David T. Merrett and Simon Ville

Financing Growth: New Issues by Australian Firms, 1920–1939

An expanding economy, new technologies, and changing consumer preferences provided growth opportunities for firms in interwar Australia. This period saw an increase in the number of large-scale firms in mining, manufacturing, and a wide range of service industries. Firms unable to rely solely on retained earnings to fund expansion turned to the domestic stock exchanges. A new data set of capital raisings constructed from reports of prospectuses published in the financial press forms the basis for the conclusion that many firms used substantial injections of equity finance to augment internally generated sources of funds. That they were able to do so indicates a strong increase in the capacity of local stock exchanges and a greater willingness of individuals to hold part of their wealth in transferable securities.

The financing of Australian industry in the interwar period has been largely ignored.[1] Such neglect contrasts with Noel Butlin's magnum opus on economic development in the second half of the nineteenth century, which placed the interaction between financial institutions and investment at the center of its narrative.[2] Whereas British and American economic historians have considered the establishment of workable systems of corporate governance that gave investors the confidence to hold securities, their Australian counterparts have not pursued

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[1] The exceptions are Colin Forster, *Industrial Development in Australia, 1920–1930* (Canberra, 1964), and F. U. McGee, "Australasian Business Finance," *Economic Record* 3 (1927).

[2] Noel G. Butlin, *Investment in Australian Economic Development, 1861–1900* (Cambridge, U.K., 1964).

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the interplay between business expansion and the ability of financial markets to bring borrowers and investors together.[3]

Recent research has highlighted the growth of "big business" in Australia during the twentieth century, a phenomenon arising from a combination of a changing technological frontier and the profit opportunities available to firms making appropriate investments in production, distribution, and managerial hierarchy.[4] The interwar years were notable for the emergence of important new industries, including iron and steel, nonferrous metals, car bodies and assembly plants, aircraft manufacture, home appliances, rubber tires, petrol distribution, electricity generation and distribution, a range of branded packaged foodstuffs such as breakfast cereals, and cinema chains. Department and chain stores spread rapidly, taking market share from independent merchandisers. The finance industry was hungry for capital. Banks, insurance companies, and stock and station agents serving the pastoral industry all raised fresh capital to build the footings of their balance sheets.

We explore the extent to which this dynamism and expansion in the economy depended on the ability of Australian businesses to make new issues on the local stock exchanges during the interwar period.[5] To understand the role of the new-issues market in this period, we begin by explaining the development of the Australian stock exchanges in the late nineteenth century under the influence of British investments, law, and institutions. We then examine important elements of the growing maturity of the Australian stock market between the wars and describe their relevance to new issues. The size of the market reflected the de-

[3] See, for instance, Ranald Michie, *The Global Securities Market* (Oxford, 2006), and his *The London Stock Exchange: A History* (Oxford, 1999); Jean-Jacques van Helten, and Youssef Cassis, eds., *Capitalism in a Mature Economy: Financial Institutions, Capital Exports and British Industry, 1870–1939* (Aldershot, 1990); Philip Cottrell, *Industrial Finance, 1830–1914: The Finance and Organization of English Manufacturing Industry* (London, 1980); Leslie Hannah, *The Rise of the Corporate Economy* (London, 1983, 2nd ed.), ch. 6; Alexander T. K. Grant, *A Study of the Capital Market in Post-War Britain* (London, 1937); Ronald F. Henderson, *The New Issue Market and the Finance of Industry* (Cambridge, U.K., 1951); Leslie Hannah, "Pioneering Modern Corporate Governance: A View from London, 1900," *Enterprise and Society* 8 (2007): 642–86; Mary A. O'Sullivan, "Funding New Industries: A Historical Perspective on the Financing Role of the U.S. Stock Market in the Twentieth Century," in *Financing Innovation in the United States, 1870 to the Present*, ed. Naomi R. Lamoreaux and Kenneth L. Sokoloff (Cambridge, Mass., 2007), 163–216. See also Mary A. O'Sullivan, "Living with the U.S. Financial System: The Experiences of General Electric and Westinghouse Electric in the Last Century," *Business History Review* 80 (Winter 2006): 621–55.

[4] Grant Fleming, David T. Merrett and Simon Ville, *The Big End of Town: Big Business and the Rise of Corporate Leadership in Twentieth-Century Australia* (Cambridge, U.K., 2004).

[5] Australia had six stock exchanges, one in each state. They did not merge into a national exchange, the ASX, until 1987. Edna Carew, *National Market, National Interest: The Drive to Unify Australia's Securities Markets* (Crows Nest, NSW, 2007).

mand for funds by governments and business and the appetite of investors for securities, compared with other forms of assets. Investors became increasingly willing to hold transferable securities for a number of reasons. Firms offered a variety of types of securities—debentures and preference and ordinary shares—that provided choices of risk. Investors were drawn to the market as their confidence in securities rose. The market was made sufficiently familiar with the value of securities through daily trading and was informed of events at a deeper level by audits of company accounts, directors' concerns about protecting their reputations, and a vigilant financial press, all of which combined to entice individuals to hold more of their wealth in transferable securities. The stock exchanges improved their governance of the behavior of their members and gradually tightened listing rules. We report and discuss the extent of the new-issues market in the subsequent section and present our estimates of the number of new issues, the amount sought, and the amount raised each year between 1920 and 1939. We then discuss the allocation of the funds raised between industries and sectors, relate this distribution to shifts in national income and capital formation, and consider the motives of firms seeking new issues.

The Rise of the Securities Market before 1918

Stock exchanges emerged in Australia in the second half of the nineteenth century. Their institutional development was heavily influenced by the British connection, based on trade, investment, migration, and empire. Australia adopted, with lags, the basic tenets of British company registration and the rules governing their behavior. Before World War I, Australia's stock exchanges were smaller, primitive versions of provincial exchanges in Great Britain. Both were overshadowed by the emergence of the London Stock Exchange as the world's largest securities market, whose operations were crucial to the export of British capital.[6] Australian governments and businesses issued securities in London.[7] Moreover, many British "free-standing" companies raised capital in London to fund their business activities in Australia, particularly in banking, insurance, and pastoral financing.[8]

The principal business of the exchanges before 1914 was in mining stocks, most of which were highly speculative. Hope triumphed over reason, making gullible investors prey for unscrupulous promoters. Nearly

[6] Michie, *London Stock Exchange*; *Global Securities Markets.*

[7] Alan R. Hall, *The London Capital Market and Australia, 1870–1914* (Canberra, 1963).

[8] Mira Wilkins, "The Free-Standing Company, 1870–1914: An Important Type of British Direct Foreign Investment," *Economic History Review*, 2nd ser., 41 (1988): 259–82.

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all mining stocks were listed at "too early a stage of their development, before the worth of the reserves was established."[9] The number of "investment" class securities in railways, banks, breweries, and the like grew slowly.[10] A single exchange emerged in each colony as competition between rival provincial and city exchanges sorted out the strongest.[11] The 1880s boom was marked by a sharp increase in the number of securities and the volume of trading. The level of activity was heightened by a large inflow of British investment in local stocks, particularly banks, stock and station agencies, and mining. The collapse of the boom in the early 1890s led to a heavy fall in stock values and a sustained withdrawal of British funds. There was a sharp decline in the value of Australian securities held by British investors between 1899 and 1913 of seventy-six million pounds, despite heavy investments in Western Australian goldfields in the 1890s and a modest resumption of portfolio investment in the decade before 1914.[12] An important link between British investors and the Australian economy had been broken. A connection was maintained, however, by Australian mining interests, such as the Collins House Group, which purchased seats on the London Stock Exchange to maintain links with British capital.[13]

However, investment increasingly flowed through another conduit, foreign direct investment (FDI). A growing market and rising incomes pulled in market-seeking investments.[14] The process was evident before World War I with the entry of subsidiaries of multinationals, such as Lever Brothers, Michelin Rubber, National Cash Register, Vacuum Oil, and others that had registered as local firms.[15] Manufacturing attracted the lion's share of investment by British and American firms.[16] A broad-brush measure of the magnitude of these flows was the growth, from 3 percent to 8 percent, in the share of world FDI situated in Australasia and South Africa between 1914 and 1938.[17]

[9] Michie, *London Stock Exchange*, 266.

