

THE STRUCTURAL TRANSFORMATION OF AUSTRALIAN AGRICULTURE: GLOBALISATION, CORPORATISATION AND THE DEVALORISATION OF LABOUR

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Two labour issues have dominated discussion of the state of Australia's agricultural industry over the past decade. One arises with the claims that the industry is facing persistent labour shortages and that this is frustrating the industry's ability to benefit from the globalisation of the industry and more particularly the several free trade agreements that have recently been negotiated. This has prompted calls for the government to introduce an industry-specific temporary migrant worker visa. How industry or sectoral specific this should be has not been addressed, which is a concern given that the claims of labour shortages have been most vociferous with respect to low-skilled work, while the claims extend across the spectrum of the agricultural food supply chain (National Farmers Federation 2008, 2018a; SSCEEWR 2006; Agricultural Appointments 2015; Davies *et. al.* 2009; Condon 2018; Relph 2019).

The second issue that has focused attention on employment relations in agriculture concerns the record of abuse and exploitative practices that temporary migrant workers (TMWs) are being subjected to. A disproportionate number of the breaches of employment standard that the Fair Work Ombudsman deals with involve 'workplace exploitation' of visa

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holders (FWO 2017).¹ Given the geographic location of agricultural work, such practices, while not restricted to TMWs employed in agriculture, can take on particularly invidious forms for Working Holiday Maker and Work and Holiday visa holders (WHMs), international students who have some work rights as well as undocumented migrant workers. Taken advantage of by labour brokers and recruitment agencies, labour enterprises, logistics and accommodation providers, these workers can be subjected to physical and sexual abuse, charged exorbitant fees for services and paid below standard remuneration rates. There have been numerous exposés of the industry not complying with employment standards and industrial law, and the federal government industrial inspectorate, the Fair Work Ombudsman, has devoted considerable resources to investigating, educating and litigating to promote compliance with accepted community employment standards.

There is a rich body of research that identifies the various bases of the exploitative relations that define the experience of temporary migrant workers (TMW). Much of the focus of this research elucidates *what is*, rather than analyse the forces at work that explain *why* this is the case. This focus, I suggest, is very much premised on revealing what can be described as the ‘absences’, factors deemed to be missing or lacking in the constitution of the TMW and in the employment relationship, including: the lack of synergy, or symmetry, between employment law and migration policy that privileges the exercise of a punitive and restrictive migration regime over employment rights (Berg 2016; Howe 2016; Clibborn and Wright 2018; Howe *et. al.* 2018); temporary migrant workers’ subordinate position in a segmented labour market that institutionalises vulnerability (Underhill and Rimmer 2016); workers’ *de facto*, vis-à-vis *de jure*, subordinate labour market status (Clibborn and Wright 2018); a more general condition of precariousness that prompts migration and diminishes the capacity or preparedness of workers to protest their exploitation (Berg 2016); workers tolerating inferior conditions of employment because they are relatively superior to the conditions that prevail in their home country (Berg and Farbenblum 2017); the absence of legal rights or the inability to exercise employment rights (Tham *et. al.* 2016); the diminution in the role

¹ TMWs make up 6 per cent of the agricultural workforce, but are involved in 18 per cent of the disputes that the FWO seeks to resolve and 49 per cent of cases that involved court action in 2016-17 and 63 per cent in the following year (FWO 2017; FWO 2018).

of trade unions and the absence of union organisation and representation in the horticulture sector (Berg 2016; Clibborn and Wright 2018).

These absences have been attributed to the transformation in the political environment and labour market governance associated with neoliberalism. Labour market deregulation and changes in institutional arrangements, most notably with decreases in direct employment and increased reliance on labour recruiting and labour hire intermediaries with respect to the employment of temporary migrant workers are products of this neoliberal era and institutionalise the aforementioned absences. They also shape legislative responses, as is the case with legislation in Queensland and Victoria, now abandoned in South Australia and foreshadowed federally, that require providers of labour hire services to provide probity assessments and be licensed and which mandate businesses using labour hire to only deal with licensed providers (Queensland 2017; South Australia 2017; Victoria 2018; Fels and Cousins 2019). But, apart from the Migrant Worker Taskforce recommendation to criminalise underpayment of wages, there has been next to no consideration of the forces that impel an industry to engage in exploitative practices. The blame cannot simply be attributed to the opportunistic and acquisitive behaviour of labour market intermediaries, although they are necessarily part of the story (FWO 2017, 2015).

The TMW experience and industry restructuring are generally approached as discrete concerns, but the argument developed here is that it is constructive to consider the place of labour in Australian agricultural industry as reflective of the pressures being confronted by an industry that is being transformed. The claims of labour shortages and the exploitative conditions that have come to define employment relations are but two features of an industry that is restructuring as it transforms in response to the forces of globalisation. Work arrangements and employment relations are being reconfigured, business structures reconstituted along with reorientation of agricultural enterprise *raison d'être*. This study contends that the restructuring of the industry can be understood as a process of how the transformation in agricultural capital's engagement with labour articulates with the reconstitution of agricultural enterprise.

The analysis concentrates on the broadly framed developments that define this process, the big picture so to speak, and it is important to acknowledge that there are two limitations with this approach that suggest there is cause for qualifying the conclusions that can be drawn. The first relates to

illuminating the reconfiguring of work arrangements and employment relations. Analysis of workplace arrangements in agriculture has been overwhelmingly framed by a discourse defined in terms of revealing the TMW experience. One consequence is there is an absence of research on the implications of the increased reliance on TMWs for employment standards for resident (Australian) workers, although it is generally taken as a given that the recruitment of TMWs results in the erosion of pay and conditions for all workers (AWU 2014; FWO 2016; AMIEU 2016). The second reservation arises with respect to the broad focus on the agricultural industry rather than on those sectors of the industry where TMWs are largely concentrated. A whole-of-industry approach may downplay the diversity in employment arrangements within agriculture's various sectors and the distinctive patterns of restructuring, but I contend that there is a common transformation trajectory evident throughout the industry that justifies this broad-brush approach. Most notable is the increasing scale of agricultural production and its global framing. Moreover, this broader focus seems warranted given that the industry association, the National Farmers Federation (NFF), presents as the voice of the whole industry in its calls for an agricultural worker visa, an *agvisa*, and represents this as solution to an industry-wide problem.

The article commences its analysis of the transformation of Australia's agricultural industry by outlining the changing character of labour force formation as local sources of labour become less important alongside the expanded recourse to TMWs. It then considers whether this is a manifestation of the declining demand for labour associated with the broader demographic consequences of industry restructuring, evidence of a shortage of domestic supply, or if this issue of labour supply shortage is the perverse or a knock-on effect of industry transformation on labour force formation. The character of industry restructuring is subsequently analysed to reveal the pressures that drive recourse to TMWs and impel the industry to engage in exploitative and abusive employment practices. The article then expands on the transformation in the context of, firstly, the competitive pressures associated with a more globally-oriented industry and, secondly, the changing industry *raison d'être* that privileges short-term managerial objectives to the detriment of a longer-term vision and impels the preoccupation with TMWs.

Employment trends in Australian agriculture: the turn to temporary migrant workers

Farmers and agricultural industry associations from across the spectrum of the industry, including produce processors, have for some time now claimed that persistent and pervasive labour shortages have bedevilled the industry. Estimates of the labour shortfalls for low-skilled and skilled occupations that stand in the way of development have been bandied around, some surveys conducted, but there have not been any really comprehensive evaluations of labour requirements to justify the claims being made.² In an important initiative to address this, Howe *et. al.* (2017) have surveyed the horticulture sector and concluded that, rather than there being an issue of systemic labour shortages, it is more appropriate to speak of ‘labour challenges’. There are sectors and areas in the industry that are experiencing difficulties recruiting and retaining sufficient and reliable workers and it is claimed these challenges are frustrating agricultural enterprise. It is this frustration that lies behind the continuing calls for the labour force challenges to be met through the employment of migrant workers, and most particularly through the introduction of an agricultural migrant worker visa.

The appeals for an *agvisa* have been made despite the introduction of several temporary work visas that have resulted in an ever-growing temporary migrant workforce and which has radically transformed the composition of the industry’s workforce. This is intriguing because it is only relatively recently that Australia’s migration policy changed focus to permit for the first time the recruitment of TMWs. The Temporary Skilled Work (457) visa was introduced in 1996, marking the first substantive break in policy. More recently, a growing population of international students, with limited work rights, has resulted in many students finding work mainly in low-skilled occupations. Schemes that permit international holiday makers to work in mainly low to medium-skilled occupations – the Working Holiday Maker 417 visa (WHM), first established in 1975, and the Work and Holiday 462 visa – have been modified to allow individuals to apply for a second visa, and from 2018 a third visa, if they work in specified occupations in rural and regional areas. Agricultural

² ABARES have commenced regular surveys of the composition of the industry’s workforce and employment characteristics (Dufty *et. al.* 2019).

work has proved the most attractive option. Ostensibly cultural exchange programs, these schemes have been expanding to attract growing numbers from ever-more diverse eligible source countries and have been redesigned to boost engagement in work. More recently, the Seasonal Worker program has provided the possibility for engaging in work, principally in horticulture, for citizens of the Pacific Islands and Timor Leste. In mid-2018, the Pacific Labour Scheme was launched in mid-2018 to allow temporary employment for a larger number of workers from Pacific Island countries to engage in low-skilled occupations in northern Australia. While there is no generally agreed consensus on the extent of reliance on migrant workers, the anecdotal evidence suggests it is quite substantial, accounting for as much as 80 per cent of the horticultural sector's workforce, for instance, and it is reasonably high in other sectors.³

The claims of labour shortages and the demand for still further liberalisation of Australia's labour migration policy requires more critical scrutiny given the somewhat contradictory position of the industry expressing the need to secure a reliable and flexible work force at the same time as serious concerns are raised about its record in not complying with Australian employment standards and the potential of measures being introduced and regulations being adopted to police industry employment practices. There is, as noted and argued by Howes *et. al.*, uncertainty about the substance of claimed labour shortages,⁴ and this is a somewhat of a mystery given the organisational and structural transformation that the industry has undergone in recent times.

³ A sample survey conducted by ABARES in 2016 calculated that 60 per cent of workers in horticulture, 44 per cent of workers engaged in vegetables and 19 per cent in cotton were working holiday (WHM) visa holders (Valle *et. al.* 2017: Figure 4; Dufty *et. al.* 2019: Figures 13 and 14). A 2019 NFF workforce survey reported that '63 per cent of respondents opted to instead employ non-residents on their farms. Many said it was necessary because permanent residents were either not available in sufficient numbers or found farm work too difficult or not to their liking' (Martinello 2019).

⁴ The ABARE farm survey concluded that dairy farms and broadacre farming had significantly more difficulty recruiting than vegetable and horticultural sectors, and, with the exception of farms in close proximity to major metropolitan centres, few farms had difficulties recruiting labour; there was more difficulty in sourcing skilled 457 visa workers and this cohort accounted for a comparatively small number of the industry's workforce (Duffy *et. al.* 2019).

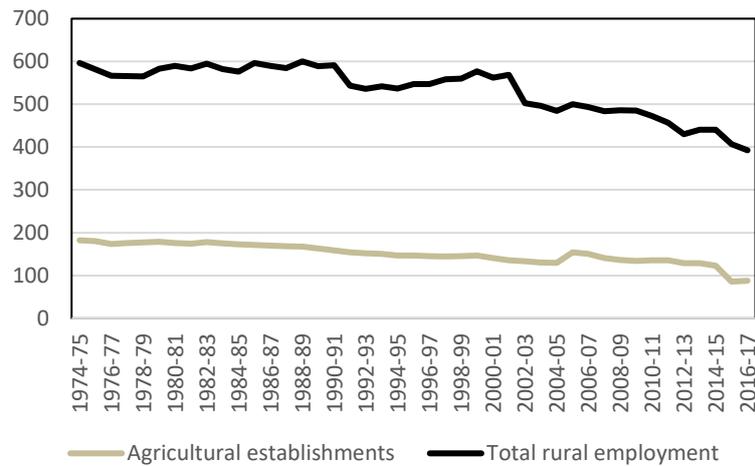
Agricultural industry restructuring and declining employment

For some considerable time now, the agricultural industry has been undergoing a structural transformation entailing the rationalisation of the number of farming enterprises. There has been steady decline in the number of farm enterprises over a lengthy period. This organisational transformation has predominantly been driven by the demise of small farming ventures, particularly in the number of sole family, owner-operator farms (Lagura and Ronin 2009; Lee 2019). These ventures have a history of wavering between being marginal and loss-making operations, many constantly on the brink of insolvency (ABS 2012).

