

DATA INSIGHT

TRACKING THE RISE OF INDUSTRY REGULATION

There has been a rise in excessively stringent regulation across the Australian economy, creating a complex, overlapping and growing web that burdens business and hinders productivity.¹ Australia will need to reform these regulatory systems to meet its goals to increase housing supply and manage the energy transition.

There was widespread agreement on the need to simplify or cut regulation at the Federal Government's Economic Reform Roundtable this year, with environmental, housing and building approvals identified as priorities.

Submissions to the Productivity Commission's recent inquiry into creating a more dynamic economy documented increasing regulatory burdens across a broad range of sectors including financial services, mining and higher education (Box 1).

Meanwhile, CEDA's recent report *Towards a More Seamless Australian Economy* highlighted that regulatory frictions preventing firms from operating seamlessly across Australia restrict competition, raise costs, reduce choice, constrain labour mobility and hold back economic dynamism and productivity.

Understanding where and how regulation is affecting industry is important to ensuring

regulatory settings are fit for purpose and not a hand brake on innovation and dynamism.

In this paper we present a starting point for a new measure of regulatory restrictions by industry. This takes a similar approach to previous analysis by the Mercatus Center at George Mason University's *RegData* database of Australian federal Acts but adds new industry-level analysis.

The new analysis is enabled by advances in AI, which make coding for text scraping and analytics much more accessible and efficient.

CEDA's estimates show that the stringency of federal legislation has increased over the past couple of decades, with particularly steep increases in key infrastructure, health care and education industries. Further work would be beneficial to extend this analysis to other time periods, legislative instruments and state and territory regulation.

The analysis clearly shows the increase in rules to which organisations must adhere, which creates additional costs and complexity to produce the goods and services that Australians want and need.

The analysis does not measure the quality of regulation, and it is acknowledged that there could be net positives from the increase in regulation if it drives better outcomes for society.



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Box 1: Businesses report growing regulatory burdens

Submissions by CEDA members to the Productivity Commission reported increasing regulatory burdens across a range of sectors.

- "... Average timeframes for approvals for major mining projects have increased by 18 months over the last five years; and conditions attached to those approvals have also become significantly more prescriptive, complex and often impractical, with little additional material environmental benefit." (Rio Tinto, p. 2)
- "A common challenge with major project[s]...is repeated requests for the same information from Commonwealth and state governments and different agencies within each jurisdiction. There is little coordination and information sharing within government and across the Federation. This presents an unnecessary drain on resources, contributes to protracted approval processes and has a detrimental impact on productivity." (Wesfarmers, p. 16)
- "Developing [a clean metals] project...has involved Fortescue navigating a nascent state regulatory environment in the hydrogen industry. Many of the regulations applied to this project are not fit for purpose and carried over from other sectors. Governments should proactively assess regulatory needs for green industries on the pathway to net zero to ensure regulations arrive before projects to ensure they can be constructed and operated safely." (Fortescue Metals, p. 5; see also Port of Newcastle Case Study 4 in CEDA's *Clean Energy Precincts Report*²)
- "Australian insurers are heavily regulated, with more than 100 pieces of regulation in force across different regulators." (Insurance Council of Australia, p. 3); "The overall regulation in financial services generally, and the insurance industry specifically, has increased significantly over time following the Royal Commission into the Banking, Superannuation and Financial Services Industry. While this regulation was an important step to address serious consumer harms, it has not always resulted in the desired outcomes for consumers. The Australian Law Reform Commission previously found that the current legislative framework for corporations and financial services regulation is overly complex and made nearly 60 recommendations to streamline financial services regulation." (Insurance Council of Australia, questionnaire p. 1)
- "Time spent on regulatory compliance by our management and governance committees has increased by 20 to 25 per cent over the last decade." (University of Sydney, questionnaire response p. 3)

In some areas such as financial regulation, regulatory emphasis has moved away from clearly defined 'black letter law' to setting regulatory principles. This can potentially streamline and simplify legislation, but can also make compliance more difficult. For example:

