cost of the general training, in this way the apprentice pays for their own training.

In the case of specific skills, the main beneficiaries are the employers. In this case, human capital theory tells us that the cost of these skills will be borne by the employer. Figure 3 shows the wage rates and marginal revenue products for specific training. In contrast to general training, employees receive wages that are in excess of their marginal revenue product. In return, the employer benefits from training as workers' marginal revenue product is in excess their wages at the post-training period. As a result of this, the employer may pay employees a slightly higher wage after the completion of training to prevent employee turnover.

Figure 3: Wage rates and marginal revenue products for specific training³.



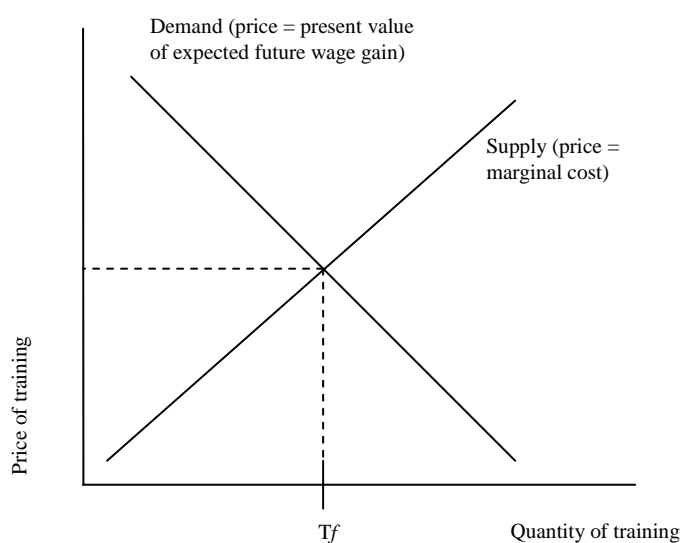
In the analysis of Becker (1962) it is implicitly assumed that all markets were competitive. As a result of this assumption, there is no role for government policy as the outcome in this situation is efficient. Figure 4 illustrates a perfectly competitive training and skilled labour market. When the training market is perfectly competitive, the training provider becomes a price taker, as potential trainees can select their preferred training provider depending on the training cost. When the skilled labour market is perfectly competitive, training providers (which employ skilled workers) will not become price-takers as training will be supplied to a point when the marginal-cost-of-training reaches the price (i.e. upward-sloping supply curve).

Consider the market for the training of a particular skill. The price of training is given on the vertical axis and is paid by the trainees to the firms supplying the training, either directly as fees, or, if training is supplied during employment, as a reduction in the wage. In the latter case, the price is equal to the difference between the trainees productivity and the wage. Suppose (for simplicity) that the training market is perfectly competitive: i.e. that firms are price takers because potential trainees are able to choose freely between many firms offering training, selecting the one that offers the lowest price or highest training wage.

³ Note. W'_p = employee wages at post-training

With the labour market perfectly competitive, even in situations where the training is supplied by the firms who also require skilled workers, firms will not bear the cost of training. They will supply training to the point where the marginal cost is equal to the price, thus the upward sloping supply curve of figure 4, which is simply the marginal cost of training. If there is also a perfectly competitive capital market, trainees will be able to borrow at the market interest rate to smooth their income. Hence they will demand training up to the point where the price, or reduction in wages during training, is equal to the discounted present value of the expected future wage gains. This generates the demand schedule, which slopes downwards because the skilled wage falls with the number of workers trained.

Figure 4: Optimal training with perfectly competitive labour and capital markets



The intersection of the supply and demand curves when both the labour and capital markets are perfectly competitive, gives the first best amount of training T_f . At this point, the marginal cost of training is equal to the present value of the workers enhanced productivity.

3 Market failures in the provision of training

The human capital explanation of the investment in education has proved to be remarkably resilient. Despite this it is not without its critics. Chief among these is the fact that, unlike the assumptions of Becker (1962) the market for various skills is frequently imperfect and the inclusion of these imperfections in the market may lead to some different implications for public policy. In particular, market failures lead to the conclusion that intervention in the market may be required to ensure an adequate level of skill formation.