The onset of the Millennium Drought in the closing years of the twentieth century is argued to have exacerbated the financial plight of the agricultural industry, marking a watershed in the pace of industry rationalisation (Lu and Hedley 2012). This was not immediately evident in the number of operating farms, as they endeavoured to weather the storm although, around the turn of the century, the pressures could no longer be avoided and the number of operations that ceased farming increased. What is apparent, however, is that the Millennium Drought unleashed a structural and organisation transformation in the industry that heralded a significant decrease in rural employment, with aggregate employment declining by 15 per cent in two short years and rural employment towards the end of the 2010s, two-thirds the size of what it had been.

Figure 1 charts this decline: the number of farms declined by 25 per cent in the 25 years prior to 2001; some 60,000 farms disappeared (Gray and Lawrence, 2001; ABS 2012; Productivity Commission 2009). The data show some expansion in the number of farm enterprises as the drought started to break, but this did not last, and rationalisation proceeded at a more substantial pace, and even more so from the mid-2010s, with some 40,000 farms disappearing (ABARE 2012).

Figure One: Agricultural enterprises and rural employment, 1974-5 to 2016-7 (000s)

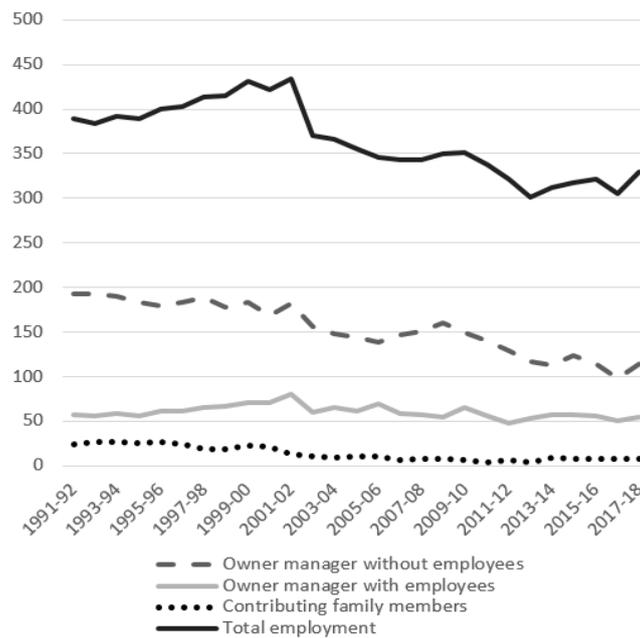


Source: ABARES (2018: Table 3.1).

This rationalisation partly reflected the growing dominance of large farming enterprises, or agribusinesses, with the rationalisation accelerating through a process of aggregation. Drawing on their higher profitability and greater borrowing capability, larger farming enterprises assumed greater significance in the industry, and the financial pressures thrown up by the Millennium Drought, especially the pressures presenting for smaller farm enterprises, created opportunities for the larger enterprises to expand their property holdings. The continuing decline in the number of agricultural enterprises reflected the continuing force of these pressures and how farm size became a more important factor in enterprise profitability (Connolly *et. al.* 2012: Table 8; Boulton and Jackson 2019). By the latter years of the 2010s, the extent to which farm aggregation had transformed the industry was evident in the largest ten per cent of all agricultural enterprises accounting for almost half of the industry's output, and this was reflected

in most sectors of the industry (Boult and Jackson 2019; Jackson and Shafron 2018; ABARES 2019c).⁵

Figure Two: Agricultural employment, 1991-2 to 2017-8 (000s)



Source: ABARES (2018: Table 3.1).

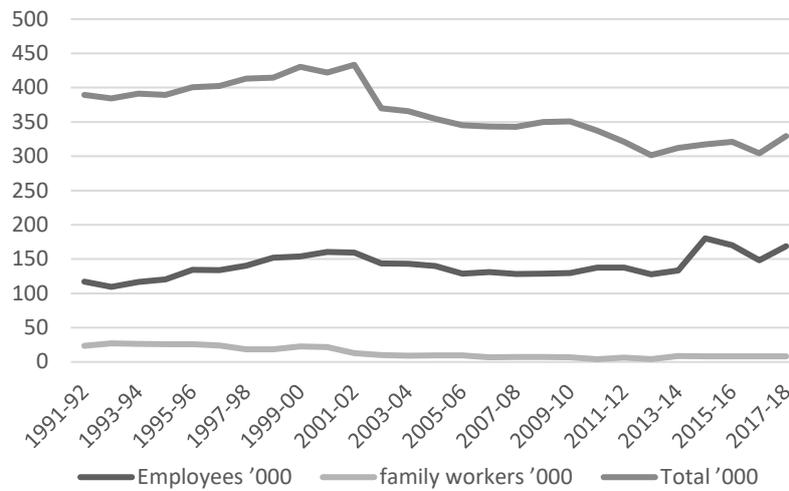
⁵ Interestingly, it was the more labour-intensive sectors which employed relatively more waged workers, such as vegetable farming, in which levels of concentration of ownership have been most pronounced. The vegetable farms cultivating more than 70 hectares, which accounted for just 14 per cent of all farms in this sector, accounted for 67 per cent of the sector’s total output (ABARES 2019c: Table 1). In horticulture, the largest 20 per cent of vegetable growing farms produce 90 per cent of produce. In dairy it is 80 per cent (Jackson and Martin 2014; Productivity Commission 2009). Moreover, both the magnitude of concentration and farm size have increased over this period. In 1996-97, the largest farms, accounting for 30 per cent of farms, produced 76.5 per cent of the value of industry output, and this increased to 80 per cent of output in 2005-2006; the smallest farms, accounting 9.8 per cent of output in 1996-97 produced just 7.2 per cent in 2005-2006, and this pattern was duplicated across beef, sheep, dairy and grain farms (Productivity Commission 2009: 20-25).

In other circumstances, this structural transformation and increased significance of large farm enterprises in increasing the scale of production would have meant greater recourse to the employment of waged labour (Dufty *et. al.* 2019). Yet, the relative increasing significance of agribusinesses did not translate immediately into an increased employment of waged workers. This seeming anomaly is best explained by the expansion of these enterprises generating economies of scale in the deployment of labour. A greater predilection for investing in new technologies, new production techniques and in increased mechanisation and generally increasing capital-labour ratios that enhanced labour productivity reduced labour requirements and thus employment opportunities (Valle 2016; Dufty and Jackson 2018; Dufty *et. al.* 2019; ABARES 2019a: Table 42; Boulton *et. al.* 2018).

Government contributed to this process of industry economising on direct employment by backing the more corporate-oriented enterprises to accelerate the pace of innovation and investment in adoption of new agricultural practices and technologies (Department of Agriculture 2019). The larger scale of production also made business sense for some farming tasks to be outsourced to contractors. This reframing of the reliance on wage workers pointed to something of a transformation in the managerial oeuvre, which is discussed below, but the effect was to strip employment positions from the industry, as the properties of the small farming enterprises that had employed workers were incorporated into the aggregated farms.

The decline in industry-wide employment also reflected the departure of farm managers/owners, one cohort within the family farm category, who had not employed workers. Many were driven out of the industry over the course of the drought. Some returned, although the diminution of this cohort persisted through to the 2010s (Productivity Commission 2005; Jackson and Turner 2014). Another cohort of workers who also departed the industry was the 'contributing family members,' again, further underscoring the organisational restructuring. Their numbers halved through the drought and continued to fall over the 2000s, recovering a little thereafter but never growing to more than a third the size they had been, as can be noted by reference to Figure 2 as well as Figure 3.

Figure Three: Employment on farms by employment status, Australia ('000)



Source: ABARES (2018: Table 3.1).

The structural transformation of Australia’s agricultural industry wrought a decline in the industry’s working population, in the number of small farmers, including those who did not employ workers and those that did, as well as in the number of waged workers. Notwithstanding the evidence that the total number of farm workers employed decreased, and that demand for these waged workers remained relatively subdued until the mid-2010s, it is apparent that a process of *proletarianization* was in train. Waged workers became a more significant proportion of the industry’s workforce, employed directly or by contractors, while the numbers of self-employed and contributing family members decreased. And the changing composition was sustained because farms that employed labour proved more resilient over the course of the drought.

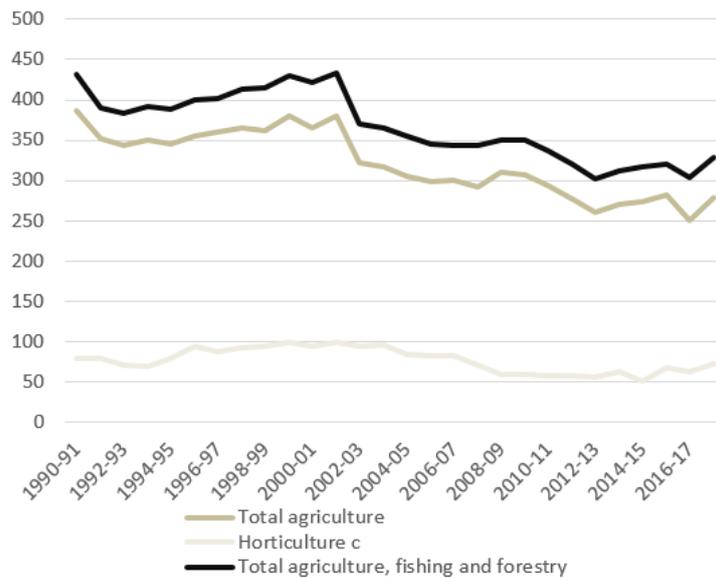
The longer-term consequences of the structural and organisational transformation became apparent in the turnaround in industry employment numbers by the mid-2010s. A more robust agricultural business environment, framed by a more buoyant global market, and the ever-

expanding ascendancy of agribusinesses and large family farming enterprises growing their businesses, increased demand for labour. As can be observed by reference to Figure 3, employees became a more significant component of industry employment, although aggregate employment did not recover to the levels that existed prior to the Millennium Drought.

Arguments about shortages of labour have to be considered in this context, a context in which any fall-off in the supply of labour has to be regarded as one of the effects of a shift in demand: potential workers departed the industry, if not the locality, because the demand for their labour diminished and as farmers left the industry. It is of course possible, though, that the growing number of enterprises employing labour, especially from 2013, and the increased significance of the large family-owned and corporate farms, generated some labour market pressures. Labour mobility patterns, particularly given the lack of symmetry in movement, with exits from the industry to seek employment in other industries and most obviously the resources sector, overshadowing the lack of confidence among prospective employers that the industry could attract new entrants from other industries, would have reinforced perceptions regarding labour market pressures (D'Arcy *et. al.* 2012; Lowe 2012). But such pressures would appear to be minimal given the flatlining of employment between 2002 and 2013. The demand for labour remained subdued, and there is little evidence of increasing competition for labour, such as in wage inflation, and this is borne out by some recent studies that query the dynamics of the industry's labour market (Dufty *et. al.* 2019; ABARES 2019a).

The diminution in the size of the labour force does not explain the rationale for the calls to relax restrictions on TMW visas and the increased recourse to employing TMWs in the period prior to the Millennium Drought – unless, of course, employers looked to TMWs as a more reliable, less expensive and more flexible source of labour. It also appears that labour mobility was a one-way phenomenon, exiting the industry with few signs of replenishment.