[10] Alan R. Hall, *The Stock Exchange of Melbourne and the Victorian Economy, 1852–1900* (Canberra, 1968).

[11] Australian Associated Stock Exchanges, *The Role and Functions of the Australian Stock Exchanges* (Sydney, 1981), Appendix B, "The Development of Stock Exchanges in Australia," 238–62.

[12] Robert L. Nash, *Australasian Joint-Stock Companies Year-Book* (Sydney), 1898 and 1913–14; Hall, *London Capital Market and Australia*, table 2, 206.

[13] Peter L. Richardson, "Collins House Financiers," in *Australian Financiers: Biographical Essays*, ed. Reginald T. Appleyard and C. Boris Schedvin (Sydney, 1988), 226–53.

[14] John H. Dunning and Sarianna M. Lundan, *Multinational Enterprises and the Global Economy* (Cheltenham, U.K., 2008), 179–83.

[15] Nash, *Australasian Joint Stock Companies*, 1913–14 edition.

[16] Forster, *Industrial Development*; Donald T. Brash, *American Investment in Australian Industry* (Canberra, 1966), Appendix A, 289–327.

[17] Dunning and Lundan, *Multinational Enterprise*, table 6.2, 175.

The break in the long drought of 1896–1902 and a recovery in export prices underpinned a decade of prosperity before World War I. Large-scale immigration and heavy government spending on infrastructure works resumed. An improved economy stimulated the stock exchanges. Governments, still smarting from their loss of reputation in London, turned increasingly to the local markets. There was substantial growth in the market for local securities. Robert Nash estimates that the value of securities held within Australia and New Zealand rose by fifty-two million pounds between 1899 and 1913.[18] Local investors bought shares sold by British investors, increasing the holdings of securities in household portfolios. In Melbourne, the number of securities was smaller in 1907 than at the end of the boom in the 1880s, but their nominal value had risen.

Australian businesses had turned eagerly to incorporation at the turn of the twentieth century in order to claim the benefits of limited liability and, in some cases, also to tap external sources of funding. They were early adopters of this new corporate form. Leslie Hannah estimates that, in 1900, nearly three-quarters of the world's corporations, approximately 90,000, were in the United States and Great Britain. Other countries were minnows by comparison. There were more than 4,000 in Japan, 1,300 in India, and "many in Canada, southern Africa, Latin America, Australasia and elsewhere."[19] We can be more precise about the Australian numbers. In 1901, there were 1,575 incorporated companies registered in Australia, 504 in nonmining and 1,071 in mining.[20] Critically, another 511 companies were operating in Australia that were registered in the United Kingdom, most of which were engaged in the Western Australian goldfields. Within a decade, the number of Australian registered companies had risen to 3,112: 2,320 in nonmining and 792 in mining industries.

World War I profoundly influenced the size and character of the Australian securities market. Trade and finance were initially thrown into confusion with the outbreak of hostilities. The various stock exchanges dithered, unsure whether to close and, if so, for how long. Eventually, Adelaide reopened before Melbourne. The markets were suspended from August 1 until late September, a shorter time than in Britain or Europe.[21] Restrictions on "time bargains" were relaxed by Christmas.[22] However, the conduct of the exchanges was subject to important

[18] Nash, *Australasian Joint-Stock Companies*, 1899 and 1913–14 edition.
[19] Hannah, "Pioneering Modern Corporate Governance," 645–46 and n11.
[20] Nash, *Australasian Joint Stock Companies*, 1902 edition.
[21] Michie, *Global Securities Market*; *London Stock Exchange*.
[22] R. M. Gibbs, *Bulls, Bears and Wildcats: A Centenary History of the Stock Exchange of Adelaide* (Adelaide, 1988), 191.

restrictions imposed in the War Precautions Acts passed in October 1914. Approval was required for registering a company, increasing nominal or authorized capital, or making calls on shares. New issues also needed the approval of the Commonwealth treasurer. These restrictions were not repealed until 1922.[23] Subjects of countries at war with Britain were required to forfeit their shares in Australian companies to the public trustee. Denying the enemy access to Australian raw materials was to have important consequences for the stock exchanges. Australia had strong trade links with Germany, particularly in the metals trade. The Australian government was most concerned to stop the export of base metals to German smelting companies and to promote local metal production.[24]

The British government indicated that Australia should bear the burden of its war effort by relying on its own resources. Individuals, rather than financial institutions or companies, purchased government bonds. Patriotic fervor led to 833,752 subscriptions to the ten War and Peace Loans. Those of limited means could purchase the inscribed stock or Treasury bonds in ten-pound installments. Beginning in February 1917, more than a million war-savings certificates, which were issued in denominations ranging from one to one thousand pounds, were taken up. These investments came free of tax and were scheduled to begin maturing in 1923.[25] A new class of investor had been born.[26]

The Interwar Securities Market

Growth and Diversification of Securities. The interwar period saw sustained growth in the number of listed securities and in the volume of business transacted. The larger firms that were incorporated as public companies increasingly turned to the stock exchanges to list their securities. Doing so signaled the availability of benefits to potential investors. These firms were able to meet the listing requirements, which provided investors with some element of safety, and their securities offered liquidity at a market-based price. Data about the number of "industrial" securities listed between the wars on the two largest exchanges, Melbourne and Sydney, are shown in Table 1. The number of shares and debentures listed more than doubled, from 472 in 1919 to 950 in 1939, while the paid-up value of those securities rose even faster, from 166 million pounds in 1919 to 485 million pounds in 1939.

[23] Geoffrey Sawer, *Australian Federal Politics and Law, 1901–1929* (Melbourne, 1956), 135, 195.

[24] Ernest Scott, *Australia during the War* (Melbourne, 1936), ch. 15.

[25] C. C. Faulkner, *The Commonwealth Bank of Australia* (Sydney, 1923), ch. 9.

[26] Gibbs, *Bulls, Bears and Wildcats*, 227.

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Table 1
Number of Issued Shares and Debentures, Paid-Up Capital, and Market Value on the Melbourne and Sydney Stock Exchanges, 1899–1939

	Melbourne			*Sydney*	
Year	*Number of Securities*	*Paid Up*[a]	*Market Value*[a]	*Number of Securities*	*Paid Up*[a]
1889	203	32	—	—	—
1907	149	39	—	—	—
1919	281	80	—	191	86
1929	470	206	—	328	205
1939	562	221	367	388	264

Sources: Columns 1, 2 and 3, Gordon R. Bruns, *The Stock Exchange (Melbourne, 1961)*, table 1, 47, for 1889, 1907, 1919, 1929; and the *Annual Report of Stock Exchange of Melbourne*, 1961, 9, for 1939. Columns 4 and 5, Stephen Salsbury and Kay Sweeney, *The Bull, Bear and Kangaroo* (Sydney, 1988), table 10.1, 242.
Note: The Melbourne data refer to the number of "investment" securities, which is greater than the number of firms, and include silver, lead, and copper shares but exclude gold and tin-mining securities. The Sydney data exclude all mining shares. The number of securities being listed rose faster than the totals shown here, as it is net of securities taken from the official lists as their companies went into liquidation or were taken over. For instance, the number of listings on these two exchanges rose by 152 between 1929 and 1939, shown above, plus those that replaced the securities associated with seventy-six companies that were delisted.
[a] In millions of pounds.

