

Plant closures in Australia's automotive industry: continuity and change

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ABSTRACT

This paper explores the possibility of using diachronic case study comparisons to shed light on continuity and change in policy interventions to manage plant closures. It compares the early results of a survey of workers retrenched in the 2017 closure of Australia's passenger vehicle manufacturing industry with the results of a similar survey of workers who lost their jobs in the 2005 closure of Mitsubishi's Adelaide engine-casting and components plant. Despite the 12 years of accumulated expertise in plant closure and structural adjustment management, this comparison shows remarkable similarities in the profile of the cohort of retrenched workers and remarkable similarities in their employment outcomes. The discussion reflects on conditions that produce continuity and change.

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INTRODUCTION

The closure of Australia's last remaining large-scale vehicle production plant in October 2017 was a watershed moment in the nation's industrial history. It brought an end to an industry established in the aftermath of the Second World War, one once perceived as an exemplar of national development (Beer, 2018). In 2013 and 2014, car manufacturers Ford Australia (herein Ford), General Motors Holden (GM Holden) and Toyota Australia (Toyota) announced their intention to close all manufacturing sites, based in South Australia and Victoria. In October 2017, GM Holden's Adelaide, South Australia, vehicle assembly plant was the last automotive factory to close, bringing to an end an industry with almost 70 years of heritage, ending the jobs


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of thousands of workers employed by these three main original equipment manufacturers (OEMs), and putting at risk employment in their local supply chain manufacturers. Initial estimates from government and industry were that 40,000–50,000 jobs would disappear within three years (Beer, 2018). Australia was the first advanced economy to experience the closure of its entire passenger vehicle industry.

The economic and political conditions contributing to the shutdown have been examined in some length elsewhere (Beer, 2018; Clibborn et al., 2016; Stanford, 2017; Wormald & Renick, 2019), but much less is known about how affected workers and communities have fared post-closure, or about whether government policies and programmes established to mitigate the effects of shutdown have succeeded in alleviating the impacts on affected individuals. To date, the only information available has come from commissioned consultancy studies of policy interventions, but these have tended to focus narrowly on short-term impacts related to specific policy aims. This paper takes a broader view. It summarizes the initial results of the first academic study of the closures, providing a first set of insights into employment and related outcomes for workers made redundant through this process of change. It reports the findings of the first stage of an Australian Research Council (ARC)-funded longitudinal study called Future Work, Future Communities (FWFC) (Beer et al., 2019), which has four streams: a longitudinal survey of worker outcomes; a series of qualitative studies; an innovative discrete choice experiment (DCE); and a survey of affected communities.¹ This paper draws on data from the first wave of the survey of workers.

This paper seeks to quantify worker outcomes, but also draw conclusions about the quality of outcomes. That objective demands that the experiences of this group of workers – and sub-groups within the cohort – are compared with some other similar closure. The novel contribution of this paper is to compare outcomes across time rather than between places, while also placing the outcomes within the context of a changing world of work, evident globally. Standing (2011) has drawn attention to the seven dimensions of employment security and insecurity: labour market security; employment security; job security; work security; skill reproduction security; income security; and representation security. While there has been a sustained critique of Standing's conceptualization (Breman, 2013; Munck, 2013) and associated responses (Standing, 2014a, 2014b), the depth and sustained nature of this debate speaks to the widespread nature of this set of processes (Barnes, 2021). This paper compares the experiences of workers displaced in the recent suite of automotive closures, as reflected in our large-scale survey, with the outcomes for workers displaced in the shutdown of Mitsubishi Motors Australia Ltd's (MMAL) Lonsdale plant in Adelaide in 2004. This comparison is illuminating because of the similarities in context and circumstances. It is an option because of overlaps between the two research teams as the authors, having been involved in the earlier study, had access to both detailed data sets.² Comparison between the two sets of events makes it possible to draw conclusions about the degree to which the policies, processes and outcomes associated with large-scale plant closures have advanced over the past decade.

The paper finds that while there has been substantial evolution in the understanding of 'best practice' management of plant closures, including the behaviours of exiting firms and the implementation of government programmes, the patterns of re-employment has changed little in the 15 years between the two events. This high degree of continuity speaks to the enduring influence of structural factors, including the nature of the Australian labour market, the direction of economic change nationally, the gendered nature of the workforce, and the characteristics of the income support and welfare systems.

The remainder of the paper is structured as follows. The next section provides the context for the closures of the Lonsdale Mitsubishi automotive plant in 2004 and the industry-wide closure in the period 2016–17. It outlines the processes established to examine both sets of events, and discusses the policies deployed by governments. The third, empirical, section compares the two sets

of former automotive workers and the outcomes with respect to the availability, nature and quality of post-retrenchment employment, as well as self-reported health and well-being. The fourth section discusses the findings. The final section draws out the implications and concludes.

AUSTRALIAN AUTOMOTIVE PLANT CLOSURES IN THE 21ST CENTURY

The two closure events – Mitsubishi in 2004 and the remaining OEMs in 2017 – are connected through a common set of causal processes associated with the opening of the Australian economy to the forces of globalization in the late 1980s, alongside the restructuring of the automotive industry internationally (Bailey et al., 2010; Beer, 2018). The embrace of a global perspective, the detail of which is discussed by Bell (1993), involved the winding back of border protections, the introduction of domestic policies to stimulate competition and the restructuring of firms to improve the international competitiveness of local industries. With government support, under the Button Plan (1985–92), the automotive industry's restructuring included upgrading technologies, introducing just-in-time (JIT) production systems, rationalizing the workforce and reconfiguring supply chains to share components across models and marques. After this upgrading, the industry prospered in the late 1990s with the support of export market development incentives. After 2000, however, the local industry's global position deteriorated as incentives were curtailed by the new trade rules accompanying the formation of the World Trade Organization (WTO) in 1995 and as the value of the Australian dollar appreciated. In addition, with global automotive production shifting locations and moving towards to a globally integrated hub model, some transnational firms operating in Australia faced crises in their home jurisdictions.