Figure Four: Persons employed in (i) horticulture, (ii) total agriculture and (iii) agriculture, fisheries and forestry, 1990-91 - 2017-18 (000s)



Source: ABARES (2018: Table 3.2).

Interestingly, an important detail that can be drawn from this broad-brush appreciation of the changing dynamics of the agricultural industry is that, while horticultural associations have been among the more vocal in petitioning for an agricultural worker visa, the level of employment in the sector remained flat, increasing marginally in the latter years of the 2010s (see Figure 4). If one acknowledges the growing numbers of WHM being employed in this sector - the ABS data which is drawn on in the construction of this chart does not include non-resident workers – then the chart suggests horticulture enjoyed a period of relative labour supply prosperity. This mirrored the employment trend for the agricultural industry more generally, as shown in Figure 4, and the trend in industry employment is much stronger when WHMs are added to the ABS picture, with WHM accounting for two-thirds of vegetable and horticultural farm

workforces and 19 per cent of cotton farms' workforce (Valle *et. al.* 2017; ABARES 2017: Figure 4; ABARES 2016). The recovery in the overall industry's employment of waged workers, supplemented by WHM, does not suggest there is substance to claims of difficulties in workforce recruiting (Dufty *et. al.* 2019; Valle *et. al.* 2017).⁶

Labour force formation in rural Australia: the diminution in the historical sources of labour?

The argument that the National Farmers Federation's chief executive has made that 'farmers had great difficulties getting adequate labour' when it appears that there has been a long-term trend of declining industry employment, including falling demand for workers, which admittedly has been reversed in the last couple of years, suggests that more consideration has to be given to reflecting on changes that might have blocked, or are blocking, engagement in the industry. There are at least two ways of approaching this question. One is to examine how established pathways for engaging in the industry may have been affected by the structural transformation of the agricultural industry. A second is to consider how the restructuring has not been complemented by changes in the organisation of employment practices.

The Millennium Drought, as noted, was a watershed moment in the restructuring of the industry, driving an exodus of small family farmers and reducing industry waged employment. The drought exposed and exacerbated the economic pressures that had defined the industry for some time: an industry characterised by low profitability and a disproportionately large number of farms that operated at a loss, and reliance on a comparatively poorly-paid workforce. These economic benchmarks did not occur in isolation. They became more obvious at the same time as the mining and resources sector began to boom. One simple measure of the disparity in the fortunes of the two industries was the

⁶ National Farmers Federation Chief Executive, Tony Mahar, disputes such assessments, arguing: 'industry evidence showed farmers had great difficulties getting adequate labour, to a much greater extent than the ABARES report suggested' (Higgins 2019d). The NFF President, Fiona Simson, has reiterated this (Simson 2019). The more recent NFF survey sums up the response as a 'farm labour crisis' (Martinello 2019). ABS labour force data does not include estimates of the number of temporary migrant workers in the industry.

manifestly different returns being generated as the resources sector took off and the drought deepened. The wages differential was quite pronounced: a difference in earnings in the range of \$120,000 compared to \$80,000. As the agricultural industry was shedding labour and small family farms either selling or fallowing, the boom proved a magnet drawing farm labour to work in the resources sector (Doyle 2014; Watts and Harrison 2014). The dampening of the resources boom did result in some returning to farming, but this was of a much smaller order (Kirkpatrick 2009).

The rationalisation of small farm operations also had indirect ramifications for the functioning of labour markets. Typically marginal and carrying high levels of debt, small-farm operations have faced ongoing difficulties in servicing loans. Off-farm work, which attracted farmers, family members and the self-employed, was one salve for generating income (Robinson *et. al.* 1982; Lim-Applegate *et. al.* 2003; Alston and Kent 2004; Productivity Commission 2005; Keogh, cited in Wahlquist 2010; Jefferson and Mahendran 2012). 'Off-farm' work did not mean not engaging in any agricultural work. On the contrary, the small operators, and often their spouses and children, helped expand the ranks of the agricultural industry's waged workforce, working 'off-farm' on other farms as casuals, semi-permanently and in a part-time or seasonal capacity, or as itinerant workers from time to time, chasing work along the harvest trail (Argent 1999; Alston and Kent 2004). 'Off-farm' work has historically made an important contribution to meeting labour requirements in horticulture, as well as boosting family farm income by as much as 30 per cent for small family farms (Lawrence and Gray 2000; Blinks *et. al.* 2016; ABS 2019b). The organisational restructuring that was manifest in some 40,000 self-employed farmers leaving the industry over the first few years of the new century, and especially during the worst couple of years of the Millennium Drought, represented the loss of a significant source of agricultural workers, of 'off-farm' workers, and as experienced agricultural workers their labour was in high demand. Their exit from the industry substantially reduced the pool of prospective workers. Figure 2 suggests this was the case from 2013 (ABS 2012; Alston and Kent 2004; Lu and Hedley 2004; Byrnes 2007; Productivity Commission 2009: 31-33). Underwriting the material implications of this was the decreased significance of another important source of labour, 'contributing family members' (see Figure 2). The diminution in their numbers impacted on the availability of both farm labour and off-farm work.

The age profile of the industry's workforce has also figured in the decline and composition of industry employment. Agriculture's workforce is disproportionately older than workforces in other industries. The Millennium Drought placed more onerous demands on the labour of farmers, demanding more effort and time in order to work against the effects of the drought to maintain the cultivation of crops and feeding stock, at the same time as revenues generated by the enterprise were eroded and the costs of farming increased. The need to generate other income, from off-farm work, increased and for an aged workforce these multiple demands tended to stretch the capacities of farmers, physically and mentally, taking their toll and prompting many to depart the industry (Alston and Kent 2004; Edwards *et. al.* 2008; Falkiner and Steen 2016; Robinson *et. al.* 1982; Lin-Applegate *et. al.* 2003; Productivity Commission 2009).

The ageing of rural communities also robbed the potential of replenishing labour force formation through family succession. Carrying high debt obligations, taking on the responsibility of running the farm proved confronting and discouraged the adolescent and older children of ageing farmers from taking on the responsibility of farm management (Falkiner and Steen 2016). Their preference to pursue other employment options outside agriculture, sometimes at the behest of their parents, foreclosed what had hitherto been a potential source of labour formation. As Barr (2014) asked 'where are the young farmers?' The exodus of a younger working population exaggerated the age structure of the rural population, reinforcing the diminution of an active workforce (Hugo 2005; Vanclay 2003; Lu and Hedley 2004).

This decline in the agricultural industry's labour force has also been mirrored in the depopulation of rural towns, and this has contributed to the reduced availability of small town residents possibly supplementing the agricultural industry workforces. Small-town residents have had a history of augmenting their income by engaging in part-time, casual or seasonal work on farms, and this shifting dynamic cannot be separated from the organisational restructuring of farming associated with the increased scale of farming, the increased concentration of farming enterprise ownership and the corporatisation of farming. Agriculture's organisational restructuring has impacted on small rural towns because the transformations in agriculture have affected the service role of the towns, with service suppliers relocating or concentrating their businesses in regional centres to match the greater requirements of the larger

agricultural enterprises (Alston and Kent 2004; Edwards *et. al.*: 7-8; Productivity Commission 2009: 59-60; Varischetti 2019). Local bank closures have been emblematic of the loss of business, with such closures having a snowball effect on other businesses and services, undermining the economic dynamism of small towns.⁷ This, in turn, has had a cascading impact on the age profile and population numbers in small towns because it has generally been the older residents who remain the small-town stalwarts, younger residents finding it easier, or necessary for employment opportunities, to migrate to regional centres or metropolitan cities. The depopulation of rural towns and communities underscores the changing demographics of rural Australia to affect labour supply, rebounding on the organisation of farm work.

The decline in overall agricultural employment and the associated depopulation of rural Australia from which much of the industry's workforce is drawn has had a knock-on effect on labour supply. Decreased employment has translated into declining labour supply, and this helps explain both the logic in industry's contention that there is a labour shortage and the frequent refrain that 'there are no jobs'. Recourse to temporary migrant workers might well be viewed as the necessary antidote to the declining participation of resident workers in agriculture. Certainly, this impression is reinforced by the estimates of some 110,000 TMWs engaged in horticulture, drawn from the working holiday schemes, the SWP, the international student population and a cohort of refugees seeking asylum who have been issued bridging visas, as well as a sizeable number of unauthorised overseas workers (FWO 2018a; Howe *et. al.* 2017; Underhill and Rimmer 2015). This masks the deficit in the demand for and the employment opportunities for resident workers. What appears to have occurred is the substitution of one group of workers, TMWs, for another group of workers and residents. Missing from the narrative is an understanding of this conundrum: if recruiting workers is such a challenge, why does the industry have such a poor record in retaining a resident workforce and so persistently fail to comply with employment standards? This suggests the need to turn the focus of inquiry to understanding the

⁷ Interestingly, and as Clibborn (2019) has observed, some small towns have embraced the influx of backpackers, welcoming them for contributing to the revitalisation of the local economy, and advocating on their behalf.

dynamics of the structural transformation and rationalisation of the industry alongside the shifting demand for labour.

Structural and organisational transformation of Australian agriculture

The persistent and pervasive nature of non-compliance with employment standards for TMWs has been well documented by researchers, media, parliamentary inquiries and government agencies, such as the Fair Work Ombudsman, that monitor and work to enforce compliance with workplace laws. Submissions to State and federal government inquiries into labour migration policy and labour markets, and action taken against employers by the FWO, demonstrate that these practices are common throughout the industry. Agriculture is, of course, not the only industry in which TMWs suffer abuse and exploitation. Such practices are endemic in other sectors of the economy in which many temporary migrant workers are employed – in hospitality, accommodation, food services and retail franchises – and the recurring exposés have forced State and federal governments to introduce some legislative initiatives in attempts to arrest non-compliance. Following the 2019 release of the report of the Commonwealth-commissioned Migrant Worker Taskforce, more legislative measures are promised, including designating wage theft as a criminal offence.

However, exposing the exploitative practices that have come to shape the experience of TMWs does not reveal the pressures that shape the behaviour and practices of employers. A starting point in identifying *why* exploitative and abusive practices are so prevalent is to reconsider the organisational and structural transformation of the industry and the various forces that are driving this. The neoliberal policy agendas that have affected labour market and employment standards have also wrought changes for industry. Federal and State government policies, for instance, forced restructuring of industry, which in turn impelled changes in employment relations. Long-established commodity marketing boards that oversaw price support schemes alongside rural adjustment schemes had provided a degree of certainty on the rewards of agricultural enterprise (Cockfield and Botterill 2005). That certainty was eroded with the adoption of neoliberal policies resulting in the deregulation of marketing boards and abolition of rural assistance schemes. Industry deregulation

reinforced the precarious tenure of agricultural enterprises, especially for the small family farms (Lawrence and Campbell 2014). The industry was not a highly profitable one, less so for the family farms, and those enterprises that were returning a profit reported low rates of return (ABARE 2015; Lagura and Ronan 2009). From 2002, a downward profit trend set in that accelerated after 2007 when the drought started to break (ABARE 2015). With government assistance concentrated on improving productivity, small family farms were harder hit, with as many as a quarter becoming loss-making ventures (Jackson and Martin 2014).

With the removal of government support, cost pressures became more pronounced and highlighted the significance of primary commodity producers as price takers. What little market power that had been exercised dissipated in the face of a domestic market that was being radically transformed with the globalisation of the economy. The dominant position of two supermarket chains was one dimension of this, their buying power translating into the ability to dominate the local market as well as buy offshore. Three major fast-food outlets, McDonald's, KFC and Hungry Jack's demonstrated their international outlook by sourcing overseas potato supplies, a move that had been initiated in response to supply uncertainties during the drought (Fyfe and Millar 2012). Farmers also faced an increasingly more highly concentrated buyers' market with the food manufacturing industry undergoing significant rationalisation. There was increasing concentration of ownership of produce processing capacity, most obviously with the ascendancy of JBS and Teys-Cargill dominance of beef processing, and this was evident in the start of a shake-out in the dairy industry as well as in vegetable processing (Sanyal 2014). The rationalisation has also resulted in the relocation of some processors to locations with lower wage costs, such as Heinz shifting production of foodstuffs to New Zealand (Austin 2012; Lauder 2012).

