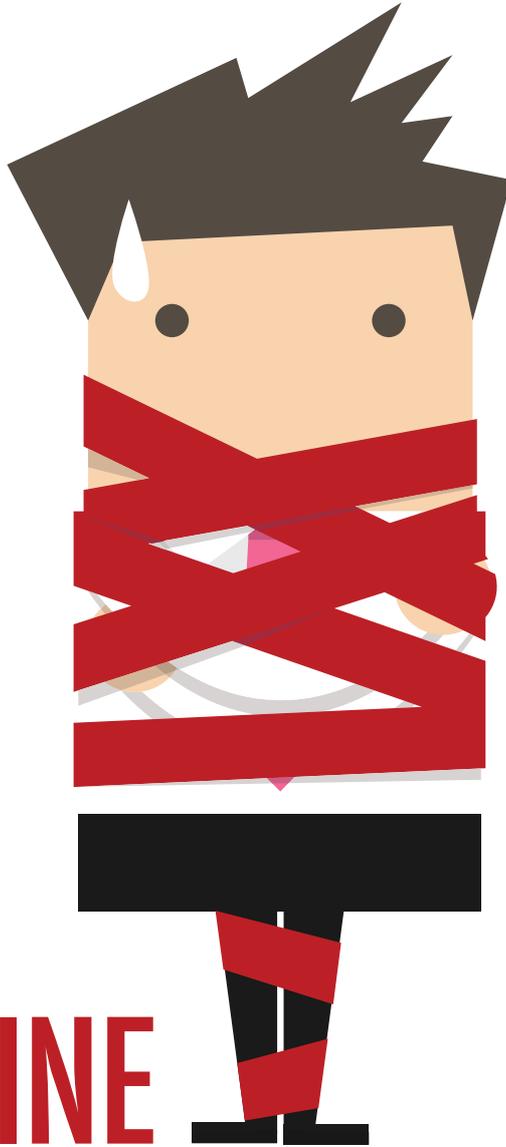


CUT RED TAPE TO

UNLEASH  PROSPERITY

July 2018



THE DECLINE OF SMALL BUSINESS

HOW RED TAPE IS UNDERMINING
OPPORTUNITY, PROSPERITY, AND COMMUNITY

Matthew Lesh, Research Fellow

 **Institute of
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Matthew Lesh is a Research Fellow at the Institute of Public Affairs.

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Executive summary

Red tape is harming small business in Australia.

Australian small business has declined in the last decade. Small businesses are employing a smaller proportion of Australians than in the past and are more likely to shut down over time.

This report finds that:

- Over the last decade, the number of Australians employed by small businesses decreased by 330,000 (-7 per cent).
- The proportion of Australians employed by a small businesses shrunk by 17 per cent, from a majority (53 per cent) to a minority (44 per cent) between 2007 and 2016.
- The average number of employees per an Australian business has increased by 14 per cent, meaning that there are fewer smaller businesses.
- A small business was almost twice as likely as a large business to shut down between 2013 and 2017.
- 3,915 large companies (0.5 per cent of all businesses) employ 32 per cent of Australians and receive 42 per cent of all business income.

Red tape is a major impediment to small business. Red tape has increased at the same time as small business has declined. The Commonwealth passed 61,615 pages of legislation, an average of 6,162 pages per year, between 2007 and 2016. This figure captures all legislative activity, including the creation of new law, and the amendment and repeal of existing law.

Red tape is a barrier to entry for new businesses, reducing competition in the market. Red tape is also advantageous to larger firms relative to smaller firms, because larger firms can absorb compliance costs across over a higher volume of output.

Small businesses are the lifeblood of local communities. They strengthen communal bonds, provide opportunities for social mobility, and are essential for competition which leads to innovation, pushes down prices, increases incomes, and creates jobs.

The IPA recommends cutting red tape and adopting a 'permissionless innovation' agenda to reinvigorate entrepreneurship and small businesses.

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1. Introduction

Small business and entrepreneurship is the life blood of a dynamic and growing economy. Newer, smaller businesses can inject innovative ideas and challenge outdated methods. This increases productivity, raises incomes and boosts employment. Entrepreneurship also increases social mobility by creating opportunity for individuals to lift their standard of living.¹

Australian entrepreneurship, however, is struggling in both historic and comparative terms. The IPA has catalogued the declining rate of entrepreneurship in Australia since 2014.²

The latest update, published in March this year, found there were over 6,000 fewer new businesses in 2016-17 compared to 2006-7, despite Australia's working age population growing by one-fifth in the same time period.³ The business entry rate has fallen by 16 per cent since 2003-04, and the business exit rate has fallen by 23 per cent over the same period. The IPA has calculated that there would be 250,000 more businesses in Australia today if business creation continued at pre-Global Financial Crisis levels.

Australia has the lowest rate of entrepreneurship of any OECD country, as measured by 'high-growth enterprise' as a proportion of employment in industry.⁴ Venture capital investment has declined by 58 per cent since 2007.⁵

This report builds on these findings by investigating the impact of Australia's falling rate of entrepreneurship on the business structure. It is found that Australia is increasingly dominated by larger firms. In the United States, 88 per cent of the largest 500 companies did not exist 50 years ago.⁶ In Australia, nine of the top ten companies were founded before 1925.⁷

Australia's prosperity, social fabric, and economic opportunity is undermined by the lack of entrepreneurship and small businesses.

1 Vincenzo Quadrini, "Entrepreneurship, Saving and Social Mobility," *Review of Economic Dynamics* 3, no. 1 (2000): 1–40; Ryan A. Decker et al., "Declining Business Dynamism: Implications for Productivity?" (Washington, D.C.: Brookings Institute, September 19, 2016), <https://www.brookings.edu/research/declining-business-dynamism-implications-for-productivity/>.

2 Dom Talianidis, "Where Have All the Entrepreneurs Gone?" (Melbourne, Victoria: Institute of Public Affairs, December 2014), <http://ipa.org.au/publications/2299/where-have-all-the-entrepreneurs-gone>; Brett Hogan, "Where Have All the Entrepreneurs Gone? An Analysis of New Business Creation in Australia" (Melbourne, VIC: Institute of Public Affairs, October 5, 2015), <https://archive.ipa.org.au/publications/2425/where-have-all-the-entrepreneurs-gone->; Brett Hogan, "Red Tape Is Crushing Entrepreneurship" (Melbourne, VIC: Institute of Public Affairs, March 7, 2016), <http://archive.ipa.org.au/sectors/economics-deregulation/publication/2470/red-tape-is-crushing-entrepreneurship/pg/7>; Matthew Lesh, "Reigniting Australia's Entrepreneurial Flame: Finding The Missing 275,000 Businesses" (Melbourne, VIC: Institute of Public Affairs, November 5, 2017), <http://ipa.org.au/publications-ipa/research-papers/reigniting-australias-entrepreneurial-flame-finding-missing-275000-businesses>.

3 Matthew Lesh, "Australia's Entrepreneurship Crisis and Three Ways to Fix It," Parliamentary Research Brief (Melbourne, VIC: Institute of Public Affairs, March 1, 2018), <https://ipa.org.au/wp-content/uploads/2018/03/Reigniting-Australia%E2%80%99s-entrepreneurial-flame-v3.pdf>.

4 OECD, "High-Growth Enterprises Rate," in *Entrepreneurship at a Glance* (Organisation for Economic Co-operation and Development, 2016), 98–101, http://www.oecd-ilibrary.org/content/chapter/entrepreneur_aag-2016-23-en.