Nieuwenhuis and Wells (2015) have argued that the removal of tariff barriers and other protections was the pivotal factor in the demise of Australia's automotive sector. This perspective, however, overlooks the fact that other nations with high labour costs – including Germany, the UK and Canada – have sustained their passenger vehicle industries. Additional factors need to be considered when trying to understand the end of the automotive industry in Australia, and these include the long-term trend for manufacturers to relocate to lower cost nations (Bailey et al., 2014), as well as ongoing consolidation of the industry (Colliers, 2016; McKinsey & Co, 2016). Importantly, Clibborn et al. (2016) commented on the impact of steadily tightening global production chains, which meant that decisions around the maintenance of the industry, and the necessary further investment in products and facilities, were increasingly taken by head offices located in other parts of the world. These head offices increasingly compared costs across nations, with Australia doubly affected by outdated production technologies as well as a small domestic market and limited exports. These latter points are especially important as Australian automotive plants were limited to relatively low volumes: in the early 2000s GM Holden's Elizabeth plant had a production run of 160,000 units per year produced by three shifts a day. While this was a significant volume, it fell well short of the 250,000 units per annum considered minimum practice by Orsato and Wells (2007) and the 1 million vehicles annually that would be produced under ideal conditions. In short, the Australian car industry came to an end because integration into global production networks exposed the history of small-scale production, under-investment in new models and production facilities, inflexibilities in the labour force (Clibborn et al., 2016), and a history of dependence on government support. The latter was perhaps the most critical factor, with an industry habituated to public sector assistance unable, or unwilling, to embrace the changes needed to adjust to the globalization of their sector.

This global context led to the 2004 Mitsubishi closure. The Lonsdale plant had operated since the mid-1960s as a foundry and a site for Mitsubishi's vehicle assembly operations in Australia. In April 2004, Australia's then prime minister, John Howard, held a press conference in Adelaide, accompanied by the state's premier and the chief executive officer (CEO) of MMAL to announce the closure of the company's Lonsdale plant. The closure of this plant, and the associated

redundancies at MMAL's Tonsley Park vehicle assembly plant, some 7 km away, resulted in the loss of 1200 jobs, mostly in Adelaide. The announcement was made just a few weeks before Australia signed a Free Trade Agreement (AUSFTA) with the United States in May 2004.

MMAL's survival had been in doubt over the previous years. Despite several rounds of direct financial assistance from state and federal governments, the business had struggled to adjust to the impact of tariff reductions through the 1990s and the rapidly rising value of the Australian dollar through the early 2000s (Conlon & Perkins, 2018; Wormald & Renick, 2019). In 2001, MMAL received A\$200 million from the Australian Government as well as a A\$20 million interest-free loan from the state government (Beer & Thomas, 2010, p. 5). Yet despite MMAL's commitment under the deal to recruit additional employees, mounting challenges led the company to shed 1000 staff between 1999 and 2002. A broader crisis within the parent company, Mitsubishi Motors Corporation, proved a final impetus for closure. At the time, there was an expectation that MMAL would be able to restructure, reposition and continue vehicle production at its Tonsley Park plant. Ultimately, the closure of Tonsley was announced in 2008, and by 2010 MMAL had ceased vehicle production in Australia.

MMAL's departure left three OEMs operating in Australia: Ford, GM Holden and Toyota. All three struggled financially in the post-WTO environment, but Toyota was more globally integrated and more stable in the consumer market. The global financial crisis of 2008, and its aftermath in the years following, exacerbated the global challenges facing these established firms. Threats included global overproduction, weak sales in mature markets, competition from Asia and changing power relations associated with the emergence of specialized suppliers (Wormald & Renick, 2019). In Australia, the weak market performance of Ford and GM Holden, pressure from imports, and weak global integration were key challenges. The high value of the Australian dollar, instability of US parent firms and policy uncertainty in the years of the Kevin Rudd–Julia Gillard administration (2007–13) added stress. By early 2013 a change of government was inevitable, and the conservative Tony Abbott government-in-waiting rejected government support for the local automotive manufacturing industry.

In May 2013, Ford, which had been losing market share and shedding workers over many years, announced its intention to end production at its Melbourne and Geelong plants by late 2016. In December 2013, GM Holden announced that it would follow suit and terminate motor vehicle production by 2017, including at its main assembly plant at Elizabeth in Adelaide's north and its engine-making plant in Melbourne, Victoria. Finally, in February 2014, Toyota also announced the cessation of vehicle manufacturing in Australia. These decisions meant that, in fewer than 12 months, all remaining OEMs in Australia had signalled their intention to exit domestic automotive production. Many firms in the supply chain were likely to fail as a consequence. The grouping of the announcements reflected the local supply chain interdependencies that had continued to develop from the years of the Button Plan.

The announcements of 2013 and 2014 had profound implications at the national, regional and local scales and was expected to have significant consequences for affected workers and the communities that accommodated these plants (Barbaro & Spoehr, 2014; National Institute for Economic and Industry Research (NIEIR), 2014). The closure of the remaining parts of the automotive industry was acknowledged by government and in the media as a profound event in Australia's history (Department of Industry, Science, Energy and Resources (DISER), 2020).

POLICY INTERVENTION

The shutdown of the industry has attracted considerable policy attention (Department of Employment, Skills and Family Business (DESF), 2019; DISER, 2020; Productivity Commission, 2014), prompting and informing government policy interventions and underscoring

the need for independent assessments of outcomes. As Weller (2021) noted, large-scale plant closures have the potential to exert a significant impact on electoral outcomes within the Australian political system, giving incumbent governments a strong incentive to be seen to have taken effective action.

In response to the closure announcements, the federal government, working in cooperation with state governments, firms and relevant unions, implemented a set of structural adjustment best-practice interventions. These have an established history in Australia (Beer, 2015), and involve programmes to improve the labour market competitiveness of displaced workers, interventions to limit the flow-on second-order impacts of closures in the supply chain and regional economies, and interventions to create jobs in affected locations. These actions have the dual objectives of mopping up unemployment created by the immediate plant closure crisis and of stimulating the longer term transformation of regional economies. For details of the interventions, see Beer et al. (2021).

Government evaluations of these interventions have focused on 'what works' to limit job losses and to improve employment outcomes for retrenched workers. A commitment to continuous improvement has seen the gradual refinement of policy intervention efforts, creating a measure of continuity from MMAL to the more recent closures. Government-commissioned studies of these interventions suggest broadly positive outcomes associated with limiting the flow-on effects of the automotive plant closures. DISER (2020), for example, concluded that, on balance, Australian government programmes of industry assistance sustained many firms in the supply chain, primarily through assistance aimed at diversifying production into non-automotive markets and industries. It found firms taking up government assistance were more likely to survive, but that the assistance was more effective for domestic firms. International firms were more likely to close, reflecting the reality that many had maintained production in Australia solely to supply the major assemblers. DISER (2020) acknowledged that employment levels had fallen across all supply chain firms but had declined much more steeply in foreign-owned enterprises.

A second federal government study (DESF, 2019) focused on the assistance provided to displaced workers. It reported that overall job losses in affected regions had not been as severe as anticipated, with government data concluding only 14,000 jobs had been lost by late 2018. This outcome was attributed to the survival of supply chain firms. The study found that by late 2018 about 85% of displaced former automotive workers were active in the labour market (the remaining 15% having withdrawn temporarily or permanently), of which 82% were employed in paid work. The government also reported high levels of wage satisfaction and positive indicators of physical and mental well-being among displaced workers (DESF, 2019).

