Flexibility and Labour Market Structures: The Role of Employers

Terri Mylett*

Abstract

The aim of this paper is to explore the possibility of explaining labour market restructuring in terms of employers' labour utilisation strategies. The main arena of activity in the labour market is within employing organisations. Therefore, whilst national and industry level labour market studies may shed some light on labour market trends, this paper suggests that analysis should also assess the impact of activity within firms. A case study is used to examine the link between the employment polices and practices of a firm in the metals manufacturing industry and the labour market position of its employees taking into account the firm's institutional context (award restructuring, enterprise bargaining, and an active union presence). The study finds that the firm's pursuit of flexibility in order to improve its cost and quality competitiveness is exacerbating and reproducing divisions within the workforce based on workers' attributes (sex, English proficiency and formal qualifications). Labour market explanation should include, if not begin with, the role of employers.

1. Introduction

Like many other industrialised market economies, Australia has experienced persistently high unemployment and a rapid rise in non-standard employment. There has been a shift in labour market power away from

^{*} Department of Economics, University of Wollongong. I am grateful to management, workers and union officials at Exvalcon Pty Ltd for their time and assistance. Thank you to Dr Chris Wright, Associate Professor Ray Markey, Dr Maree Murray, Dr Michael Zanko, Ms Gail Mylett, Mr William Beerden and the anonymous referees for their contributions to this paper.

employees to employers arising from increasing employment insecurity, casualisation, underemployment, contracting out, high unemployment and legislative changes. Part-time employment, which tends to be low paid, casual and lacking in training and career opportunities (Probert 1995: 2), is the fastest growing category of employment. The weak labour market power of employees may also be shown by the difficulties employees face in finding secure employment. The ABS conducted a study over 1994 to 1996 of 875,000 job seekers. This group started 878,000 jobs between May 1995 and September 1996; 89 percent of these jobs lasted less than 12 months, 66 percent were casual, and 48 percent were part-time (the categories overlap). Of those working in September 1996, only half were in permanent employment (ABS 6286.0).

Labour market restructuring is affecting some groups more than others (Rimmer 1994). Full-time employment opportunities for youth have collapsed (ABS 1994; Whitfield and Ross 1996) and older workers face the longest periods of unemployment (ABS 6286.0). Migrants from non-English speaking backgrounds (NESB) are also experiencing above average unemployment rates (up to 23% for those with poor English language proficiency). Manufacturing employment (which has an over-representation of migrant workers) was hard-hit by the recessions of the early 1980s and early 1990s and NESB migrants lost more jobs than other manufacturing workers (ABS 6203.0 October 1997). Women are also experiencing labour market disadvantage. Women have lower unemployment rates but are also more likely to be underemployed or discouraged job seekers (Whitfield and Ross 1996). They account for a majority of casual and part-time jobs and experience horizontal (occupational) and vertical ('the glass ceiling') segregation (ABS 6203.0). Further, the gradual erosion of sex-based pay inequity over the 1970s and 1980s has ceased (ABS 1994; Hall and Fruin 1994).

This negative picture of the labour market is in contrast to the positive predictions for labour market restructuring embodied in post-Fordist theorising and some versions of human resource management. Product market changes are said to be demanding a competitive strategy based on high quality jobs (Piore and Sabel 1984; Pfeffer 1995). Under these accounts of labour market restructuring, employees are highly skilled, flexible, empowered, and secure. In Australia, the empirical foundation for this optimistic view is less obvious than the pessimistic view beyond 'best practice' examples and evidence within enterprise agreements of clauses emphasising the importance of training and career paths. Labour market statistics show that employers' training efforts have risen but the evidence also shows

that training is provided more selectively and is likely to be directed towards professional and managerial employees rather than tradespersons and labourers (Fraser 1996). Perhaps the pessimists and post-Fordists are both right but are talking about different groups of workers. That is, perhaps the distribution of labour market advantage and disadvantage is becoming increasingly differentiated.

Is it feasible to explain labour market restructuring by examining employers' labour utilisation strategies; flexibility in particular? Flexibility literature is a useful starting place for labour market analysis because most variants of flexibility include consideration of the relationship between labour utilisation strategies and labour market structures (albeit not always as their main object). Also, descriptions, prescriptions and predictions of changes in the nature of work in the 1980s and 1990s have centred on flexibility (Pollert, 1988: 50) and have substantially influenced Australian industrial relations policy (Campbell 1990; Harley 1994). This paper describes the implementation of flexibility strategies within a metals manufacturing workplace and assesses the implications of flexibility-inspired workplace reform on employees' labour market position.

The paper is structured as follows. Section 2 puts forward some reasons for placing employers centre-stage within labour market analysis (a focus in contrast to mainstream economics). The relationship between the flexible firm (the most influential variant of flexibility theorising) and labour market structures is described. Section 3 presents the case study. The study suggests that workplace reforms associated with flexibility theorising, when pursued within a workplace, do have consequences for employees' labour market position, whilst also demonstrating that workplace change, and the distribution of advantage and disadvantage from this change, is worked out within a context that includes trade union influence, social norms, industrial relations institutions and challenging product market conditions. Flexibility is the main vehicle used in the case study to examine workplace change. However, the relationship between employers' labour utilisation strategies and employees' labour market position can hold for a range of managerial control and cooperation strategies as employers respond to change within particular industrial, social and economic contexts (Allan, 1997; Burgess 1997; Rubery and Wilkinson 1994).

