RE-CONSIDERING THE USE OF CHILD LABOR: WHY NINETEENTH CENTURY AUSTRALIA WAS DIFFERENT TO OTHER MODERNIZING NATIONS

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INTRODUCTION

Child labor has long been seen as an undesirable but inevitable feature of industrialization (Rahikainen, 2004; Kirby, 2003; Basu and Van, 1998). Reflecting on the North American experience, Hindman (2002: 4-5) has observed that "we know no major advanced nation that did not go through a stage of pervasive child labor." This paper, however, argues that late nineteenth century Australia provides an exception to this rule. Australian managers largely desisted from engaging youngsters despite a relative shortage of adult workers. For while Australia had a youthful demographic (the median age in 1881 was 20.08 years), the economy's peculiar structure meant that child and adolescent labor was confined to a small number of trades, none of which was central to national development. The highly capitalized sectors which drove economic growth – mining, construction, pastoralism and transport – were all dominated by adult males. Much of this work was carried out in Australia's inhospitable interior.

A CONTINUING DEBATE: THE CHILD LABOR LITERATURE

Until the last few decades studies of child labor invariably portrayed the phenomenon as a social evil. This diverted attention from the wider economic and social factors that underlie child and adolescent employment. More recently, however, researchers have tried to explain child labor's rise and decline through reference to "some very familiar categories of analysis, supply and demand" (Cunningham, 2000: 419). On the supply side some (Cruikshank, 1981, Cunningham, 2000) have highlighted the importance of demographic factors. An increased birth rate meant that children and young adolescents made up a disproportionate share of the late nineteenth century population in industrializing Europe, America and European settler societies such as Australia. Families readily sent their younger members to work. But as the birth rate fell families began to hold their children back from the workforce. Other "supply" side studies (Nardinelli, 1990; Basu and Van, 1998) have stressed that a child's entry into the workforce reflects the decisions of adult family members, not the child. According to this perspective the key factor influencing the supply of children available for work is the wage of the household head. As adult wages rose the incidence of child labor fell. While "supply-siders" emphasise the factors that cause children to seek work, "demand-siders" (Rahikainen, 2004; Kirby, 2003) examine the reasons why managers employ, or do not employ, younger workers in lieu of adults. By the 1880s managers were increasingly "productivity-conscious" as complex work processes demanded adult workers with formal training. In consequence, the demand for child labor fell.

In Australia, there has been relatively little discussion of child labor. Most of the research that has occurred has suggested that the phenomenon assumed major proportions during the late nineteen century. Walsh (1971) observed that, "Child labor under bad conditions was a feature of factory employment in the second half of the century." Murray (1993) has similarly concluded

that, "Children's work was of import in colonial New South Wales, particularly in the second half of the nineteenth century." Methodologically, such studies have typically been qualitatively based, relying heavily on various colonial inquiries into working conditions.

METHOD

In exploring the extent to which managers utilized younger workers this paper analyses the 1891 and 1901 census figures of Queensland, Australia's third largest colony (prior to 1901 the Australian "states" were self-governing British colonies). The years 1891 and 1901 were chosen for two reasons. It was in this decade that the Australian age profile was at its youngest. It also makes for a useful comparison with the United States, where the incidence of child labor peaked during this decade (Hindman, 2002). This study differs from previous research by recording the participation rates for those aged between 15 and 19 years, as well as those aged under 14 years. This allows a fuller understanding of the extent to which Australian managers were willing to consider younger workers as an alternative to adults.

RESULTS: PATTERNS OF CHILD AND ADOLSECENT EMPLOYMENT IN QUEENSLAND (AUSTRALIA) 1891-1901

In common with the rest of Australia the colony of Queensland was, in the nineteenth century's closing decades, a young and rapidly growing society. Between 1891 and 1901 the population grew by more than a quarter, from 393,718 to 503,266. Reflecting the Australian norm, this population was characterized by its youth. In 1891, 46.2 per cent were aged 19 years or less. Those aged between 10 and 19 years - ages when workforce entry could be expected comprised 26 per cent of the total population. A decade later they made up 28 per cent of the total. This numeric strength was not, however, reflected in the job market. In 1901 children and adolescents made up only 18.1 per cent of the workforce. The labor force participation rate of those aged 19 years or under was a mere 17.9 per cent. Even if we exclude those aged under 10 the participation level rises to only 36.9 percent (Queensland Registrar, 1902). In other words, almost two-thirds of those who were aged between 10 and 19 did not work.

