# Gold's influence on Australian economic development in the nineteenth century

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### **Abstract**

This article seeks to set out the significant ways in which the gold industry, particularly during the booms of the nineteenth century, affected Australia's development. I argue that the most substantial effects of the gold rush affected two broad aspects of Australian society. First, the gold rush impacted the Australian economy by bringing substantial wealth to Australian shores as an export, stimulating secondary industries, driving population growth and restructuring the manufacturing sector. Second, the gold rush helped shape Australia's socio-political climate. Compared with the previously hegemonic wool industry, gold provided better economic wages for the working class. These wage increases spread to other industries and, with increased population in Australia, a new era began wherein the working class expected high wages. I posit that this was due to the labour movement dominating Australia's political left. I suggest that the labour movement's influence on the political left has fostered more stable social outcomes in comparison with Argentina, an economy that developed a more radical political left.

### Introduction

Edward Hargraves's discovery of gold on the fields of Ophir in 1851<sup>1</sup> flagged the beginning of arguably the most important period of Australian economic development. Economic historians widely agree that gold's impact on the Australian economy was as significant as any other factor since colonisation. The task that remains is to pinpoint exactly how gold shaped Australia's economy. I argue that gold's influence on the Australian economy was twofold. Gold not only brought unprecedented wealth to the colony's shores, but fundamentally restructured consumption, production and the political and social structure of Australia. In discussing how gold altered economic development in the nineteenth century, I will compare historical trends against a counterfactual scenario in which gold was not mined, ceteris paribus.

This essay identifies two broad themes of economic change instigated by the emergence of the gold industry, which caused a thirteenfold increase in the value of Australian exports, and a threefold population increase from 1851 to 1860.<sup>2</sup> First, I examine the direct effects of gold on Australia's pattern

<sup>&</sup>lt;sup>1</sup> Sumner J La Croix, 'Property Rights and Institutional Change During Australia's Gold Rush'. Explorations In Economic History 29 (1992): 5.

<sup>&</sup>lt;sup>2</sup> Rodney Maddock and Ian McLean. 'Supply-Side Shocks: The Case of Australian Gold'. The Journal Of Economic History 44 (1984): 1049.

of exports, analysing how rapid economic growth spurred by gold mining restructured the macroeconomy. Second, I discuss gold's indirect role in reshaping the socio-political structure of Australia to foster more egalitarian economic outcomes. This particular phenomenon was largely attributable to the structural differences between Australia's gold mining and pastoral sectors.

# Contributions of the gold industry to macroeconomic restructuring in the nineteenth century

The combination of gold becoming Australia's largest export and the sheer rapidity of the GDP, wage and population growth it created delivered wealth that significantly changed the trajectory and stability of the Australian economy.<sup>3</sup> To understand the mechanisms by which these changes occurred, the context of gold's rise to prominence must first be understood. I then explore the two primary ways in which gold's rise strengthened Australia's economy: increasing economic activity that sustained the growth secondary industries; and securing stable economic growth.

### Context of the gold rush

Gold occupied the driver's seat in the Australian economy in the latter half of the nineteenth century. To usurp wool as the continent's dominant industry, gold relied upon being a far more lucrative industry for working-class labourers than the competing wool industry. In the early days of the rush, the gold industry's attractiveness was attributable to the industry's low barriers to entry, and high returns on labour.<sup>4</sup> Alluvial diggers needed almost no capital or land resources, and nominal licensing fees permitted easy industry entrance.<sup>5</sup> Spectacularly, the alluvial digger of 1851 could expect to see their annual income quintuple within 12 months.<sup>6</sup>

Wage increases in the gold industry spread to other industries because employers were faced with the economic reality that unless they increased wages, their employees would leave, as they were better off trying their luck on the goldfields. Improved wages consolidated to around a 70 per cent increase in real wages by the end of the decade.<sup>7</sup> This is contrasted against the wool industry, where the climatic constraints of the pastoral frontier, reliance on convict labour and the squatter oligopoly created by the

<sup>&</sup>lt;sup>3</sup> La Croix, 'Property Rights and Institutional Change', 9.