2. The Role of Employers in Shaping the Labour Market

The role of employers in shaping the labour market can be considered from either the demand or supply side. That employers shape labour demand is

hardly contentious: 'Labour economics is often defined as the study of the pricing and allocation of labour. It is centrally concerned with how the labour market transforms the attributes of workers into the requirements of employers' (Whitfield and Ross 1996: 3). The role of employers in creating the labour supply is less obvious.

Labour supply is usually regarded as a product of individuals' choices and family circumstances plus government policies on the provision of education, training and social welfare. However, the role of employers must also be acknowledged. In practical terms, most of the labour supply exists within organisations and most workers are recruited from other firms rather than from the home or from educational institutions. ABS labour mobility data shows that in February 1996, 77 percent of Australia's 8.2 million workers had been in their current job for more than one year and 15 percent had moved from one job to another during the year. This data means that at least 91 percent of the labour supply was from within employing organisations during the year to February 1996. Even workers who started a job in year-to-February 1996 were twice as likely to come from another employer than from an educational institution or unemployment (ABS 6209.0). Therefore, redirecting attention away from labour market activity at the margins (such as a change in individuals' choices, participation rates, unemployment and/or skill shortages) towards activity within organisations seems warranted.

The appropriateness of emphasising activity within organisations is further supported by the recognition that labour supply is not just a quantity of people; it is the capacity to 'labour as directed' to meet the goals of the organisation. Employers create labour supply through training and development which, in a broad sense, includes all aspects of work and learning that create a greater capacity for labour in quality and quantity terms. The capacity to labour must then be harnessed through control and cooperation strategies.

Despite this practical role for employers in creating the labour supply, most thinking within human resource management (HRM) and industrial relations presumes that the labour market is separate to employers; as though it is merely part of an employer's environment. Models drawing on contingency or systems theorising tend to unproblematically posit the labour market as an input into HRM or industrial relations processes and outcomes at the firm level without the impact of organisations' policies and practices on the labour market being fed back into the environment [refer, for example, to Kramar, McGraw and Schuler (1997) and Dunlop's industrial relations system (1958 in Fox, Howard and Pittard 1995: 18)].

The emphasis of neo-classical economics on the 'invisible hand' of market forces also encourages a view that labour markets are independent and separate from the actions of employers, a position not overly challenged by the neo-institutionalist school which includes a partial consideration of activity within organisations through analysis of human capital, efficiency wages and transaction costs (Jacoby 1990; Rubery 1994). A conceptualisation of the labour market that does allow a role for employers can be found within institutional labour market economics [such as Doeringer and Piore's (1971) dual labour markets model]. Employers' requirement for a steady supply of trained labour, combined with the costs of recruitment, selection and investment in firm-specific skills, leads to the creation of internal labour markets (ILMs). The labour market thus becomes divided between those inside ILMs and those outside (the secondary labour market).

The variant of labour economics that places most emphasis on the role of employers in shaping the labour market is the labour process perspective, such as Gordon, Edwards and Reich's (1982) labour market segmentation theory. Here the main arena is inside the employer's front door, and the focus is the relationship between control strategies and labour market structures. Labour market activity outside is a product of employers' control strategies inside (Whitfield and Ross 1996: 31, 58). An associated theory is Friedman's (1986) managerial style typology of direct control and responsible autonomy. Friedman argues that both of these styles of management control contain limitations and inflexibility, but that by dividing workers into core and periphery groups, some of these inflexibilities may be overcome. The division between workers 'is easier to achieve if divisions between central and peripheral workers coincide with racial, sexual and geographic cleavages already existing among workers' (Friedman 1986: 100).

Rubery and Wilkinson (1994) support the thrust of labour market segmentation but argue that assessments of control strategies tend to be too simplistic. Their research (within the Social Change and Economic Life Initiative, hereafter SCELI) demonstrates that employers have many options for labour management and there is little evidence of a systematic response to particular product market or technical circumstances. So whilst advocating that employers shape the labour market, they recommend linking labour market analysis closely to context because of the substantial constraints posed by product markets, demographics, industrial relations and the legal environment. For example, demography affects the sex of the supply of labour on one hand but on the other, gender differences at work arise from social processes and from employer practices. Employer prac-

tices consolidate and reproduce social divisions. The industrial relations context limits the options available to management and provides the avenues for pursuing change (Rubery and Wilkinson 1994: 8).

The recognition of the impact of institutional and product market constraints on employers from Rubery and Wilkinson (1994) aids understanding of labour market restructuring whilst retaining the labour process' central contribution of emphasising the role of employers. Rubery and Wilkinson (1994: 33) conclude:

Perhaps the most important institutional factors structuring the labour market are the employment strategies of employers themselves. These create the rules, norms, and structures which shape wage, job, and promotion opportunities in both the internal and external labour market and through which individuals progress, enhancing or diminishing their labour-market credentials. They also create for each individual employer the labour-market environments, internal and external to their firm, which act as important constraints on the range of employment strategies that an individual employer can devise and deploy.