These figures are reassuring, but there are concerns about the timing of the follow-up – the extent to which the follow-up work was undertaken while short-term stimulus measures were still propping up labour demand – and about the degree to which the studies were biased towards workers who had been successful with assistance programmes. Previous research on plant closures in Australia suggests that it takes much longer than 12 months for workers retrenched from long careers to settle into a new trajectory (Beer et al., 2019; Weller & Webber, 1999). According to DESF's (2019) estimates, 18% of surveyed workers were still unemployed 12 months after the final closures, thereby qualifying, under Australian definitions, as long-term unemployed. An 18% rate of unemployment was around three times greater than the national average. If the 15% of workers who left the labour market were involuntary exits, that would produce an unemployment rate of 33%, almost exactly the rate found in previous studies (Beer et al., 2006; Weller & Webber, 1999). This estimate of the unemployment rate needs to be placed in the context of factors such as age, location and the impact of redundancy payments – all of which may elevate the

numbers out of work. However, as a headline estimate, the data underscore the less-than-optimal outcomes for workers leaving the automotive industry. Moreover, DESFB (2019) reported just over half of those who had returned to paid work (53%) worked full-time hours. Even allowing that a proportion of workers chose to work shorter hours, a potential under-employment rate of 47% is considerably higher than the national average (of approximately 15%). It is also a less favourable outcome than found in previous Australian studies, possibly reflecting the decline in full-time employment opportunities for less skilled workers in Australia. These issues demand more rigorous investigation and more detailed statistical analysis over a longer timeframe.

COMPARING PLANT CLOSURES OVER TIME

A basic tenet of social science research is the imperative to deploy comparative methodologies that expose similarities and differences among cases. Beer and Thomas (2008), for example, compared the Mitsubishi closure in Australia to the MG-Rover closure in Birmingham, UK. Such comparisons are complicated by qualitative differences in contexts which may lead similar causal processes generating a range of outcomes. In addition, there is an ongoing debate in urban and regional studies about how to realize the theoretical benefits of comparative studies and how to manage the perennial and inherent tension between generalizability and particularism (Peck, 2015). Yet this debate is concerned almost exclusively with synchronic comparisons among different places at similar times (or similar stages of development). Diachronic studies focusing on different events in the same contexts (Gerring, 2007) – such as this comparison between the MMAL and OEM closures – overcome many of the limitations of synchronic comparison. They address research questions related to continuity and evolution, which means diachronic approaches are crucial to the examination of the role of industry closures in path-dependent development trajectories (Grillitsch, 2019; Grillitsch & Sotarauta, 2020; Hassink et al., 2019; Henning et al., 2013; Miörner, 2020; Miörner, 2021). The authors' involvement in multiple studies of plant closures in Australia makes inter-temporal comparison possible. In this empirical section we examine the impacts of major plant closures by comparing data collected in the 2008 MMAL study with data from the first wave of the 2018 full closure (FWFC) study.

Inter-temporal comparisons introduce limitations related to the qualitative and quantitative changes in the sites of interest over time. Changes in the outcomes of retrenchment are a function of these contextual and policy changes. At the outset, therefore, it is important to identify these changes and be clear about the comparability of the two studies. Four crucial issues are the evolution of the social context, the implications of the industry's evolution (trajectory of decline), the evolution of policy interventions, and differences in methodology between the two studies.

The two data collections were completed in markedly different periods in Australia's economic history. The first was undertaken during an economic boom as the nation's mining industry experienced a period of marked expansion in response to China's demand for minerals (Downes et al., 2014). It was a time of rising real wages, a tight labour market and a strong Australian dollar, although the extent to which the resulting prosperity 'trickled down' to fuel urban job creation is open to question (O'Hara, 2008). By contrast, the second study conducted its first survey in the middle of the Covid-19 crisis, when Covid-19 lockdowns pushed Australia into its deepest crisis of unemployment and under-employment for 30 years. Although Australia's lockdown policies were highly effective, Covid-19 was nevertheless an unprecedented shock to the economy and labour market (Borland & Charlton, 2020). Covid-19 emerged after a period in which slower economic growth had been accompanied by stagnant wages growth, rising inequality and considerable uncertainty for the nation's economic future. It would, however,

be too easy to overstate the impact of Covid-19 on Australia's labour market, with data in 2021 suggesting a world-best recovery (National Skills Commission (NSC), 2021). In addition, Covid's effects on the labour market were concentrated in personal services, hospitality and tourism employment. None of these is a large employer of former automotive workers. Employment in warehousing, distribution and security – jobs that are accessible to former automotive workers – increased during Covid.

Nonetheless, differences in post-retrenchment outcomes between 2006 and 2020 were more likely to reflect long-term social and economic change. The most important of these are the progressive deterioration in employment standards and employee protections since Australia's 2004 industrial relations reforms, the displacement of lower skilled jobs by automation, and the increasing incidence of short-term labour hire and gig economy jobs. Another important issue has been slow wage growth, relative to living costs, one effect of which has been to increase the labour force participation rate of women. In contrast to the 1990s, a higher proportion of households of retrenched automotive workers in 2019 were likely to have a spouse earning income, which disqualifies the households from unemployment benefit support. A host of reforms – in particular, mortgage drawdown facilities – have encouraged, and institutionalized, household-level risk management strategies in the event of job loss.

The Mitsubishi plant had been set up for the casting of engines and the assembly of components, which meant the plant had relatively few higher skilled design and engineering personnel when compared with the OEM closures in 2017. Respondents to the MMAL study were almost exclusively employed on the factory floor. Assembly work is relatively labour intensive and new technologies in the period 2008–16 have altered the task content of jobs and reduced the proportion of less skilled jobs. To control for differences in workplace composition, the analysis below compares only those workers identified as working in 'blue collar' shopfloor production roles. An important difference in the labour market was that in the period 2004–06, the Australian automotive industry was still operational, enabling retrenched MMAL workers to find work in an occupation similar to their pre-retrenchment occupation. The full-industry OEM closure was expected to force many workers to look to new occupations and industries.

Policy responses to plant closure have also evolved. In both cases interventions targeted both worker re-employment and stimulating local economies. However, at the time of the MMAL closure, there was more emphasis on the labour adjustment side, and regional interventions were arguably less targeted on affected labour markets. The 2017 interventions were more explicitly directed to creating jobs in affected labour markets. There was also more attention in 2017 on pre-closure advice and assistance and on managing the actual closure event to minimize mental health repercussions.