5 OECD, "Determinants of Entrepreneurship: Venture Capital," in *Entrepreneurship at a Glance* (Organisation for Economic Co-operation and Development, 2016), 135–142, http://www.oecd-ilibrary.org/content/chapter/entrepreneur_aag-2016-23-en.

6 Mark J. Perry, "Fortune 500 Firms in 1955 v. 2015: Only 12% Remain, Thanks to the Creative Destruction That Fuels Economic Prosperity," American Enterprise Institute, *AEIdeas* (blog), October 12, 2015, <http://www.aei.org/publication/fortune-500-firms-in-1955-vs-2015-only-12-remain-thanks-to-the-creative-destruction-that-fuels-economic-growth/>.

7 John McDuling, "Corporate Australia's Real Problem: Ancient Companies," *The Sydney Morning Herald*, November 26, 2015, <http://www.smh.com.au/business/the-economy/corporate-australias-real-problem-ancient-companies-20151125-gl7wu2.html>.

Entrepreneurship is closely linked to economic growth, job creation, and higher incomes.⁸ Newer, smaller firms create competitive pressures that force jobs and investment to reallocate to their most worthwhile purpose. Joseph Schumpeter called this the process of 'creative destruction,' a key benefit of the free market system.⁹

The competitive process unleashed by entrepreneurship is explained by the Brookings Institute:

Competition is the basis of a market economy. It forces businesses to innovate to stay ahead of other firms, to keep prices as low as they can to attract customers, and to pay sufficient wages to avoid losing workers to other firms. When businesses vie for customers, prices fall and economic output increases. When businesses hire workers away from each other, wages rise and workers' standard of living improves. And as unproductive firms are replaced by innovative firms, the economy becomes more efficient.¹⁰

The benefits of entrepreneurship have been affirmed in Australia. A study by the Department of Industry, Innovation and Science found that newer businesses have stronger jobs growth, higher sales, increased productivity and profit, and are more innovative and collaborative.¹¹

Furthermore, there are substantial social benefits provided by entrepreneurship and small business. Small businesses are the lifeblood of local communities. Small businesses are often directly involved in their community, sponsor local sports teams and civil society groups, and provide a sense of community belonging.¹² Accordingly, entrepreneurship is associated with higher social capital – networks and relationships that enable society to function – and reductions in poverty, discrimination, and exclusion.¹³

Entrepreneurship has been linked to integration and success of immigrants in Australia.¹⁴ Many new Australians, from Italian and Greek to Thai, Vietnamese and Lebanese backgrounds, have become successful entrepreneurs. For immigrants to Australia, 'a small business such as a corner shop, a small factory, taxi or building firm promised dreams of independence, of freedom and financial security, if not fabulous wealth'.¹⁵

Small businesses provide the opportunity for human flourishing, and increased dignity and freedom. Being self-employed allows individuals to set their own work rhythm, have greater

8 John Haltiwanger, "Job Creation and Firm Dynamics in the United States," *NBER*, April 23, 2012, 17–38; Chad Syverson, "What Determines Productivity?," Working Paper (National Bureau of Economic Research, January 2010), <http://www.nber.org/papers/w15712>.

9 Joseph Schumpeter, "Capitalism, Socialism and Democracy," in *The Democracy Sourcebook*, ed. Robert Alan Dahl, Ian Shapiro, and José Antônio Cheibub (Cambridge, Mass: MIT Press, 2003).

10 Jay Shambaugh et al., "The State of Competition and Dynamism: Facts about Concentration, Start-Ups, and Related Policies" (Washington, D.C.: Brookings Institute, June 13, 2018), <https://www.brookings.edu/research/the-state-of-competition-and-dynamism-facts-about-concentration-start-ups-and-related-policies/>.

11 Office of the Chief Economist, "Australian Innovation System Report 2015" (Canberra, ACT: Department of Industry, Innovation and Science, 2015), <https://industry.gov.au/Office-of-the-Chief-Economist/Publications/Documents/Australian-Innovation-System/Australian-Innovation-System-Report-2015.pdf>.

12 Small businesses are often involved in their communities, which has been found to increase their success, see Terry L. Besser, "Community Involvement and the Perception of Success among Small Business Operators in Small Towns," *Journal of Small Business Management* 37, no. 4 (October 1, 1999): 16; Campopiano Giovanna, De Massis Alfredo, and Cassia Lucio, "Corporate Social Responsibility: A Survey among SMEs in Bergamo," *Procedia - Social and Behavioral Sciences, World Conference on Business, Economics and Management (BEM-2012)*, May 4–6 2012, Antalya, Turkey, 62 (October 24, 2012): 325–41, <https://doi.org/10.1016/j.sbspro.2012.09.053>; MAUREEN KILKENNY, LAURA NALBARTÉ, and TERRY BESSER, "Reciprocated Community Support and Small Town - Small Business Success," *Entrepreneurship & Regional Development* 11, no. 3 (July 1, 1999): 231–46, <https://doi.org/10.1080/089856299283182>.

13 Saul Estrin, Tomasz Mickiewicz, and Ute Stephan, "Entrepreneurship, Social Capital, and Institutions: Social and Commercial Entrepreneurship Across Nations," *Entrepreneurship Theory and Practice* 37, no. 3 (May 1, 2013): 479–504, <https://doi.org/10.1111/etap.12019>.

14 See Jock Collins and Angeline Low, "Asian Female Immigrant Entrepreneurs in Small and Medium-Sized Businesses in Australia," *Entrepreneurship & Regional Development* 22, no. 1 (January 1, 2010): 97–111, <https://doi.org/10.1080/08985620903220553>; Lan-hung Nora Chiang, "The Dynamics of Self-Employment and Ethnic Business Ownership among Taiwanese in Australia," *International Migration* 42, no. 2 (June 1, 2004): 153–73, <https://doi.org/10.1111/j.0020-7985.2004.00284.x>; Jock Collins, "Cultural Diversity and Entrepreneurship: Policy Responses to Immigrant Entrepreneurs in Australia," *Entrepreneurship & Regional Development* 15, no. 2 (January 1, 2003): 137–49, <https://doi.org/10.1080/0898562032000075168>.

15 Jock Collins, *A Shop Full of Dreams: Ethnic Small Business in Australia* (Leichhardt, NSW: Pluto Press Australia, 1995).

autonomy in their lifestyle, and be directly rewarded for their hard work.¹⁶ Individuals employed in small organisations can request more flexible work arrangements and have a greater say in their work life.

Red tape is a key reason for the decline in small business and entrepreneurship. Red tape has increased as small business has declined. This is because red tape creates barriers to entry and structural biases in favour of larger firms. Big business can more easily spread the costs of compliance over a higher number of outputs.

In order to address the decline of small business in Australia, policymakers must take steps to reduce the red tape to secure Australia's future prosperity, opportunity, and community.

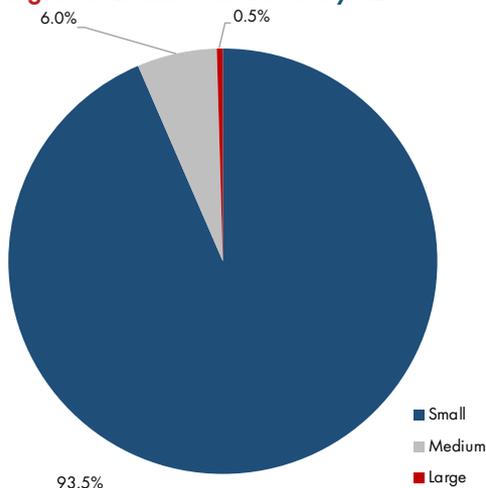
¹⁶ For discussion about how some employers put in place stringent restrictions on behaviour, see Elizabeth Anderson, *Private Government: How Employers Rule Our Lives* (Princeton, N.J.: Princeton University Press, 2017).