- "Fairness obligations [are] embedded across multiple legislative instruments including the ASIC Act, Competition and Consumer Act, Corporations Act and National Consumer Credit Protection Act. These are further layered within industry codes and state-based legislation, resulting in a fragmented regime that is difficult to interpret and comply with." (NAB, p. 9)

Data suggests a trend towards more restrictive regulation

Australia's ranking on the OECD Product Market Regulation index has been falling over the past two decades (Figure 1). This index assesses regulatory barriers to firm entry and competition in key market sectors. Australia's worsening ranking has mainly been driven by lower barriers in other countries and reflects poor rankings for administrative and regulatory burden (37th out of 43 countries) and the competition-friendliness of licensing and permitting arrangements (39th out of 43 countries).³

Australia's ranking in the IMD World Competitiveness Yearbook has also fallen from the top-10 globally two decades ago to 18th in 2025.⁴

Other sources show regulatory restrictions in Australia increasing over the past decade. US research shows 'business freedom' has declined by two per cent over the decade to 2025, while 'labour freedom' has declined by 20 per cent, based predominantly on World Bank data.⁵

Analysis by Australia's Office of Impact Analysis shows regulatory burdens increasing every year since 2015-16, from a starting point of an estimated 86,000 regulations with a compliance burden of \$65 billion.⁶

Survey-based measures of compliance burden have also increased. Regulation requirements were the fourth most cited economic challenge faced by company directors in 2025, with 25 per cent citing this factor. This is an increase from 2016, when too much regulation was the eighth-most cited factor, highlighted by 21 per cent of directors. Two-thirds of directors expect compliance requirements to increase in the next year, up from 40 per cent in 2016.⁷

The most direct measure of aggregate regulatory restrictions is *RegData: Australia*, which quantifies restrictive terms in Australian regulation using an approach developed to analyse US regulation by the Mercatus Center.⁸ This source shows dramatic growth in the number of restrictive and conditional terms in federal Acts and legislative instruments in the two decades to 2020.⁹

To date, however, no analysis has tracked Australian regulatory restrictions by industry. *RegData* does this for the US, but a similar approach was not readily applicable to the different industry classification in Australia.¹⁰ The OECD Product Market Regulation database does assess competition restrictions by industry, but only for a selected sample of mainly network industries such as transport, energy and telecommunications.

Figure 1: Australia's ranking on regulatory barriers to competition has worsened

Ranking for the extent of economy-wide regulatory barriers to competition, where the top ranked country has the least barriers



Source: OECD Product Market Regulation Database

Industry-specific restrictions are growing

Taking a similar approach to *RegData* (see Appendix for methodology), new CEDA analysis of federal Acts shows restrictive terms have increased by around 30 per cent between 2003 and 2025. This is consistent with the trend in *RegData* but extended to more recent data.

The novel aspect of this analysis is the classification of each Act to one or more affected ANZSIC industries, based on keywords in the title, purpose statement and first three sections of each Act (Appendix A).

This reveals there has been a 39 per cent increase in regulatory restrictions that directly affect Australian industries (Figure 2). Acts are considered industry-relevant only if they have been classified through our analysis; unclassified Acts are therefore excluded from this value.

Infrastructure and service sectors are particularly affected

Regulatory restrictions in federal Acts have increased most over the past two decades in key infrastructure (Electricity, Gas, Water and Waste services; and Information Media and Telecommunications) and service industries (Health Care and Social Assistance; and Education and Training) (Table 1).

The number of restrictions has increased for all industries, but the increase was more moderate in Transport, Postal and Warehousing; Manufacturing; Financial and Insurance Services (albeit starting from a high base); and Wholesale Trade.

These preliminary estimates would be improved by including additional legislative

instruments and state and territory Acts and regulations. For example, an increase in federal restrictions could represent a genuine increase in regulation, but it could also represent a centralisation of state legislation in a federal Act, as occurred when Work Choices and the *Fair Work Act 2009* centralised industrial relations law. In many other cases, however, such as the National Construction Code, nationally consistent rules continued to be given legal effect through state and territory legislation.