Labour market changes in the 1980s and 1990s have been closely associated with employers' labour use strategies, including the flexible firm (Rubery and Wilkinson 1994). As noted above, increasing flexibility of markets and workplaces as a source of productivity growth has been a focus of academic debate and policy makers in the 1980s and 1990s. The impact of flexibility on labour market structures has not received the same attention but flexibility models, such as Womack, Jones and Roos' (1990) lean production model, Piore and Sabel's (1984) flexible specialisation and Atkinson's (1987) flexible firm, embody labour market restructuring. The flexible firm most clearly articulates the implications of flexibility for labour market structures. It has two dimensions: a typology of flexibility sought (for example, numerical or functional) and a typology of workers (core and periphery). The flexible firm creates core and periphery segments by seeking different sorts of flexibility from different sorts of workers, and the skills and responsibilities demanded for certain types of work mean that different employment policies are required for different types of jobs (National Economic Development Office, 1986: 92).

Following is a case study which investigates Rubery and Wilkinson's proposition that management strategies such as the flexible firm have contributed to labour market restructuring. Practices associated with flexibility are investigated at the workplace level in order to identify the link between an employer's labour use strategies and the labour market position of employees. The case study indicates that the employer's strategies,

combined with Australia's decentralisation of wage determination, are leading to intensified labour market polarisation. 'Polarisation' is used in preference to 'labour market segmentation' because it implies that patterns of advantage and disadvantage lie along a continuum as opposed to suggesting that workers can be accurately compartmentalised into categories like 'core' and 'periphery'. The workplace is within the metals manufacturing industry. Bramble (1989) identified the adoption of new production concepts and the beginnings of dual labour market strategies (especially casualisation) in the industry in the 1980s. Further, Boreham, Lafferty, Roan and Whitehouse (1996: 5) argue that Australian policy development since the mid-1980s has been based on the circumstances of the manufacturing industry.

Using the flexible firm model to organise the data demonstrates some of the model's limitations. A particular weakness is that the flexible firm understates the degree to which functionally flexible core workers may act as a source of numerical flexibility (through shift work and overtime); and specialist contracted workers (a source of external functional flexibility) are conflated with casual workers (who are a source of numerical flexibility). It is too simplistic to equate functional flexibility with core workers and numerical flexibility with peripheral workers. Further, the manifestation of flexibility is not easily discernible. Some forms of flexibility are mutually exclusive; some forms are interdependent and the goal of flexibility is often intertwined with the goal of cost effectiveness or improved customer service. Burgess (1997) argues that the theoretical antecedents of the flexible firm (within cost minimisation behaviour and labour market segmentation theory) are so muddled that, at its best, the flexible firm is merely description. Further, the application of flexibility outside academic literature has been applied to many aspects of workplace reform and associated with any number of management theories. Nevertheless, the flexible firm model is used here as it is most explicit in terms of juxtaposing advantaged and disadvantaged workers, but features of employment associated with Piore and Sabel's (1984) flexible specialisation (multiskilling and small batches) and lean production [kanban and quality management ideas, as described by Womack, Jones and Roos (1990)] are also evident in the case.2

3. Flexibility in the workplace: a case study

The case study is used to identify patterns of labour market advantage and disadvantage at the workplace level.³ The focus is the implementation of

flexibility strategies in a metals manufacturing workplace ('Exvalcon' Pty Limited) and the implications of this flexibility for the labour market position of the workforce. The implications of workplace change are considered according to employees' attributes (sex and English proficiency); employment status; and skill levels. Given Rubery and Wilkinson's (1994) criticisms that labour market explanations from the labour process perspective tend to over-emphasise the labour process and downplay the institutional context, the institutional context (particularly the decentralisation of wage fixation) and the competitive position of the workplace are also taken into account.

A brief description of Exvalcon

The company is located in an industrial area in Sydney. After 60 years as a family company, Exvalcon was bought by one of Australia's largest holding companies in 1987. Exvalcon manufactures a range of solenoid valves and pneumatic controls for use in machinery. It is a successful operation but subject to extensive pressure from competitors. The company plans to expand output based on increased automation and productivity growth. Over 60 percent of output is exported. The company is the world's market leader for clean air systems valves but its higher production costs mean Exvalcon's market share in Asia is lower than in other markets. The company's other products are less successful due to higher costs because of relatively low production volumes, but it competes in these areas through customisation of products and timely delivery. Cost and volume are still important ingredients for competitive advantage in addition to newer emphases on quality and flexibility.

Work organisation

A company's strategies for work organisation and the introduction of new production methods are important determinants of employees' labour market position because work organisation is the key determinant of skill demand and development. Table 1 shows Exvalcon's workforce by skill level and sex. Employees classified from C10 to C6 are trade-qualified. From this table, it is apparent that Exvalcon employ a large number of skilled workers but the workforce is dominated by low skilled labour. Women have a disproportionate share of work at the bottom of the hierarchy.

Classification Men Women Total Example of job title C14 2 1 Cleaner 89 119 C13 30 Process Worker, Machine Operators C12 29 5 34 Machinist, Diecaster, Storeperson C11 21 0 21 Forklift driver, CNC Setter and Operator 1 12 C10 11 Trade, Machinist, CNC Setter, Toolsetter 0 C9 13 13 Toolmaker 0 C8 18 18 Special Class Fitter, CNC Programmer C7 2 0 2 Engineering Trade Special Class Electrician C6 2 0 2 Quality Inspector, Technician Casuals 10 2 12 Note: another 6 casuals are included in the C13 to C6 classifications 0 Fitter/machinist or Toolmaker Apprentices 8 8 Trades 3 0 3 Foremen Foreman, CNC Programmer

Table 1. Employment by Classification and Sex

Note: Classifications are based on the Metal Industry Award. C14 is the lowest classification and C1(b) the highest but Exvalcon did not employ anyone beyond the C6 classification within the factory. Award rates of pay vary from \$341.40 per week for C14, \$433.20 for C10 and \$537.50 for C6. Case study participants reported that most Exvalcon employees eamed above award rates but individual rates of pay were not available.