Both studies adopted a longitudinal design involving repeated survey interviews with former automotive workers. The earlier research involved a single closure site and had three waves of data collection. The first interviews with 373 full-time permanent workers were conducted before the MMAL plant closed, between March and November 2005. Second wave interviews with 315 of the original respondents were conducted 6–12 months after closure to capture the experience of workers and their families as they adjusted to the shock of redundancy. A total of 300 third-wave interviews were undertaken 12 months after the wave 2 interviews to establish longer term career destinations. The second study, the FWFC work on the full industry closure, involves multiple sites with five waves of data collection (Beer et al., 2019). Fieldwork commenced in 2020 with an initial first wave sample of 1277 retrenched workers drawn from both OEM and affected supply chain firms. At the first wave, two to three years had already elapsed since workers' retrenchment, depending on where respondents had worked. This makes the third wave of the MMAL study broadly comparable with the first wave of the FWFC study, at least in terms of the period between data collection and plant closure. The next sections compare the two populations before examining differences in outcomes.

Benchmarking the two populations

In order to ensure the comparability of the two data sets, only former employees in blue collar occupations are included in the analysis presented. In total, 848 respondents to the FWFC survey came from production and other shopfloor occupations, compared with 300 respondents from the MMAL research.

In both studies, respondents were also overwhelmingly men: 90% in the first study and 85% in the second. Despite broader changes in the Australian workforce, automotive manufacturing remained a male-dominated industry. The age profile of the workforces made redundant, at the 2006 and 2020 surveys, was very similar in overall age distribution. Although the MMAL study had a greater proportion of younger respondents (Figure 1), both workforces comprised predominantly older men with long careers in manufacturing. In both studies, the median age was in the 50–59 age bracket.

As Figure 2 shows, the data collected on length of service with automotive employers are also broadly similar across the two studies, although the respondents to the FWFC study have a shorter average duration of employment compared with MMAL, and a significantly greater percentage of workers were employed for fewer than 15 years. Conversely, MMAL had many more respondents who had worked with the company for more than 30 years. Nonetheless, compared with Australian labour force aggregates, both studies comprised workers with exceptionally long careers with a single employer. Figure 2 shows that 75.5% of workers in the MMAL study and 71.6% in FWFC study had been with their employer for more than 10 years. This compares with just 27% for Australia's labour force in aggregate (Australian Bureau of Statistics (ABS), 2020).

Both groups of workers worked similar hours, with approximately three-quarters working full-time, for between 36 and 40 h per week in their pre-closure automotive sector position. For both groups, some 22% of staff reported working in excess of 40 h per week, reflecting the routine availability of overtime. In both studies, pre-closure workplaces were dominated

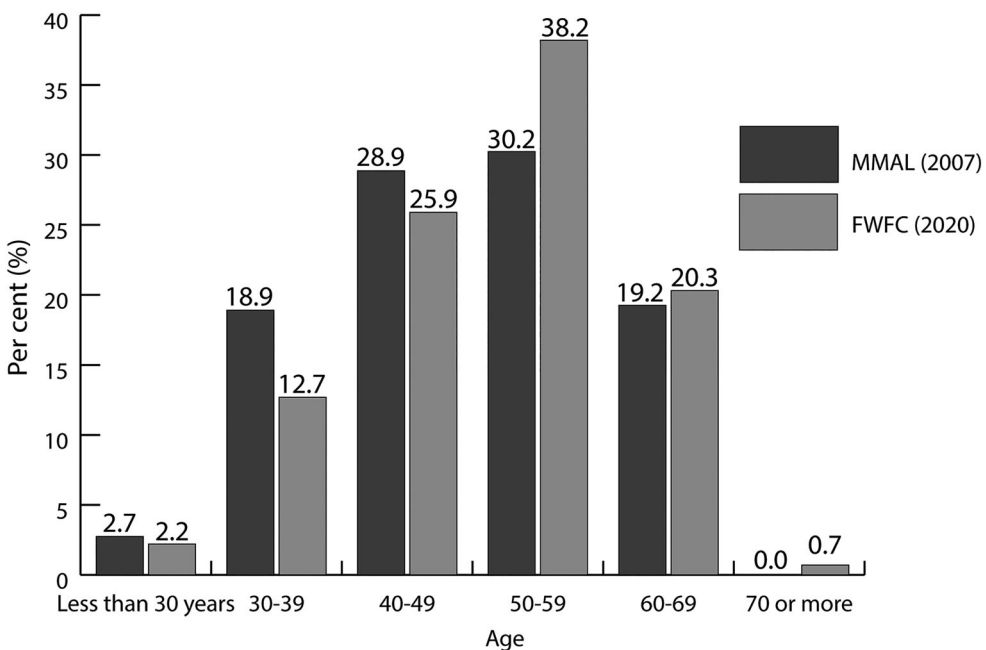


Figure 1. Age profiles of the survey respondents, 2007 and 2020.

Note: Future Work, Future Communities (FWFC), $n = 837$; and Mitsubishi Motors Australia Ltd (MMAL), $n = 291$.

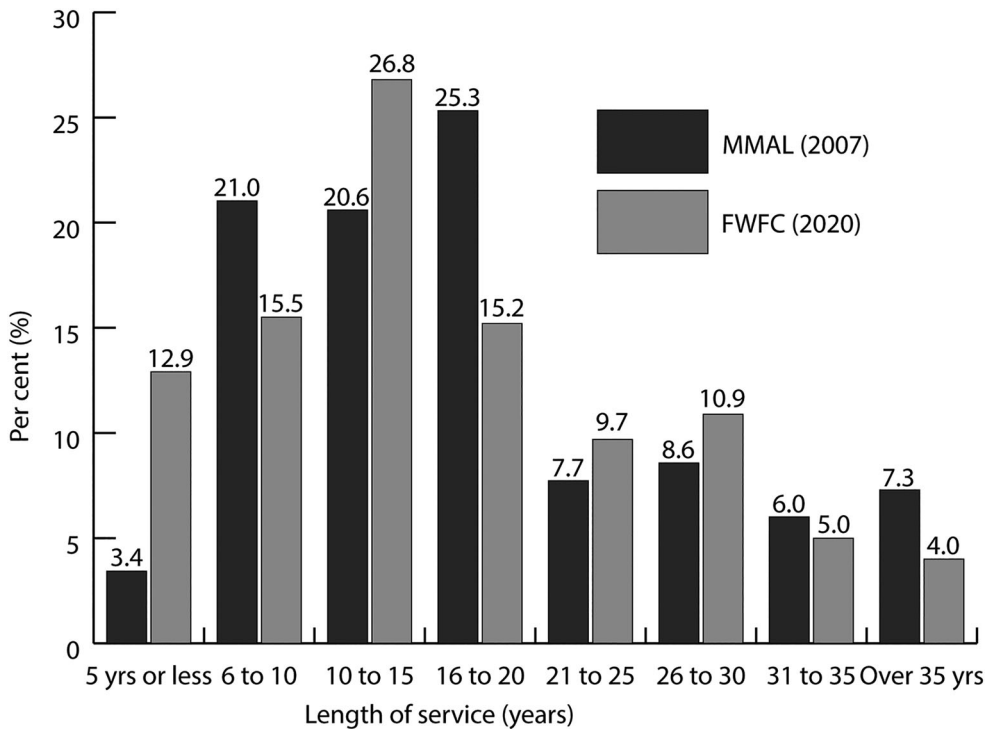


Figure 2. Length of service with a previous employer in the automotive industry.
Note: FWFC, $n = 846$; and MMAL, $n = 233$.