<sup>&</sup>lt;sup>4</sup> Maddock and McLean, 'Supply-Side Shocks', 1052.

<sup>&</sup>lt;sup>5</sup> Ibid, 1054.

<sup>&</sup>lt;sup>6</sup> Ibid, 1053.

<sup>&</sup>lt;sup>7</sup> Ibid.

1847 Lease Agreements limited growth and wages. 8 The allure of gold led labour from around the colonies and overseas to flood the goldfields. 9

Spurred by recurring discoveries of gold deposits, capital began to flow into the industry, as companies became involved in sophisticated mining methods like deep alluvial gold mining and gold-bearing quartz extraction. The inelasticity of gold prices, due to the international economy's dependence on the metal for the gold standard of currency, and the industry's independence from climatic conditions such as drought, fostered confidence in labour and investors alike. These factors sustained the heavy inflow of labour and capital into the mining industry, allowing the industry to crystallise into the engine room of Australia's most socially influential boom.

### Increased economic activity stimulating secondary industry growth

The gold rush in Australia stimulated two types of secondary industries in Australia. First, it supported industries that complimented the expanding population and increased wealth of the working class. Second, it supported industries that directly backed the mining sector. The gold industry's deliverance of increases to average wages, a population boom creating greater demand for manufactured goods, and the increase in Australia's import capacity as its exports exponentially rose led to increased aggregate demand for goods. The Australian working class experienced the best living conditions of any working class in the world during this era, with wages rising across all sectors due to labour shortages in many nonsubstitutable industries such as construction. The effect of this was that the per capita consumption of imports doubled from 1851 to 1860, causing short-term shocks in industries like manufacturing but leading to long-term growth and stability. To highlight this effect, rapid wage growth in the 1850s created immediate decline in import-competing manufacturing industries such as beer and clothing. This was because international firms paid lower wages and were therefore able to produce cheaper goods, granting them a competitive advantage over domestic producers. However, this decline was offset by the 'spending effect' of wage increases and the population boom generating increased demand for non-tradable domestic manufacturing like construction.

<sup>&</sup>lt;sup>8</sup> Paul Cashin and C John McDermott, "'Riding on the Sheep's Back": Examining Australia's Dependence on Wool Exports'. *Economic Record* 78 (2002): 249–63.

<sup>&</sup>lt;sup>9</sup> Maddock and McLean, 'Supply-Side Shocks', 1054

<sup>&</sup>lt;sup>10</sup> La Croix, 'Property Rights And Institutional Change', 12.

<sup>&</sup>lt;sup>11</sup> Maddock and McLean, 'Supply-Side Shocks', 1054.

<sup>&</sup>lt;sup>12</sup> La Croix, 'Property Rights And Institutional Change', 13.

<sup>13</sup> Ibid.

<sup>14</sup> Ibid, 9.

<sup>15</sup> Ibid, 20.

subject to competition from imports and experienced a net improvement due to this demand spike. Nonetheless, the rise of construction required a gross reallocation of resources, which took time.

While the early years of the gold rush actually harmed manufacturing in Australia, once the industry evolved manufacturing grew as an employer and exporter. Considering the counterfactual in which gold never boomed, demand for manufactured goods would most likely have remained low without real wage increases. Some might counter-argue that the role of government in stimulating manufacturing by creating tariff walls was never contingent on a gold rush, and it could be said that manufacturing may have grown as an export industry regardless. However, gold provided labour to facilitate a manufacting industry, increased demand by growing the consuming class, and provided the political cover to introduce tariffs which had long been opposed by wool traders. <sup>16</sup> Therefore, gold can be largely credited for manufacturing growth in the Australian economy, particularly in regard to construction.