Booth and Snower (1996) provide a comprehensive list of factors that may result in market failures in the market for training, leading in turn to an underinvestment in training. These factors include the fact that the markets for training may be less than competitive. Stevens (1995) talks of labour market imperfections due to the existence of transferable skills and imperfect competition in the labour market. There may also be capital market imperfections that result in an underinvestment in training (see, for

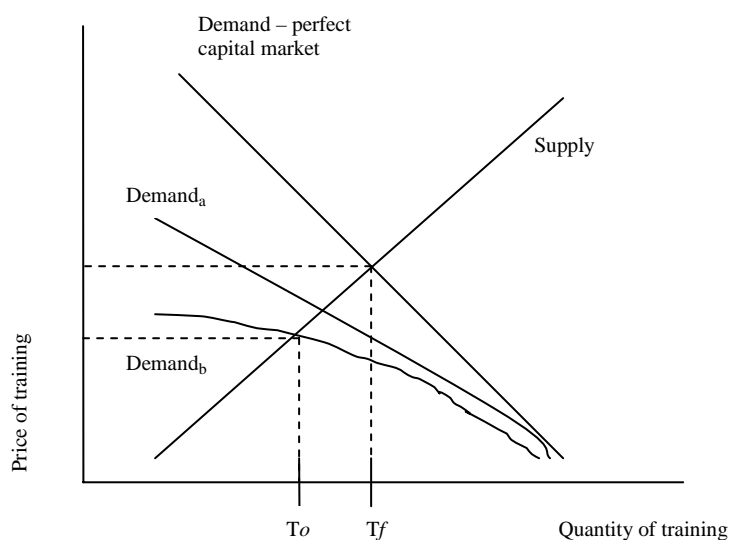
example, Acemoglu 1996). Market failure may also be due to imperfect information and this is explored in Burdett and Smith (1996). Other sources of market failure may be due to the interaction between skills and the innovative performance of firms or the interaction between skills and skilled workers (see, Ulph 1996 and Snower 1996 respectively for a discussion of these points.)

3.1 Capital market imperfection

Figure 5 shows how imperfections in the capital market affect the supply and demand for training. Capital market imperfection exists when trainees are faced with credit constraints and are uncertain about future wage gains. The demand for training will decrease and the training price will need to be reduced in order to attract potential trainees. The demand schedule also becomes flatter when trainees' discount expected future wages increases at a higher rate with respects to the trainee wages, in figure 5 the quantity of training falls to T_o ($T_o < T_f$).

Stevens (1999) notes that capital-market imperfections do not have any effect on training supply, even when workers are constrained, so that training is low and skilled wages are high, firms are still prevented from bearing the training costs by the effect of competition for skilled workers by other firms. In this way capital market imperfections always result in a decrease in the level of training, as shown by figure 5.

Figure 5: Capital-market imperfection on equilibrium training (while having a perfectly competitive labour market)⁴.



3.2 Labour market imperfection

It is possible that an imperfect labour-market exists while there is a perfectly competitive capital-market. In this case, the wages of skilled workers will be below their marginal product. As the wage gain from training is lower, trainees will be less

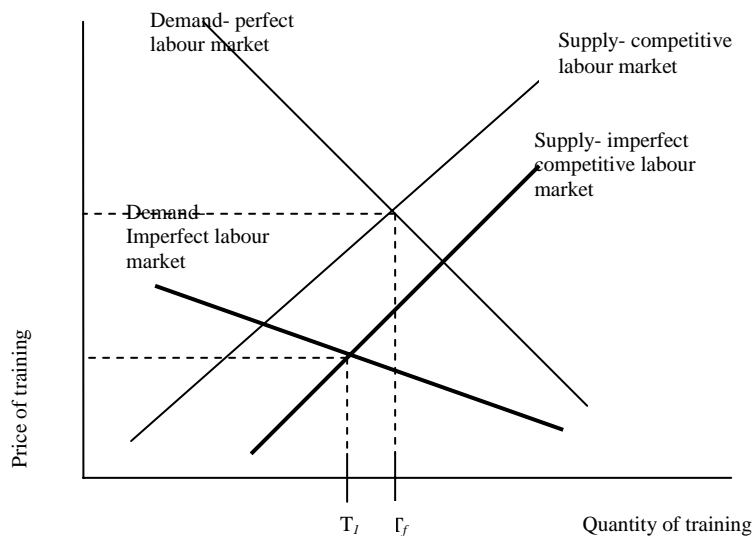
⁴ Note. demand_a = credit constraints and uncertainty; demand_b = no loans available.

willing to invest in training, which leads to a decreased training demand. However, training providers will be willing to accept some training cost, if they see a positive probability of retaining their trainees at a lower wage. In this situation, the supply curve will shift outwards as the training price is equated to the marginal cost less the expected benefit to the training firm of training an additional worker, with imperfectly competitive capital market as well as imperfectly labour market, T_I unit of training occurs.