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Source: Payroll Listing, 14 February 1995

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Two significant features of Exvalcon's production are small batch runs (associated with a large product range and customisation of products) and a high degree of internal supply (or vertical integration). Both require more skilled labour and greater functional flexibility than production strategies based on out-sourcing or large batch runs because a wider range of production processes demands a wider range of skills, and more time is spent on setting up and programming production runs as opposed to 'machine minding'. At the time of study, Exvalcon was moving towards cellular manufacturing, team working [in the style of value-added management (VAM) teams] and kanban. Automated, computerised numerically-control-

led (CNC) machinery was introduced to handle Exvalcon's larger batch runs (and to improve the precision of machining). Further automation is planned but small batch sizes, including at times producing one cylinder or valve to meet a customer's requirements, mean that craft-style work processes will always be a feature.⁴

Changes to production practices and philosophies affect skill requirements, and therefore the labour market position of employees. In VAM teams, when they work as they ought, process workers who are team members need communication and other inter-personal skills. A higher level of cognitive skill is also necessary as an effective contribution to VAM requires an understanding of work processes throughout the factory. On the other hand, kanban seems to have a negligible impact on skills. It adds inventory control to a job but this task is repetitive once the system is established, although some workers are unable to undertake such tasks because of poor literacy. Technological change also has implications for flexibility and skills. At Exvalcon, automated technology is programmed on the shopfloor by tool setters with CNC training. The tool setters' job has become more skilled because of the addition of CNC programming skills. Process workers also need additional skills as they work on a greater range of machines. However, the labour saving nature of automated machinery means fewer relatively low skilled process workers are required. Yet, some aspects of the production process are extremely mundane and repetitive, and whilst there is an awareness of the hazards associated with such work. case study interviewees believe that there will always be such low grade jobs in the factory regardless of automation and the policy of upgrading skills across the factory.

An employee's labour market position is affected by the degree of workplace specificity of skills as well as the level of skills because this can affect an employee's opportunities for better employment elsewhere. The company regards its employees' skills as enterprise-specific. Nevertheless, most skilled labour (using the notion of 'skill' as used within the company) on the shop floor is produced by the industry-based apprenticeship system and higher-level TAFE training. Exvalcon's apprentices spend the first nine months of their employment at a neighbouring engineering firm in a group training scheme which indicates that some skills are common to the industry. The union delegates argue that the highly variable nature of work combined with experience using or maintaining the latest machinery means that Exvalcon employees have transferable skills.

Work organisation at Exvalcon is flexible. While very few aspects of flexibility can be found in the written enterprise agreement, there are very few demarcations (those that exist are based on ability), there is internal mobility between sections in line with fluctuations in work flow, process workers undertake maintenance to the extent of their skills, and there are some variations to hours by agreement for particular work processes. Unlike a lot of factories, overtime is used sparingly and the company argues that it is better to employ more people than to institutionalise overtime. There is also casual employment to meet peaks in production and contract labour for one-off or high skilled work. There is, to use Atkinson's flexible firm terminology, a high level of functional flexibility, a small amount of internal numerical flexibility, a limited amount of external and distancing numerical flexibility, but no wages flexibility.

Labour management and enterprise bargaining

The company intends to raise the skill level on the shop floor and training and career paths are an important focus. The emphasis on training was stimulated by award restructuring and continues to be important for technological and work process change, quality and safety improvements and it reflects the interests of the union delegates. The delegates regard access to a career for those willing to undertake training as a benefit from workplace and industrial relations change. Case study participants confirmed that all employees have access to training. Four career paths for Exvalcon's factory workers have been identified and further developments are expected associated with the shift to the competency-based training and classifications system introduced at the industry level.

Another important aspect of Exvalcon's labour management strategy is employment security (which enhances retention of skilled workers and functional flexibility). Employment security is implicitly guaranteed by the enterprise agreement (EA) which states that the long-term intent of the company is to enhance job security and that no employee's job will be directly at risk because of workplace change. Also, the company did not retrench any employees during the early 1990s recession. The Operations Manager believes that the provision of employment security is very important in generating acceptance of workplace change and encouraging employees' interest in the fortunes of the company.

Wages are an important aspect of labour management: management at Exvalcon are concerned with balancing the need to retain the workforce (particularly skilled workers) and the need for cost control to maintain international competitiveness. With reference to industry and local wage surveys, the Personnel Manager stated that wages paid to tradespersons are near the top of the range, wages paid to process workers are closer to average

levels and that the low turnover rate at Exvalcon indicates that wages are not greatly out of line with market rates. The organiser for members of the Federation of Industrial, Manufacturing and Engineering Employees (FIMEE) regards the company as a 'good average' and 'they do what they have to do plus a little bit more'. Nevertheless, review of the payroll listing shows that many employees at Exvalcon have long service even in the lowest grades at the lowest pay rates. Rubery's (1994) analysis of case studies in a region in England (as part of the SCELI study) found that employers did not have to pay high wages and provide promotion opportunities to ensure a stable workforce if they employed workers who believed that they would not be better off elsewhere; such as workers from groups experiencing labour market disadvantage (Rubery, 1994: 59, 65). This finding appears to be applicable to the women and NESB workers at Exvalcon. Given the industry's reliance on the Metal Industry Award and a tendency towards pattern bargaining for over wage rises, there is no reason for employees to think they would be able to earn higher wages elsewhere whilst retaining the degree of employment security provided by Exvalcon.