by permanent full-time employment contracts with stable and predictable patterns of work. All workers at MMAL and the overwhelming majority (90%) of workers in the FWFC study had been permanent employees. In Australia, permanent employment means that workers are entitled to a minimum period of notice for retrenchment and to redundancy pay when their employing firm employs 15 or more workers. By 2017, only about half of all Australian workers were considered permanent employees with full-time work and paid leave entitlements (Carney & Stanford, 2018).

As with other indicators of labour market positioning, the two groups of production workers had similar levels of education and training (Figure 3). However, despite the broad similarities and consistent with the expectation of higher literacy demands in more automated workplaces and the decline in training provision, those made redundant in the later FWFC study were slightly less likely to have left school prior to the completion of high school and were less likely to have completed a certificate or diploma.

The outcomes of retrenchment

Government evaluations of the efficacy of plant closure interventions tend to focus on *whether* and *how quickly* retrenched workers return to the labour force. They are much less interested in the extent to which workers are able to build on their skills in similar types of jobs, or in the quality of jobs in terms of pay and working conditions. Both the MMAL and FWFC studies, in contrast, have been concerned with skill retention and job quality, while also assessing former automotive workers' self-reported well-being. This section compares these outcomes.

There were similarities and differences in the methods retrenched workers used to look for work. For both studies, job seekers used multiple search methods and seldom relied on a single

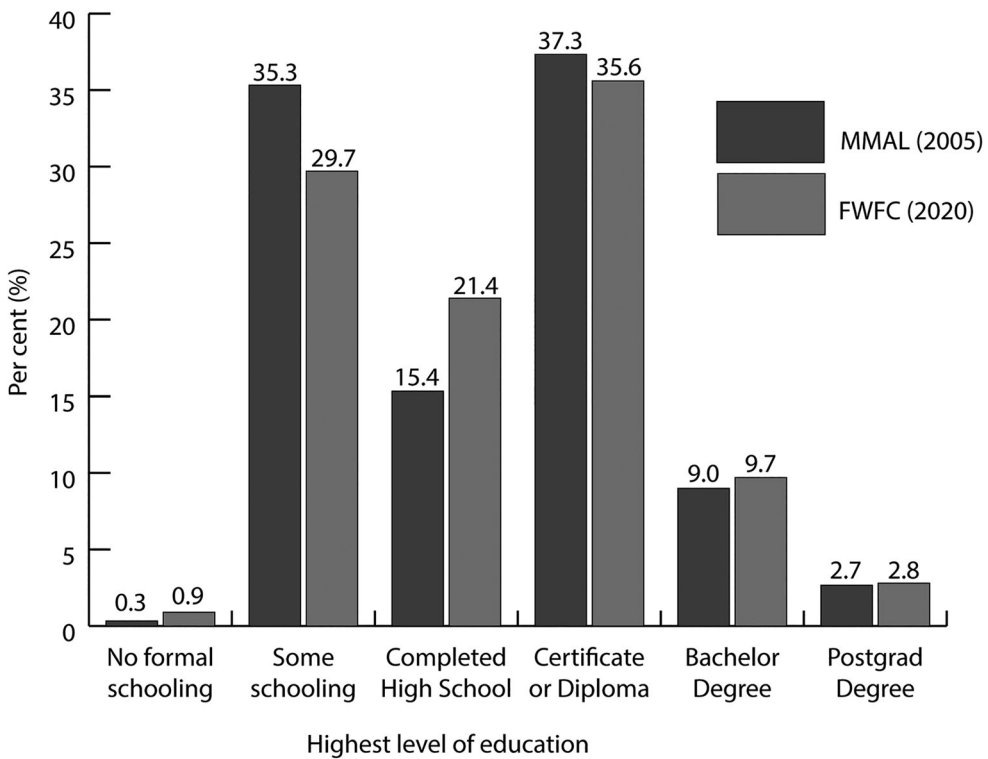


Figure 3. Highest level of education.

Note: FWFC, $n = 808$; and MMAL, $n = 300$.

source of information. For both groups, internet-based searches were important, with just under 69% of MMAL workers using web-based approaches compared with 73.6% in the FWFC study. However, formal employment agencies were used by a much higher proportion of MMAL workers (75%) compared with FWFC (59.7%), which is likely to reflect the more vigorous pre-closure interventions in the case of the workers in the FWFC study. Examining newspaper job advertisements was important for MMAL job seekers (98%) but barely mattered in the FWFC study (12%), reflecting the general decline of this method of job search.

Almost two-thirds of retrenched workers found new jobs: 65% of workers included in wave 1 of the FWFC survey had re-entered paid employment, compared with a slightly lower proportion of 62.7% of former MMAL workers. MMAL workers were twice as likely to report they were self-employed (11.3%) as FWFC respondents (5.3%). MMAL workers were also more likely to have reported that they had retired (11.7% compared with 7.3%). This suggests that FWFC workers were more likely to be active in the labour market. However, a much higher percentage of workers in the FWFC study (14.4%) reported they were unemployed and looking for work compared with the MMAL study (5.3%). The magnitude of this difference – the FWFC rate is almost three times higher – is likely to reflect the adverse influence of the Covid-19 crisis at the time of data collection.