The composition of securities listed had changed irrevocably from prewar years. Government securities were the largest section of the market in terms of capitalization. The value of government securities domiciled within Australia had risen by 252 million pounds between 1913 and 1919, and it grew by another 346 million pounds between 1919 and 1939.[27] The value of government securities as a proportion of all securities in Australia was over 70 percent in the interwar years, compared with around a third in Britain.[28] There was also a significant shift within the types of securities issued by the private sector. Mining stocks, once the mainstay of the market, were overtaken, both absolutely and relatively, by the expanding "industrials." Australian exchanges had been a haven of speculation, particularly in mining stocks, whose values rose under the influence of rumor and fraud and receded under the

[27] Matthew Butlin, "A Preliminary Annual Database 1900/01 to 1973/74," research discussion paper 7701 (Reserve Bank of Australia, Sydney), table 4.15, 104–6.

[28] Gordon R. Bruns, *The Stock Exchange* (Melbourne, 1961); Michie, *London Stock Exchange*, 270.

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weight of short selling.[29] Even in the 1930s, shares in gold companies traded on the Perth exchange attracted "scams and sharp practices aplenty."[30] At the outbreak of World War I, the chronicler of the Melbourne stock-broking firm of J. B. Were opined that "investment interest had not yet spread through all classes of the community."[31] The demand for securities rose, stimulated by the prior experience of entry into the wartime market when risk-free government securities offered an attractive yield, and by rising prosperity in the 1920s. Don Lamberton's index of the prices of industrial and commercial shares listed on the Sydney Stock Exchange had doubled between 1900 and 1919 and then trebled between 1920 and 1939, despite a brief hiatus between 1929 and 1931, when it fell sharply.[32] At the margin, the demand for securities exceeded the supply offered by the exchanges. The committees of most of the exchanges tried to choke this excess demand by prohibiting their members from engaging in "curb trading" of mining stocks and by lobbying governments to outlaw the door-to-door hawking of unlisted securities, practices that became increasingly frequent in the 1930s.[33]

The 1930s provided challenges and opportunities for the stock exchanges. The immediate effect of the depression was to dampen trade. Share prices fell heavily as company profits shrank, dividends were cut, and investors liquidated their positions. However, policy decisions by the Australian and British governments helped the stock exchanges position themselves as the economy recovered. At the margin, shares became a more attractive option for investors than bonds. The Premiers Plan adopted by the Commonwealth and the states in 1931 reduced interest on bank deposits, government bonds, mortgages, and rents, offering equality of sacrifice across a community in which unemployment had risen above 25 percent. The gap between the reduced bond yields, which had lost their tax-free status in the 1920s, and those offered on shares widened in favor of the latter. Moreover, the price of gold rose dramatically after Britain left the gold standard in May 1931, sparking a rush of gold-mine flotations and a revival in trade in mining shares.

[29] Gibbs, *Bulls, Bears, and Wildcats*.

[30] Graeme Adamson, *Miners and Millionaires: The First One Hundred Years of the People, Markets and Companies of the Stock Exchange in Perth, 1889–1989* (Perth, 1989), 54.

[31] A. T. Ellis, *The House of Were* (Melbourne, 1954), 173.

[32] Don Lamberton, "Some Statistics of Security Prices and Yields in the Sydney Market, 1875–1955," *Economic Record* 34 (1958), table 3, 259.

[33] Ellis, *House of Were*; Graeme Adamson, *A Century of Change: The First Hundred Years of the Stock Exchange of Melbourne* (South Yarra, 1984); Adamson, *Miners and Millionaires*; Gibbs, *Bulls, Bears and Wildcats*; Stephen Salsbury and Kay Sweeney, *The Bull, the Bear and the Kangaroo: The History of the Sydney Stock Exchange* (Sydney, 1988).

Institutional Development of Stock Exchanges. The capacity of the stock exchanges to handle a considerably larger securities market increased in the interwar years. The membership of the Sydney exchange rose from sixty-eight in 1918 to one hundred by 1939.[34] Within the offices of broking firms, the number of partners and back-office staff rose. Brokers became connected to the floor of the exchange and to their clients by telephones and later by the use of teleprinters. The extension of interstate phone lines allowed for connections between local exchanges. Entrepreneurial spirits, like Staniforth Ricketson of J. B. Were, took the lead in introducing new and improved services to clients, including underwriting industrial stocks and setting up investment trusts. His firm also opened an office in London in 1928, and, to the chagrin of the Sydney brokers, actively sought business in their market.

Major steps were taken to create a national securities market. Beginning in 1903, a series of interstate conferences was held, whose goal was to find common ground among six sets of listing rules and brokerage charges while addressing differences among brokers from different exchanges. World War I placed greater responsibilities on the exchanges, as they had been assigned the vital role of issuing and trading government bonds. This unaccustomed prominence made it more urgent for them to be able to speak with a single voice on issues of national importance. Interstate conferences continued throughout the 1920s and 1930s, leading to agreement on many issues. Brisbane came into line with the other exchanges on reciprocal listing in the early twenties. In an attempt to stop the bears from forcing down prices in July 1930, the Adelaide, Melbourne, and Sydney exchanges outlawed "time bargains." Listing requirements, particularly for mining stocks, were tightened during the 1930s. By 1937, the exchanges had set up the Australian Associated Stock Exchanges to act as a national body.[35]

Business Demand for Funds. The dilemma for firms wishing to take advantage of the new business opportunities arising across many parts of the economy was that retained earnings might not be sufficient to fund expansion, particularly for one-off large investments in emerging industries that used capital-intensive and science-based technologies. Paradoxically, the high profits earned in the 1920s provided more funds, but they also fueled the appetite for even more capital.[36] Firms that had already exploited their first-mover advantages to achieve a

[34] Salsbury and Sweeney, *Bull, Bear, and Kangaroo,* 241.

[35] Gibbs, *Bulls, Bears, and Wildcats,* 148, 184, 214, 276; Salsbury and Sweeney, *Bull, Bear, and Kangaroo,* 198, 206–7, 209, 287; Robert Murray and Kate White, "Staniforth Ricketson," *Australian Financiers,* ed. Appleyard and Schedvin, 309–30.

[36] Simon Ville and David T. Merrett, "A Time Series for Business Profitability in Twentieth-Century Australia," *Australian Economic Review* 39, no. 3 (2006): 330–39.

position of market dominance had a stream of high earnings on which they could draw. The greatest challenges faced firms wishing to make the initial investments to capture the economies of scale that could propel them into a dominant market position.[37] Managers and providers of external funds had asymmetric information about the risks and payoff from investments, a situation that led external providers to overestimate the risks and underestimate the rewards. Firms that were newer, less profitable, and less well known faced greater obstacles in attracting additional share capital. They were seen as riskier propositions to external providers of capital, reducing the amount they could borrow and increasing its cost.[38]

The stock exchanges were a growing source of funds for business. The development of wider and deeper markets allowed investors to lay off risk by diversifying their portfolios across a range of listed firms. Enterprises that were not incorporated or listed were condemned to a narrower range of financing options. All was not lost for the fortunate few among them, however. As Staniforth Ricketson, a leading broker in Melbourne, noted, "Quite a number of public companies owe their establishment and expansion to the enterprise of strong industrial or finance groups, which have originated and developed new enterprises, bringing them to the stage of assured success before asking for public capital."[39] Broken Hill Proprietary, the Collins House Group of companies, and Imperial Chemical Industry Australia and New Zealand nurtured their associated and subsidiary companies up- and downstream in this fashion.[40] Occasionally, stockbrokers acted as intermediaries between the founders and promoters of newly incorporated companies and new investors.[41] More commonly, as the chairman of the Sydney Exchange asserted, the principals raised capital "from friends or from people who knew the business."[42] The case of Sir Frank Beaurepaire's Olympic Tyre & Rubber Company illustrates the point. A champion

[37] Fleming, Merrett, and Ville, *Big End of Town*, 84–88.

[38] Jonathan B. Baskin and Paul J. Miranti Jr., *A History of Corporate Finance* (Cambridge, U.K., 1997), ch. 5.

[39] Staniforth Ricketson, *Minutes of Evidence, Royal Commission on Money and Banking, 1935–37* (hereafter *RCMB*), 4 Sept. 1936.