Industrial relations processes are central to workplace change at Exvalcon and there is a close interplay between external developments and the institutional framework and industrial relations within the factory. Management prefers a consultative approach to change and the workforce is strongly unionised (which might encourage the employer's consultative approach). There is a closed shop and four unions organise the workforce. FIMEE represents the largest number of workers and most of the tradespersons. The Australian Manufacturing Workers' Union (AMWU) has the second largest number and represents mostly process workers and, therefore, most of the women. The Communication, Electrical and Plumbing Union (CEPU) and the National Union of Workers have a few members each. There are three delegates representing FIMEE, the CEPU and the AMWU. There is a conflict between the two main unions present. The AMWU is seen by the trade delegates to be driven by ideology, while the AMWU organiser believes that the FIMEE and CEPU delegates only represent the trade-qualified minority of the workforce. The AMWU's delegate, a female process worker, is regarded by management and the trade delegates as having a poorer understanding of workplace change and being overly influenced by the (male) AMWU organiser.

Despite the importance of formal industrial relations processes, most of the improvements in workplace flexibility have been gained by management through managerial prerogative, custom and practice, or through the consultative committee. Enterprise bargaining is not used to improve flexibility directly. There is no mention of career paths, internal mobility, minor variations to start and stop times, the elimination of demarcations nor the use of casual workers in the EA, but all these forms of flexibility are important to Exvalcon. The EA's significance lies in it allowing management to integrate workplace change with wage fixation. In Australia in unionised workplaces, integrating pay with workplace change is difficult unless sanctioned by the external industrial relations system (or unless management is willing to pay over award rates or is willing to risk confrontation with unions). When asked 'would the company have gone down a different path without the external industrial relations system and outside unions?', the delegates replied that the company would not have grown so much arguing that 'You needed to have something to drive management as well' (FIMEE delegate).

The union delegates play an important role in industrial relations. The three delegates are directly involved in solving grievances, negotiating and monitoring the application of the EA, and consulting over change. The delegates support management's view that employment security and improvements in wages are dependent upon achieving productivity and quality improvements to maintain Exvalcon's export drive. From the delegates' perspective, the benefits to the workforce include employment security, gradual improvements in wages and safety, access to career paths and training and some influence over management. Work effort is an example. Most of the 30% rise in productivity achieved between 1992 and 1995 was due to technological change and new production philosophies, but improved scheduling of work combined with the motivational impact of a productivity bonus (within the EA) and output measurement means that work intensification also contributed. The intention is to add a quality measurement to the Productivity Improvement Index and bonus system to keep 'moving the goalposts' because 'That's part of trying to keep job security. By being competitive and staying ahead of everyone else' (CEPU delegate).

The closed shop at Exvalcon has support from the employer. When the workplace first became unionised in 1987, the workers argued there would be a dispute if some workers refused to join. About 20 refused but the general manager asked them to join the union, arguing that he 'wanted to talk to one group of people all in or all out' (FIMEE delegate). From the delegates' perspective, it is important that everyone who benefits from the union's activities should pay union dues. The delegates' resistance to casual employment (discussed below) is linked to maintaining the closed shop as casuals are not union members.

Industrial relations at Exvalcon has resonance with the findings of Rose's (1994) analysis of management strategy and industrial relations (part of SCELI). He found that employers with a strategic approach to industrial relations tended to:

- face a strongly unionised workforce with an active union presence;
- encourage closed shops;
- not take advantage of Britain's anti-union laws to de-unionise their workplaces;
- generally find unions to be supportive of workplace change and an effective vehicle for bargaining and for communicating with their workforce; and
- be likely to introduce employee participation arrangements but in a way that does not challenge the position of the union.

All of these points are applicable to Exvalcon's approach to industrial relations. To sum up, the climate at Exvalcon is positive despite work intensification and the pace of change. Complaints from workers are mostly about equipment, machines and processes that do not work as well as they should, and the role and performance of management and supervisors (who are also seen not to work as well as they should).

Labour market polarisation and workplace divisions

The impact of the pursuit of flexibility on the labour market position of employees varies according to the many differences between workers.

Sex Segregation

Sex segregation is a conspicuous aspect of Exvalcon's work organisation. Women are concentrated in the lowest classifications and therefore receive lower pay. They do the repetitive, 'fiddly, sit down' jobs, such as processing work on small components and packing [the nature of women's work at Exvalcon echoes Game and Pringle's (1983) case studies]. In some instances, inventory control, quality monitoring and minor tasks have been added to jobs. A lot of the work done by men is equally unpleasant and in some cases low skilled but men overall work in different areas and perform different tasks to women. Men are more evenly spread between low skilled to high skilled work. The payroll listing shows that it is rare for a woman employed by Exvalcon to have a job title other than 'Level 2 Grade 2 Process Worker' (C13). That is, women's work is undifferentiated. Women are not concentrated in the lowest classifications because of shorter service.