The negotiation of free-trade agreements provided further evidence of how globalisation and liberalisation was reframing agricultural market dynamics to affect the organisation and structure of the industry. Free trade agreements were supposed to underpin expansion into export markets. With 60 per cent of agricultural produce being exported, this seemed like a promising development, but with potential market openings in countries that were highly protective of their agricultural industries, the local producers' ostensible competitive advantage was somewhat attenuated (Lawrence and Campbell 2013; Lawrence and Gray 2014; Productivity Commission 2005). On the other hand, as domestic market barriers were

lifted, there was a surge in food imports, which eroded domestic producers' share of the market (Austin 2012; Fyfe and Millar 2012; McGovern 2015). Running in consort with these challenges to revenue flows were the climbing costs of land and water rights. The rationalisation of industry and the associated aggregation of farm land holdings was largely financed through borrowing from banks, and embedded in this was the increased cost of servicing the loans. From the late 1980s, the state's liberalisation project added another cost. The attachment of water allocation to land holdings began to be severed in order to establish markets in water rights. Ostensibly designed to promote more efficient utilisation of water, from 2004 when access to water became contingent upon the purchase of a water rights licence, this engendered new and additional cost pressures. Since most restrictions were lifted on who could bid for and hold water licences, farmers have had to compete with others speculating on prices that have escalated (Albert *et. al.* 2013; Aghakouchak 2014; Byrnes 2007; Doolan 2015; Higgins 2019a, 2019b, 2019c). Water rights could be registered as collateral for loans, thereby potentially reinforcing the material vulnerability of high-debt equity ratios that were secure as long as prices, as was the case with land, continued to appreciate. But a new element of risk was injected into borrowing with banks providing finance by drawing funds from international money markets, denominated in foreign currency, which meant that servicing such loans suddenly became more costly with the depreciation of the dollar exchange rate. This served to emphasise the diverse range of ways in which agricultural enterprise is captive to the prices they are presented with for their produce, the capital they borrow and the right to access their water requirement.

Structural cost constraints and the devalorisation of temporary migrant waged labour

The standout message from this reflection on some challenges presenting for revenue flows is the relative impotence of farmers' capacity to negotiate prices and costs in produce and financial markets. Marx draws a distinction between the factors of production, between constant capital, the land and machinery required for production, and variable capital, essentially the labour that brings together the factor inputs to animate the production process. The distinction is one that has some bearing on the Australian agricultural industry insofar as cost pressures are concerned and

with respect to the underpayment of temporary migrant workers. The designation 'variable' in the context of the challenges that Australian agriculture encounters is thus quite prescient. On the one hand, as argued above, the relative significance of labour as an input in the agricultural industry has diminished. This appears to be the consequence of the declining demand for waged labour, the consequence of the increased aggregation of landholdings and concentration of ownership and the increasingly capital-intensive nature of agricultural production resulting in decreasing labour to land or output ratios. On the other hand, the industry clamour about labour shortages belies this fall-off in labour force formation and predictions that this fall-off will continue (Falkiner and Steen 2016).

The cost of labour remains a critical consideration in enterprise profitability, and perhaps more so given the relatively greater significance of waged work in the industry (Senate Standing Committee 2016: 18). Competitive pressures are signalled as one factor driving the turn to underpayment as a business survival strategy, and once underpayment has taken root in some quarters it is not long before competitive pressures establish the practice as the norm. The FWO's *Inquiry* reported that cost pressures were the leading challenge confronting the industry, and labour costs were more susceptible to cost cutting than any other category of costs (FWO 2018a: 24). As the vice-president of the Victorian Farmers Federation noted, a survey of horticulture members established that only 2 of 265 members canvassed were compliant with employment standards, with underpayment the norm (Seccombe 2019; Underhill and Rimmer 2016). As much as underpayment is linked to the employment of unauthorised migrant workers, the NFF president's explanation that recruitment of these workers occurs because farmers are 'in many cases so desperate for workers that they knowingly allow migrants to work illegally with substandard labour conditions', but clearly labour shortages do not explain why such recourse should go hand-in-hand with substandard conditions (Higgins 2019d; Sullivan and Fitzgerald 2019).

There are a range of structural pressures that have prompted farms to underpay TMWs. Diversity in the organisational structure of farm enterprises was one such factor. Larger farm enterprises generally enjoy the advantage of economies of scale, with lower production costs compared with their smaller counterparts (ABARES 2019c: Tables 20-25). Agribusinesses were also in a stronger bargaining position with respect to negotiating supply contracts with prospective buyers, and more likely to

strike long-term supply agreements with the supermarket chains and processors, agreeing on prices for their produce that ensure a degree of certainty into the future. The large farms, including horticulture and vegetable growers have strengthened their position in the market by farming in a range of geographically and climatically diverse locations across Australia. This has extended their harvest season and their capacity to supply produce for much of the year. The construction of glass houses in which tomatoes and a range of vegetables and salad items are cultivated has had similar consequences in lengthening the supply season to enable continuity in supply contract arrangements.

Such developments and associated contractual arrangements could lock small farming operations out of some markets making them more likely to have to confront a classic *laissez-faire* market situation in which they were in a weak bargaining position and forcing them to explore ways to reduce costs in order to compete (David *et. al.* 2007). The small family farms are also more vulnerable to the prospect of a smaller operator, anticipating a bountiful season that could deliver higher prices for a particular crop, 'opportunistically' engaging in the cultivation of that crop that drove down the market price (Weragoda *et. al.* 2017: 2; Ausveg 2018). This was especially the case in horticulture with its low set-up and capital costs.

Historically, small family farm enterprises have sought to maintain competitive cost structures by drawing on family labour, but this practice has been declining. Their mounting competitive pressures explain the recourse to the employment of TMW or unauthorised workers on terms that do not comply with industry standard remuneration rates (David *et. al.* 2007; Seccombe 2019).

The focus on labour costs has been multiplied by the concerted efforts to expand Australia's exports of primary commodities and the billion-dollar export industry ambition and by the increasing international orientation which has brought into sharper relief the challenge of intensifying competitive pressures. As Keogh *et. al.* (2015) have observed, expressing sentiments that echo across the industry, Australian producers face increased international competition with the lowering of trade barriers and increased exports from South America and Eastern Europe. Domestic labour costs place Australia at a competitive disadvantage because: 'Australia has become one of the highest cost nations globally, especially in relation to business inputs such as labour.' Keogh, in his capacity as an

Australian Competition and Consumer Commission commissioner, has expressed this with even more brutal frankness:

Australian farmers and processors cannot ever hope to experience energy, labour, transport and regulatory costs as low as those experienced by many of our major global competitors, so even with sustained productivity growth through all levels of supply chains, trying to beat global competitors purely on price is not a sustainable strategy [...] for Australian agriculture more generally, the ability to compete purely as a 'least cost supplier of generic product' is rapidly diminishing (2019).

The chief executive of Australia's preeminent horticultural business, Costa's Harry Debney, has endorsed this concern, arguing that: 'Australian horticulture is still constrained by high labour costs' (Neales 2018a).

The highlighting of these competitive pressures has been magnified by the globalisation of the agricultural food supply chain (AMPC 2018). In the instances of horticulture and meat processing, Australian-based operations are having to compete against the international production ventures which they have established – Costa having established berry farms in China and Morocco and partnered with the giant North American producer Driscoll – or are the Australian operations of transnational corporations – as is the case with meat processors JBS and Teys-Cargill, which dominate the Australian industry. A similar situation has intensified the competitive pressures in the dairy industry, which through a succession of takeovers, has established the industry as a truly global enterprise putting local producers in competition with other corporate producers or, in the case of some dairy farms now owned by Chinese corporations, including Tasmania's formerly named Van Diemens Land Company and the Moxey and Perichs families' farms merger and union with China's New Hope Dairy Holdings (Manson 2015), in competition against the new agribusiness owners' expanding operations in China. In each of these instances, competition entails competing against producers in low-wage economies.

Such forms of international organisation and competition serve to sharpen the focus of industry on relative labour costs. This points to a key rationale for the underpayment of TMW: competition and the desire to compete effectively in a level playing field is affecting the industry with regards to its capacity, or willingness, to remunerate workers in line with industry awards or enterprise agreements with the objective of ensuring their

internationally competitiveness.⁸ As the Senate Standing Committee investigating horticultural labour shortage claims noted, and revisited by Howe more recently, the implication being expressed, though not explicitly, is that wage levels are excessive and should be reduced in order to underwrite the industry's economic viability; employing WHMs is one means of achieving this (SSCEEWR 2006: 18; Joanna Howes, cited in Patty and Boys 2019; see also Campbell 2018).

The industry has sought to contain any wage inflation, and increased reliance on TMW has been one means of achieving this. Industry associations have been resolutely opposed to adjusting the minimum wage that employers are required to pay workers under the terms of the 457 and 482 skilled labour visas. The minimum rate of remuneration was set in response to criticisms that the 457 visa program could result in lower-paid migrant workers displacing local workers and drive down remuneration standards. The Temporary Skilled Migration Income Threshold specified minimum rates, which were aligned with industry market rates at the time the Thresholds were introduced. The TSMIT has not been adjusted in five years, and the industry has been quite candid, and successful, in arguing that it should not be increased (John Hourigan cited by Gothe-Snape 2019). In fact, following the abolition of the 457 visa and introduction of the 482 visa, there were some skilled occupations in sectors of the industry – dairy, meat processing and pork farms – that had previously been accommodated in the 457 list of occupations but were not included in the 482 visa list, and following industry lobbying the government agreed to include these as stand-alone industry labour agreements. However, the details of these agreements are confidential, and while remuneration rates are supposed to be comparable to market rates, there is no mechanism for establishing that individual agreements comply with the requirement (personal communication, Employer Sponsored Program Management, Department of Home Affairs, 4 March 2019). The appeal of the Designated Area Labour Agreements for employers is that they include provisions that permit concessions to be made in set employment standards

The supply of TMW relieves some of the pressures of labour costs or, at least, removes some of the potential for wage inflation were the industry

⁸ And industry is clearly alert to this. For instance, JBS reports that its cost of processing animals in Australia is 1.5-3 times that in other countries (Australian Abattoirs 2017; Condon 2018)

wholly reliant on domestic labour force formation to meet employment needs. This is a classic case of a reserve army of labour being brought to bear and, once established, becoming the subordinate rung in a segmented labour market. The structural pressures that give rise to this are driving agricultural enterprises to employ TMWs and to employ them on lower rates of remuneration and poorer working conditions, on exploitative terms. It is the threat to this form of labour force structuring that prompts the industry's criticism of the Seasonal Worker Programme, that the Programme imposes too many costs on employers and is too inflexible in setting the minimum requirements for work and the duration of employment. The government has since given ground to employers by relaxing some of the administrative requirements (Commonwealth of Australia 2015a).

But it is not just this capacity to engage a vulnerable workforce, but the fact that underpayment can be so readily regarded as acceptable that gives more meaning to the reserve army of labour/labour market segmentation theses. Underpayment is a common practice if not more the norm than is acknowledged judging by the FWO *Harvest Trail Inquiry*. Underpayment of wages has to be regarded as how industry chooses to respond to the pressures of domestic and international competition farmers face, and the power relations that shape the organisation of the industry.