[40] Department of National Development, *The Structure and Capacity of Australian Manufacturing Industries* (Melbourne, 1952), 168–76; Richardson, "Collins House Financiers"; William J. Reader, *Imperial Chemical Industries: A History*, vol. 2 (London, 1975), 207–12. For the more recent history of BHP and the Collins House Group, see David Merrett, "Sugar and Copper: Postcolonial Experiences of Australian Multinationals," *Business History Review* 81 (Summer 2007): 213–36.

[41] William F. Woods, chairman of the Stock Exchange of Melbourne, *Minutes of Evidence, RCMB*, 10 Mar. 1936; and Eric G. Blackmore, chairman of the Sydney Stock Exchange, *Minutes of Evidence, RCMB*, 8 May 1936.

[42] Blackmore, *Evidence, RCMB.*

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swimmer, he financed his first venture in 1922, the Beaurepaire Tyre Service, with his share of a five-thousand-pound reward for rescuing a victim of a shark attack at Coogee Beach in Sydney and money from his brother-in-law. The business flourished. By 1933, he had registered it as a proprietary company, Olympic Tyre & Rubber Co. P/L, receiving assistance from a J. T. Vinton Smith in "disposing of his first group of shares" to outside investors, including R. G. Menzies, a future prime minister.[43] However, there were only twenty-seven shareholders, and Beaurepaire, with his father and sister, held the majority of the stock. Within a year, the company, needing substantial fresh capital, converted to public company status.[44]

Securities in proprietary companies were highly illiquid. Often, sales required the permission of the directors and could be made only to existing shareholders at a price determined by the directors.[45] Norman Rydge advised his readers to "leave unlisted stocks for the other fellow."[46] Not all heeded his advice, and those who did not were neither naïve nor greedy. For instance, some members of the Stock Exchange of Melbourne showed their interest by defying its committee and trading unlisted securities within the exchange call room in the 1930s.[47] Melbourne's leading stockbroking firm, J. B. Were, operated a large investment trust, Australian Foundation Investment Company Limited, which held twenty-one unlisted securities in its portfolio.[48] For some, "insider" knowledge acquired by previous relations with the principals through social or business networks more than offset the downside of illiquidity.[49] The latter consideration may have been transitory, in any case. As the Beaurepaire example demonstrated, trading unlisted shares could lead to the establishment of a market, leaving the original investors with freely traded securities in a highly profitable company.

Ricketson informed the Royal Commission that "if the record and standing of the company itself and of those associated with it are

[43] Graham Lomas, *The Will to Win: The Story of Sir Frank Beaurepaire* (London, 1960), 109.

[44] Ibid., 71–78, 102–3, 109, 114. The Beaurepaire family held 23 percent of the ordinary shares in 1954. Edward L. Wheelwright, *Ownership and Control of Australian Companies: A Study of 102 of the Largest Public Companies Incorporated in Australia* (Sydney, 1957), 194–95. On the debate over ownership and control in American companies during the twentieth century, see Brian Cheffins and Steven Bank, "Is Berle and Means Really a Myth?" in this issue of *Business History Review* (Autumn 2009).

[45] Clifford M. Collins, *Australian Company Law: Being a Handbook of Law Relating to Companies in Each of the Australian States* (Sydney, 1940), 167.

[46] Norman B. Rydge, *The Australian Stock Exchange* (Sydney, 1934), 95.

[47] Adamson, *Century of Change*, 96–98.

[48] J. B. Were, *Australian Investment Trusts* (Melbourne, 1948).

[49] Naomi R. Lamoreaux, *Insider Lending: Banks, Personal Connections, and Economic Development in Industrial New England* (Cambridge, U.K., 1994).

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satisfactory, and if there appears to be a reasonable assurance of success, the investing public will almost invariably subscribe the requisite permanent capital."[50] He noted that even during the depression "there have been many minor issues, and, except in a few isolated cases where there were special reasons for failure, the new issues have met with signal success."[51] In particular, the "corporate leaders" of the period, whose securities were mostly "listed," were major players in a small economy whose reputation and standing made them a lower-risk investment.[52]

Investor Confidence. Investors faced greater risks when purchasing securities in preference to government bonds or holding their funds in bank deposits. What level of confidence could they have in the information made available to them by the firms whose securities they purchased and in the probity of the share brokers with whom they traded? The risk was deepened by the growth in the types and numbers of investors in the interwar period. Before the war, most individual investors were men of means who had personal relationships with their brokers. Britain and Australia shared a similar experience as the new investors flooded into the market to buy war bonds. Many stayed on and switched the balance of their portfolios toward equities.

The number of shareholders and the value of their holdings rose strongly in the United States and the United Kingdom in the 1920s and 1930s.[53] The only available data points for Australia lie on either side of the two world wars. We can compare the number of shareholders in thirteen large companies in 1954 and 1912.[54] In the earlier year, these firms had 13,302 shareholders, an average of 1,029.[55] In 1954, these same companies had 79,323 shareholders, an average of 6,102. The 1954 study of the 102 largest firms showed that they had 490,000 shareholders, who on average held stock with a nominal value of 642,000 pounds. However, the majority of shareholders were individuals with a nominal stock value of 1,000 pounds or less.[56] An examination of the balance sheets of financial institutions, especially life-insurance companies, in the 1920s and 1930s, shows little evidence of shares as assets.

[50] Ricketson, *Evidence, RCMB.*

[51] Ibid.

[52] Fleming, Merrett, and Ville, *Big End of Town*, 148–49.

[53] Gardiner C. Means, "The Diffusion of Stock Ownership in the United States," *Quarterly Journal of Economics* (Aug. 1930): 562; Michie, *London Stock Exchange*, 176–77.

[54] The companies are Adelaide Steamship, Bank of Adelaide, Bank of New South Wales, Commercial Banking Company of Sydney, David Jones, Elder, Smith, Foy & Gibson, Howard Smith, Mercantile Mutual Insurance, North Broken Hill, Swan Brewery, Tooth & Co., and Tooheys.

[55] Nash, *Australasian Joint-Stock Companies*, 1914 edition.

[56] Wheelwright, *Ownership and Control*, tables 3, 3 C, 38–42, 48–52. Michie notes that, in the 1920s, 85 percent of shareholders in the seven largest industrial firms in Britain owned stock worth 500 pounds or less. *London Stock Exchange*, 176.

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How many individuals owned shares? Intuition suggests that their number was far smaller than the list of "book stockholders," because investors would hold a portfolio of shares to reduce risks. In 1934, Norman Rydge advised clients with only 1,000 pounds to buy shares in four or five firms operating in different industries. Someone with 5,000 pounds was advised to select two dozen firms situated in ten different industries.[57] The best estimate of the number of persons receiving dividends was made some years after World War II. The Commonwealth government assumed a monopoly of income-tax collection in 1942. The commissioner of taxation first provided information about the number of persons for whom dividends were part of their assessable income in the tax year 1951–52. Of the two million or so individuals paying income tax, 109,000, 40 percent of whom were women, received part of their income from investments in government stock, rents, and dividends. Nearly one-half of this income stream, 48 percent, was derived from dividends.[58] Roughly, 5 percent of individuals paying income tax held transferable securities.

The arguments made by Hannah with respect to attenuating corporate governance issues in British securities markets around 1900 resonate for Australia.[59] Australia followed British company law from the 1860s, and it had an army of accountants to provide independent audits of accounts.[60] Apart from mandatory disclosure, directors faced the threat of removal and, perhaps more important, had compelling incentives to increase their own wealth, particularly if the company was highly leveraged. A vigilant financial press could make or break directorial reputations. While there were improvements in the quality of information reaching investors, some problems remained. Alex Jobson expressed concern that company promoters might "flood the market with prospectuses of more or less merit."[61] The company legislation and stock-exchange listing requirements in each of the states, while requiring greater disclosure, still allowed firms considerable latitude in the information they put in prospectuses. Norman Rydge observed in the 1930s that the "average company promoter in Australia is the object of much public odium because his schemes are mostly traps to catch the unwary."[62]

[57] Rydge, *Australian Stock Exchange*, 89–91.