Analysis of classification by length of service for men and women reported in Table 2 that women do not participate in career paths.

Table 2. Length of Service and Classification for Men and Women

Women

Men

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Classification	No. of Employees	Average Years of Service	No. of Employees	Average Years of Service
C11	0	i <u> </u>	21	12
C12	5	13	28	6.7
C13	89	8.2	30	4.2
C14-C6	96	8.4	132	8.1

Source: Payroll Listing, 14 February 1995

The factors behind the concentration of women in the lowest grades are complex. They may include: societal factors (for example, Exvalcon received 160 applications for apprenticeships in 1995 and none were from women); institutional factors (the Australian Industrial Relations Commission awarded lower pay to women for many years); gender relations in the factory (such as protecting masculinity); and disadvantages associated with unequal family responsibilities. But the main (tangible) basis of gender segregation by classification is that women appear to be less inclined to undertake formal training. When asked about access to training, one female process worker stated that women do not 'put their hand up for courses'. Training records showed that the workplace spent about 1 percent of its payroll on training but there was no record of the allocation of training expenditure by gender. National statistics show that Plant & Machine Operators & Drivers and Labourers & Related Workers receive the lowest levels of training and these are the occupations in which most women at Exvalcon are located. Further, employers with female-dominated workforces spend well below average levels on training (Fraser 1996). That is, the reported distribution of training at Exvalcon appears to be in keeping with other firms in the metals manufacturing industry.

From the perspective of female process workers, participation in formal training is not the issue. Rather, they argue that their work is undervalued. A number also claimed that women tended to be classified unfairly, that their skills are not recognised and that, even if men and women are in the same classification, the women tend to receive a lower level of pay. Management dispute this, and there are some indications of management attempting to reverse the gendered basis of work but being unable to make

progress. The women's perceptions of unfair pay and management's difficulties in improving gender equity may reflect the over-valuation of formal trade courses (which have a long association with male employment) and the traditional undervaluing of women's work. The emphasis on formal training based on attending technical college after working hours is an example of indirect discrimination against women because it is a difficult model for women with family responsibilities to fit.

Many case study participants characterise most of the women at Exvalcon as having the attitude that work is to earn some extra money to help support their families rather than being central to their lives. That is, that they do not have career aspirations. Management regards the high level of absenteeism (around 25 workers per day are absent) as related to female employees' greater commitment to their families than to their jobs. The organiser for members of FIMEE agrees that the majority of the workers do not have 'careers'. The organiser believes that workers will learn extra skills if it means more money, but that the classification structure does not provide sufficient incentive for workers in the lower grades to take training. The organiser pointed out that to reach the C12 level a worker required 300 hours of formal training. He argues that people who are willing and able to undertake that sort of training will not work in these sorts of jobs, in a factory, for low pay.

The preoccupation at Exvalcon with training and careers is largely irrelevant to Exvalcon's female workforce and whilst the case study did not allow for a systematic assessment of women's workers views, informal conversations revealed a sense of frustration with the unions and management and a sense that the women's perspective on the labour process is not understood. Burchell and Rubery (1994) (part of SCELI) surveyed workers and management within particular firms on the same issues and found that employees had quite different perceptions from employers on the quality of wages and conditions. Such a gap in perception appears to be present at Exvalcon, particularly between women workers on one side and management and the male union delegates on the other. Issues that could have been taken up during enterprise bargaining and joint consultation that would be of particular concern for women (for example, flexible hours and permanent part-time work to help workers manage family responsibilities or the reclassification of work) have not been given serious attention. There have been minor changes to working hours in some parts of the factory and the introduction of an afternoon shift but this is in response to the needs of production and maximising the operating period for expensive technology rather than the needs of employees. There has only been one short-lived initiative that could be considered family-friendly (provision of half-day absences following advance notice).

Overall, the lack of consideration of issues of concern to women workers reflects the dominance of men and trade-qualified workers during consultation and enterprise bargaining. This is related to the pattern of union membership. FIMEE is the dominant union and the AMWU tends to oppose unsuccessfully the direction of Exvalcon's enterprise agreements. However, it is not apparent that the AMWU has ever pursued issues that would particularly benefit women during negotiations at Exvalcon. The situation at Exvalcon is in keeping with the Australian union movement's maledominated history and agenda (Pocock, 1995). Similarly, Hall and Fruin's (1994) and Charlesworth's (1997) research into enterprise bargaining outcomes found little evidence of enterprise bargaining improving the quality of working life for women.

English proficiency

There are a significant number of workers with poor English proficiency. In 1991, Exvalcon found that 45 percent of non-trade employees and 24 percent of trade qualified employees have insufficient English language skills. Workers with poor English proficiency are hindered in terms of participation in VAM teams and in understanding workplace change at Exvalcon. They are also disadvantaged by the classification system's emphasis on formal training as workers from a NESB are generally identified as unwilling to or incapable of studying formal courses. Some workers do not have the basic literacy and numeracy skills to train for the base-level Engineering Production Certificate (the starting point for the award's career structure). This partly reflects poor English skills but also reflects some workers' low formal educational levels in general. NESB workers are concentrated in the lowest grades at Exvalcon although gender appears to be a more significant characteristic in keeping workers in the lowest grades. The Personnel Manager noted that women from a NESB are disadvantaged by their cultural background as well as by a lack of English, and as a result, are less 'go ahead' and confident compared with men. The delegates commented that Vietnamese workers are more likely to take opportunities to advance than other NESB workers. Bertone and Griffin's (1995: 143) research found that there is greater similarity between the industrial priorities of NESB women and ESB women compared with NESB women and NESB men, and this appeared to be the case at Exvalcon.