The FWFC study asked more detailed questions than the earlier study about the difficulties individuals encountered in finding new work. Age-related discrimination in the labour market was an important factor for both groups, but much more so for MMAL workers. A massive 60% of MMAL workers believed age discrimination was a barrier to finding work, whereas only 24% of FWFC respondents reported this view. This result perhaps reflects the overwhelming importance of the Covid crisis in shaping responses in the FWFC study, but it may be an artefact of

differences in question wording. It is also possible that the perception of age bias among MMAL workers derives from their personalization of more systemic discriminatory logics. Employers were reputed to have negative views of the MMAL working environment and work practices, which may have stymied MMAL workers' opportunities. For many workers in the FWFC study, the positive reputation of their former employers made workers more attractive to alternative employers on reputational grounds. Workers tended not to attribute their personal outcomes to obsolete skills sets: some 6.7% of MMAL respondents considered that they were at a disadvantage in seeking work because their skills were not valued. Just 4.4% of the FWFC cohort indicated their search for a new position was impeded by inexperience, inadequate skills or by the nature of the employment arrangements (e.g., casual or short-term contract employment) associated with available jobs. For respondents to the FWFC study, age (24%) was the most commonly cited barrier to re-employment, but 11.3% of job seekers indicated that Covid-19 had impeded their employment search, 10.3% commented that employers and agencies had failed to respond to their applications, 9.3% felt that there were insufficient available jobs and 6.9% indicated that their health was a barrier to finding new employment. Only 2.5% considered that available work was too distant from their homes.

Turning to the quality of employment outcomes, Figure 4 shows that of those workers taking up new employment, new working arrangements were similar in the two studies. In both the MMAL and FWFC cohorts, two-thirds (66% in the MMAL study and 66.4% in the FWFC study) of former automotive workers in employment had found new jobs with permanent employment contracts. The proportions with insecure work – known in Australia as casual work – were also similar in the two studies (totalling 30.9% for MMAL and 29.3% for FWFC). The key difference is that in the FWFC study some 7% of the casual workers were employed in 'labour-hire' work, meaning that their casual jobs were organized through

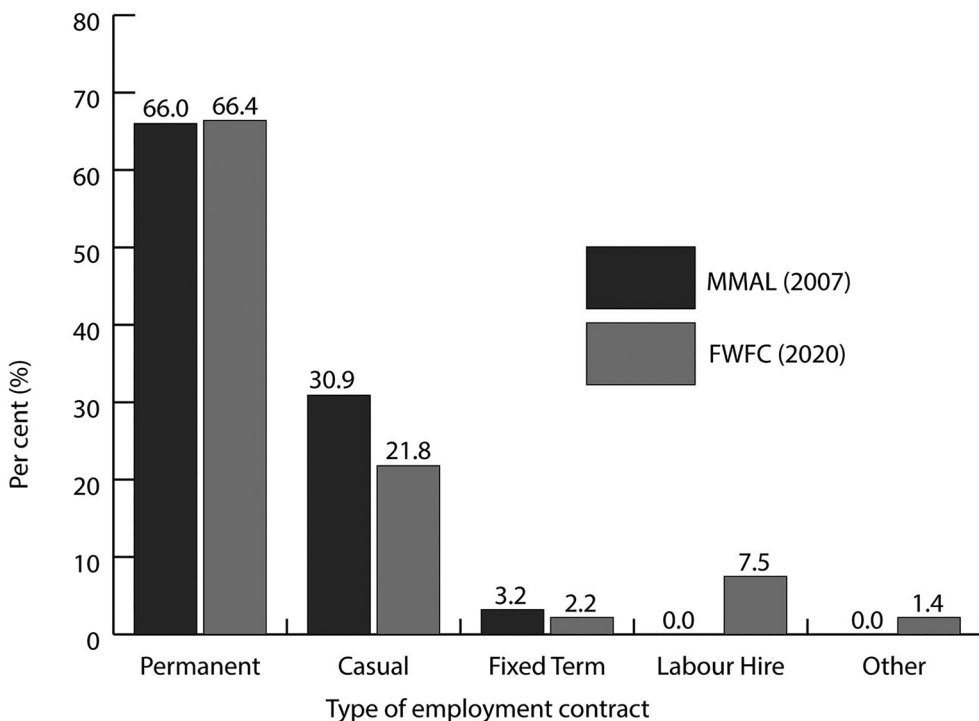


Figure 4. Employment contract in the main current job.

Note: FWFC, $n = 550$; and MMAL, $n = 188$.

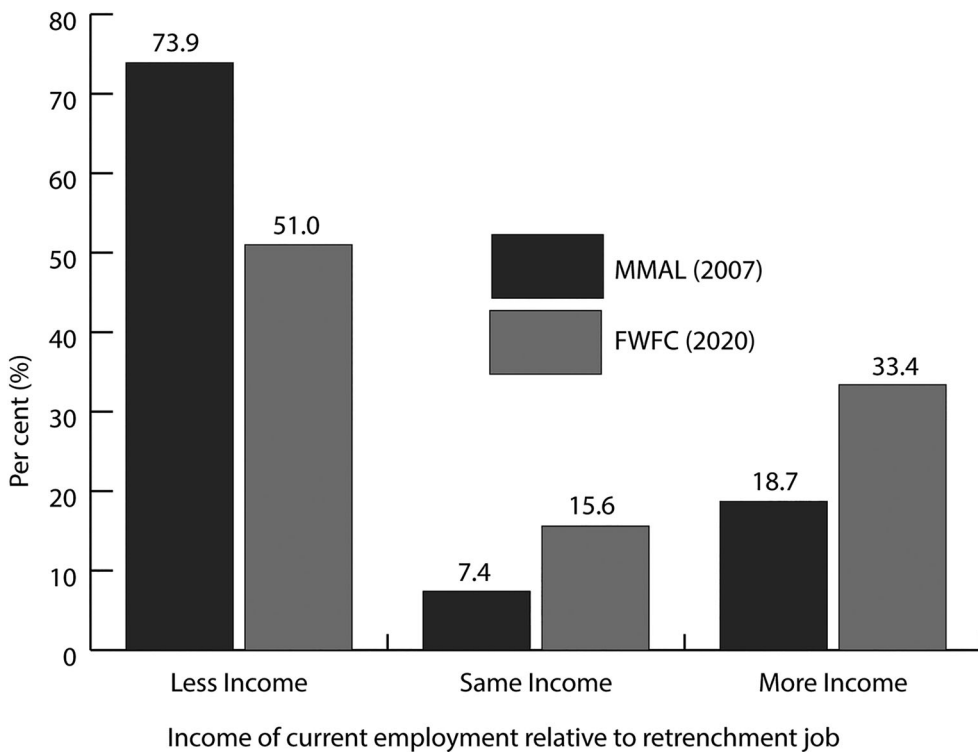


Figure 5. Wage income from the main current job.
Note: FWFC, $n = 443$; and MMAL, $n = 299$.

an agency or internet-based platform. The rise of labour hire, especially in manufacturing work, is a significant innovation to work organization that has emerged in the time between the two studies.