The extremely limited role played by children (those aged 14 years or less) becomes clear when, in Table 1, we consider employment patterns in the main industry sectors – agriculture and pastoralism, industrial (including building), mining, and commerce and transport. In the United States, those aged between 10 and 14 years made up 6.5 per cent of the non-farm workforce in 1890 (Hindman, 2002: 31). In Queensland, even if we include all of those aged 14 years or under, no sector approaches this figure. In 1891, children made up only 0.7 per cent of the mining workforce, 2.5 per cent of industrial workers, 2.3 per cent of the agricultural / pastoral workforce, and 4.1 per cent of the workforce in commerce and transport (which included retail). In the ensuing decade the incidence of child labor fell in mining, industrial employment, and (most markedly) commerce and transport. The only area that witnessed a significant growth in child employment was the agricultural / pastoral sector. Even here children made up only 3.5 per cent of the workforce in 1901. The reluctance of employers to engage non-adult labor is highlighted when we extend our analysis to include those aged between 15 and 19 years. Given that this age cohort made up 13-14 per cent of the population it is evident that they were underrepresented in those sectors that involved employment in the interior – agricultural / pastoral work and mining. They were over-represented in industrial employment, and commerce and transport (although their share fell markedly in the latter between 1891 and 1901). But employers in both sectors reduced their reliance on workers aged 14 years or under. In other words, they were employing older adolescents rather than children.

Denied jobs in those sectors that drove economic and employment growth the young found themselves largely confined to a handful of occupations – domestic service, textile manufacture, grocery retail, drapery retail, printing and pupil teaching. In each of these six occupations children and adolescents made up at least 20 per cent of the workforce in 1891. Collectively, they gave work to 48 per cent of all of those aged 19 years or under who held a job. Ten years later these six occupations still employed 36.8 per cent of workers in this age category. In most areas, however, managers resisted the temptation to offset a demographic shortage of adults by changing their hiring practices and engaging youngsters.

Insert Table 1 about here

While the above analysis has focused on Queensland the picture in the larger, and more industrialized, colonies of New South Wales and Victoria was broadly similar. In Melbourne, Australia's most industrialized city, only three per cent of the Melbourne workforce (male and female) was aged 14 years or younger in 1901 (Larson, 1974).

DISCUSSION: WHY WAS AUSTRALIA DIFFERENT?

To what can we attribute the low incidence of child labor in Australia? The "traditional" explanations – legally imposed restrictions and compulsory schooling – can be dismissed with ease. Queensland did not pass its first Factories and Shops Act until 1896. The smaller colonies (South Australia, Western Australia, and Tasmania) passed similar legislation at even later dates. Compulsory schooling legislation also appears to have had little impact. Although Queensland introduced compulsory schooling laws in 1875 the compulsory clauses were not proclaimed until 1900. However, few of those who avoided school found gainful employment.

Supply-side theories also do not provide a suitable framework for understanding the Australian situation. A bountiful demographic supply did not create its own demand. Nor can the low workforce participation rates of children and adolescents be attributed to their family's high household income. Wages for unskilled and semi-skilled labourers in Australia were, generally, higher than in Britain. But the work was also highly seasonal, reflecting the annual movement of pastoral products from the interior to the waterfront. This produced a labor market characterized by casual employment, insecurity and substantial social disadvantage. Any additional income would have been welcome.

If supply-side explanations cannot account for the low incidence of child labor in nineteenth century Australia how do demand-side theories fare? According to those who link child labor to industry's changing productivity needs (Rahikainen, 2004; Kirby 2003) we would expect to see its usage associated with low-productive ventures. It is certainly the case that child labor in the Australian manufacturing sector was found in small, poorly capitalized workplaces. The problem with applying "productivity-needs" theory to Australia, however, is that - by world standards – virtually all Australian manufacturing firms fell into this category. Few employed more than 100 workers. Nevertheless, manufacturing grew in importance, employing 20 per cent of the Victorian workforce and around 15 per cent of breadwinners in other colonies during the

1890s (Linge, 1979). Yet despite the growth of this (relatively unproductive) manufacturing sector most managers did not avail themselves of the plentiful supply of children. In Queensland, for example, metal and mineral processing was in 1901 the largest employer of industrial labor after the textile industry, giving work to 4,718 employees. However, only 2.8 per cent were aged 14 years or younger. In the engineering trade only 0.8 per cent of the workforce were children (Queensland Registrar, 1902).