Gold's immense growth also birthed industries that serviced the gold industry and secured Australia's international economic position. The industries that grew with the gold rush include banking, transportation across both land and sea, and the manufacturing of equipment used for deep mining and the processing of gold contained in quartz, when the alluvial era ended.<sup>17</sup> By contrast, the previous hegemon of wool was not capital intensive, and therefore there was little demand for either manufacturing farming equipment or for finance as provided for by the banking sector.<sup>18</sup> Of course, later technological advancements to incorporate more capital equipment into the agricultural sector, and mining of other minerals would have also fostered the growth of these supporting industries. In the nineteenth century, however, gold was the most demanded international good, meaning that only gold could deliver growth on the scale observed in nineteenth century Australia. Further, in creating increased aggregate demand that positively translated into an expansion of secondary industries that reflected Australia's increased wealth, there was potential for growth in the gold industry as the alluvial era ended.

### Securing sustainable economic growth

Gold contributed to Australian economic stability by increasing the size of the labour force, and by providing Australia with an export that was practically immune to market shocks. Gold gave Australia an economy that, for the first time, was of substantial enough size to avoid being derailed by exogenous shocks in international markets. Following the disastrous 1840s recession that was almost entirely attributable to the surplus in the British wool market, <sup>19</sup> Australian colonial governments became dedicated to the goal of increasing its population, with over 270,000 assisted immigrants, and 550,000 immigrants

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<sup>&</sup>lt;sup>16</sup> Cashin and McDermott, "Riding on the Sheep's Back", 257.

<sup>&</sup>lt;sup>17</sup> Maddock and McLean, 'Supply-Side Shocks', 1054.

<sup>&</sup>lt;sup>18</sup> Cashin and McDermott, "Riding on the Sheep's Back", 255.

<sup>19</sup> Ibid, 253.

overall arriving on Australian shores between 1850 and 1860.<sup>20</sup> This helped in developing a more robust economy, highlighted by the response of the economy to the mild decline of gold exports in the 1870s when wool boomed.<sup>21</sup> Here, the population boom and transition to smaller farming plots that followed the gold rush provided the labour base for the economy to quickly switch focus, and subsequently Australian sheep populations and wool exports both more than doubled in this decade.<sup>22</sup>

In the nineteenth century there was virtually 'unquenchable demand' for the strategic commodity of gold in international markets that protected it from shocks.<sup>23</sup> This set gold further apart from the preceding dominant commodity: wool.<sup>24</sup> Not only was gold unthreatened by climatic changes like drought, but, as noted above, demand for it was virtually ineleastic. As the nineteenth century came to a close, the independence of gold's value from all other economic factors was shown, as the 1890s gold rush in Western Australia staved off a global and domestic depression. As the gold-driven economy returned the current account to surplus by the early 1900s, it increased Western Australia's population fourfold, and doubled mining's contribution to Australia's GDP, despite weaker international markets.<sup>25</sup> Contrasted against an Australian economy where gold hypothetically did not exist, the capacity of the pastoral frontier was constrained by the need for rainfall to be above 10 mm annually,<sup>26</sup> meaning that there was little expansion possible after the 1870s demand and production spike.<sup>27</sup>

If gold were not discovered, Australia's economy would still be at the mercy of the volatile agriculture market. It would further be condemned to remaining labour scarce, thus preventing an expansion in secondary industries. It cannot be said that other minerals discovered in Australia like copper or coal carried gold's capacity to act as a beacon for labour and capital, as they, like wool, were volatile markets not tied to any currency. Therefore, gold must be almost solely credited for its role in stabilising, growing and diversifying Australia's economy in the latter half of the nineteenth century. Gold's influence was far-reaching and spread beyond the economic sphere, with the industry shaping the foundations of a more egalitarian society as Australia's population soared and the twentieth century dawned.

<sup>&</sup>lt;sup>20</sup> Ian McLean, Why Australia Prospered (Princeton, Princeton University Press: 2012), ch. 5.