As Figure 5 shows, another similarity between the two studies is that most workers saw their incomes fall in the new jobs found after retrenchment. This was particularly pronounced for MMAL workers, with 73.9% reporting their new job paid less than their position in the automotive sector. For those in the FWFC study, over half (51%) reported lower wages in their new jobs, while 15.6% indicated their income remained the same. Wages had increased in new jobs for 18.7% of MMAL workers but for an impressive 33.4% of FWFC workers. This may reflect a premium from employer recognition of the quality of training and work practices in the retrenching employers, or that the assistance provided to workers improved the quality of placements.

Respondents to the MMAL survey in paid employment were more likely, compared with FWFC respondents, to be continuing to search for a better position. Just over 25% of MMAL workers indicated they continued to look for other work, compared with 20% of FWFC participants. This difference suggests FWFC workers had a higher level of satisfaction with the quality of their new jobs. Nonetheless, there was considerable agreement between the two groups with respect to self-reported satisfaction with new (current at the time of the survey) employment relative to previous roles in the automotive industry. When asked whether their current role was better, the same, or worse than their job with an automotive employer, approximately 40% of both groups indicated that the new job was worse (40.9% for MMAL and 41.1% for FWFC); one-quarter reported that it was similar (25.8% for MMAL and 26.5% for FWFC) and approximately one-third said it was better (33% for MMAL and 32.4% for FWFC).

The self-reported quality of life outcomes of the FWFC cohort appear to be worse than those of MMAL respondents. This outcome reflects differences in the incidence of retirement outcomes, differences in new job quality and differences in survey question wording.³ One of the central objectives of the pre-closure counselling for workers in the FWFC study was to better inform them of their options, and this may have resulted in more workers accepting early retirement. For the FWFC respondents, 30.9% reported their quality of life is better post-redundancy from the automotive industry, compared with 42.4% in the MMAL survey reporting their quality of *family* life was better. Some 33.4% of FWFC respondents reported their life as a whole had worsened since retrenchment, compared with 26.7% of MMAL respondents. Just over one-third of FWFC respondents (34.1%) and just under one-third of MMAL respondents (30.9%) reported their quality of life had stayed the same. One explanation of this difference is the effects of retrenchment on household-wide – as opposed to individual worker – labour market engagement. One-quarter (25%) of FWFC households, but only 18.5% of MMAL households, reported that their partner had changed their employment arrangements – for example, by increasing working hours or moving to a better paid position – to compensate household income.⁴ Deployment of this option is likely to reflect both women's greater labour force participation and the relative accessibility, in the contemporary labour market, of jobs in industries that employ a relatively large percentage of women.

As shown in Figure 6, self-reported health circumstances three years after retrenchment were also remarkably similar in the two studies. MMAL participants reported slightly better health, as reflected in the distribution of responses between 'good' and 'very good'. Approximately, two-thirds of each sample reported their health to be either good or very good (67.1% for FWFC and 68.7% for MMAL).

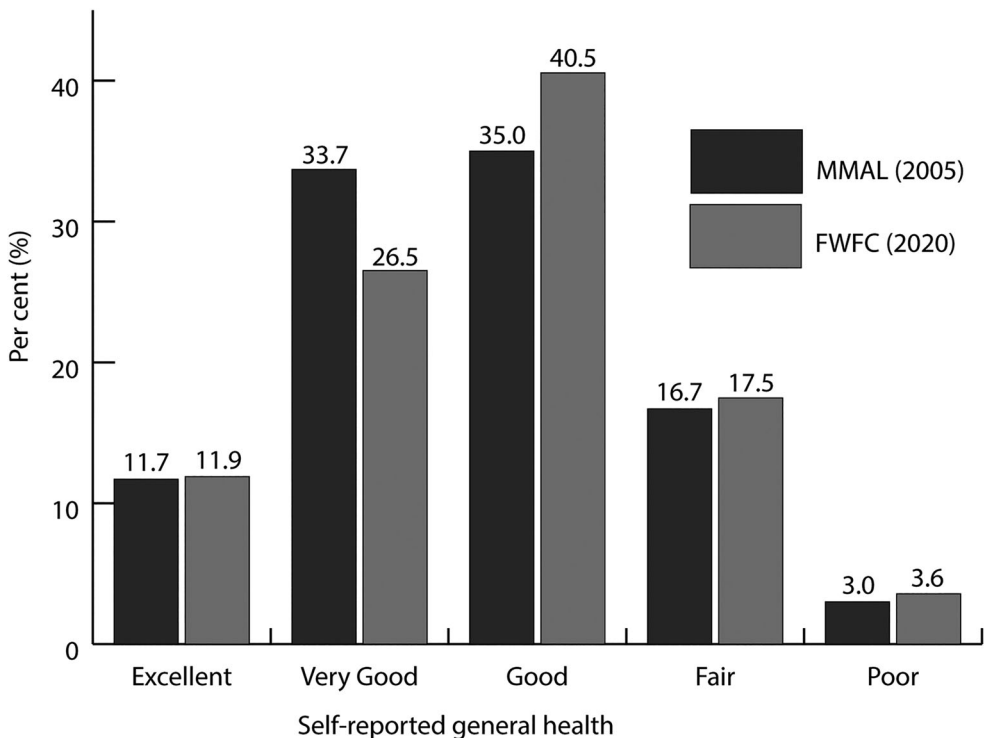


Figure 6. Self-reported general health.

Note: FWFC, $n = 841$; and MMAL, $n = 300$.

The final issue is assessing the relative success of retrenched workers who chose to open their own business. Again, comparison is hampered by differences in question wording. The FWFC survey asked respondents whether they were earning income from their business, while the MMAL survey asked participants to rate how they thought their business was doing. Comparing the two sets of responses suggests that, overall, MMAL business owners had better outcomes. Only 8.8% reported that their business was doing poorly, whereas 17% of FWFC business owners reported they were not earning income from their business. However, again, the Covid-19 crisis is likely to have had a substantial impact on the performance and viability of enterprises, especially those in their infancy at the start of the pandemic.

DISCUSSION: THE EFFECTIVENESS OF POLICY INTERVENTION

The comparison of two retrenchment cohorts – the MMAL closure of 2005 and the full industry closure of 2017 – and their labour market outcomes provides new insights into how workers and their households fare post-retrenchment. These outcomes are the product of changes in industry composition, evolution in social (and regulatory) context, and shifts in policy intervention. Isolating the impacts of policy requires judgements about which, among many, causal factors dominate at a particular time. In drawing insights, it is important to acknowledge the differences in broader economic conditions between the two periods of data collection: the early 2000s were a period of economic prosperity in Australia, while life in 2020 was profoundly disrupted by the Covid-19 pandemic recession involving the episodic ‘lockdown’ of businesses and communities. In addition, the MMAL research was restricted to South Australia and one employer – an OEM – whereas subjects from the later study were drawn from two states – Victoria and South Australia – and included workers from firms in the supply chain as well as from the OEMs. Despite these caveats, a number of key lessons emerge from the comparisons presented in this paper.