[58] *Thirty-Third Report of the Commissioner of Taxation*, Commonwealth Parliamentary Papers, 1954–55, paper no. 68, table 37, dividends included in taxable income, 52 and appendix, 110–11.

[59] Hannah, "Pioneering Modern Corporate Governance."

[60] Robert W. Gibson, *Disclosure by Australian Companies* (Melbourne, 1971); Rob Linn, *Power, Progress and Profit: A History of the Australian Accounting Profession* (Melbourne, 1996), 45–49.

[61] *Australian Investment Digest* 1 (Apr. 1920): 53–54.

[62] Rydge, *Australian Stock Exchange*, 105.

Brokers became more than passive sales intermediaries. They sought to reach a wider market through advertising, producing circulars, and setting up unit trusts. J. B. Were used its in-house research capacity to offer higher-quality advice. Both the Melbourne and Sydney exchanges set up research departments in the 1930s, and Sydney's avowed aim was to enable its members to compete with J. B. Were's.[63] Stock-exchange members were either sole traders or partners with limited financial resources to cover their exposures before settlement. Failures of brokers were rare, but the sensational demise of the Melbourne firm of Edward Ward & Co. and the default of the Brisbane stock exchange's president in 1937 highlighted the need for reform.[64] The southern exchanges went their separate ways: Sydney required brokers to hold their client's monies in a trust account, while Melbourne suffered the indignity of the passage of the Stock and Share Brokers Bill, which required periodic audits of brokers' accounts and the establishment of a fidelity fund.[65] A long fight ensued in New South Wales to avoid legislation and preserve self-regulation.[66]

Australian investors displayed symptoms of schizophrenia. They gambled on mining stock but were risk averse when buying other securities. Eighteen percent of all issues were of preference shares, and 7 percent were of bonds.[67] These securities had a higher ratio of take-up to offer than ordinary shares. Some firms offered both ordinary and preference shares in the same issue. Ordinary shares were the most common type of security offered, comprising 75 percent of the value of all issues. However, companies strove to maintain constant dividend payouts, which gave ordinary shares often debtlike properties with lower risk.[68] During the depression, there was a sharp swing toward issues of preference shares and bonds at the expense on ordinary shares; those types of securities rose to 46 percent of all issues between 1931 and 1935.

A principal reason for the increased willingness to invest in securities was that they could be "realized at will via the Stock Exchange."[69] A wide and deep market in which securities were regularly traded provided prices set by the interplay of supply and demand and liquidity. However, many securities were not regularly traded between the wars. This was the case on the London Stock Exchange, as well as in Austra-

[63] Salsbury and Sweeney, *Bull, Bear, and Kangaroo,* 285–87.
[64] Ibid., 264–65.
[65] Adamson, *Century of Change,* 94–95.
[66] Salsbury and Sweeney, *Bull, Bear, and Kangaroo,* 263–75.
[67] The ratio of ordinary shares to fixed-interest securities in Australia was comparable to Britain over the same period. See Michie, *London Stock Exchange*, 285.
[68] Fleming, Merrett, and Ville, *Big End of Town*, 150–51.
[69] Michie, *London Stock Exchange*, 269.

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lia. Less than 10 percent of quoted securities on the London Stock Exchange "could command a ready market" before 1914, and many stocks remained inactive in the 1920s.[70] There is reason to believe that the percentage of securities traded on Australian exchanges grew in the interwar period. For instance, the Stock Exchange of Melbourne's *Official Record* shows that the 26 percent of all securities were traded in June 1926. That ratio had risen to 73 percent in June 1939.[71] While the secular trend was upward, the volume of trading also reflected the trade cycle. During the depression, the volume of trades fell away to such an extent that brokers played cards to while away the time in the call room of the Brisbane Stock Exchange.[72]

The Growth of New Issues

Data Source and Trends in New Issues. To our knowledge, only two of the six state-based stock exchanges published any information about the number and nominal value of securities issued during the interwar years. As we described in the previous section, the number of securities, shares, and debentures issued by companies on the country's largest exchanges, the Stock Exchange of Melbourne and the Sydney Stock Exchange, nearly doubled between 1919 and 1939, and their nominal value nearly trebled. However, these annual data do not capture all the information about new issues, as additional issues by a company of the same class of security would not have been recorded. There is an element of double counting, as the largest firms were listed on more than one of the state-based exchanges. New issues by public companies not listed on the stock exchanges were missed. Moreover, the stock-exchange data cannot tell us which firms were offering the new issues or for what purposes. Consequently, we have turned to the financial press, which reported and commented on new issues by publishing prospectuses as they came to hand.

Prospectuses reached a wider audience after World War I. Stock exchanges began to publish monthly reports of their activities, and stockbrokers also circulated information about securities to their clients. A specialist financial press, exemplified by *Wild Cat* and *Australasian Insurance and Banking Record,* complemented the coverage on the business pages of the quality newspapers. Companies, promoters, and underwriters would have approached the financial press to publicize their offerings. Our judgment is that the *Australian Investment*

[70] Ibid., 95, 272–74.
[71] Stock Exchange of Melbourne, *Official List,* June 1929, June 1939.
[72] Alan L. Lougheed, *The Brisbane Stock Exchange, 1884–1984* (Brisbane, 1984), 109.

Digest (*AID*) provides the most complete and accurate coverage.[73] The data set of new issues covers 2,176 usable observations. Its richness permits us to collect much material about each application for funds, including the amount sought and the purposes to which it would be put, the type of securities being offered, and whether the issue was underwritten. The data for the amounts sought and the types of security on offer are complete. There are gaps in coverage of some of the other areas, particularly in accounts of the purpose for which the issue was being sought, but enough information exists to allow judgments to be made.

The coverage of new issues from *AID* is a large enough sample to offer robust findings. The total value of new issues raised between 1920 and 1939 drawn from *AID* of 137 million pounds compares with an increase in the paid-up capital of securities listed on the Stock Exchange of Melbourne of 141 million pounds, and on the Sydney Stock Exchange of 178 million pounds.[74] Many of the leading companies were listed on both exchanges, so taking the growth separately gives a closer approximation to the net increase than using a combined number.

The number of new issues, the amounts sought, and the amounts raised in each year are shown in Table 2. A strong cyclical pattern is evident. The demand for funds mirrored the state of the economy. Following a brief postwar recession, Australia enjoyed a strong upswing through the 1920s, fueled by a combination of strong export prices and high government spending on capital works. The onset of the world depression hit Australia, a debtor nation, doubly hard as the price of primary products collapsed on international markets and as Australian governments could no longer borrow abroad. The depression was particularly severe: unemployment reached more than 25 percent of the workforce, the economic situation worsened, and recovery was delayed by the government's deflationary fiscal policy. Recovery began to take hold in 1932, as the result of a revival in commodity prices and a rapid expansion of manufacturing.[75]

The number of issues rose through the twenties, reaching more than 180 each year in 1926, 1927, and 1929, before dropping sharply in

[73] *Australian Investment Digest* (1920–24), latterly named *The Investment Digest of Australia and New Zealand* (1924–27), and *Jobson's Investment Digest of Australia and New Zealand* (1927 onward). We refer to the source as *AID* hereafter. Colin Forster, "Jobson, Alexander (1875–1933)," *Australian Dictionary of Biography*, vol. 9 (Melbourne, 1983), 488–89.

[74] Firms whose balance sheets were reported in *AID* in 1926 and 1939 have been identified as having had securities listed on the stock exchange.

[75] C. Boris Schedvin, *Australia and the Great Depression* (Sydney, 1970); Robert G. Gregory and Noel G. Butlin, eds., *Recovery from the Depression: Australia and the World Economy in the 1930s* (Melbourne, 1988).