While agricultural enterprises are essentially price takers with respect to the purchase of factor inputs, such as land, water and seed, the cost of borrowing and the sale of their produce to wholesalers, supermarket chains and into export markets. There is quite limited scope to negotiate any relief from these costs. By contrast, there is scope for employers to set remuneration rates. The prevalence of wage theft demonstrates that the industry is exercising just such an option, one they consider within their immediate reach and over which they as employers have some command. As Howe *et. al.* (2017) have noted, labour costs are one of the few things that growers can have much direct influence over. Wage theft has become the option that many farms are choosing to improve the chances of their enterprise surviving financially (Keogh 2019).

However, it does not necessarily follow that exploitative practices by paying below-standard wages are the only option. Two of the largest horticulture enterprises, Costa and Select Harvest, for instance, have concluded enterprise agreement with the unions representing workers that secure the commitment to pay minimum wages and comply with industry

employment standards Costa 2019; Select Harvest 2019: 53). Both report being committed to building the local workforce and treating workers in a 'fair and reasonable manner' and to ensuring contracted labour is paid by contractors according to accepted standards. No doubt, the scale of these agribusinesses and the size of their workforces, resident as well as TMW, has provided opportunity for workers and unions to establish a foothold within these two enterprises to negotiate enterprise agreements. But it is also likely that the nature and organisation of their productive activities, having invested in new techniques and across climatic zones, are not so concentrated around a comparatively short-harvesting season that necessitates the rush to engage labour to work the harvest. Engaging a workforce that has greater continuity of employment provides a foundation for reliability, and, as these agribusinesses' annual reports attest, the opportunity to invest in labour force formation and upskilling to increase labour productivity within the enterprise.

The telescoping of the agricultural business horizon and the devalorisation of labour

The reliance on TMW and recourse to unlawful wage deflation have to be seen for what they are: pragmatic and short-term solutions to circumscribed labour force formation. They are solutions only insofar they provide some semblance of competitive advantage with respect to labour costs. Crucially, this advantage is contingent upon restricting TMW's ability to establish residence rights in Australia, which would enable mobility, allowing them to exercise the right to change employers and to assert their industrial rights and no doubt raising concerns among employers that such rights would undermine the call for a reliable workforce. The government has moved quickly to allay concerns about labour shortages, countering a fall-off in numbers of some categories of TMWs applying for visas in order to maintain the inflow of labour. It has wasted no time in modifying existing TMW schemes, to permit extended periods of employment, adding an ever-growing number of partner countries from which TMWs can be sourced, lifting the caps on the number of visas issued for Work and Holiday program and the Seasonal Worker Programme and introducing new temporary labour schemes such as the Pacific Labour Scheme and approving Designated Area Migrant Agreements.

The determination to ensure the flow of TMWs reflects a more general shift in the forces shaping the dynamics of the industry's organisational and structural transformation. The deregulation of the industry removed some of the measures that insulated farmers from the vagaries of the market and this in turn opened the way for aggregation of farm properties. The Millennium Drought exacerbated the difficulties faced by some farmers and with the increasing number of bank foreclosures the opportunity for enterprises with the capital or the capacity to borrow to expand their property holdings (Garnett 2014; RBA 2014; Falkiner and Steen 2016). The process of aggregation became more evident with growing interest by international investment management trusts, pension and sovereign wealth funds seeking to diversify their asset holdings and spread their risk by investing in Australian agriculture. The depreciation of the Australian dollar during the global financial crisis made investment in farm enterprises an attractive proposition, especially when this entailed acquiring land and water rights which were appreciating in value.

This investment activity, however, contributed to spearheading a reorientation in the definition of business undertakings, especially in the post-GFC period. The larger enterprises adopted accounting techniques and practices prevalent in the international corporate world based on reconfiguring fixed and illiquid assets in ways that they could become sources of revenue. Within the agricultural industry, this has resulted in the adoption of some novel accounting techniques as well as a repurposing of farming enterprise. Land, the fundamental foundation of farming has, for instance, been historically recorded as a tangible fixed asset, valued because its physical terrain on agricultural enterprise is conducted. In accounting terms, it is valued in monetised form at cost or sometimes at nominal market value, and as the manifestation of equity, this valuing serves as collateral for securing loans.

The adoption of innovative financial practices over the course of the 2000s has radically altered the management of land. There has been a reconfiguring of land that enables it to be treated as an asset that can be traded with the object of generating revenue streams. Land parcels have been repackaged, title sold to another distinct legal entity within the corporate structure, and become a source of revenue and expense through lease-back arrangements. Such practices reconstitute the asset as an animated investment that yields financial returns (Wibberley 2014; Grain Research and Development Corporation 2018; Senate Standing Committee 2016). One illustration of this has been Costa's decision to hive

off the company's land holding into a distinct legal entity and for this to be leased back to Costa for cultivation purposes. Similar ventures are evident across the industry's landscape, such as Rural Funds Group leveraging off its land holdings through leasing arrangements (Schlesinger 2019a, 2019b, 2019c, 2019d, 2019e; Wilmot 2019; Rural Funds Management 2019).

Trading in water rights has emerged as a more substantial manifestation of this process. So-called 'assetisation' has become a common legal manoeuvre and accounting practice among larger agribusinesses in Australia for expanding revenue-producing sources (Costa 2019; Select Harvest 2019). No doubt, the acquisition of water licences by investment houses has contributed to a general reorientation in farm management priorities (Duxton Water 2019; Courtney 2017; Rural Bank 2019a, 2019b; Snow and Jobson 2010), and this replicates similar developments in agricultural industries in other parts of the world (Birch 2016; Ducastel and Ward 2017; Ward and Swyngedouw 2018).

Such schemes are aspects of the more general process of financialisation, of turning assets into financial instruments that can be traded. This includes the development of derivatives, traded against the anticipated underlying value of a commodity that is yet to be produced. The derivative provides opportunity to speculate on, or hedge against, the value of a commodity that is intended to be produced, in effect a proxy designed to call forth and realise the value of the actual commodity. As the annual reports of Costa Group and Select Harvest indicate, trading in derivatives has become an important feature of the stock in trade of agribusinesses and other large farming enterprises producing in Australia. Financialisation has transformed the *raison d'être* of these two enterprises as they trade in the anticipated value of titles to property.

Banks, the preeminent providers of capital for the industry, are thoroughly immersed in the financialisation process. Much of the capital banks provides to farmers is sourced internationally, and this has heightened banks' concerns about the security of loans. They have adopted a more hands-on role in monitoring the financial affairs and governance of farm enterprises and are pressuring agricultural enterprises to look towards innovative means of generating additional revenue flows (Laferté and Diallo 2017). Thus, small and medium-sized family farms have been drawn into the reorientation of the industry's *raison d'être*, albeit as more passive than active participants in the process (RBA 2014). Reflecting this,

family farm enterprises are seeking greater legal protection to limit personal liability by registering as incorporated entities and experimenting with and actively engaging with the new financially-orientated business models, reforming as trusts or as limited liability and public companies to pursue new strategies for profit making (Connolly *et. al.* 2012: Table 5; Schlesinger 2019a; Birch 2017; Falkiner and Steen 2016).⁹

Investment trusts, pension and sovereign wealth funds are also becoming more actively engaged in the opportunities that present in Australian agriculture and deepening the financialisation of the industry. Several very large North American pension funds, and most notably the Ontario Teachers' Fund, have bought into the industry, diversifying their investment portfolio in order to spread their risk (Cranston 2015; Larder *et. al.* 2015; Larder *et. al.* 2018). Several established investment groups in Australia, such as the Macquarie Group, Rural Funds Group and Rabobank, have been joined by a number of investor newcomers intent on building a broader mix of assets. Superannuation funds are, for the first time, expressing interest in the industry, and the investments in higher-value commodities, such as avocado, cotton, nuts and vineyards, and in high-yield ventures more generally affects investment patterns and management strategies throughout the industry (Rabobank 2018; Rural Funds Group 2019; Schlesinger 2019f). Alongside the trading in newly established agriculture-related assets, these investments have consolidated financialisation as the foundation of new business norms.¹⁰

The process of financialisation highlights the pressures which frame agricultural enterprise and particularly how these pressures manifest with respect to employment standards, and there is one further way in which this plays out. Financialisation focuses attention on the immediacy of

⁹ 'Australian farms have traditionally been held within simple legal structures, *e.g.* sole proprietorships or family partnerships.' However, the prevalence of trust and company structures has increased significantly since 2005 (Grain Research and Development Corporation 2018; Keogh 2012; ProAgtive 2017). This metamorphosis is not without its familial tensions, as is apparent in the disagreements around the incorporation of Costa and the group's and partnering in GoFarm, an investment trust that is investing in a range of asset classes (Schlesinger 2019f; *The Weekly Times* 2019).

¹⁰ This is not without its tensions as has been evident in the Costa Group. The retirement of the long-term head of the Group, Frank Costa, and the Group's CEO, resulted in the succession of a younger management team that has shifted the focus from investing in improving agricultural productivity and the workforce to more speculative activities involving financial practices (Kitney 2015; Schlesinger 2019a).

enterprises' economic standing. It engenders a preoccupation with managing financial flows and particularly with an eye on the short-term. Effective and successful management turns on the short-term, and the different ways in which these cost pressures can be managed provides insight into why the organisation of employment relations and why TMW are so vulnerable. Managing revenue streams becomes a priority. Baulking at paying the banks, the rural merchant suppliers, the water licence holders is not an option if cultivation and harvesting are to continue, and at the end of the day the prices agriculturalists receive for the sale of their produce are not something they have much influence over.

The management of labour is a somewhat different story because they do have some control over affecting the cost of the measure of their commitment to their workforce. They can, for instance distinguish between a core group of workers that they engage on a continuing basis and for whom they provide career opportunities and invest in, and a subordinate workforce recruited from the periphery of the labour market and whose employment status is more precarious. This workforce includes local workers and itinerant residents, such as grey nomads, but at least in the horticulture and vegetable growing sectors, TMW constitute a substantial proportion of the workforce. This is the labour market model that some of the larger farm enterprises, such as the Costa Group and Select Harvest, have adopted. This is a model that is based on the devaluing of TMW relative to the resident workforce.

The more pragmatic and ruthless response is to take advantage of the vulnerable position of the TMW. Financialisation of enterprises can drive farm management in this direction because it has immediate results. And they have largely been able to get away with this strategy.

This has at least two critical implications for understanding the character of employment relations in the industry. Firstly, as much as labour has been subject to the process of commodification, the formal inability of farm enterprises to secure property rights over TMW's capacity to exercise labour power severely limits the possibility of transforming labour into a tradeable commodity and thus being directly subjected to the financialisation process. I say limits, rather than circumscribes, because labour hire companies can trade in TMW's capacity to labour under the terms of labour hire contracts. The demand for replenishing the stock of labour and establishing a more specifically industry-defined visa can be considered as a step towards circumventing this limit, although even this

initiative would not place labour on the same footing as land, water rights or the agricultural commodity. There does not as yet exist a comparable futures market that would, for instance, provide scope for speculation on the future composition and/or productivity of the TMW work force.

The second implication arises with the shift in the temporal reframing of the business horizon associated with financialisation. The horizon has been both lengthened insofar as investors in the industry can look beyond the immediacy of the production cycle by trading in future possible market scenarios, in derivatives and through hedging. The horizon has also been shortened insofar as the process of valuing the net worth, the profitability, of an enterprise calls for immediacy in that valuation, and it is against this present value that the future, the net present value, is set. This recalibration of the management oeuvre shifts the focus to how revenue streams can be enhanced and expenditures contained. This highlights the impotence of agricultural enterprise in its inability to contain some inescapable costs, the cost of servicing debt, of key inputs including water which now has a price and likewise land, which is now priced through leasing arrangements.

Labour is the stand-out outlier in this mix. There is no real incentive for the industry or individual enterprises to invest in labour force formation because it cannot be assured that it will capture the benefits of that investment. The industry's *raison d'être* that privileges the short-term works against this possibility. For a similar reason, there is no real incentive to treat TMW on terms consistent with minimally accepted employment standards. And with government sanctioning of employers underpaying or mistreating TMW an elusive feature of the regulatory regime, wage theft not only contributes to an enterprise's financial position, it can become the norm. The preoccupation with the short-term becomes the rationale for treating TMW as the expendable input in the industry.