As shown in figure 6, in this situation, the equilibrium of training is lower (i.e. $T_I < T_f$) when compared to the equilibrium of a perfectly competitive labour market, as wages will be lower after training regardless of where workers decide to work, with organisations benefiting only if the trainees decide to stay. This is because the fall in demand outweighs the rise in supply, because a workers will lose from the reduction in the wage wherever they work after training, whereas the firms supplying training gains only if the worker stays at the firm.

Despite this negative effect, Stevens (1999) notes that the presence of labour market imperfections acts to reduce the problems associated with capital market problems. When the demand for training is already low because of credit constraints, a reduction in the skilled wage may have little further effect on supply.

Figure 6: Labour-market imperfections on equilibrium training



3.3 Information asymmetries

Apart from capital market and labour-market imperfections, some other explanations of market failures concentrate on information asymmetries. These occur when there is an asymmetry of information between the workers and the training provider about the nature and quality of training. The fact that much vocational training is provided during employment, partly on-the-job, means that the market for vocational training is, in a sense, hidden beneath the labour market. Employers do not advertise a price for vocational training, instead training constitutes one of many elements of an employment contract. Employees do not have clear price signals to inform training decisions. Further, it is difficult for them to ascertain the quality and value of a

training course, both adverse selection and moral hazard problems may result, making employees unwilling to accept a reduced wage during a training period.

4 Policy response to market failures

The range of possible market failures outlined in the previous section suggests that there is a wide range of factors that may lead to market failures and a consequent under investment in training. As a consequence, there is no one policy response that is applicable to all situations, with the appropriate response depending very much on the underlying problems in the market for specific skills.

4.1 Responses to capital market imperfections

The argument that capital market imperfections result in an underinvestment in training are compelling Acemoglu (1996) notes that there is little doubt that human capital investment decisions are risky, that workers may be deterred from training by these risks and that even when they are willing to train they may face financial constraints.

The traditional approach to the apprenticeship system, that of a fixed term, during which the apprentice was contracted to work for a fixed period provided one way of overcoming this problem. During this period, the employer was bound to provide training and employment. Stevens (1999) argues that a plausible interpretation of this system is that it provided a means of overcoming the problem for the worker for financing general training. In the early part of the apprenticeship period the employer incurred costs of training provision; in the latter part the apprentice was sufficiently skilled for the employer to be able to recover those costs by paying a wage lower than productivity without fear of the apprentice leaving. In this way the apprentice effectively commits himself to repay a loan from the employer by giving the employer a claim on his human capital for a specific period.

The apprenticeship system has been in decline as a pathway for young persons entering into the labour market and has received criticism on many fronts. These include the inflexibility of contracts, the use of time serving rather than tests of competence which would ensure quality training and the potential for exploitation by employers to name but a few (see Stevens 1999).

While these criticisms are valid, the disappearance of this type of apprenticeship has eliminated a solution for capital market problems, leaving policy makers with no easy alternatives. While 'New Apprenticeships' lasts until the trainee achieves the required qualification, going some way to solving the problem of quality, it means there is no time serving period which would enable the employer to recoup costs.

Another response to imperfections on the capital market is the provision of student type loans in which the government acts as the guarantor. However, these still expose the trainee to considerable risk; the loan has to be repaid whether or not a qualification and subsequent job are obtained. Further, this type of scheme does not seem appropriate in situations where a substantial part of training takes place on the job.

An alternate strategy offering greater protection from risk is a subsidy financed by a tax on wages, (see, for example, Acemoglu 1996). Layard et al (1995) emphasised the problem of the uncertainty of risk averse trainees and argued for a government subsidy of training costs. In particular, these authors recommend that the government should pay fees for vocational training courses. An alternate approach might be the uses of a HECS type scheme such as that proposed recently by Beer and Chapman (2005). A HECS type scheme would provide a way for trainees to shift risk of undertaking a risky investment, with the risk reduced because the repayments are only made when their income crosses some predetermined threshold. In this situation, the risk is transferred to the government providing the funding for HECS.

4.2 Responses to labour market imperfections

Underinvestment in training is not only the result of capital market imperfections, but can also be caused by labour market imperfections, which in turn, resulted from a free rider or poaching problem. Stevens (1999) notes that most training is neither fully general nor fully specific, but to some extent transferable. This type of training is of value to more than one firm, yet because it is not demanded by many firms the market for this training is less than competitive. In this situation, a less than optimal amount of training is provided because some of the benefits of training may accrue to firms that poach skilled staff, reducing the incentive for firms to provide this type of training.