2. The decline of small business

2.1 Small businesses are the backbone of Australia's economy

The vast majority of Australia's businesses are small (See Figure 1). A small business has 1-19 staff, a medium business 20-199 staff, and a large business has over 200 staff.¹⁷ Ninety-four per cent of employing businesses are small (812,084), 6 per cent are medium (52,249), and 0.5 per cent are large (3,915).

Figure 1. Business numbers by size



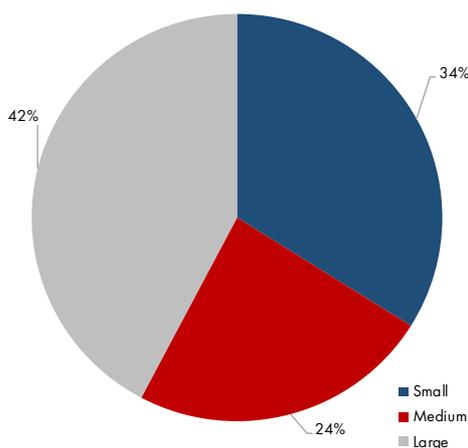
Source: ABS, Cat. No. 8165.0

2.2 Australia has a high number of large businesses

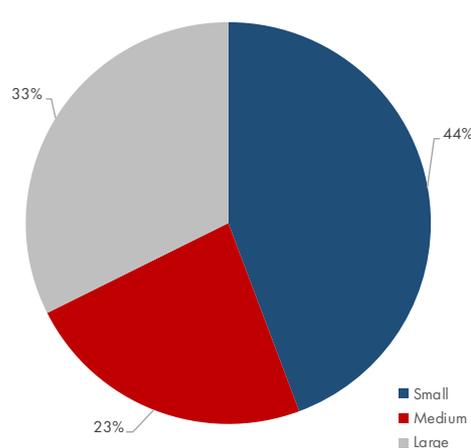
Nevertheless, large businesses employ a high number of Australians, and receive a big share of business income (See Figure 2). Just 3,915 large businesses employ 32 per cent of Australians, and receive 42 per cent of all business income.

Figure 2. The size of Australian businesses

Income by firm size



Employees by firm size



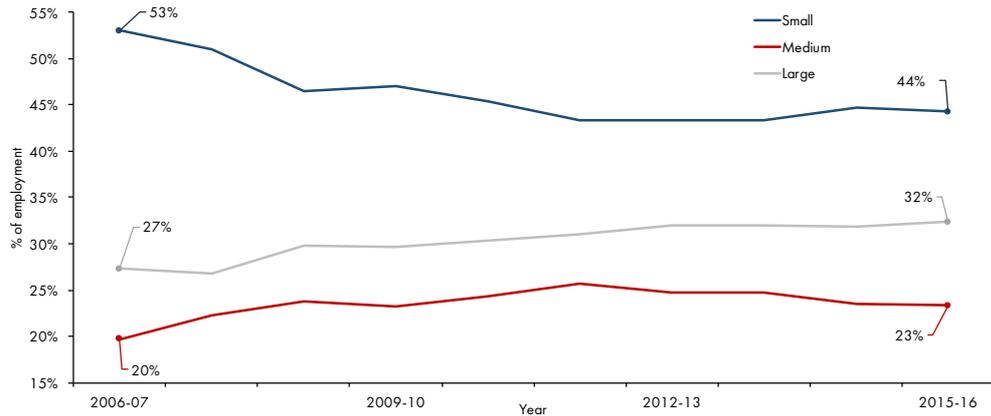
Source: ABS, Cat. No. 8155.0

¹⁷ This is the definition used by the ABS.

2.3 Australian businesses are growing larger

The distribution of Australia’s business structure has become increasingly dominated by larger firms (See Figure 3). Between 2007 and 2016, the proportion of Australians employed by a small businesses declined by 17 per cent, from a majority (53 per cent) to a minority (44 per cent). Meanwhile, the proportion employed by medium businesses increased by 15%, from 20 per cent to 23 per cent, and the proportion employed by large businesses increased by 19%, from 27 per cent to 32 per cent.

Figure 3. Share of employment by business size

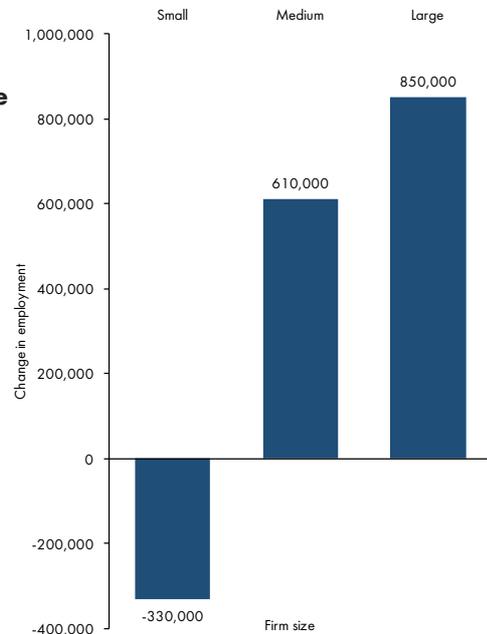


Source: ABS, Cat. No. 8155.0

Between 2007 and 2016 the number of Australians employed by small businesses declined by 330,000, while the number employed in medium and large firms increased by 1.46 million (See Figure 4) .

Over the period, small businesses employment declined from 5.06 million to 4.73 million (-7 per cent), while medium business employment grew from 1.88 million to 2.49 million (+33 per cent), and large business employment increased from 2.61 million to 3.46 million (+33 per cent).

Figure 4. Employment change by business size (2007-2016)



Source: ABS, Cat. No. 8155.0

As a result of the growth of larger firms and decline of small firms, the average number of workers at an employing business increased from 12.41 employees in 2007 to 14.09 employees in 2017 (See Figure 5).¹⁸ Therefore, the average size of a business has grown by 14 per cent in just the past decade, as measured by the number of workers. There was a marked growth in the average size of businesses in the immediate period following the Global Financial Crisis, however the trend has not abated since or returned to previous levels.

Figure 5. Average workers per employing business

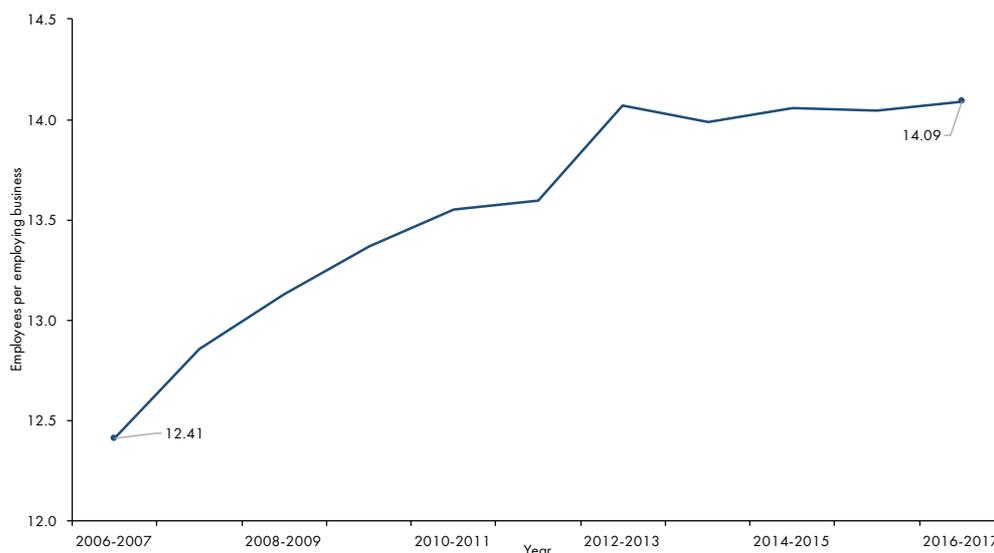
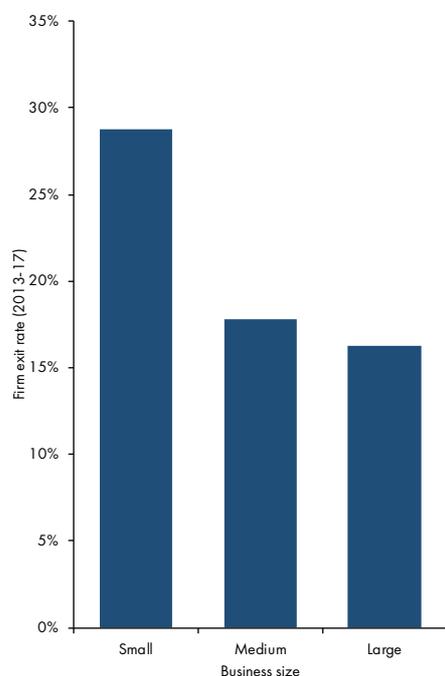