Exvalcon participated in government-supported 'English in the Workplace' education for around twelve months but the program was eventually discontinued by management partially because the training was regarded as insufficiently workplace specific. Apart from this experiment, there is no evidence from consultative committee minutes, from enterprise bargaining documents or from interviews with delegates that NESB workers were regarded as having different priorities or particular disadvantages despite acknowledgment that language barriers interfere with productivity. Bertone and Griffin (1995: 132, 136) point to a poor record for Australian unions in terms of meeting the needs of NESB workers and of inclusion of NESB workers in union roles, and the situation at Exvalcon does not contradict this.

Employment status

In February 1995, there were eighteen workers employed on a casual basis at Exvalcon. Twelve casuals were hired through agencies. Six were hired directly and of this group, five were performing work requiring a trade qualification. Trade-qualified casuals are used to cover absences of permanent employees or to complete one-off projects. These 'casuals' are normally hired for a fixed term. However, most casuals are employed for only short periods (in jobs that require little training) to cover production fluctuations. Casual employment at Exvalcon is also a method of recruitment and selection. After two months, the casual may be offered a permanent job if they 'fit into that role' (Personnel Manager). Casual employment is limited by an unregistered agreement which states that if a casual works for more than two months he or she must be made permanent. Early in 1995 management wanted to increase this period to three months (in line with industry standards) but the delegates refused.

The disadvantaged labour market position of casuals is linked to employment and income insecurity but the reasons these workers will accept casual work also illustrate their disadvantaged status. For example, one casual worker was returning to the labour market after being on sickness benefits. Another had been retrenched very recently from permanent work. Those employed for low skilled work were also disadvantaged by a lack of marketable skills. Nevertheless, the casuals who make it to permanent status at Exvalcon experience a marked improvement in their labour market position.

An argument could be made that Exvalcon will never use casual employment on a larger scale than the level described here because casual labour is not appropriate for management's objectives of improving productivity and skill levels, plus the award provides casuals with a higher hourly pay rate. There are also union restrictions. However, Exvalcon is

unwilling to raise its permanent employment level in response to rising sales because of its intention to invest extensively in labour-saving automation. Therefore, the use of casual workers will allow Exvalcon to avoid costly, disruptive retrenchments as productivity rises (as well as reducing holiday and sick leave costs and overtime payments). Permanent employment can be held to an absolute minimum. According to the union organisers interviewed for this case, employers would use casuals much more extensively if union restrictions were not in force. The FIMEE organiser said:

They [employers] think they have more control [over casuals] They think, have them on a day to day basis, and if things go bad, 'rissole' them and they don't have to pay redundancy. [Casuals] are less likely to be members of unions and things like that.

Skills and qualifications

In the metals manufacturing industry, qualifications are an important aspect of a worker's labour market position because of the strong link between trade qualifications and wage classifications. Workers are considered to be skilled if they hold a trade qualification. At Exvalcon, there is an overlap between disadvantage by skills and disadvantage by gender and English proficiency. The low skilled group is distinguished from trade-qualified workers and other workers by a lack of formal training and by the threat to their employment posed by technological change and casualisation. Exvalcon employs a large proportion of people with low education and skill levels which constrains the implementation of cellular manufacturing, VAM and kanban. The union delegates explained the impact of low skills (including English) and education on productivity improvement in the following way: VAM worked very well in a particular area and the delegates attributed this to a process worker who had a reasonable level of education 'in her own country'. VAM failed in the next area it was tried and this was put down to the workers' inability to understand the concept. Apparently, some workers also have difficulty with kanban. A lot of the workers in the factory are seen to have only a limited capacity to understand concepts such as the difference between 'production' and 'productivity'. One delegate believes that about 80 percent of workers in the factory do not understand how the Productivity Improvement Index (the basis of the bonus system) is calculated. In the male delegates' opinion, the inability to understand concepts is the main reason that some workers are dissatisfied with workplace change and believe that they are not listened to.

It seems unlikely that Exvalcon will change its hiring practices in order to obtain a more highly educated and perhaps 'trainable' workforce because they would have to increase wages to attract and retain these employees. Possibly this group of long-term permanent employees' willingness to work and acceptance of change is valued by the company more than ready disposability. Further, low turnover rates contribute to cost effectiveness. Some of these employees have long service with Exvalcon so the tacit knowledge they have accumulated may exceed what would be expected of their classification.

Labour Utilisation and Labour Market Position

In summary, the changing pattern of employment in the factory associated with new production processes and technology points to labour market polarisation. This polarisation builds on existing divisions within the workforce. Trade-qualified employees with access to a career path via formal training are at the top of the labour market continuum for factory employment. Second to these employees are those who are willing to undertake formal training to move out of the process worker classifications. Next are the workers who are unwilling or unable to undertake training and who will remain in the bottom classifications. These employees are more likely to be women and are more likely to be from a NESB, so NESB women appear to be doubly disadvantaged. As management puts its investment plans into place, fewer of low-skilled workers will be needed as the rate of automation increases. However, it is difficult to term Exvalcon's low skilled workers as peripheral because of their high degree of employment security and unionised status. But they also lack the functional flexibility associated with core employment. This difficulty in categorising employees highlights the appropriateness of seeing the labour market as a continuum rather than as consisting of two boxes called 'core' and 'periphery'.