Acemoglu (1996) argues that evidence of skill shortages is strongly suggestive of imperfect competition in the labour market and that a model with an imperfectly competitive labour market explains more satisfactorily than other models the evidence from cross country comparisons of growth performance and human capital investment.

The direct approach to solving the externality problem would be measures to increase competition between employers in the labour market, so ensuring that the wages paid to skilled workers reflect their productivity. Efforts to make labour markets more flexible could reduce the labour market power of employers. This will be the case if it successfully decreased the turnover costs and improved the availability of information about job opportunities.

An alternative approach would be “to accept that firms do receive rents from employment of skilled workers, and ensure that they jointly internalise the benefits” (Stevens, 1999, p.28). The analysis in the preceding section suggests that this could be done by requiring them to raise training expenditure, or alternatively, using a subsidy financed by a tax on firms’ profits. This is in many ways similar to the Training Guarantee Scheme that was in operation in Australia over the 1988 to 1994 period before its abolition due to its unpopularity with employers (see Smith 2003). Stevens (1999) considers the case of a scheme in the UK that had a similar structure and fate and concludes that the most plausible explanation for its demise was that, while an additional tax was levied, employers could see little benefit in terms of increases in appropriately trained persons. The problem may have been that the type of training provided under the scheme was specific to the firm providing the training rather than general in nature, circumventing the objective of the scheme. Additionally, McNab and Whitfield (1994) considerate it likely that much of the

training provided by firms under the scheme in the UK was ‘pseudo-training’, that had little if any practical effect on improving the level of skill formation and a similar problem may have occurred in Australia.

One policy response to this problem is shown in figure 6. In this response public authorities regulate the training activities of organisations by asking or compelling them, by providing the right incentives, supplying more training than they would normally. In this response the government could provide incentives to training organisations to jointly internalise the externality, or source of market failure, shifting out the supply function in figure 6, until equilibrium is reached at T_f .

4.3 Responses to asymmetric information

In the case of information asymmetries, a different set of policies would be appropriate. Keep & Mayhew (1996) and Stevens (1999) suggest that, in the UK, the inability to evaluate the costs and benefits of training and lack of appropriate information, such as the nature and quality of training available to potential trainees, are two major information problems. Policies that may be appropriate in this situation include the introduction to a system of vocational qualifications in addition to the measurement of training output.

Stevens (1999) argues that such an approach may reduce the information problem experienced in UK, particularly, in relation to the nature and quality of training. The same author also notes that information asymmetries about the quality of the training received by individuals should in principle be reduced by the establishment of a respected system of vocational qualifications. In contrast, Bennett et al (1993) focuses on the lack of information available to young people and recommends policies to simplify the routes to higher skill levels and improve career advice. To the extent that information is a public good, there may be a role for government in supplying it.

5 Case study – The Strategic Employment Development program

Through the SmartState initiatives, the Queensland government introduced the Strategic Employment Development Program in 2004. The purpose of this program is to fund organisations and government agencies providing skills, training and employment programs in industries facing skill shortages including, building and construction, electrical and electronic, metals and the aviation industries. Under this program, private sector employers may be eligible to receive a \$2200 incentive payment for each apprentice they take on once the apprentice has been in the apprenticeship for six months.

Further, the Commonwealth Government also provides a number of other incentives for apprenticeship training, i.e. the Innovation New Apprenticeships Incentive, which gives an additional \$1,210 payment to employers when they hire a trainee in a targeted occupation. Employers may be eligible to receive an additional \$825 incentive for employing a New Apprentice in an endorsed School Based New Apprenticeship at the Certificate II to IV level; and a further \$825 for continuing to employ the person after he or she has completed Year 12.

These payments, made to employers, seem implicitly to presume that the costs of training are such that the incentives do not exist for employers to provide enough training. In this situation then, using the definitions provided in the preceding section, it seems that this policy response implicitly assumes some failure in the labour market, leading to an externality resulting in an underinvestment in training.

Section 4 illustrates that there are a number of reasons why failures in the labour market may result in an under provision of training. Firstly, firms may under invest in training may be because they cannot recoup the cost of training. Most of the skills learnt during an apprenticeship are specific in nature, i.e. applicable to the occupation in general rather than to the firm. The incentive for the employee to provide for this type of training has traditionally been done through the structure of the apprenticeship system. Under this system the employee is paid a wage rate which is set as a proportion of the award rate for the particular trade they are learning. This proportion increases as the employee gains more skills. This sliding scale enables employers to recoup the cost of the provision of this type of training.