Figure 6. Firm exit rate by employees

Source: ABS, Cat. No. 8155.0 & 6202.0



Source: ABS, Cat. No. 8155.0

Furthermore, larger businesses are more likely to survive over time (See Figure 6). A small business operating in June 2013 had a 29 per cent chance of shutting down by June 2017. By comparison, a large business had a 16 per cent chance of shutting down over the same four-year period. Therefore, a small business is almost twice as likely to shut down over time. Small businesses are also starting up in fewer numbers than in the past.¹⁹

In sum, the number and proportion of Australians employed by small business has declined substantially, while larger businesses employ a growing number of Australians.

¹⁸ This figure is calculated by dividing Australian's total number of workers (labour force statistics) by the number of employing businesses (business counts statistics).

¹⁹ Lesh, "Reigniting Australia's Entrepreneurial Flame: Finding The Missing 275,000 Businesses"

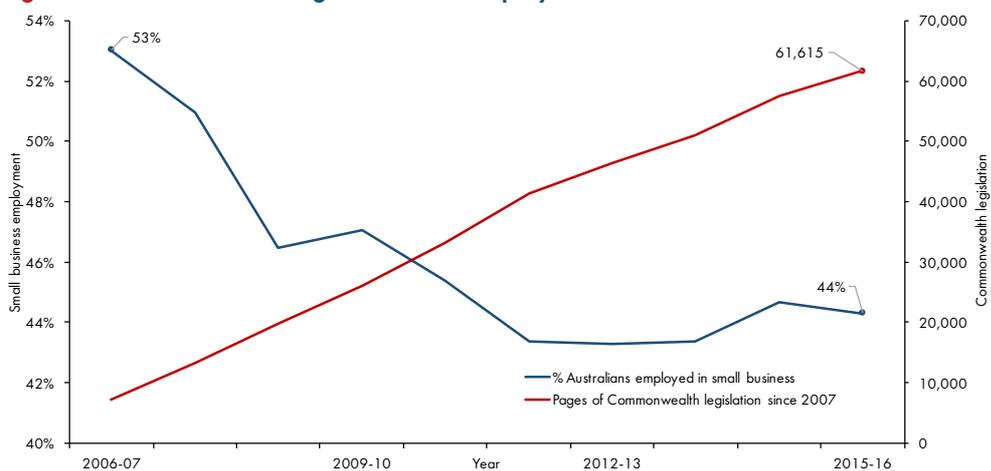
3. How red tape harms small business

Red tape is a key factor holding back Australian small businesses. Red tape benefits existing and larger firms at the expense of new and smaller businesses. Red tape costs \$176 billion a year (the equivalent of 11 per cent of GDP) in lost economic output, an average of \$19,300 for each Australian household.²⁰ Australia ranks at 80 out of 137 countries for the burden of regulation in the World Economic Forum’s Global Competitiveness Index.²¹

The reduction in the number and proportion of Australians employed in small business has coincided with an increase in red tape. Dr Mikayla Novak found that 198 regulatory bodies established by the Rudd and Gillard governments between 2007 and 2013 continued to exist in 2016.²² Red tape is regulation beyond ‘minimal effective regulation’. ‘Minimal effective regulation refers to a regulatory regime where the fewest rules, requirements, or procedures are in place to achieve a stated regulatory objective,’ Daniel Wild and Dr Darcy Allen explain.²³ Red tape is an impediment to human flourishing. It prevents businesses from being started, jobs being created, pay rises being earned, and innovation.

The quantity of legislation is a measure of red tape.²⁴ Although legislation is not always red tape it is a useful proxy for the expanding regulatory burden. **The Commonwealth passed 61,615 pages of legislation between 2007 and 2016, an average of 6,162 pages per year (See Figure 7).**²⁵ This is over three times higher than the average pages of legislation per year since 1901. This figure captures all legislative activity, including the creation of new law, and the amendment and repeal of existing law. In the same period the proportion of Australians employed in small business declined by 17 per cent. The existence of a correlation does not necessarily indicate causation. Nevertheless, there is substantial evidence, from survey data and academic research, that red tape is harmful to small business.

Figure 7. Commonwealth legislation and employment in small business



Source: IPA & ABS, Cat. No. 8155.0

20 Daniel Wild and Darcy Allen, “Five principles of red tape reduction” (Melbourne, VIC: Institute of Public Affairs, April 2018).
 21 World Economic Forum, “The Global Competitiveness Index 2017-2018 Edition: Australia” (Cologny, Switzerland: World Economic Forum, September 27, 2017).
 22 Mikayla Novak, “The Red Tape State” (Melbourne, VIC: Institute of Public Affairs, May 2016).
 23 Mikayla Novak, “The \$176 Billion Tax on Our Prosperity” (Melbourne, VIC: Institute of Public Affairs, May 2016).
 24 This method was pioneered by Chris Berg, *The growth of Australia’s regulatory state: ideology, accountability and mega-regulators* (Institute of Public Affairs, 2008).
 25 IPA research

Surveys indicate that Australian businesses are struggling under the weight of red tape. The Australian Chamber and Commerce and Industry found that 72 per cent of businesses say regulation has had a negative impact, 47 per cent reported that regulation had prevented them from making changes to grow their business, and that over a quarter of businesses spend 11 hours or more per week on compliance.²⁶ Respondents pointed to the burdens of health and safety, workers compensation, employee wages, conditions and superannuation, and industry specific regulations.

A similar survey by the Chamber of Commerce and Industry of Queensland found more than half of businesses have experienced a growth in the cost of complying with regulations in the past two years.²⁷ Just 1.9 per cent of businesses believed the time they take on managing compliance had decreased over the same period.

Red tape is a substantial barrier to entrepreneurship and inherently favourable to larger businesses over small business. Countries with less regulation have a higher level of entrepreneurship and proportion of small businesses.²⁸ Furthermore, countries with a larger proportion of small businesses have stronger economic growth.²⁹

3.1 Red tape is a barrier to business creation

Red tape creates barriers to entry for new businesses, reducing competition in the market, and entrenching existing firms.