Table 2
New Issues, 1920–1939: Number, Amount Sought and Raised

Year	*No. of Issues*	*Amount Sought*[a]	*Amount Raised*[a]	*Percent Raised*
1920	123	15.5	11.8	76.3
1921	105	14.2	9.9	69.5
1922	136	12.6	7.6	60.2
1923	164	16.2	6.5	40.4
1924	178	18.2	12.5	68.6
1925	176	14.1	8.1	57.4
1926	185	28.1	14.3	50.7
1927	187	24.2	18.5	76.5
1928	166	15.9	8.0	50.3
1929	187	22.7	9.0	39.6
1930	81	8.6	3.2	37.3
1931	38	2.5	0.9	34.5
1932	35	2.7	0.5	18.7
1933	31	4.0	0.3	6.6
1934	32	3.4	0.6	17.7
1935	33	3.5	1.6	45.9
1936	55	5.4	4.0	75.4
1937	91	9.4	5.7	60.2
1938	101	9.2	7.8	84.2
1939	72	6.7	5.8	86.7
Total	2176	237.2	136.5	57.6

Source: *Australian Investment Digest*, 1920–1939. The amount shown in column 3 as "amount raised" is calculated from reports in *Australian Investment Digest* and an examination of the company's subsequent balance sheets.
[a] In millions of pounds.

1930. The number hovered around the low thirties until 1936, when a strong recovery commenced. The amount of monies successfully raised peaked in 1926 and 1927. However, the ratio of amounts raised to amounts sought through issues plummeted, dropping from 76 percent in 1927 to a nadir of 7 percent in 1933. The "success" rate rose sharply again later in the 1930s, reaching over 80 percent in 1938 and 1939.

Allocation of New Issues between Industries and Sectors. Which industries were most active in the new issues market? Only firms that were incorporated had the opportunity to participate. These were a small fraction of all businesses, as most of the economy was the province of owner operators. From the late nineteenth century onward, an increasing number of enterprises took advantage of local company acts, based on British law, to register as companies with limited liability. However, most newly incorporated businesses were not listed, and many of them adopted private company (proprietary) status once the appropriate legislation was passed in their state, commencing with Victoria in 1896. Rates of incorporation and stock-exchange listing differed widely across sectors and industries.[76] Listed companies came from the more capital-intensive manufacturing industries and from among the banks and insurance companies, stock and station agents serving the pastoral industry, department and chain stores, shipping companies, and the utilities, such as gas and electricity. The larger mining companies in gold, base metals, and coal were also incorporated. Many of these businesses possessed the key attributes of Alfred Chandler's large industrial companies.[77] They were more capital intensive than firms in other industries, had many distinct operating units, and employed fledgling hierarchies of salaried managers.[78]

The number of nonmining companies listed on the Stock Exchange of Melbourne grew strongly. Between June 1926 and June 1939, the number of nonmining firms offering ordinary shares rose from 246 to 350.[79] Nearly three-quarters of the increase came from manufacturing firms. The industries most heavily represented within manufacturing were metal refining, chemicals, car bodies, paper and board production, newspapers, textiles, tobacco, dairy products, processed foods, and electrical engineering. The number of listed retailers rose from ten to thirty-one, an increase that was largely accounted for by capital-city department stores and new chain stores.[80] By comparison, the number of mining companies listed fell from 214 to 180 over the same period.

The nearly 2,200 new issues collected from *AID* provide a richer data set. To begin with, the set throws light on the access to the new-issues market by listed and unlisted firms. Our new-issues data have been divided into firms whose securities were "listed" on stock exchanges and those whose securities were "nonlisted," because we hypothesized that the two categories would have different characteristics. We posited that listed securities would have been made by larger, better established companies, which would have sought greater amounts of funding, would have had higher success rates, would have returned to the market making multiple issues, would have been more likely to offer the securities to existing shareholders through rights issues, and would have been more apt to be underwritten. Of the 1,036 successful issues of

[76] Nash, *Australasian Joint Stock Companies*, various years.

[77] Fleming, Merrett, and Ville, *Big End of Town*.

[78] Alfred D. Chandler Jr., *The Visible Hand: The Managerial Revolution in American Business* (Cambridge, Mass., 1977); Fleming, Merrett, and Ville, *Big End of Town*.

[79] The Exchange's *Official Record* began publication in 1925.

[80] Stock Exchange of Melbourne, *The Stock Exchange Official Record* (Melbourne, June 1926 and 1939).

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listed securities, the average amount sought was 126,000 pounds, while, of the eighty-five unlisted securities, the amount was only 66,000 pounds. Listed securities also enjoyed greater success: 78 percent of their issues attracted capital, compared with only 10 percent of the nonlisted securities. For each successful issue, firms with listed securities raised 92 percent of the amount sought, against 65 percent for nonlisted securities. Almost all of the 548 multiple issues were for listed securities. Listed firms relied on underwriters more frequently, employing them for 13 percent of issues, compared with their use by only 2 percent of nonlisted securities. However, there were few other differences: firms with both listed and unlisted securities offered more than three-quarters of their issues to the public, rather than as rights issues to shareholders. Only 29 percent of issues of listed securities and 25 percent of nonlisted securities issues were offered exclusively to existing shareholders.

Table 3 compares the distribution of the new issues across sectors with the distribution of the gross domestic product (GDP). Australia had large farm and mining sectors that generated around a quarter of GDP. Manufacturing and utilities were expanding in importance, but were still eclipsed by the distribution part of the service sector. The finance industry made only a small contribution to GDP. Construction and public and private services made up the remaining third of the economy. Three points stand out. First, manufacturing and utilities and finance were disproportionately represented in the new-issues market. Their combined contribution to GDP was around 20 percent, but they

Table 3
New Issues by Sector, 1920–1939

Sector[a]	*Share GDP* 1919–1920	*Share GDP* 1938–1939	*No. of Issues (%)*	*Monies Raised (%)*	*Success Rate (%)*
Rural and mining	27	23	11	2	32
Manufacturing and utilities	14	19	41	44	63
Distribution	19	19	18	21	82
Finance	2	3	13	26	55
Other	39	37	17	7.0	40
Total	100.0	100.0	100.0	100.0	58

Sources: GDP data from Butlin, *Australian Domestic Product*, tables 3, 12–13; new issues from *AID*. New issues have been allocated to industries as defined in the Australian Bureau of Statistics, 1993 version of Australia and New Zealand Standard Industrial Classification.
[a] Others are Construction, Accommodation, Transport and Storage, Property and Business Services, and Cultural and Recreational Services.

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made more than half of all issues and took nearly 70 percent of the monies raised. Finance issues were heavily bunched in the 1920s, when the sector raised a third of all new-issues funds. In the 1930s, it raised only 6 percent. By contrast, there was a dramatic rise in the relative importance of new issues raised by manufacturing and utilities, which climbed from 38 percent of the total in the 1920s to 62 percent in the next decade. Second, the farm and mining sectors and the nondistribution parts of the service sector were underrepresented. Their combined share of GDP was more than 60 percent, but they made less than 30 percent of new issues and took less than 10 percent of the monies raised. The distribution sector, covering wholesale and retail trades, had a presence in the market commensurate with its size in the economy. Third, there were marked differences in the ratios of issues made to monies raised: distribution raised 82 percent, manufacturing and utilities raised 63 percent, and finance 55 percent. The farm and mining sectors and the other parts of the services sector not only made proportionately fewer approaches to the new-issues market; they also gathered less than half of the funds offered to investors.

In many respects, manufacturing and utilities were the outliers, as they made the most new issues, in spite of their more modest position in the economy. Unsurprisingly, there were marked differences between subgroups within these industries. The data are shown in Table 4. Industries are ranked in descending order, according to their contribution to manufacturing output at the end of the interwar period. There is no obvious connection between the size of an industry and its resort to new issues. The three largest industries, food, metal, and textiles, aggregated over 70 percent of output but took only half of new issues and 43 percent of all monies raised. The smaller industries by output, such as chemicals, nonmetallic minerals, and the utilities, were equally important, making over a third of all issues and taking nearly a half of all the monies raised. The electricity and gas producers were particularly salient, accounting for a third of all the money raised by new issues.