The cost pressures and telescoping of the business oeuvre also helps to explain the recourse to recruiting migrant workers through labour hire operators or engaging workers through labour contractors. The labour market intermediaries become the conduits for minimising the duration of farmers' engagement of and with workers. The contracting out of recruitment and employment act as subterfuge for farmers pleading ignorance and avoiding responsibility for non-compliance with employment standards. Some in the industry explain this reliance on

labour market intermediaries as a reflection of the lack of expertise in recruiting and in selecting reliable workers, and directly employing and supervising them, and that it makes better business sense for finite management resources to be devoted to other tasks. The time and resources that would be required to develop a measure of human resource management expertise that farmers generally do not have can be avoided. However, as the FWO has established, such explanations belie the fact that some of the largest employers in the agricultural supply chain do have well-resourced human resource management departments but still outsource some recruitment and employment. The giant agribusiness corporations that dominate meat and poultry processing are prime examples in this regard. Not all enterprises that make recourse to labour contractors are motivated by the objective of underpaying this second tier of the workforce, but for many others outsourcing to 'unscrupulous' labour hire operators becomes a deliberate strategy to avoid paying industry standard remuneration rates and other entitlements or to negotiating employment contracts that provide continuity of employment (FWO 2016; SSVEERCA 2016; Australian Meat Industry Employees Union 2016).

As Farbenblum and Berg (2019) have demonstrated, the temporal dimension of the TMW employment opportunity also diminishes the prospect of TMWs being able to seek redress for underpayment. Many TMWs are reconciled to the possibility of wage theft being a feature of their work experience, and the lack of clarity in the capacity of state authorities to coalesce around action to remedy breaches of the Fair Work Act has underscored this.¹¹ For these workers, the short-term is truncated.

The prevalence of exploitative employment arrangements as a manifestation of the industry's responses to cost-pressures does not necessarily play out in the same way across the different organisational forms of farming enterprise, although more research on this is essential. The small family-owned and operated farms are not significant employers of temporary migrant workers, although anecdotal evidence suggests that their pressing and even precarious financial circumstances means that they

¹¹ As argued (Berg 2016; Clibborn 2015), TMW programs are managed by the Department of Home Affairs and the ability of the FWO to act to remedy breaches was uncertain because it was not apparent that the Department would not waive the possibility of deportation when a TMW no longer complied with visa requirements and thereby foreclose the TMW pursuing her/his case. An informal agreement between Home Affairs and the FWO extends this practice to undocumented workers.

are more likely to engage TMWs, including unauthorised workers, as a matter of desperation (FWO 2018a; Howe *et. al.* 2019; Underhill and Rimmer 2016). On the other hand, judging by media exposés and the compulsory undertaking settlements the FWO has negotiated, some of the larger-sized corporate enterprises formulate employment arrangements, such as in underpayment and employment of unauthorised workers, as a more strategic response to cost pressures.

Largeness is no impediment to engaging in exploitative practices. The Covino farm enterprise, which was exposed in the ABC's *Four Corners* program for underpaying workers and employing unauthorised migrant workers, is among the largest vegetable grower operating in Victoria (2015). The company was the beneficiary of government regional development support designed to provide full-time positions for local resident workers, but this support did not discourage Covino from organising its employment practices by forming a partnership with a labour market intermediary that was responsible for formally engaging and underpaying unauthorised migrant workers (Meldrum-Hannah 2015; Toscano 2015). Australia's largest asparagus producer was similarly attracted to the advantages of employing unauthorised migrant workers (Fitzgerald 2016).

Conclusion

Australia's agricultural industry's greater reliance on the employment of temporary migrant workers as a reliable and flexible source of labour, so industry associations are arguing, has been a necessary response to help resolve labour shortages. Notwithstanding the federal government's establishment of several temporary labour migration programs and the expansion of these, the industry continues to lobby for the introduction of a dedicated visa for agriculture. At the same time, the industry has been subject to sustained criticism because its record as an employer has been highly questionable. Irrespective of whether farmers employ workers directly or contract the provision of workers through labour hire operators, there has been an unprecedented flouting of employment law and employment standards, with workers being exploited, underpaid, and taken advantage of by being charged exorbitant sums for accommodation and transport. These abuses are even more pronounced with the engagement of unauthorised migrants. Paradoxically, successive

governments have prioritised the introduction of new TMW schemes and modified existing schemes in order to attract more workers, while being quite tardy in establishing measures that could go some way to moderating the prevalence and persistence of the exploitative and abusive practices that have come to define the industry.

This situation is an anomaly that is no simple accident of history. Rather it is the product of the particular way Australia has engaged with the globalisation project and the embrace of the liberalisation of the economy to frame this engagement. The project has been the driving force in propelling the transformation of agriculture. The promise of an international competitive advantage, progressed through the negotiation of numerous free trade agreements, holds out the potential of realising the benefits of liberalisation and globalisation project. However, this has not been without its contradictions. The structural changes wrought by the globalisation of the industry and the wider effects of economic liberalisation have generated systemic pressures on industry cost structures, hastening organisational transformation in the industry. Significant demographic changes that have followed, affecting both the demand for and the supply of labour to work the fields, process and despatch the produce. Recasting – internationalising – labour force formation as an ingredient in the globalisation project has seemed a simple solution to the demographic challenge. While the recourse to temporary migrant workers may have contributed to enhancing the industry's international competitiveness, through wage theft or because increased labour supplies act as a fetter on the prospect of wage inflation, it is a competitive advantage that comes at the cost and safety of those enlisted in fostering this advantage.

But this 'race to the bottom' model of engaging international competitive advantage is not the only way forward. The annual reports of the largest of the horticultural industry's producers, the ASX-listed Costa Group and Select Harvest, indicate a more measured recourse to TMWs, employed as an adjunct to their cohort of permanent employees. It is a model that recognises the benefits of respecting minimum standards, of ensuring that, in recruiting seasonal labour through labour hire operators, the Costa Group ensures 'that all employment instruments and agreements used by any third party labour hire firm engaged by Costa comply with legal minimum pay and conditions' (Costa Group Holdings Ltd 2018: 23). Above all, as Select Harvest contends, building international competitive advantage is as much about investing in its workforce to enhance skill

formation, promote career advancement opportunities and increase enterprise productivity. But building that competitive advantage future is also about investing in the development of the broader community, of laying the foundations of labour force formation (Costa 2019; Select Harvest 2019).

The real challenge is to take this investing in labour force formation agenda beyond a couple of leading enterprises to engage the industry as well as government. Employers, and the state, must be required to take responsibility for investing in employment standards. Unfortunately, notwithstanding the tentative interventions to combat the practice of wage theft alongside government assurances that it will act on the recommendations of the Migrant Work Taskforce and introduce stricter regulations and enforcement, it is essential to appreciate what we are up against in this ambition. The government's decisions to relax some of the regulatory requirements governing the SWP, to counter the fall-off in the number of TMWs from established source countries by negotiating new TMW source agreements, to lift the cap on the numbers eligible to apply in several of the Work and Holiday visa programs, and to expand the PLS exposes the government's reluctance to take decisive action to move beyond a 'race to the bottom' approach, let alone honour its undertakings to afford greater protection for TMWs.

The government is firmly wedded to this low road. It is an agenda that is consistent with the neo-liberal project. Dressed up as a project that could deliver employment opportunities for Pacific Islanders through temporary labour migration programs, it is manifest in broader development agendas. It is articulated in the two federal government policy positions issued in 2015, *Our North, Our Future: White Paper on Developing Northern Australia* and the *Agricultural Competitiveness White Paper*, and in the regional development projects being promoted under the cover of Designated Area Migration Agreements that include provisions permitting employers to apply for concessions that would relieve them from complying with the burden of established employment standards. The fact the industry association has also woven this short-sighted approach to labour formation into its vision of the future, the *2030 Roadmap*, indicates its inability to look beyond the short-term (NFF 2018).

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References

- ABARES [Australian Bureau of Agricultural and Resource Economics and Sciences] (2016) *Survey of irrigation farms in the Murray Darling Basin*, Canberra.
- ABARES (2017) *Australian vegetable growing farms survey*, Canberra.
- ABARES (2018) *Australian Commodity Statistics*, Canberra.
- ABARES (2019a) *Farm Survey data - Australian vegetable-growing farms: an economic survey, 2017–18 and 2018–19*, Canberra.
- ABARES (2019b) *The structure of farms in Australia*
<https://www.agriculture.gov.au/abares/research-topics/surveys/structure-of-farms>.
- ABARES (2019c) 'Australian vegetable-growing farms: an economic survey, 2017–18 and 2018–19', Farm Survey data.
- ABS [Australian Bureau of Statistics] *ABS Labour Force, Australia, Detailed - Electronic Delivery*, cat. no. 6291.0.55.003, Canberra.
- ABS Labour Force, Australia*, cat. no. 6203.0, Canberra.
- ABS (2010) *Characteristics of Australian Farms*, cat. no. 7102.0, Canberra.
- ABS (2012) 4102.0 - *Australian Farming and Farmers Australian Social Trends*, Dec 2012.
- ABS (2015) 6291.0.55.003 - *Labour Force, Australia, Detailed, Quarterly*, February.
- ABS (2018a) 6333.0 *Characteristics of Employment, August, Table 3.1 Employees (excluding OMIEs) in main job: Weekly earnings in main job - Selected characteristics - By industry of main job*.
- ABS (2018b) 81550DO001_201617 *Australian Industry, 2016-17*.
- Aghakouchak, A., D. Feldman, M. J. Stewardson, J-D. Sophores, S. Grant and B. Sanders (2014) 'Australia's Drought: Lessons for California' *Science* 343, 28 March, 1430.
- Agricultural Appointments (2015) 'Why skill shortages are the number one threat to agribusinesses' 22 June, <https://www.agri.com.au/why-skills-shortages-are-the-number-one-threat-to-agribusinesses>.
- Albert, L. J. M., A.J. van Dijk, H. E. Beck, R. S. Crosbie, R. A. M. de Jeu, Y.Y. Liu, G. M. Podger, B. Timbal and N. R. Viney (2013) 'The Millennium Drought in southeast Australia (2001–2009): Natural and human causes and implications for water resources, ecosystems, economy, and society' *Water Resources Research* 49, 1040-1057.
- Alston, M., and J. Kent (2004) *Social Impact of Drought: A report to NSW Agriculture*, Wagga Wagga: Centre for Rural Research, Charles Sturt University.