The Australian Government's *Business.gov.au* website states that 'One of the first things you need to know when you're starting out is what laws apply to your new business. As a small business owner, you'll know that being legally compliant relies on being aware of rules and regulations'.³⁰ The site lists just some of the laws that businesses must comply with, including fair trading, privacy, anti-bullying, unfair dismissal, importing and exporting, intellectual property, franchising code, employment, environment, and marketing law. The government also states 'You may wish to consult a legal professional for advice on what you must comply with, such as licences and registrations, contracts and leases'. In addition to the initial process of registering a new business with government, these myriad of regulations make it substantially more difficult to start up a business.

The IPA's Daniel Wild outlines the three types of regulation that hamper business creation: product, labour, and financial.³¹ Product regulation controls the sale of goods and service and includes permits, licenses, accreditation standards, and codes of conduct. These add to the cost of getting goods to market, hurting innovation and potential new businesses. Labour market regulations, such as occupational licensing, minimum wages, and unemployment benefits, reduces the ability for individuals to challenge market incumbents. For example, occupational licences, which often

26 Australian Chamber of Commerce and Industry, "National Red Tape Survey" (Canberra, ACT: Australian Chamber of Commerce and Industry, March 2015), <https://www.acci.asn.au/resources/national-red-tape-survey-march-2015>.

27 Chamber of Commerce and Industry of Queensland, "Red Tape Survey 2017" (Brisbane, QLD: Chamber of Commerce and Industry of Queensland, 2017), <https://www.cciq.com.au/assets/Advocacy/Red-Tape/CCIQ-Red-Tape-Survey-2017-screen.pdf>.

28 Peter T. Calciagno and Russell S. Sobel, "Regulatory Costs on Entrepreneurship and Establishment Employment Size," *Small Business Economics* 42, no. 3 (March 1, 2014): 541–59, <https://doi.org/10.1007/s11187-013-9493-9>; Kristina Nyström, "The Institutions of Economic Freedom and Entrepreneurship: Evidence from Panel Data," *Public Choice* 136, no. 3/4 (2008): 269–82.

29 A. Leegwater and A. Shaw, "The Role of Micro, Small and Medium Enterprises in Economic Growth: A Cross-Country Regression Analysis" (USAID, September 2008); Thorsten Beck, Asli Demirguc-Kunt, and Ross Levine, "SMEs, Growth, and Poverty: Cross-Country Evidence," *Journal of Economic Growth* 10, no. 3 (September 1, 2005): 199–229, <https://doi.org/10.1007/s10887-005-3533-5>.

30 Department of Industry, Innovation and Science, Australian Government, "Legal Essentials for Business," *Business.gov.au*, March 15, 2018, <https://www.business.gov.au/info/plan-and-start/start-your-business/legal-essentials-for-business>.

31 Daniel Wild, "Barriers to Prosperity: Red Tape and the Regulatory State in Australia" (Melbourne, VIC: Institute of Public Affairs, October 2017).

require costly training and education and fees, make it prohibitively expensive for new entrants into a particular market.³² Financial market regulation includes regulation of banks, insurance, and other lending organisations. These regulations increase the costs of raising capital necessary for business creation and developing new technologies. Together, these regulations place substantial barriers to entry, limiting new business creation.

3.2 Red tape advantages larger businesses

Red tape is innately advantageous to larger businesses over smaller businesses. Red tape creates structural biases in favour of larger firms, who can absorb compliance costs across over a higher level of output. Furthermore, red tape helps existing players increase their market power and potential profits by creating barriers to entry that reduce competition.

In economic terms, regulation has economies of scale. Compliance with regulation and knowledge of the regulatory regime is a fixed cost that can be spread across additional units of output. Smaller and newer businesses are at a natural disadvantage because they have fewer units of output to spread the costs of regulation.

In practical terms, big businesses can hire 'compliance' teams to address the myriad of government laws applicable across an organisation. Big business can also hire lobbyists and public affairs officers who can establish relationships with the regulators to receive information about the nature of regulation, and favourable treatment. Small businesses cannot afford the armies of compliance staff and lobbyists, and therefore are at a natural disadvantage.

As Richard Williams and Mark Adams of the Mercatus Centre at George Mason University have written:

Attempting to comply with too many rules is harder for small businesses. Large businesses manage by complex internal procedures and can dedicate resources to compliance. Small businesses without internal bureaucracies must be as flexible as possible and cannot arrange their business around rigid external rules.³³

The advantages of regulation for larger firms have been confirmed by case studies across a diverse array of regulatory fields. Michael Maloney and Robert McCormick found that environmental regulations help larger producers in an industry because they can more easily afford to comply.³⁴ Lacy Glenn Thomas found in the pharmaceutical industry that regulation has led to 'devastating reductions in research productivity' of smaller firms, while the largest firms 'benefited from regulation, as sales gains due to reduced competition more than offset their quite moderate declines in research productivity'.³⁵

A range of studies in the United States have calculated the disproportionate regulatory burden felt by small businesses.³⁶ The U.S. Small Business Administration calculated the cost per employee is 36 per cent higher for a firm with 20 or fewer employees compared to a firm with over 500 employees as of 2008.³⁷ Another study in 2014 estimated that the cost per employee

32 See Gideon Rozner, "Your Licence to Work," *IPA Review*, May 2018.

33 Richard Williams and Mark Adams, "Regulatory Overload" (Arlington, Virginia: Mercatus Center, George Mason University, February 2012).

34 Lacy Glenn Thomas, "Regulation and Firm Size: FDA Impacts on Innovation," *RAND Journal of Economics* 21 (December 1, 1990): 497-517, <https://doi.org/10.2307/2555465>.

35 Glenn Thomas.

36 Nicole V. Crain and W. Mark Crain, *The Impact of Regulatory Costs on Small Firms* (DIANE Publishing, 2005).

37 Nicole Crain and William Crain, "The Impact of Regulatory Costs on Small Firms," *Federal Regulatory Costs: Estimates and Analysis*, April 1, 2011, 41-100.

of complying with regulation is 23 per cent higher for businesses with fewer than 50 employees compared to a business with over 100 employees.³⁸ The same study found that in manufacturing, a highly regulated sector, the cost of regulation is a whopping 86 per cent higher for smaller firms compared to larger firms.

3.3 Red tape is sought after by the regulated

Larger firms can more easily adapt to regulation by spreading the costs over a higher level of output. This changes the incentives for market players. A potential strategy for larger and existing businesses is to lobby for product market regulation, under the guise of a 'public interest' such as consumer safety, to impede the entry and competition from new firms that could undercut their profits and market share.

Public choice economists argue that, as a consequence of the potential benefits, regulation is sought after and captured by existing businesses.³⁹ Businesses seek out favourable regulation that helps prevent new entrants into a market, allowing them to charge higher prices and achieve monopoly or cartel status. Economist George Stigler has argued that 'regulation is acquired by the industry and is designed and operated primarily for its benefit'.⁴⁰

The more regulation in an industry the more difficult it is for a potential new entrant, who has less knowledge of the regulatory framework, to comply. Even regulations that have burdensome compliance implications in the short term are beneficial because they create barriers to entry that prevent competition in the longer-run.

Red tape encourages potential entrepreneurs redirect their efforts towards seeking benefits from policymakers in the political process. This includes lobbying for subsidies, licences, tariffs, safety and product regulations, and land-use regulations. Economist William J. Baumol argues that 'rent seeking' is an 'unproductive' form of entrepreneurship.⁴¹ Lawyers, accountants, and lobbyists spend much of their time seeking to take advantage of and change regulation to benefit themselves. This provides no value to the overall economy or consumers, however it does allow them to maintain higher profits.