First, the data presented in this paper make clear that the two populations of workers made redundant from the Australian automotive industry were similar in profile and comparable in their longer term prospects. The production workers surveyed after MMAL closed its Lonsdale plant and the workers surveyed in the FWFC study were broadly comparable in terms of key social and demographic variables, including the distribution of age, skills, educational qualification, forms of employment and number of hours worked.

Second, and importantly, many dimensions of working life post-redundancy were similar for the two groups. In general, after being retrenched from the automotive industry, workers’ incomes were more likely to fall than rise. A significant percentage of workers shifted from full- to part-time work and from permanent to casual work. The data show that many retrenched workers continue to experience a significant decline in the number of hours worked, a reduction in wage income and a greater reliance on precarious forms of employment, including labour hire arrangements (Barnes, 2021). Many felt they had experienced discrimination in the labour market, particularly age-based discrimination. Many workers viewed their new (current) job to be worse overall than their previous employment in the automotive industry. In many instances, other household members were impelled to change their employment arrangements in order to raise additional income. This assessment speaks to deteriorating employment conditions associated with Australia’s changing labour market and experience of deindustrialization. There can be little doubt that the Covid-19 recession, which sharpened the experience of insecurity and precarity among retrenched workers in 2020, also influenced the perceptions given voice in 2020. The Covid-19 recession undoubtedly exacerbated the vulnerability of insecure workers.

Third, the data present a more sober assessment of the employment outcomes for workers who lost jobs as a result of the closure of the Australian car industry than government analyses

would indicate (DESF, 2019; DISER, 2020). The consequences for workers were significant and included a relatively high unemployment rate. Three years after the 2017 closures, the FWFC data showed 14.4% of workers who were active in the labour market were still unemployed. While this is a lower rate than the 18% figure reported by the government at a follow-up survey conducted 12 months after the closures (DESF, 2019), the persistence of high unemployment rates suggests the labour market has not 'cleared'. Critically the rate of unemployment remained high relative to national averages, hovering at almost three times the national target rate of 5% and nearly twice the national peak of 7.5% unemployment during the height of the Covid-19 recession in mid-2020.

Similar outcomes do not mean that policies and processes associated with large-scale plant closures have not advanced over the past decade. The few differences between the two events – and, in particular, the proportion of FWFC cohort workers in better jobs with better pay – suggests there have been advances, but that their impact has been uneven. There can be little doubt that the Covid-19 recession sharpened the experience of insecurity and precarity among retrenched workers in 2020, influencing the outcomes of the FWFC study. However, in the final analysis, for less successful workers, what was true in 2005 was true in 2017: employers decide who gets which jobs. Many former manufacturing workers have not progressed in the queue for quality jobs because of the dearth of relevant opportunities in the Australian labour market rather than the abilities or commitment of retrenched workers. Employers do not prioritize the skills of long-term manufacturing workers, and in large part that is because the nation's economy has progressed. Retrenched workers need fundamentally new, deep, skills if they are assured of employment, and this will only be possible if government programmes focus on the acquisition of skills and knowledge central to 21st-century businesses.

CONCLUSIONS

This paper set out to compare the effects of major plant closures at two points in time in the same evolving social context. It contrasted the experiences of production-level workers made redundant as a consequence of the closure of MMAL's Lonsdale plant in 2005 with workers laid off as a result of the closure of the passenger vehicle manufacturing industry in Australia in 2017. In contrast to comparisons of plant closures in different places with quite different labour market and regulatory conditions, this comparison across time has revealed a durability of outcomes despite the efforts of policymakers to introduce better policy responses and support programmes. Since 2004, there has been substantial evolution in the processes surrounding plant closures, including the ways exiting firms manage the process of plant closure and the content and delivery of government programmes to assist retrenched workers. Nevertheless, despite these efforts and the evolving refinement of best-practice policies, many key outcomes associated with closures have remained relatively unchanged. Many workers exiting the automotive industry still experience poor labour market and employment outcomes, including a reduction in wage incomes, lower job satisfaction, reduced security of employment, ongoing pressure on household budgets and early retirement. This reality speaks to the enduring influence of structural factors in shaping the fate of workers retrenched after long careers in manual and trade occupations.

The established pattern in Australian major plant closure events has been that one-third of workers maintain their careers, one-third drop back to less skilled jobs with inferior work arrangements and one-third do not ever return to the labour force (Beer et al., 2006; Weller & Webber, 1999). Broadly, the FWFC data suggest that this pattern persists. However, there are some indications that policy innovations have improved outcomes for the competitive one-third of the cohort, whose outcomes have improved over time, and for the one-third who take up voluntary early retirement and see an improvement in their health. Conversely, policy

interventions have not overridden the effects of deteriorating labour market conditions that have worsened outcomes for the relegated middle one-third. This exemplifies the global reach of processes that bifurcate the labour market into ‘good’ and ‘bad’ jobs (Kalleberg, 2011). It is certain that labour market outcomes for workers made redundant with the closure of the automotive industry in Australia will continue to evolve and future publications from the FWFC project will provide insights into this set of transitions.

The outcomes presented in this paper are significant for Australia, but also for many other parts of the world experiencing economic disruption and the decline of key industries. The results presented here show clearly that the processes that lead to the rise of a ‘precariat’ (Standing, 2011) are deeply entrenched in the contemporary economy: enduring over time, evident in multiple localities and apparently impervious to the efforts of contemporary governments to achieve better outcomes. This is a conclusion of considerable profundity for decision-makers around the globe because it suggests simply improving the efficiency and effectiveness of current policies and programmes will be insufficient to achieve good outcomes for those at greatest risk. In part this means governments need to acknowledge the necessity of stepping away from a reliance on market-based responses to the challenges of economic restructuring. Instead, governments should look to a broad portfolio of programmes that brings together labour market responses with place-based policies that empower communities and give voice to those with the most pressing needs.

DISCLOSURE STATEMENT

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NOTES

¹ For further information about the study, see the project website at www.fwfc.com.au/.

² We acknowledge the work of scholars involved in that earlier work, including Professor Fran Baum, Professor Susan Richardson, Dr Lisel O’Dwyer, Dr Diannah Lowry, Associate Professor Anna Ziersch, Associate Professor Colin McDougall and Professor Fiona Verity.

³ FWFC participants were asked about their *quality of life* as a whole since being retrenched, while MMAL participants were asked about the *quality of their family life* since they were made redundant.

⁴ Some caution is needed in interpreting these data as FWFC participants were asked whether a spouse or partner changed their working arrangements, while MMAL survey participants were asked about change in employment for any household member. This could conceivably include children, unrelated adults or other family members.

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