Further down the labour market continuum at Exvalcon are casual workers. Whilst they do not make up a large proportion of the workforce and there are strict limits on their employment, these workers are important to Exvalcon's operations and play an important role in facilitating workplace change. Casuals receive a higher hourly rate of pay than similarly classified permanent employees but they tend to be located in the lowest classifications, they do not receive over-award pay, and they do not receive pay for public holidays, sick leave, and holidays. Casuals suffer from employment insecurity and may experience breaks in employment continuity (and therefore income continuity). The other group of numerically flexible workers at Exvalcon are the small number of contract workers and trade qualified casuals. These workers are more highly skilled than other workers employed as casuals, and their skills and pay place them higher on

the continuum than many of Exvalcon's permanent workers. The demand for their skills (especially the contracted toolmakers) means that their employment insecurity is relatively less of a disadvantage. Finally, at the bottom of the labour market are members of the labour force who have been excluded from employment at Exvalcon altogether due to labour savings from rising productivity and technological change.

The strongest argument that could be made against the labour market polarisation thesis is that what has been found at Exvalcon has always been the case: that there have always been substantial differences between workers based on skill levels, sex, and English proficiency; this is the basis of labour market segmentation theory. However, in this case, these divisions have become more significant in recent years, due to the expansion of casual employment and the increasing emphasis in metals manufacturing on skills gained through formal training. The gap between the high skilled and the low skilled is increasing at Exvalcon because of technological change and the extension of VAM and cellular manufacturing. Technological and workplace change at Exvalcon need not contribute to labour market polarisation. The nature of change, and who benefits and who doesn't is socially, not economically or technically, constructed. Further, flexibility is not absolute. 'Flexibilisation' is about changing the pattern of rigidity and flexibility in the interests of management (Hyman, 1991: 271, 281). This claim is supported by the Exvalcon case and other research into enterprise bargaining outcomes in Australia (Hall and Fruin, 1994; Charlesworth, 1997). The case study illustrates that trends apparent in the labour market (such as an expansion in training for some workers and the growth in casual employment) as a whole are the product of management and, to a lesser extent, union decision making. That is, labour markets are not shaped by an 'invisible hand'; market forces are only one of the inputs into decision making. For example, it was management which decided to discontinue English-language training and there was no union opposition to this decision. Such a decision severely limits the labour market opportunities of affected workers. Further, women process workers at Exvalcon claim that trade-qualified workers have reaped most of the benefits of workplace change at the expense of process workers. At Exvalcon, management is driving change in order to remain quality and cost competitive, but the nature of change is mediated by the relationship between management and the delegates, as well as being affected by the award, union strategies and enterprise bargaining processes.

4. Conclusion

Labour markets are complex and reflect the impact of many participants and the social, political and economic context. Identifying trends is difficult; determining causality is more difficult. The features of employment used to analyse labour market advantage and disadvantage within the case study included training, skills and qualifications, career paths, employment security, wages, working hours, and attributes of workers (specifically, sex, English language proficiency and qualifications). These issues were explored at the workplace level and demonstrated the complex strategies, practices and patterns of decisions that shape labour market trends.

The case study showed that an employer's pursuit of flexibility has consequences for the labour market position of employees. The advantages and disadvantages are unevenly distributed throughout the workforce. That is, workplace change associated with flexibility is reproducing and exacerbating inequality between workers at Exvalcon. Some workers are benefiting from training, career paths, employment security and higher earnings. However, there is also evidence of casualisation and evidence of a reduction in demand for low skilled labour. In conclusion, there is validity in the notion that employers shape the labour market as predicted by Atkinson's flexible firm model and labour process theorists. But this paper also upholds Rubery and Wilkinson's acknowledgment of the complex nature of labour markets and the need to analyse labour market trends within particular institutional contexts.

Notes

- A systems model that does see a link between industrial relations and labour market structures is Kochan, Katz and McKersie's (1986) strategic choice model. The diagrammatical presentation of the model has a 'feedback loop' between the performance outcomes from industrial relations activity within organisations and the external environment.
- Sub-contracting is an exception. It is a key aspect of lean production but it is not used in the workplace under study as the Operations Manager believed that in-house vertical integration was the best way to improve quality.
- 3. The case study was conducted in 1995. A range of data gathering methods were used including observation of work processes, examination of documents, and in-depth interviews with union delegates, union organisers and the Operations and Personnel Managers. There were also informal discussions with employees during lunch breaks, attendance of a consultative committee meeting, and a guided factory tour.
- 4. A sign attached to a large tin drum shows the company's exposure to kaizen (continuous improvement): 'Each full bin of scrap castings represents \$1500 in wasted effort'. Its motivational impact is questionable because the sign had nearly

- fallen off the drum due to a broken hook. *Kaizen* and *kanban* are only partially in place, and there are large amounts of stocks and finished goods throughout the factory. An apprentice remarked that the high level of stocks and finished goods were 'in case something goes wrong'.
- 5. There are only two exceptions. Exvalcon's only female 'tradesman' was a process worker who took up an adult apprenticeship. Another female process worker trained to become the First Aid officer.

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