In a high regulation jurisdiction, there is much to be gained by allocating your time to seeking out government advantages. In the worst cases this can lead to corrupt activities. Academics Randall Holcombe and Christopher Boudreaux found that countries with more regulation, along with higher public expenditures, are associated with more corruption because it invites opportunities for government officials to be paid for favours, subsidies, and government contracts.⁴² Simeon Djankov, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer found that nations with stricter regulation of entry have higher levels of corruption and a larger unofficial economy.⁴³ They also conclude that more regulation is *not* associated with a higher quality of products, or better pollution records or health outcomes.

38 W. Mark Crain and Nicole V. Crain, "The Cost of Federal Regulation to the U.S. Economy, Manufacturing and Small Business" (Washington, DC: National Association of Manufacturers, September 10, 2014).

39 Gordon Tullock, "The Welfare Costs of Tariffs, Monopolies, and Theft," *Economic Inquiry* 5, no. 3 (June 1, 1967): 224–32, <https://doi.org/10.1111/j.1465-7295.1967.tb01923.x>; Sam Peltzman, "Toward a More General Theory of Regulation," *The Journal of Law and Economics* 19, no. 2 (August 1, 1976): 211–40, <https://doi.org/10.1086/466865>.

40 George J. Stigler, "The Theory of Economic Regulation," *The Bell Journal of Economics and Management Science* 2, no. 1 (1971): 3–21, <https://doi.org/10.2307/3003160>.

41 William J. Baumol, "Entrepreneurship: Productive, Unproductive, and Destructive," *Journal of Business Venturing* 11, no. 1 (January 1, 1996): 3–22, [https://doi.org/10.1016/0883-9026\(94\)00014-X](https://doi.org/10.1016/0883-9026(94)00014-X).

42 Christopher Boudreaux and Randall G. Holcombe, "Economic Institutions and the Durability of Democracy," SSRN Scholarly Paper (Rochester, NY: Social Science Research Network, January 6, 2016), <https://papers.ssrn.com/abstract=2715748>.

43 Simeon Djankov et al., "The Regulation of Entry," *The Quarterly Journal of Economics* 117, no. 1 (2002): 1–37.

3.4 Red tape is damaging Australia's economy

There a number of ways in which red tape, by dampening the level of entrepreneurship, is undermining Australia's prosperity. An economy with fewer entrepreneurs has less competition against existing. Competition is the key driver of investment, innovation, and technological development that leads to lower prices, more variety, and higher quality products for consumers.

3.4.1. Prices and quality

The entrance of new businesses puts pressure onto existing businesses to lower their prices and improve quality. Red tape, because it impedes new entrants and the associated competition, has been linked to higher consumer prices, particularly for low income households that spend a greater proportion of their income in highly regulated industries. Economists Dustin Chambers, Courtney A. Collins, and Alan Krause found that a 10 per cent increase in regulations is associated with just under a 1 per cent increase in prices.⁴⁴ The IPA's Daniel Wild found substantial price increases in heavily regulated fields.⁴⁵ Since 1997, the cost of housing has increased by 330 per cent, child care by 310 per cent, electricity by 215 per cent, insurance by 209 per cent, and education by 174 per cent. These are fields characterised by substantial barriers to new entrants. Meanwhile, lightly regulated and highly competitive products such as personal care, clothing, household appliances, and televisions have declined in price over the same time period.

3.4.2. Investment and wages

Red tape, because of fewer entrants and increased market concentration, is associated with less investment which reduces innovation, productivity and wages. In the US manufacturing industry, for instance, investment in technology has been directly linked to competition from foreign companies.⁴⁶ Dr Darcy Allen and Professor Jason Potts conclude that red tape prevents experimentation with new ideas and technologies.⁴⁷ The lack of new businesses challenging incumbents to improve their processes, by investing in research and equipment, may help explain Australia's woeful level of business investment. Business investment is now just 12% of GDP, which is lower than the Whitlam era economic crisis.⁴⁸ The lack of business investment is consistent with Australia's mediocre levels of wage growth in recent years.⁴⁹

3.4.3. Corporate profits

Red tape may also be a factor in the high levels of corporate profitability. Regulation can increase corporate profitability by preventing new firms which challenge existing market players to lower prices and profit margins.⁵⁰ To the extent that corporate profits are the result of innovative

44 Dustin Chambers, Courtney A. Collins, and Alan Krause, "How Do Federal Regulations Affect Consumer Prices? An Analysis of the Regressive Effects of Regulation," *Public Choice*, October 9, 2017, 1–34, <https://doi.org/10.1007/s11127-017-0479-z>.

45 Daniel Wild, "How Regulation And Red Tape Makes Families Poorer" (Melbourne, VIC: Institute of Public Affairs, March 12, 2018), <https://ipa.org.au/wp-content/uploads/2018/03/IPA-Report-How-Regulation-and-Red-Tape-Makes-Families-Poorer-1.pdf>.

46 Germán Gutiérrez and Thomas Philippon, "Declining Competition and Investment in the U.S.," Working Paper (National Bureau of Economic Research, July 2017), <https://doi.org/10.3386/w23583>.

47 Darcy Allen and Jason Potts, "Innovation Strangled by Red Tape" (Melbourne, VIC: Institute of Public Affairs, February 2015), https://archive.ipa.org.au/portal/uploads/200215_Submission-DA-innovation_strangled_by_red_tape.pdf.

48 Daniel Wild, "Business Investment In Australia Now Lower Than Under Whitlam," Parliamentary Research Brief (Melbourne, VIC: Institute of Public Affairs, March 8, 2017), <https://ipa.org.au/publications-ipa/research-papers/business-investment-australia-now-lower-whitlam>.

49 Stephen Letts, "Australian Workers Continue to See Wage Growth Mired near Historic Lows," ABC News, May 16, 2018, <http://www.abc.net.au/news/2018-05-16/wage-price-index-march-quarter-2018/9766438>.

50 Joe S. Bain, "Relation of Profit Rate to Industry Concentration: American Manufacturing, 1936-1940," *The Quarterly Journal of Economics* 65, no. 3 (1951): 293–324, <https://doi.org/10.2307/1882217>; James Bessen, "Accounting for Rising Corporate Profits: Intangibles or Regulatory Rents?" (Washington, D.C.: Cato Institute, September 21, 2016), <https://www.cato.org/publications/research-briefs-economic-policy/accounting-rising->

practices, technological advancement, and providing value to consumers, they should be welcomed. Nevertheless, to the extent that high profits are the result of regulation that safeguards businesses against competition from new market entrants, they are of concern. It is arguable that the large profits in Australia's finance sector, for instance, partly reflect the regulatory restrictions on new entrants challenging current providers, that would result in profits being shared more widely among a higher number of market players – as well as increasing wages, reducing costs to consumers, and creating jobs.

3.5 Alternative explanations

Red tape is a major reason, though not the only reason, for the decline of small business in Australia. There are a number of structural, economic, and cultural impediments to small businesses. Large businesses benefit from economies of scale that allow them to deliver goods and services at a lower cost than smaller firms, and therefore pure efficiency also helps explain the success of larger businesses. Technological advancement in recent decades has likely increased the benefits of scale. There are also a number of other barriers to business start-up, including high personal and corporate tax rates that reduce potential rewards, the inability to raise capital and find staff with the right skills, and broader economic uncertainty. Furthermore, entrepreneurship requires a positive social culture and individual attributes, including determination, skills, and ideas, that could be lacking in society.

There is not a clear answer to the perfect balance between small, medium, and large businesses. Nevertheless, government interventions have increasingly tipped the balance in favour of larger businesses. As there are a number of community and economic benefits to small and new businesses, this is a worrying trend that policymakers have a role in addressing by reducing red tape.

corporate-profits-intangibles.

4. Conclusion

The Australian economy is increasingly dominated by a small number of large firms that employ a large proportion of Australians and receive an even larger proportion of business income. Over the last decade medium and large businesses grew while small business faltered.