- AMIEU [Australian Meat Industry Employees Union] (2016) 'Submission 040, Re: Finance and Administration Committee – Inquiry into the practices of the labour hire industry in Queensland, 29 March, <https://www.parliament.qld.gov.au/documents/committees/FAC/2015/15-LabourHire/submissions/040.pdf>.
- AMPC [Australian Meat Processing Council] (2018) 'Analysis of Regulatory and Related Costs in Red Meat Processing', Sydney: October.
- Argent, N. (1999) 'Inside the blackbox: Dimensions of gender, generation and scale in Australian agricultural restructuring processes' *Journal of Rural Studies* 15 (1), 1-15.
- Austin, N. (2012) 'Imports knife Australian food future' *The Advertiser* 7 January, <https://www.adelaidenow.com.au/news/imports-knife-australian-food-future/news-story/8f5879c70becc2147a816575e0d2b53c>.
- Australian Abattoirs (2017) 'Chronological History of Australian abattoirs and meatworks' <https://australianabattoirs.com/tag/abattoirs-currently-operating/>.
- The Australian Farm Institute (2016) 'Farm funding models and business structures in Australia' Grain Research and Development Corporation. https://www.ampc.com.au/uploads/FINAL_Cost%20to%20Operate%20Report%20Oct%202018.pdf.
- Ausveg (2018) 'Australian vegetable production statistics' <https://ausveg.com.au/resources/economics-statistics/australian-vegetable-production-statistics/>
- AWU [Australian Workers Union – Queensland branch] (2014) 'The 457 visa program' <https://qld.awu.net.au/sites/qld.awu.net.au/files/awu-file/457%20Visa%202014%20members%20info%20sheet.pdf>.
- Barr, N. (2014) *New entrants to Australian agricultural industries: where are the young farmers?* NCVER.
- Barton, D., J. Bailey and J. Zoffer (2015) *Rising to the challenge of short-termism* New York: FLCT Global.
- Berg, L. (2016), *Migrant Rights at Work: Law's precariousness at the intersection of migration and labour*, Routledge, London.
- Berg, L., and B. Farbenblum (2017) *Wage Theft in Australia: Findings of the National Temporary Migrant Work Survey* Migrant Worker Justice Initiative, University of NSW and University of Technology Sydney.
- Birch, K. (2017) 'Rethinking Value in the bio-Economy: Finance, Assetization, and the Management of Value' *Science, Technology & Human Values* 42 (3), 460–490.
- Boult, C., H. Valle, S. Zhao, and T. Jackson (2018) *Productivity in Australia's broadacre and dairy industries* Canberra: ABARES.
- Boult, C., and T. Jackson (2019) 'Disaggregating farm performance by size' *ABARES Agricultural Commodities*, March quarter, 142-154.
- Byrnes, M. (2007) 'Australian farmers face bankruptcy from drought' *Environmental News Network*. 24 October, <https://www.enr.com/articles/24066>

- Campbell, I. (2018) 'Temporary Migrant Workers, Underpayment and Predatory Business Models', in A. Stewart, J. Stanford and T. Hardy (eds.) *The Wages Crisis in Australia: What it is and what to do about it*, Adelaide, University of Adelaide Press, 187-201.
- Clibborn, S. (2015) 'Why undocumented immigrant workers should have workplace rights' *The Economic and Labour Relations Review* 26(3), 465-473.
- Clibborn, S. (2019) 'It takes a village: Civil Society Regulation of Employment Standards for Temporary Migrant Workers in Australian Horticulture' *UNSW Law Journal* 42 (1), 242-268.
- Clibborn, S., and C. Wright (2018) Employer theft of temporary migrant workers' wages in Australia: Why has the state failed to act? *Economic and Labour Relations Review*, 29 (2), 207-227.
- Cockfield, Geoff, and Linda Courtenay Botterill, (2006) 'Rural adjustment schemes: juggling politics, welfare and markets' *Australian Journal of Public Administration*, 65 (2), 70-82.
- Commonwealth of Australia (2015a) *Our North, Our Future: White Paper on Developing Northern Australia*, Canberra.
- Commonwealth of Australia (2015b) *Agricultural Competitiveness White Paper*, Canberra.
- Condon, J. (2018) 'Cost to operate analysis exposes alarming lack of competitiveness for Australian processing' *Beef Central* 12 November, <https://www.beefcentral.com/processing/cost-to-operate-analysis-exposes-alarming-lack-of-competitiveness-in-australian-processing/>.
- Condon, J. (2019) 'Two thirds of red meat processors hampered by labour issues' *BeefCentral* 14 May, <https://www.beefcentral.com/processing/two-thirds-of-red-meat-processors-hampered-by-labour-issues/>
- Connolly, E., D. Norman and T. West (2012) 'Small business: An Economic Overview' *RBA Bulletin* May, 1-13.
- Courtney, A. (2017) 'Water rights, trading and the new water barons' 1 November, <https://www.intheblack.com/articles/2017/11/01/water-rights-barons>.
- Costa Group Holdings Ltd (2018) Annual Report 2018.
- Cranston, M. 2015. 'Ontario Teachers' Pension Plan Board Cracks \$115 m Macquarie Almond Deal,' <http://www.afr.com/real-estate/ontario-teachers-pension-planboard-cracks-115m-macquarie-almond-deal-20150807-gitsjt>.
- D'Arcy, P., L. Gustafsson, C. Lewis and T. Wiltshire (2012) 'Labour market turnover and mobility' *RBA Bulletin* December, 1-7.
- David, P., D. Burch and G. Lawrence (2007) 'Neither 'family' nor 'corporate' farming: Australian tomato growers as farm family entrepreneurs' *Journal of Rural Studies*, 23(1), 75-87.
- Davies, A., M. Tonts, L. Troy and H. Pelusey (2009) *Australia's Rural Workforce: An analysis of labour shortages in rural Australia* Canberra: Rural Industries Research and Development Corporation
- Doolan, J. (2015) 'Lessons from Australia's Millennium drought' *Maven's Notebook* 27 January, <https://mavensnotebook.com/2015/01/27/lessons-from-australias-millennium-drought/>.

- Doyle, M-A. (2014) 'Labour movements during the resources boom' *RBA Bulletin* December, 7-16.
- Ducastel, A., and A. Ward. (2017) 'The assetisation of South African farmland: The role of finance and brokers' in Valérie Boussard (ed) in *Finance at work* London: Routledge, 123-136
- Dufty, N., and T. Jackson (2018b) *Information and communication technology use in Australian agriculture* Canberra: ABARE.
- Dufty, N., P. Martin and S. Zhao (2019) *Demand for farm workers: ABARES farm survey results 2018* Research report 19.10. Canberra: ABARES.
- Dufty, N., S. Zhao, W. Shafron and H. Valle (2018) *Dairy industry workforce survey, 2015–16* ABARES.
- Duxton Water (2019) 'Australia's only ASX listed vehicle providing investors with direct access to water', <https://www.duxtonwater.com.au/>.
- Edwards, B., M. Gray and B. Hunter (2008) 'Social and economic impacts of drought on farm families and rural communities', Australian Institute of Family Studies, Submission to the Productivity Commission's Inquiry into Government Drought Support, <https://www.pc.gov.au/inquiries/completed/drought/submissions/sub092.pdf>.
- FWO [Fair Work Ombudsman] (2016) *Baiada Compliance Partnership – Interim Report*, <https://www.fairwork.gov.au/reports/baiada-group-interim-reports/background>.
- FWO (2017) *Annual Report 2016-17*.
- FWO (2018a) *Harvest Trail Inquiry: A Report on workplace arrangements along the harvest trail* Canberra: Commonwealth of Australia.
- FWO (2018b) *Annual Report 2017-18*.
- Falkiner, O., and A. Steen (2016) *Australian Farming Families: Succession and Inheritance* Chapman Eastway and Charles Sturt University.
- Farbenblum, B. and Berg, L. (2018) *Wage Theft in Silence: Why Migrant Workers Do Not Recover Their Unpaid Wages in Australia*, Sydney, Migrant Worker Justice Initiative.
- Fitzgerald, B. (2016) 'Farming groups condemn illegal labour hire practices after raid uncovers foreign nationals working for Australia's largest asparagus producer' *ABC News* 5 December, <https://www.abc.net.au/news/rural/2016-12-05/koo-wee-rup-farm-raid/8091896>.
- Fyfe, M., and R. Millar (2012) 'Surge in imports sends Australian farms to brink' *The Sydney Morning Herald* 27 May, <https://www.smh.com.au/national/surge-in-imports-sends-australian-farms-to-brink-20120526-1zc2u.html>
- Garnett, A. (2014) 'Farmers are in debt, and more debt won't help' *The Conversation* 6 February, <https://theconversation.com/farmers-are-in-debt-and-more-debt-wont-help-22698>.
- Gothe-Snape, J. (2019) 'Cheap migrant worker cut-off slips as regional push brings further discounts for employers' *ABC News* 11 July, <https://www.abc.net.au/news/2019-07-10/tsmit-dama-regional-visa-migration-pay-threshold/11293858>.
- Grain Research and Development Corporation (2018) 'Applying corporate principles and processes to the family farm' *Farm Business Fact Sheet* September.

- Gray, I., and G. Lawrence (2001) *A Future for Regional Australia: Escaping Global Misfortune*. Cambridge University Press, Oakleigh, Victoria.
- Heath, R., and A. Tomlinson (2016) 'A review of farm funding models and business structures in Australia' Canberra: Australia Farm Institute.
- Higgins, E. (2019a) 'How the system of liquidity works' *The Australian* 9 September, 1.
- Higgins, E. (2019b) "'We looked to the future and saw crisis coming'" *The Australian* 9 September, 1.
- Higgins, E. (2019c) 'Water crackdown ordered' *The Australian* 9 September, online.
- Higgins, E. (2019d) 'Farmers 'forced to hire illegals' *The Australian* 3 October, 6.
- Horwath, C. (2014) 'Business Structures for a Successful Family Farm' Grain Research and Development Corporation, <https://grdc.com.au/resources-and-publications/grdc-update-papers/tab-content/grdc-update-papers/2014/10/business-structures-for-a-successful-family-farm>.
- Howe, J., & Owens, R. (2016) 'Introduction to Temporary Labour Migration in the Global Era: The Regulatory Challenges' in J. Howe, & R. Owens (Eds.), *Temporary labour migration in the global era: the regulatory challenges*, United Kingdom: Bloomsbury, 3-40.
- Howe, J., Reilly, A., van den Broek, D. and Wright, C.F. (2017), *Sustainable Solutions: The Future of Labour Supply in the Australian Vegetable Industry*, The University of Adelaide, Adelaide.
- Howe, J., S. Clibborn, D. van den Broek and C. Wright (2019) *Towards a Durable Future: Tackling Labour Challenges in the Australian Horticulture Industry*, Adelaide: The University of Adelaide.
- Howes, S. (2018) 'A bumper year for the Seasonal Worker Programme' *Devpolicyblog* 31 July, <https://devpolicy.org/another-bumper-year-for-the-seasonal-worker-programme-20180731/>.
- Hugo, G. (2005) 'The state of rural populations', in C. Cocklin and J. Diblen (eds) *Sustainability and Change in Rural Australia* Kensington: University of NSW Press, 38-55.
- Jackson, T., and P. Martin (2014). 'Trends in the size of Australian farms', in *Agricultural Commodities* 14(3), Canberra, 122-131.
- Jackson, T. and W. Shafron (2018) 'Disaggregating farm performance statistics by size' *ABARES Agricultural Commodities* 16(2), 226-235.
- Jefferson, T., and A. Mahendran (2012) 'Calculating the Paid Off-farm Work Contributions of Women in Australian Agricultural and Rural Communities' *International Review of Business Research Papers* 8 (5), 191-204.
- Jones, E. (2012) 'Rural Finance in Australia: A Troubled History' *Rural Society* 12(2) 160-181.
- Keogh, M. (2019) 'The ACCC view – Dairy from a competition perspective' Trans-Tasman Dairy Leaders Forum 6 May, <https://www.accc.gov.au/speech/the-acc-view-dairy-from-a-competition-perspective>.
- Keogh, M. (2012) 'The end of the family farm – or just the usual cyclic trend?' *The Australian Farm Institute* 27 February, http://www.farminstitute.org.au/ag-forum/the_end_of_the_family_farm_-_or_just_the_usual_cyclic_trend.