<sup>&</sup>lt;sup>21</sup> Ibid.

<sup>22</sup> Ibid.

<sup>&</sup>lt;sup>23</sup> Cashin and McDermott, "Riding on the Sheep's Back", 253.

<sup>24</sup> Ibid.

<sup>&</sup>lt;sup>25</sup> Irving Kravis, 'Trade as a Handmaiden of Growth: Similarities Between the Nineteenth and Twentieth Centuries'. *The Economic Journal* 80 (1970): 857.

<sup>&</sup>lt;sup>26</sup> Ian McLean, Why Australia Prospered, ch. 5.

<sup>&</sup>lt;sup>27</sup> Ibid.

# Long-term socio-political effects of gold on Australia's development as a nation-state

Gold's rise to prevalence in the Australian economy also created a socio-political culture that cultivated egalitarian outcomes. Adopting a normative lens, the cultural benefits can be specifically categorised as breaking the squatting oligarchy, avoiding the resource curse, distributing wealth equally among workers, and politically empowering the working class.

### Breaking the squatting oligarchy

After crossing of the Blue Mountains in 1819, emancipists and free settlers flocked to the inland plains to capitalise on the immense opportunity in the wool industry. The wool industry was one of the only colonial exports to truly flourish in face of capital and labour scarcity and became Australia's largest export by 1830. This was because the capital (sheep) reproduced and the farming was land (rather than labour) intensive. Despite the government's dislike for private citizens exploiting Crown land without providing consideration for their use of the land ('squatting'), the authority's hands were largely tied by the immense political and economic clout of the squatting class. The recession of 1840 revealed the significance of wool to the Australian economy, and the failing of the 1844 lease agreements to distribute land rights more fairly reflect this. The consequence of this was that, by 1860, 70 million hectares of land was shared between only 2,000 squatters.

This culture, where squatters held the balance of power, fostered negative social conditions. The squatters' strict property rights to the land and capital components of the economy's leading staple produced an oligarchy. The high barriers to entry into the industry created severe income inequality, which not only is an unfair outcome, but reduces spending and access to imports and foreign capital that could be used to start new business ventures. Furthermore, the squatters used their political clout to prolong the convict era, due to their reliance on unfree shepherding labour.<sup>32</sup> Squatters were against tariffs that could foster manufacturing but would harm wool exports, and opposed suffrage, as they held strong influence in the bureaucratic Legislative Council of NSW.<sup>33</sup>

The discovery of gold in Victoria particularly was responsible for breaking the squatter oligarchy. This was not because gold drew labour from the paddocks to the gold fields, as the advent of fencing largely

<sup>&</sup>lt;sup>28</sup> Cashin and McDermott, "Riding on the Sheep's Back", 259.

<sup>&</sup>lt;sup>29</sup> Ibid, 254.

<sup>&</sup>lt;sup>30</sup> Morris Altman, 'Staple Theory and Export-Led Growth: Constructing Differential Growth'. *Australian Economic History Review* 43 (2003), 245–50

<sup>&</sup>lt;sup>31</sup> Cashin and McDermott, "Riding on the Sheep's Back", 262.

<sup>32</sup> Ibid.

<sup>33</sup> Maddock and McLean, 'Supply-Side Shocks', 1058.

circumvented the need for shepherds.<sup>34</sup> Rather, gold incited an immigration boom that tripled Australia's population between 1851 and 1860: this was the factor responsible for breaking the squatting class's political clout.<sup>35</sup> For the first time in Australian history, there was the labour required for land-intensive farming and a pressing need to accommodate the rapidly growing population. Thus, the Settlement Acts of 1861 were enacted, creating smaller farming plots, promoting broader ownership and more land-intensive farming practices.<sup>36</sup> With their land and economic hegemony finally stripped, the era where pastoralists wielded enormous political clout was at end, paving a way for a more progressive age where Australia achieved social milestones like broad male suffrage and minimum wages.