Entrepreneurship is essential for a successful economy. Newer businesses have stronger jobs growth, higher sales, increased productivity and profit, and are more innovative and collaborative.⁵¹ The entrance of new firms also puts important pressure on incumbents to invest in technology to become more efficient, improving the quality of products and reducing prices.

Red tape is a key reason for decline of small business in Australia. Red tape is a barrier to entry that prevents businesses existing in the first place. Furthermore, red tape creates structural biases in favour of larger businesses who can more easily afford to comply with the regulatory burden.

In order for Australia to prosper in the future, it is essential that policymakers take steps to reduce the burden of red tape. A useful concept in the drive to cut red tape is 'permissionless innovation,' as described by economist Adam Thierer.⁵² New market entrants should be able to experiment with new ideas and concepts without having to worry about red tape.

The sectors and technologies of the future – the sharing economy, big data, drones, advanced medical technology, and the internet of things – will only be successful if they can innovate without interference. When it comes to starting a business the question must be 'why not?'

⁵¹ This has been confirmed to be true in Australia, see Office of the Chief Economist, "Australian Innovation System Report 2015."

⁵² Adam D. Thierer, *Permissionless Innovation: The Continuing Case for Comprehensive Technological Freedom* (Mercatus Center, George Mason University, 2014).

Bibliography

- Allen, Darcy, and Jason Potts. "Innovation Strangled by Red Tape." Melbourne, VIC: Institute of Public Affairs, February 2015. https://archive.ipa.org.au/portal/uploads/200215_Submission-DA-innovation_strangled_by_red_tape.pdf.
- Anderson, Elizabeth. *Private Government: How Employers Rule Our Lives*. Princeton, N.J.: Princeton University Press, 2017.
- Australian Chamber of Commerce and Industry. "National Red Tape Survey." Canberra, ACT: Australian Chamber of Commerce and Industry, March 2015. <https://www.acci.asn.au/resources/national-red-tape-survey-march-2015>.
- Bain, Joe S. "Relation of Profit Rate to Industry Concentration: American Manufacturing, 1936-1940." *The Quarterly Journal of Economics* 65, no. 3 (1951): 293–324. <https://doi.org/10.2307/1882217>.
- Baumol, William J. "Entrepreneurship: Productive, Unproductive, and Destructive." *Journal of Business Venturing* 11, no. 1 (January 1, 1996): 3–22. [https://doi.org/10.1016/0883-9026\(94\)00014-X](https://doi.org/10.1016/0883-9026(94)00014-X).
- Beck, Thorsten, Asli Demircuc-Kunt, and Ross Levine. "SMEs, Growth, and Poverty: Cross-Country Evidence." *Journal of Economic Growth* 10, no. 3 (September 1, 2005): 199–229. <https://doi.org/10.1007/s10887-005-3533-5>.
- Bessen, James. "Accounting for Rising Corporate Profits: Intangibles or Regulatory Rents?" Washington, D.C.: Cato Institute, September 21, 2016. <https://www.cato.org/publications/research-briefs-economic-policy/accounting-rising-corporate-profits-intangibles>.
- Besser, Terry L. "Community Involvement and the Perception of Success among Small Business Operators in Small Towns." *Journal of Small Business Management* 37, no. 4 (October 1, 1999): 16.
- Boudreaux, Christopher, and Randall G. Holcombe. "Economic Institutions and the Durability of Democracy." SSRN Scholarly Paper. Rochester, NY: Social Science Research Network, January 6, 2016. <https://papers.ssrn.com/abstract=2715748>.
- Calcagno, Peter T., and Russell S. Sobel. "Regulatory Costs on Entrepreneurship and Establishment Employment Size." *Small Business Economics* 42, no. 3 (March 1, 2014): 541–59. <https://doi.org/10.1007/s11187-013-9493-9>.
- Chamber of Commerce and Industry of Queensland. "Red Tape Survey 2017." Brisbane, QLD: Chamber of Commerce and Industry of Queensland, 2017. <https://www.cciq.com.au/assets/Advocacy/Red-Tape/CCIQ-Red-Tape-Survey-2017-screen.pdf>.
- Chambers, Dustin, Courtney A. Collins, and Alan Krause. "How Do Federal Regulations Affect Consumer Prices? An Analysis of the Regressive Effects of Regulation." *Public Choice*, October 9, 2017, 1–34. <https://doi.org/10.1007/s11127-017-0479-z>.
- Chiang, Lan-hung Nora. "The Dynamics of Self-Employment and Ethnic Business Ownership among Taiwanese in Australia." *International Migration* 42, no. 2 (June 1, 2004): 153–73. <https://doi.org/10.1111/j.0020-7985.2004.00284.x>.
- Collins, Jock. *A Shop Full of Dreams: Ethnic Small Business in Australia*. Leichhardt, NSW: Pluto Press Australia, 1995.
- . "Cultural Diversity and Entrepreneurship: Policy Responses to Immigrant Entrepreneurs in Australia." *Entrepreneurship & Regional Development* 15, no. 2 (January 1, 2003): 137–49. <https://doi.org/10.1080/0898562032000075168>.
- Collins, Jock, and Angeline Low. "Asian Female Immigrant Entrepreneurs in Small and Medium-Sized Businesses in Australia." *Entrepreneurship & Regional Development* 22, no. 1 (January 1, 2010): 97–111. <https://doi.org/10.1080/08985620903220553>.
- Crain, Nicole, and William Crain. "The Impact of Regulatory Costs on Small Firms." *Federal Regulatory Costs: Estimates and Analysis*, April 1, 2011, 41–100.
- Crain, Nicole V., and W. Mark Crain. *The Impact of Regulatory Costs on Small Firms*. DIANE Publishing, 2005.
- Crain, W. Mark, and Nicole V. Crain. "The Cost of Federal Regulation to the U.S. Economy, Manufacturing and Small Business." Washington, DC: National Association of Manufacturers, September 10, 2014.
- Decker, Ryan A., John Haltiwanger, Ron S. Jarmin, and Javier Miranda. "Declining Business Dynamism: Implications for Productivity?" Washington, D.C.: Brookings Institute, September 19, 2016. <https://www.brookings.edu/wp-content/uploads/2016/09/declining-business-dynamism-implications-for-productivity.pdf>.

brookings.edu/research/declining-business-dynamism-implications-for-productivity/.

Department of Industry, Innovation and Science, Australian Government. "Legal Essentials for Business." [Business.gov.au](https://www.business.gov.au/info/plan-and-start/start-your-business/legal-essentials-for-business), March 15, 2018. <https://www.business.gov.au/info/plan-and-start/start-your-business/legal-essentials-for-business>.

Djankov, Simeon, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer. "The Regulation of Entry." *The Quarterly Journal of Economics* 117, no. 1 (2002): 1–37.

Estrin, Saul, Tomasz Mickiewicz, and Ute Stephan. "Entrepreneurship, Social Capital, and Institutions: Social and Commercial Entrepreneurship Across Nations." *Entrepreneurship Theory and Practice* 37, no. 3 (May 1, 2013): 479–504. <https://doi.org/10.1111/etap.12019>.

Giovanna, Campopiano, De Massis Alfredo, and Cassia Lucio. "Corporate Social Responsibility: A Survey among SMEs in Bergamo." *Procedia - Social and Behavioral Sciences*, World Conference on Business, Economics and Management (BEM-2012), May 4–6 2012, Antalya, Turkey, 62 (October 24, 2012): 325–41. <https://doi.org/10.1016/j.sbspro.2012.09.053>.