- Keogh, M., A. Tomlinson and M. Henry (2015) *Assessing the competitiveness of Australian Agriculture* Rural Industries Research and Development Corporation
- Kirkpatrick, M. (2009) 'Back to the Land: with the end of the mining boom, farming and food production offered renewed economic opportunities for economic development in regional Australia' *About the House* 37.
- Kitney, D. (2015) 'Costa Group IPO was Frank's last resort' *The Australian* 11 June.
- Laferté, G., and A. Diallo (2017) 'The financialization of the private wealth of farmers. Is it the work of banks?' in Valérie Boussard (ed) in *Finance at work* London: Routledge, 93-107.
- Lagura, E., and G. Ronan (2009) 'How Profitable is Farm Business in Australia? An interpretation of ABARE broadacre and dairy industries' farm performance data and some implications for public policy' 21 July, http://agrifood.info/Agrifood/connections/2009/Lagura_Ronan.html
- Larder, N., S. R. Sippel and Neil A (2018) 'The redefined role of finance in Australian agriculture' *Australian Geographer* 49(3), 397-418.
- Larder, N., S. R. Sippel, and G. Lawrence. 2015. 'Finance Capital, Food Security Narratives and Australian Agricultural Land' *Journal of Agrarian Change* 15 (4), 592-603.
- Lauder, S. (2012) 'Heinz tomato sauce factory closes' *ABC News* 7 January, <https://www.abc.net.au/news/2012-01-06/heinz-factory-closing-today/3760676>.
- Lawrence, G., and H. Campbell (2014) 'Neoliberalism in the antipodes: understanding the influence and limits of the neoliberal political project' in S. A. Wolfe and A. Bonanno (Ed.), *The Neoliberal Regime in Agri-food: Crisis, Resilience and Restructuring* Abingdon, Oxon, England: Routledge, 263-283.
- Lawrence, G., and I. Gray (2000) 'The myths of modern agriculture: Rural production in the 21st century' in P. McManus and B. Pritchard (eds) *Land of discontent: The dynamics of change in rural and regional Australia* Kensington: University of NSW Press, 33-51.
- Lee, T. (2019) 'Corporate Farming: Big business investment in agriculture' *ABC Landline* 8 September
- Lim-Applegate, H., G. Rodriguez and R. Olfert (2003) 'Determinants of non-farm labour participation rates among farmers in Australia' *Australian Journal of Agricultural and Resource Economics* 46(1), 85-98.
- Locke, S. (2014) 'Australian farm labour costs are the highest: Rabobank' *ABC Rural* 7 April, <https://www.abc.net.au/news/rural/2014-04-07/rabobank-ag-risks/5371666>.
- Lowe, P. (2012) 'The labour market, structural change and recent economic developments' Speech to the Financial Services Institute of Australasia, 9 October, <https://www.rba.gov.au/speeches/2012/sp-dg-091012.html>.
- Lu, L., and D. Hedley (2004) 'The impact of the 2002-2003 drought on the economy and agricultural employment' *Economic Roundup* Autumn 2004, The Treasury.
- Manson, S. (2015) 'Two of Australia's biggest dairy farming families, the Moxeys and Perichs, form a dairy consortium backed by Chinese investment' *ABC Rural* 29 April, <https://www.abc.net.au/news/rural/2015-04-28/moxey-farms-consortium-new-hope-dairy/6428248>.

- Martinello, A. (2019) 'Survey uncovers multi-million-dollar loss of farm labour crisis' *National Farmer* 2 July, <https://farmers.org.au/news/survey-uncovers-multi-million-dollar-cost-of-farm-labour-crisis/>.
- McGovern, M. (2014) 'Subprime agriculture, and Australia?' *Economic Policy and Analysis* 44(3) 243-258.
- McGovern, M. (2015) 'Free trade agreements fail to boost Australian agriculture and food processing' *The Conversation* 17 September, <https://theconversation.com/free-trade-agreements-fail-to-boost-australian-agriculture-and-food-manufacturing-47576>.
- Meldrum-Hannah, Caro (2015) 'Slaying away: The Dirty Secrets Behind Australia's Fresh Food, *ABC 4 Corners* 4 May 2015.
- NFF [National Farmers Federation] (2012) 'Seasonal Worker Program', <https://www.nff.org.au/policy/workplace.html?hilite=Labour+Shortage+Action+Plan>.
- NFF (2013) 'Overseas Workers and Skilled Migration' <https://www.nff.org.au/policy/workplace.html?hilite=Labour+Shortage+Action+Plan>.
- NFF (2018) 'Farm workforce survey reveals the impact of agriculture's labour shortfall' Media Release 4 April, <https://www.nff.org.au/read/5950/farm-workforce-survey-reveals-impact-of.html>.
- NFF (2018b) *2030 Roadmap: Australia's agricultural plan for a \$100 Billion Industry* Canberra.
- Neales, S. (2018a) 'Asian market greedy for great balls of gold' *The Australian* 21 March, 9.
- Patty, A. (2019) 'Australia's reputation 'at risk' over treatment of visa workers' *The Sydney Morning Herald* 28 July, <https://www.smh.com.au/business/workplace/australia-s-international-reputation-at-risk-over-treatment-of-visa-workers-20190715-p527a5.html>.
- Patty, A., and C. Boys (2019) 'Do customers need to start picking up the tab for the cost of proper wages?' *The Sydney Morning Herald* 27 July, accessed <https://www.smh.com.au/business/workplace/do-customers-need-to-start-picking-up-the-tab-for-the-cost-of-proper-wages-20190723-p529vj.html>.
- ProActive (2017) 'Enable families to remain in agriculture', <http://www.proactive.com.au/>.
- Productivity Commission (2005) *Trends in Australian Agriculture*, Canberra.
- Productivity Commission (2009) *Government Drought Support* February, Canberra.
- Rabobank (2018) 'No 'summit in sight' for climbing Australian agricultural land prices' <https://www.rabobank.com.au/media-releases/2018/180823-no-summit-in-sight-for-climbing-australian-agricultural-land-prices/>
- RBA [Reserve Bank of Australia] (2014) 'Sectoral Trends in Funding Patterns in the Australian Economy: Submission to the Financial System Inquiry' March.
- Reilly, A., H. Howe, D. van den Broek, C. Wright (2018) 'Working holiday makers in Australian horticulture: labour market effect, exploitation and avenues for reform' *Griffith Law Review* 27(1), 99-130.
- Relph, Z. (2019) 'Dairy industry braces for skill shortage' *The West Australian* 25 July, <https://thewest.com.au/countryman/news/dairy-industry-braces-for-labour-shortage-ng-b881262714z>.

- Reynolds, E. (2016) ‘‘I wonder how long you’ll last?’’ Backpacker exploitation goes even deeper’ *news.com.au* 17 October, <https://www.news.com.au/lifestyle/real-life/news-life/i-wonder-how-long-youll-last-backpacker-exploitation-goes-even-deeper/news-story/a49524652574425c2680f902c749f017>.
- Robinson, C., P. J. McMahon and J. C. Quiggin (1982) ‘Labour Supply and Off-farm work by Farmers: Theory and Estimation’ *Australian Journal of Agricultural Economics* 26 (1), 23-38.
- Rural Bank (2019a) *Australian agricultural Outlook 2019*
- Rural Bank (2019b) ‘Australian Farmland Values’, <https://www.ruralbank.com.au/for-farmers/ag-answers/farm-land-values>.
- Rural Funds Management (2019) ‘Rural Funds Management Limited (RFM) is one of the oldest and most experienced agricultural fund managers in Australia,’ <https://ruralfunds.com.au/about-rfm/about/>.
- Sanyal, K. (2014) *Foreign investment in Australian agriculture*, Canberra: Parliamentary Library.
- Schlesinger, L. (2019a) ‘US buyers nab almond orchard’ *The Australian Financial Review* 7 January, 30.
- Schlesinger, L. (2019b) ‘New \$150m Aussie farm fund to tap into global food demand’ *The Australian Financial Review* 12 May.
- Schlesinger, L. (2019c) ‘Farm returns dip as drought bites’ *The Australian Financial Review* 17 June, 32.
- Schlesinger, L. (2019d) ‘South Australia leads 10.7pc surge in farmland values’ *The Australian Financial Review* 19 June, 35.
- Schlesinger, L. (2019e) ‘Cashed-up farmers see auction rise to \$13.9m’ *The Australian Financial Review* 15 July, 33
- Schlesinger, L. (2019f) ‘It’s Costa versus Costa in rent spat’ *The Australian Financial Review* 3 September, 35.
- Schneider, K. (2016) ‘Family farms a strong business model’ ABARE.
- Secombe, M. (2019) ‘Undocumented labour a new class’ *The Saturday Paper* 9 March.
- Select Harvest Annual Report 2019.
- SSCEEWR [Senate Standing Committees on Education, Employment and Workplace Relations] (2006) *Perspectives on the future of the harvest labour force* Canberra 18 October.
- SSCEERC [Senate Standing Committee on Education and Employment References Committee, Australia] (2016) *Australia’s disgrace: the exploitation of temporary work visa holders*.
- Simson, F. (2019) ‘Bipartisan stalemate deprives Australian farmers of workers’ *AustralianFarmer* 9 May, <https://farmers.org.au/blog/bi-partisan-stalemate-deprives-farmers-of-workers/>.
- Skilbeck, M. (2016) ‘Australian agriculture faces a future of increased corporatisation and foreign ownership of farms and the agribusiness value chain’ *Occasional Papers 16/1*, Centre for the Study of Agribusiness, Melbourne: Marcus Oldham.

- Snow, D., and D. Jopson (2010) 'Thirsty foreigners soak up scarce water rights' *The Sydney Morning Herald* 4 September, <https://www.smh.com.au/environment/sustainability/thirsty-foreigners-soak-up-scarce-water-rights-20100903-14uev.html>.
- Sullivan, K., and B. Fitzgerald (2019) 'Australian Farmers' reliance on illegal labour as exploitation is readily accepted, report says' *ABC Rural* 8 March, <https://www.abc.net.au/news/rural/2019-03-08/farm-labour-report-says-farmers-rely-on-illegal-labour/10881832>.
- Tham, J-C. , I. Campbell and M. Boese (2016) 'Why is Labour Protection for Temporary Migrant Workers so Fraught?: A Perspective from Australia' in J. Howe, & R. Owens (eds.), *Temporary labour migration in the global era: the regulatory challenges*, United Kingdom: Bloomsbury, 173-200.
- Toscano, N. (2015) 'Covino Farms penalised overtreatment of migrant workers' *The Age* 19 May, <http://www.theage.com.au/victoria/covino-farms-penalised-over-treatment-of-migrant-workers-20150519-gh599p.html>.
- Underhill, E., and M. Rimmer (2016) 'Layered vulnerability: Temporary migrants in Australian horticulture' *Journal of Industrial Relations* 58(5), 608-626.
- Valle, H. (2016) 'Productivity in Australian broadacre farming and dairy industries' *Australian Commodities* 6(2), 215-225.
- Valle, H., N. Millist and D. Galleano (2017) *Labour Force Survey* Australian Bureau of Agricultural Research and Economics and Sciences, May.
- Vanclay, F. (2003) 'The impacts of deregulation and agricultural restructuring in Australia' *Australian Journal of Social Issues* 38(1) 81-94.
- Varischetti, B. (2019) 'Is corporate farming ruining the sense of community in small rural and regional towns' ABC Country Hour 8 May, <https://www.abc.net.au/news/rural/2019-05-08/corporate-farming-ruining-rural-communities/11091568>.
- Wahlquist, A. (2010) 'Rural incomes rocket from reform' *The Australian* 12 November, <https://www.theaustralian.com.au/national-affairs/rural-incomes-rocket-from-reform/news-story/09fe270de0ee6b10b2e9189ab6304097>.
- Ward, C., and E. Swyngedouw (2018) 'Neoliberalisation from the Ground Up: Insurgent Capital, Regional Struggle, and the Assetisation of Land' *Antipode* 50 (4) 1077-1097.
- Watts, S., and J. Harrison (2014) 'Farming on the verge of a workforce crisis' Deloitte Australia
- The Weekly Times* (2017) 'GoFarm goes for it' 8 November, 30.
- Weragoda, A., J. Frilay and Dale A. (2017) 'Physical Characteristics of Australian Vegetable Growing Farms' Australian Bureau of Agriculture and Resource Economics, at: <http://agriculture.gov.au/abares/research-topics/surveys/vegetables#physical-characteristics-of-australian-vegetablegrowing-farms>.
- Wibberley, B.D., (2014) *Business structures for the family farm*, Grain Research and Development Corporation.
- Wilmot, B. (2019) 'Swapping chicken for beef' *The Australian* 27 October, on-line.