### Avoiding the resource curse: A comparison with Argentina

History teaches us that young countries with plentiful deposits of natural resources often fall victim to the resource curse: rapid wealth growth in small pockets of the economy that facilitates oligarchical political outcomes.<sup>37</sup> Gold helped Australia avoid the resource curse; this can be compared with Argentina, which, like Australia, was an economy with high resource stocks but labour scarcity in the nineteenth century. Like Australia, Argentina relied heavily on its rural sector, and its export staples of wheat and beef.<sup>38</sup> Applying staple theory, <sup>39</sup> the strict land rights afforded to agriculturalists in Argentina led to a gross concentration of wealth that led to the same oligarchical political culture that a politically powerful squatting class threatened to deliver to colonial Australia. In Argentina, this concentration of political power culminated in the National Autonomist Party, also known as PAN, emerging as the dominant Argentinian political party. PAN effectively suppressed other political movements in order to preserve the immense wealth concentration and broad economic growth provided by canvassing free trade policy and high barriers to entry in these staple industries. 40 These policies bear a strong resemblance to the canvassing free trade policies implemented by NSW's colonial parliament at the bidding of the economically powerful squatters. However, the overriding influence of gold mining in Australia helped end the rising of a squatting oligarchy, while Argentina's political monopoly was eventually broken in the Barings crisis of the 1890s by the rise of a Radical Party. This Radical Party was met with great resistance by soon-to-be dethroned pastoralists and is broadly agreed to have set back the Argentinian economy for many decades. 41 By contrast, the rise of gold in Australia prevented this reality from ever

<sup>34</sup> Maddock and McLean, 'Supply-Side Shocks'.

<sup>35</sup> Ibid, 1049.

<sup>36</sup> Ibid.

<sup>&</sup>lt;sup>37</sup> Altman, 'Staple Theory and Export-Led Growth'.

<sup>&</sup>lt;sup>38</sup> Paula Alonso, Between Revolution and the Ballot Box (Caimbridge, UK: 2000), 3.

<sup>&</sup>lt;sup>39</sup> Altman, 'Staple Theory and Export-Led Growth', 245–50.

<sup>&</sup>lt;sup>40</sup> Alonso, Between Revolution and the Ballot Box, 5.

<sup>&</sup>lt;sup>41</sup> Ibid, 9.

eventuating, with the political clout of the squatting class diminishing as the economic might of the mining industry dominated the economy. It is worth noting that, while Argentina became independent in 1853,<sup>42</sup> the British Government still held sovereignty in 1860s Australia. While both colonial and Argentinean policymakers stood to benefit from the continued boom of the pastoral sector, historians have suggested that the British Government may have intervened to prevent squatters from exerting too much political power in Australia.<sup>43</sup> Notwithstanding this, gold certainly played a role in breaking a predictably dangerous squatting oligarchy, through facilitating the Settlement Acts, and delivering a broad male suffrage following the Eureka Stockade in 1854.

### Fair distribution of economic opportunity

Another way in which gold contributed to more egalitarian social outcomes in the Australian economy was the industry's low barriers to entry, making it more accessible to everyone than wool. Contrasted against wool, which rose to prominence in a period of colonial history where free men who were allowed to export were outnumbered by convicts, gold arose in an era where unfree labour populations were dwindling. Furthermore, while land in the 1850s was becoming scarcer as the squatting class consumed it for wool exports, licenses for alluvial gold mining were uncapped.<sup>44</sup> This led to labourers from a range of sectors converging on the goldfields, a sector which, even after equilibration in the late 1850s, provided higher real wages to diggers than what they had previously received.<sup>45</sup>

A secondary consequence of the gold rush was that the economy transitioned to a more wage-based economy. This happened with the rise of manufacturing, and also non-alluvial gold mining where companies began to enter the industry in the 1860s.<sup>46</sup> These opportunities provided greater opportunity for working-class Australians to climb social ladders and experience income security, contrasted against the previously wool-driven economy.