Motivations for Firms to Seek New Issues. Companies made new issues for a variety of reasons. They turned to external sources of finance when internal cash flows and retained earnings were insufficient to meet immediate or future spending plans. They may have wanted a cash injection to buy assets or to use as working capital. They may have sought equity in a new issue if it reduced their funding costs by retiring more expensive debt. British contemporaries argued that the majority of monies raised went to the founders of private companies that went public. Ronald Henderson carefully reworked the data for capital issues in 1926 and 1937, concluding that only 37 percent and 52 percent of issues in those years were of "new money," defined as "new capital [raised]

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Table 4
New Issues within Manufacturing and Utilities, 1920–1939

ANZSIC Code	*Share of Manufacturing Output 1938–1939 (%)*	*No. of New Issues*	*Amount Raised*[a]
C21 Food, drink and tobacco	30.5	143	10.4
C27 & C28 Metals	28.5	217	11.0
C22 Textiles, clothing and footwear	12.2	100	4.4
C25 Chemicals	7.1	101	4.5
C24 Printing, publishing	5.2	42	2.4
C29 Other	4.7	17	0.4
C23 Wood and paper	4.5	40	2.0
C26 Nonmetallic minerals	3.9	87	4.7
D36 Heat, light, and power	3.5	125	19.8
Unclassified			0.4
Total	100.0	872	60.0

Sources: Manufacturing output by industry from *Production Bulletin, Manufacturing 1938–39* (Canberra, 1939); new-issues data from *AID*.
[a] In millions of pounds.

for investment by the company concerned." The majority represented "simply a change of ownership of existing assets."[81] Alexander Grant, employing a different approach, concurs that "it is noticeable that money going to replace existing capital and to acquire existing assets far outweighs new capital."[82]

The evidence available from *AID* does not allow us to say with precision which of these motives dominated in Australia. However, it does support the case that most of the money sought was "new" money to augment internal sources as firms sought to expand their operations. The prospectuses listed in *AID* provided information about the purposes for which the funds were sought. *AID* tended to provide in its commentary more information about initial floats by unknown firms than about offers by the larger and better known firms whose securities were already listed. For most of the latter cases, *AID* simply remarked that the firm was seeking additional capital. Of the 2,176 issues made, 508 identified themselves as new companies seeking start-up capital; another 909 issues were made by existing firms that stated they wished to increase their capital. These 1,417 issues accounted for 82 percent of all monies raised. By contrast, only 12 percent of monies raised was

[81] Henderson, *New Issue Market*, 96.
[82] Grant, *Capital Market in Post-War Britain*, 160.

connected with the purchase of an existing business or existing rights in technology, exploration rights for minerals, and timber concessions. Only 6 percent of monies raised went toward repaying debt or undertaking a reconstruction.

Such a conclusion is consistent with the strong growth in the assets employed by the largest firms operating in Australia between the wars. Two-thirds of the largest one hundred nonfinancial firms made at least one issue between 1920 and 1939.[83] A study of the *AID* data on two groups of companies, the forty companies that raised the most capital and the sixteen companies that made six or more new issues, shows that all were investing in additional assets. These overlapping groups of companies were made up almost entirely of "corporate leaders," firms that remained among the largest over a sustained period of time.[84]

The 1920s offered great opportunities for business expansion. "For entrepreneurs themselves the times were propitious: there was peace, with a rising population, an increasing demand for basic and luxury goods, stable export industries, and great personal wealth."[85] The growing demand for funds was driven by the twin forces of expanding domestic demand and the adoption of new technologies.[86] Consumer preferences also shifted over time, independently of incomes, as new goods and services became available and in response to changes in relative prices. Profits signaled where additional supply was needed. Moreover, the nature of production was shifting, at the margin, toward more capital-intensive and science-based technologies.[87] In particular, the interwar period bore witness to the rise of two major general-purpose technologies, electricity and the automobile, which both generated a range of new industries and transformed the organization and operation of many existing ones. The capital–labor ratio was therefore rising. A corollary was that the need for capital by business also rose.

New issues raised amounted to nearly one-fifth of business investment across the interwar period. The new-issues data have been allocated to the sector classifications used by Butlin in his estimates of gross

[83] Simon Ville and David T. Merrett, "The Development of Large-Scale Enterprise in Australia, 1910–64," *Business History* 42, no. 3 (2002): 36–37.

[84] Fleming, Merrett, and Ville, *Big End of Town*.

[85] Gibbs, *Bulls, Bears, and Wildcats*, 231.

[86] Rodney Maddock and Ian W. McLean, "The Australian Economy in the Very Long Run," in *The Australian Economy in the Long Run*, ed. Rodney Maddock and Ian W. McLean (Cambridge, U.K., 1987), table 1.1, 14; Ian McLean, "Australian Economic Growth in Historical Perspective," *Economic Record* 80, no. 250 (2004): table 1a.

[87] Frank R. E. Mauldon, *Mechanisation in Australian Industries* (Hobart, 1938), identified twenty-three industries in which rapid mechanization displaced labor; Russell T. Madigan, ed. *Technology in Australia: A Condensed History of Australian Technological Innovation and Adaptation during the First Two Hundred Years* (Melbourne, 2000).

Table 5
Sector Shares of Capital Formation and New Issues, 1920–1939

Sector	*GDCF*[a,b]	*GDCF (%)*	*New Issue*[a]	*New Issue (%)*	*Ratio of New Issue to GDCF*
Rural and mining	260	37	3	2	1
Industrial and shipping	257	36	41	30	16
Commercial	191	27	93	68	49
Total	708	100	137	100	19

Sources: Noel G. Butlin, *Australian Domestic Product, Investment and Foreign Borrowing, 1861–1938/39* (Cambridge, U.K., 1962); and *Jobson's Investment Digest of Australia and New Zealand* (1927 onward). The capital-formation data are for private-sector, nonresidential investment.
[a] In millions of pounds.
[b] Gross domestic capital formation.

domestic capital formation.[88] As shown in Table 5, three "industries" dominated the capital formation: rural and mining, manufacturing, and commercial.[89] New-issue raisings showed a markedly different distribution between industries. The rural and mining sectors had a prominent place in capital formation but did not seek to fund this activity through new issues. Nearly all farms were unincorporated enterprises that relied on debt instruments for capital improvements. By comparison, new issues made by manufacturers raised the equivalent of 16 percent of that sector's large investment. The service-sector industries, which Butlin described as "commercial," were the outliers. Their share of capital formation was lower than the other sectors. However, the new issues made by these firms were the equivalent of nearly half of all investment. This figure should be adjusted downward, because the investment series underestimates capital formation in services.[90] Moreover, these industries, more so than manufacturing, used new issues for purposes other than investment in physical assets. This trend applied particularly to finance, whose new issues totaled more than thirty-five million

[88] Noel G. Butlin, *Australian Domestic Product, Investment and Foreign Borrowing, 1861–1938/39* (Cambridge, U.K., 1962), ch. 17.

[89] We have included "shipping" with manufacturing, as that series includes the value of ships constructed in Australia. Butlin, *Australian Domestic Product,* ch. 17.

[90] The series relies on changes in the value of buildings used by service-sector firms. This measure fails to capture the considerable investments in fixtures and fittings used within those structures. See Butlin, *Australian Domestic Product,* ch. 17.