If there is a general under provision of training in traditional trades, then it may be because changing labour market conditions, or institutional settings within these occupations, may impact on the employers' ability to recoup the cost of this training. In this situation subsidies paid to employers may move the supply curve of training outwards, but other policies such as changes to these institutions may be a more efficient means. What this may suggest is that changes, such as the fast tracking of apprenticeships may contribute to further declines in training supplied by employers in situations where much of that training involves general skills, simply because less of the benefits will accrue to the firm providing the training.

Secondly, some skills are neither fully general nor fully specific, but are transferable in nature, meaning that they are useful for a small number of firms beside that the employee is currently working in. Stevens (1996) shows that the existence of the transferable skills will result in an underinvestment in training, because the firm does not have the incentive to provide this type of training as some of the benefit will accrue to other employers.

For transferable training that occurs during employment, it would be expected that the training firm would share the costs with the trainee, since in an imperfectly competitive labour market it has positive probability of retaining the worker for some time after training, at a wage less than the marginal product. However, with the existence of transferable skills there is an obvious problem: part of the expected return to transferable training accrues to firms who may employ the worker in the future, but who do not share the costs. Thus transferable training creates an externality, which may lead to underinvestment in training (see, for example, Stevens 1996 or 1999).

Firms in this situation are likely to not only under invest in training, but also pay labour less than its marginal product. This will result in a high turnover of staff as they seek a higher return on their training in other firms in more competitive labour markets. Both factors combined will result in a relative scarcity of workers with the appropriate skills in this industry and consequently, what employers in this industry will call a skill shortage.

This is likely to be a problem in the high skill end of the aviation industry in Queensland. The Queensland government has sort to attract investment in the aviation industry into Queensland, through its SmartState strategy. At present there are only a few firms employing highly skilled workers in this industry. This makes it very likely that much of the training required by employees in this industry is transferable across these few firms. Further, the small number of firms means that the labour market for these types of skills will be imperfectly competitive. While there may be competition between these few firms to employ the skilled workers, this competition will not be sufficient to ensure that the wage is driven up to its marginal product.

A subsidy to employers, such as that offered through the Strategic Employment Development Program, to encourage the provision of additional training is only one possible response in situations where this type of market failure is occurring. Stevens (1999) notes that the direct approach to solving the externality problem in the case of transferable training would be measures to increase competition between employers in the labour market, ensuring that the wages paid to skilled labour reflects their productivity after training.

Efforts to make labour markets more flexible, if they have succeeded in reducing turnover costs and improving the availability of information about job opportunities, should reduce the labour market power of employers, leading to wages for skilled workers rising to their marginal product, increasing the incentive of the workers to invest in skills.

Another approach would be to accept that firms do receive rents from the employment of skilled workers, and ensure that they jointly internalise the benefits of training. The analysis in section 4 suggests that this could be done by introducing market regulation, requiring them to increase training expenditure, or alternatively, using a subsidy financed by a tax on profits.

Another policy response to this problem would be to regulate the training activities of organisations in the industries in questions by compelling them by providing the right incentives, supplying more training than they would normally. In this response the government could provide incentives to training organisation to that enable them to jointly internalise the source of the externality or market failure.

6 Conclusion

This paper has provided a summary of the human capital framework in explaining investment in training. Further, it is shown that this framework can be used to explore some implications for vocational training policies in addressing an underinvestment in training.

Although human capital theory assumes that there is a perfectly competitive market, the supply and demand aspects of the theory are useful in explaining market failures. Moreover, the theory offers a clear framework for an analysis of the incentives to undertake education and training and how changes to these incentives may impact on the decision to invest in further education and training.

In the absence of market failures human capital theory shows us that there is little role for government in implementing training policy. However, there are compelling arguments and considerable evidence that market failures exist. In the presence of these market failures there is a strong role for government intervention in the provision of training, yet because of the plethora of reasons for market failure, there is no 'one policy fits all' solution. For example, market failures in occupations associated with the aviation industry are likely to be contributing to skill shortages in this industry, yet the nature of these market failures is dissimilar to those associated with building and construction, occupations that are also considered to be in shortage. It is suggested therefore, that government intervention in the market for training must be focused and based on a careful consideration of the operation and likely failings of markets for particular skills.

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