#### Gold's contribution to the labour movement in Australia

Gold's role in transitioning the economy to a more wage-based economy can also be identified as an origin of the labour movement in Australia, and the emphasis placed on protecting workers' rights by the Australian political left. As discussed above, an immediate effect of the gold rush was labour shortages across other sectors such as construction and pastoralism.<sup>47</sup> The consequence of this was an increase in the price of labour (wages), which subsequently required early gold mining companies such as BHP to

<sup>&</sup>lt;sup>42</sup> Ibid, 7.

<sup>&</sup>lt;sup>43</sup> Maddock and McLean, 'Supply-Side Shocks', 1064.

<sup>&</sup>lt;sup>44</sup> Altman, 'Staple Theory And Export-Led Growth', 237.

<sup>&</sup>lt;sup>45</sup> Maddock and McLean, 'Supply-Side Shocks', 1054.

<sup>46</sup> Ibid, 1065.

<sup>47</sup> Ibid, 1053.

offer wages that were competitive with other sectors.<sup>48</sup> Suddenly, the Australian working class was experiencing the best working conditions of any working class in the world.<sup>49</sup> By the 1890s, this experience consolidated into a collective sense of entitlement to such working rights. Strikes, campaigns for eight-hour working days and other worker rights coloured the depression of the 1890s in Victoria, leading to the original labour movement combining with the Protectionist Party to form the predecessor to the modern Australian Labor Party (ALP).<sup>50</sup>

The development of the ALP is particularly attributable to the gold rush when considering the Eureka Stockade, which, by birthing democracy in Australia, and 'symbolically fighting for the rights of every man'<sup>51</sup> gave scope for political parties to appeal to the working class. This is different from the previous colonial bureaucracy that clearly favoured individuals and groups with business clout. The crux of Australia's political left labour movement origins is not necessarily reflected in any economic statistics.<sup>52</sup> Where this history becomes relevant, however, is in attributing Australia's rich history of industrial relations and unionism to the nature of its political left, which is distinct from a party that was forged in the politicisation of various social and political ideals, such as the United States' Democratic Party.<sup>53</sup> It is plausible that, if not for the intervention of the gold rush, the Australian political left may have arisen in the form of campaigns for radical social restructuring, as happened in Argentina – unlike the modern ALP, which was formed through campaigning for the preservation and continuation of the broadly high working conditions provided by a gold-influenced economy in Australia.<sup>54</sup>

### Conclusion

To conclude, the effect of gold mining in altering the Australian economy's development in the nineteenth century was substantial. It brought growth that was so grossly accelerated that it increased Australia's wealth to a level that was world-leading, and unforeseeable without gold's influence. This growth was so rapid that it permeated all facets of the economy, especially manufacturing and pastoralism, resulting in massive restructures that affected results and human experiences in these sectors. Finally, gold's role in forging Australia's political and social identity leaves a legacy of fierce protection of the working class, which is still effectual today. While gold's impact on the Australian export economy is no longer substantial, the social and political legacy of the once-hegemonic gold industry can be remembered as the

<sup>&</sup>lt;sup>48</sup> Maddock and McLean, 'Supply-Side Shocks', 1055.

<sup>49</sup> Ibid.

<sup>&</sup>lt;sup>50</sup> Kravis, 'Trade as a Handmaiden of Growth', 862.

<sup>&</sup>lt;sup>51</sup> The Age, May 8, 1855.

<sup>52</sup> Ibid.

<sup>&</sup>lt;sup>53</sup> Alonso, Between Revolution and The Ballot Box, 7.

<sup>&</sup>lt;sup>54</sup> Kravis, 'Trade as a Handmaiden of Growth', 857.

bridge between Australia's booming but fragile colonial economy and the robust, diverse and laboursupportive economy of modern Australia.

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