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pounds, the greater part of which was used by the banks to sustain their capital base and to fund a series of acquisitions between 1917 and 1931.[91]

The marked change in the behavior of the trading banks in the first half of the twentieth century was an additional factor pushing business to seek alternative sources of external finance.[92] Trading banks had been the principal providers of working capital and, largely by default, important providers of fixed capital through the late nineteenth century. The crashes of the 1890s crippled the banking sector for decades, prompting a flight of deposits to government-owned savings banks and life-insurance policies. Neither of these institutions provided funds to business; both invested heavily in government securities. The private trading banks continued to behave conservatively throughout the interwar period, even as they repaired their damaged balance sheets, in part through their own new issues. The amount they had available to lend was checked by strong competition for deposits from savings banks, life-insurance policies, and government bonds.[93] Trading banks had become de facto long-term lenders to their customers, but this service represented a recycling of working capital, rather than lending to create new capacity. Moreover, only 30 percent of trading-bank advances during 1927–36 went to nonrural businesses, broadly categorized as manufacturing, mining, commerce, transport and distribution, and insurance and finance.[94] As trading-bank advances had grown by forty-four million pounds between June 1920 and June 1939, this meant an increase in nonrural business loans of only thirteen million pounds.[95]

Bankers were criticized for ignoring the needs of small borrowers, particularly through their failure to offer "facilities for the provision of long term capital for the persons of limited means who have been successful on a small scale in secondary industry which is capable of expansion and deserving of encouragement in the public interest."[96] In this respect, Australian banks showed the same attitude as their British

[91] Sidney J. Butlin, Alan R. Hall, and R. C. White, *Australian Banking and Monetary Statistics, 1817–1945* (Sydney, 1971), table 12. *RCMB*, table 43, 359.

[92] David T. Merrett, "Capital Markets and Capital Formation in Australia, 1890–1945," *Australian Economic History Review* 37, no. 3 (1997): 181–201; and Merrett, *ANZ Bank: A History of the Australia and New Zealand Banking Group Limited and Its Constituents* (Melbourne, 1985).

[93] Cumulated annual increases in trading bank term deposits between 1920 and 1939 were 135 millions pounds, compared with 108 million pounds of additional deposits in savings banks and 348 million pounds m in government bonds in the hands of the nonbank public. Butlin, Hall, and White, *Australian Banking and Monetary Statistics*, tables 12, 62(i) and 62(ii); Matthew Butlin, "Preliminary Annual Database," table 4.15.

[94] *RCMB*, Appendix, table 10, 314.

[95] Butlin, Hall, and White, *Australian Banking and Monetary Statistics*, table 12.

[96] *Report, RCMB*, para. 572.

counterparts toward what were perceived as high-risk borrowers.[97] Small borrowers wanted fixed-term loans, rather than overdrafts. Those with property as collateral turned to "assurance companies, trustee companies, building societies, trustees and private investors."[98] Manufacturers were considered to be particularly disadvantaged, as bankers would not offer overdrafts repayable at call to firms that might not break even for years.

Conclusion

The interwar years provided many opportunities for entrepreneurs to profit from new technologies and shifting consumer demand. New industries emerged in manufacturing and services, which were increasingly capital intensive. Domestic firms entering these industries were, for the most part, not able to rely on past earnings to finance sizable additions to their assets. Consequently, there was a rush to incorporation and stock-exchange listing to access external funds. All the evidence suggests that companies were able to greatly increase their funding during the 1920s and after recovery from the depression, despite the difficulties in attracting investors to the growing points of the economy.

Numbers of investors, securities, and listed firms all rose rapidly in this period. Legacy factors laid the foundations as local investors, buoyed by holding wartime bonds and seeking to fill gaps left by the exodus of British investors and conservative bankers, entered the local stock markets. Problems of asymmetric information commonly associated with external equity markets appear to have been mitigated by the growth of investor information and advice from the likes of Alex Jobson and by improvements in accountability requirements. The constant dividend practices and rising share values of many firms, together with the emerging reputation of the stock exchange as a maturing capital-market institution, provided further reassurance for a growing corpus of shareholders. The pursuit of portfolio diversification and the increasing liquidity of the market helped to mitigate residual risks for investors.

[97] Michael Collins, *Money and Banking in the U.K.: A History* (London, 1988); and the following by Duncan M. Ross: "The Clearing Banks and Industry: New Perspectives on the Interwar Years," in *Capitalism in a Mature Economy*, ed. Helten and Cassis, 52–70; "Bank Advances and Industrial Production in the United Kingdom during the Inter-War Years: A Red Herring?" in *European Industry and Banking between the Wars: A Review of Bank Industry Relations*, ed. Philip L. Cottrell, Håkan Lindgren, and Alice Teichova (Leicester, 1992), 183–202; "The Unsatisfied Fringe in Britain, 1930s–80s," *Business History* 38, no. 3 (1996): 11–26.

[98] *Report, RCMB*, para. 569.

In the process, business enterprises became important new players in the intersectoral flow of funds. During the nineteenth century, net savers and borrowers were connected by financial intermediaries and direct financing through social networks. By the interwar years, the biggest net borrowers operated through the stock exchange, where together the amount of capital they raised surpassed the increase of deposit liabilities of the trading and savings banks.[99] The corporate leaders of the period, firms that perceived opportunities to acquire prime-mover advantages through innovation and deployment of strategic assets, were the ones that benefited most from the growth of the new-issues market. The amount of new money flowing into business expansion was also sharply expanded by the direct investments being made by the rapidly growing number of subsidiaries of foreign multinationals.[100]

Much of the supplied funds found their way into new investment, rather than being diverted into the pockets of promoters and company vendors, as occurred in the United Kingdom. Whether the cash raised by these new issues was directed to firms and industries that were notable for innovative new technologies and business practices is a research question beyond the scope of this paper. As Mary O'Sullivan argues persuasively for the United States, capital markets do not always get it right in directing funds to activities with the highest payoffs.[101] New issues funded the expansion of industries with both low and high technologies. Moreover, new money funded entrants that not only spurred competition but also permitted incumbents to erect barriers to entry. Our list of firms that raised the greatest amount of money spans low-technology industries, in which competitive pressures were low, such as banking, to "new" industries, such as motor cars, ferrous and nonferrous metal refining, paper and pulp, processed foods, and chain and department stores.

The stock exchanges played a far greater role in the financial system and economy of the interwar period than has been recognized to date. Australia was an early and enthusiastic adopter of the joint-stock company, behind the United States and Great Britain. Differences in scale make direct comparisons of the amounts raised problematic. However, comparing the value of new issues as a percentage of GDP is illuminating. The two major economies, which had the world's largest stock exchanges and manufacturing industries of greater weight than Australia's, had ratios of new issues to GDP between 1920 and 1939 of

[99] Bank deposits are interest-bearing deposits in trading banks and savings-bank deposits. Butlin, Hall, and White, *Australian Banking and Monetary Statistics*, tables 1 and 53(i).

[100] Forster, *Industrial Development*, appendix 3, 230–32; Brash, *American Investment in Australia*, appendix A, 289–327.

[101] O'Sullivan, "Funding New Industries."

3.86 percent in the United States and 2.58 in Great Britain.[102] Australia managed a very creditable 0.92 percent, which was an average of 1.40 during the 1920s.

The ratio of the market value of corporate securities to GDP within Australia is another measure of the relative importance of this class of asset. A wartime census reported in 1915 that the market value of company shares and debentures held by Australian residents was 176 million pounds, the equivalent of 47 percent of GDP.[103] The market value of company securities continued to climb between the wars. By the end of the 1920s, Ian Potter, a prominent Melbourne broker, calculated, after adjusting for double counting, that the market value of securities traded on the four largest stock exchanges was 810 million pounds, just above the figure of GDP.[104] The ratio of the market value of securities listed on the Stock Exchange of Melbourne to GDP in 1939 was 44 percent, slightly above its value from 1963 to 1989.[105]

[102] For Great Britain: new issues are "home issues," excluding public bodies; see Grant, *Capital Market in Post-War Britain*, 134. GDP figures from B. R. Mitchell, *British Historical Statistics* (Cambridge, U.K., 1988), 823. For the United States: new issues and GDP data from Susan B. Carter, ed., *Historical Statistics of the United States*, vol. 3 (Cambridge, Mass., 2006), tables Ca91-19, Cj831-37, and Cj817-30.

[103] George Knibbs, *The Private Wealth of Australia* (Melbourne, 1918), 39. GDP figure from Noel G. Butlin, "Australian National Accounts," in *Australians, Historical Statistics*, ed. W. Vamplew (Sydney, 1987), ANA 50-64, 133.

[104] Potter, *Evidence to RCMB*.

[105] R. A. Foster, *Australian Economic Statistics, 1949–50 to 1994–95* (Sydney, 1995), table 3-17, p. 152.