In part the low incidence of child labor in most Australian manufacturing sectors can be attributed to its role in servicing the nation's highly capitalized mining, pastoral and transport sectors. Most heavy machinery was imported but maintained locally. Servicing the needs of the state-owned railways, in particular, provided manufacturing with much of its work. Between 1860 and 1890 60 per cent of all public investment went on the railways (Linge, 1979). Such work required skilled fitters, coach makers and the like. This work was the domain of adults.

Although the need for skilled labor for repair work provides one reason for the low incidence of child labor in manufacturing it is not a fully convincing explanation. There are, after all, many "odd jobs" that children can do in a small metal shop. To properly understand the factors that would have guided managerial decision making we need to consider not just what workers did, but where they did it. While Australia in the late nineteenth century was an urbanised society, most people did not live in the cities. In 1891, only 35 per cent of the population of New South Wales (the largest colony) resided in Sydney. In Queensland, only 28 per cent of the population lived in the capital, Brisbane. The vastness of the interior, and the cost of internal transport, meant that manufacturing was geared to domestic needs. Australia's pastoral and mining centres were hundreds and sometimes thousands of miles from the nearest port. The isolation of towns in the mining sector - an industry that employed one-sixth of the adult male workforce in 1901 - was particularly marked. At the turn of the century the most significant Australian mining districts were located in remote semi-desert regions around Kalgoorlie-Boulder in Western Australia, Broken Hill in New South Wales and Charters Towers in Queensland. Such centres were no place for children.

The problems of distance and location that beset manufacturing were even more manifest in the rural sector. The harshness of the climate limited opportunities for European-style agriculture. Most of the land was better suited for vast sheep and cattle runs. This made work on the family farm, and on neighboring properties, much less important in Australia than it was in Europe or North America. Pastoral work was performed by a vast army of casually-employed shearers and labourers. During the "season" (which began in Queensland in February and finished in southern Australia during August), this itinerant workforce walked hundreds of kilometres across the "outback", camping over-night next to creeks and billabongs. Few members of this army were children. In 1891 Queensland gave work to 8,748 shearers and pastoral laborers. Only 237 were under 15 years of age (Queensland Registrar, 1892).

Mining work was less suited to child labor than any other. While child labor was, infamously, a feature of the British and North American coal industries, most Australian miners were employed in "hard-rock" operations. By the 1890s the vast bulk of Australia's gold, copper and lead output came from deep, highly capitalized mines. Employment relationships were complex. Most mines were staffed by self-employed contractors, tributers and syndicates (Bowden and Penrose, 2006). These groups would have gained little from sending children deep underground to assist with the packing of dynamite or the operation of mechanical rock-drills.

CONCLUSION

The experiences of nineteenth century Australia suggest that we need to be wary in making generalizations drawn solely from analyses of industrialization in Western Europe and North America. In Australia there were many children and adolescents. But few of them found their way into paid employment. In the final analysis, the low incidence of child labor in Australia reflected both the nation's geography and its place in the international economy. Australia's "comparative advantage" lay in its pastoral sector, and in hard-rock mining, rather than manufacture. Reflecting the service role of the Australian manufacturing sector, many factories, mills and workshops were located in the interior. The Australian "bush", however, was an inhospitable place for children and young adolescents. Due to both the nature and location of work, managers invariably placed a premium on physical strength, mobility and experience.

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TABLE 1: CHILD AND ADOLESCENT PARTICIPATION IN KEY INDUSTRIES: QUEENSLAND 1891, 1901#

	1891	1901
Mining – total workforce	11,627	16,375
Mining – Aged 15- 19 years	474 (4.1%)	1,231 (7.5%)
Mining – Aged 14 years or less	71 (0.7%)	113 (0.6%)
Industrial (includes Building) - total workforce	47,184	51,716
Industrial - Aged 15- 19 years	6,660(14.1%)	8,935 (17.3%)
Industrial – Aged 14 years or less	1,201 (2.5%)	1119 (2.2%)
Agricultural and Pastoral - total workforce	67,992	68,323
Agricultural and Pastoral - Aged 15-19 years	7,493 (11%)	8,711 (12.7%)
Agricultural and Pastoral - Aged 14 years or less	1,550 (2.3%)	2,424 (3.5%)
Commerce and Transport – total workforce	20,386	34,694
Commerce and Transport - Aged 15-19 years	3,777 (18.5%)	5,382 (15.5%)
Commerce and Transport – Aged 14 years or less	843 (4.1%)	1,169 (3.4%)

[#] Figures in parentheses represent percentages of the total occupational workforce

Source: Queensland Census of 1891 and 1901.