Glenn Thomas, Lacy. "Regulation and Firm Size: FDA Impacts on Innovation." *RAND Journal of Economics* 21 (December 1, 1990): 497–517. <https://doi.org/10.2307/2555465>.

Gutiérrez, Germán, and Thomas Philippon. "Declining Competition and Investment in the U.S." Working Paper. National Bureau of Economic Research, July 2017. <https://doi.org/10.3386/w23583>.

Haliwanger, John. "Job Creation and Firm Dynamics in the United States." *NBER*, April 23, 2012, 17–38.

Hogan, Brett. "Red Tape Is Crushing Entrepreneurship." Melbourne, VIC: Institute of Public Affairs, March 7, 2016. <http://archive.ipa.org.au/sectors/economics-deregulation/publication/2470/red-tape-is-crushing-entrepreneurship/pg/7>.

———. "Where Have All the Entrepreneurs Gone? An Analysis of New Business Creation in Australia." Melbourne, VIC: Institute of Public Affairs, October 5, 2015. <https://archive.ipa.org.au/publications/2425/where-have-all-the-entrepreneurs-gone->.

KILKENNY, MAUREEN, LAURA NALBARTE, and TERRY BESSER. "Reciprocated Community Support and Small Town - Small Business Success." *Entrepreneurship & Regional Development* 11, no. 3 (July 1, 1999): 231–46. <https://doi.org/10.1080/089856299283182>.

Leegwater, A., and A. Shaw. "The Role of Micro, Small and Medium Enterprises in Economic Growth: A Cross-Country Regression Analysis." USAID, September 2008.

Lesh, Matthew. "Australia's Entrepreneurship Crisis and Three Ways to Fix It." Parliamentary Research Brief. Melbourne, VIC: Institute of Public Affairs, March 1, 2018. <https://ipa.org.au/wp-content/uploads/2018/03/Reigniting-Australia%E2%80%99s-entrepreneurial-flame-v3.pdf>.

———. "Reigniting Australia's Entrepreneurial Flame: Finding The Missing 275,000 Businesses." Melbourne, VIC: Institute of Public Affairs, November 5, 2017. <http://ipa.org.au/publications-ipa/research-papers/reigniting-australias-entrepreneurial-flame-finding-missing-275000-businesses>.

Letts, Stephen. "Australian Workers Continue to See Wage Growth Mired near Historic Lows." *ABC News*, May 16, 2018. <http://www.abc.net.au/news/2018-05-16/wage-price-index-march-quarter-2018/9766438>.

McDuling, John. "Corporate Australia's Real Problem: Ancient Companies." *The Sydney Morning Herald*, November 26, 2015. <http://www.smh.com.au/business/the-economy/corporate-australias-real-problem-ancient-companies-20151125-gl7wu2.html>.

Novak, Mikayla. "The \$176 Billion Tax on Our Prosperity." Melbourne, VIC: Institute of Public Affairs, May 2016. <http://ipacutredtape.org.au/wp-content/uploads/2016/05/The-176-Billion-Tax-On-Our-Prosperity.pdf>.

Nyström, Kristina. "The Institutions of Economic Freedom and Entrepreneurship: Evidence from Panel Data." *Public Choice* 136, no. 3/4 (2008): 269–82.

OECD. "Determinants of Entrepreneurship: Venture Capital." In *Entrepreneurship at a Glance*, 135–142. Organisation for Economic Co-operation and Development, 2016. http://www.oecd-ilibrary.org/content/chapter/entrepreneur_aag-2016-23-en.

———. "High-Growth Enterprises Rate." In *Entrepreneurship at a Glance*, 98–101. Organisation for Economic Co-operation and Development, 2016. http://www.oecd-ilibrary.org/content/chapter/entrepreneur_aag-2016-23-en.

- Office of the Chief Economist. "Australian Innovation System Report 2015." Canberra, ACT: Department of Industry, Innovation and Science, 2015. <https://industry.gov.au/Office-of-the-Chief-Economist/Publications/Documents/Australian-Innovation-System/Australian-Innovation-System-Report-2015.pdf>.
- Peltzman, Sam. "Toward a More General Theory of Regulation." *The Journal of Law and Economics* 19, no. 2 (August 1, 1976): 211–40. <https://doi.org/10.1086/466865>.
- Perry, Mark J. "Fortune 500 Firms in 1955 v. 2015; Only 12% Remain, Thanks to the Creative Destruction That Fuels Economic Prosperity." American Enterprise Institute. *AEIdeas* (blog), October 12, 2015. <http://www.aei.org/publication/fortune-500-firms-in-1955-vs-2015-only-12-remain-thanks-to-the-creative-destruction-that-fuels-economic-growth/>.
- Quadrini, Vincenzo. "Entrepreneurship, Saving and Social Mobility." *Review of Economic Dynamics* 3, no. 1 (2000): 1–40.
- Rozner, Gideon. "Your Licence to Work." *IPA Review*, May 2018.
- Schumpeter, Joseph. "Capitalism, Socialism and Democracy." In *The Democracy Sourcebook*, edited by Robert Alan Dahl, Ian Shapiro, and José Antônio Cheibub. Cambridge, Mass: MIT Press, 2003.
- Shambaugh, Jay, Ryan Nunn, Audrey Breitwieser, and Patrick Liu. "The State of Competition and Dynamism." Washington, D.C.: Brookings Institute, June 13, 2018. <https://www.brookings.edu/research/the-state-of-competition-and-dynamism-facts-about-concentration-start-ups-and-related-policies/>.
- Stigler, George J. "The Theory of Economic Regulation." *The Bell Journal of Economics and Management Science* 2, no. 1 (1971): 3–21. <https://doi.org/10.2307/3003160>.
- Syverson, Chad. "What Determines Productivity?" Working Paper. National Bureau of Economic Research, January 2010. <http://www.nber.org/papers/w15712>.
- Talimanidis, Dom. "Where Have All the Entrepreneurs Gone?" Melbourne, Victoria: Institute of Public Affairs, December 2014. <http://ipa.org.au/publications/2299/where-have-all-the-entrepreneurs-gone>.
- Thierer, Adam D. *Permissionless Innovation: The Continuing Case for Comprehensive Technological Freedom*. Mercatus Center, George Mason University, 2014.
- Tullock, Gordon. "The Welfare Costs of Tariffs, Monopolies, and Theft." *Economic Inquiry* 5, no. 3 (June 1, 1967): 224–32. <https://doi.org/10.1111/j.1465-7295.1967.tb01923.x>.
- Wild, Daniel. "Barriers to Prosperity: Red Tape and the Regulatory State in Australia." Melbourne, VIC: Institute of Public Affairs, October 2017.
- . "Business Investment In Australia Now Lower Than Under Whitlam." Parliamentary Research Brief. Melbourne, VIC: Institute of Public Affairs, March 8, 2017. <https://ipa.org.au/publications-ipa/research-papers/business-investment-australia-now-lower-whitlam>.
- . "How Regulation And Red Tape Makes Families Poorer." Melbourne, VIC: Institute of Public Affairs, March 12, 2018. <https://ipa.org.au/wp-content/uploads/2018/03/IPA-Report-How-Regulation-and-Red-Tape-Makes-Families-Poorer-1.pdf>.
- Williams, Richard, and Mark Adams. "Regulatory Overload." Arlington, Virginia: Mercatus Center, George Mason University, February 2012.
- World Economic Forum. "The Global Competitiveness Index 2017-2018 Edition: Australia." Cologne, Switzerland: World Economic Forum, September 27, 2017. http://reports.weforum.org/pdf/gci-2017-2018/WEF_GCI_2017_2018_Profile_AUS.pdf.