The lack of previous industry-level analysis of regulatory restrictions makes benchmarking difficult, but the results can be compared against the OECD's Product Market Regulation (PMR) indicators. Both our results and the PMR find relatively little change in regulatory restrictions applying to the transport sector since 2003.

However, the PMR data show no increase, or even a decrease, in regulatory barriers in the energy and telecommunications sectors.¹¹ Differences can be explained by different methodologies: PMR indices measure specific regulatory barriers to entry and competition collected through a cross-checked questionnaire of national authorities, rather than a count of the total number of regulatory restrictions.

The discrepancy suggests that many of the increased restrictions applying to the energy and telecommunications sectors are not barriers to competition, but rather regulations covering other issues such as safety and environmental issues.

Figure 2: Federal Acts place increasing restrictions on Australian industries

Growth in restrictive regulation from 2003 to 2025 (per cent)

All Acts	27
Industry Relevant Acts	39

CEDA analysis is based on a combined count of requirement terms ('must', 'shall', 'required', 'mandatory', 'obliged', 'compulsory', 'necessary', 'duty', 'obligation', 'liable', 'responsible') and prohibition terms ('prohibited', 'forbidden', 'banned', 'unlawful', 'illegal', 'shall not', 'must not', 'cannot', 'may not', 'restricted').

Industry relevant Acts excludes all Acts that were unclassified in our analysis (337 Observations).

An important driver of increases in regulations applying to the electricity, gas, water and waste services industry is the *Offshore Petroleum and Greenhouse Gas Storage Act 2006*, which has little effect on entry or competition within the domestic electricity and gas industries. Similarly, new

legislation such as the *Digital ID Act 2024*, the *Surveillance Devices Act 2004* and the *Data Availability and Transparency Act 2022* is relevant to the Information Media and Telecommunications industry but would have little or no effect on competition in the sector as assessed by the PMR.

Table 1: Key infrastructure and service industries had the biggest growth in regulation

Industry	Count of restrictive terms in 2025 Acts	Increase in restrictive terms 2003 to 2025 (per cent)
Electricity, Gas, Water and Waste Services	43,216	65
Information Media and Telecommunications	36,189	60
Health Care and Social Assistance	47,701	57
Education and Training	32,162	56
Administrative and Support Services	39,404	54
Mining	34,577	53
Arts and Recreation Services	30,642	51
Retail Trade	31,113	50
Other Services	36,736	49
Construction	29,134	49
Public Administration and Safety	64,277	46
Accommodation and Food Services	27,324	45
Rental, Hiring and Real Estate Services	32,417	44
Professional, Scientific and Technical Services	33,312	41
Agriculture, Forestry and Fishing	31,074	40
Wholesale Trade	34,080	37
Financial and Insurance Services	49,228	37
Manufacturing	31,301	32
Transport, Postal and Warehousing	33,898	13
Unclassified	42,805	-3
Total	192,909	27
Total affecting industries	150,104	39

Source: CEDA analysis of principal Acts as stored on the Federal Register of Legislation.

Conclusions

Our analysis shows restrictions in federal Acts applicable to Australian industries have increased by 39 per cent over the past two decades. Our count of restrictive terms in legislation does not indicate whether the quality or net benefits of regulation have changed, but it does indicate that there has been an increase in the overall quantum of regulation that firms must comply with.

This increase has been particularly steep in key infrastructure and service sectors. Restrictive terms have increased by at least 60 per cent for the Electricity, Gas, Water and Waste and Information Media and Telecommunications industries, and by more than 50 per cent for major service sectors and mining.

Further work is needed to identify solutions to improve and better target regulation. These findings support the work being undertaken by the Productivity Commission, and arising from the Economic Reform Roundtable, to

review regulatory settings across industries and look for opportunities to simplify or reduce regulatory burden where it is not contributing to better economic or social outcomes.

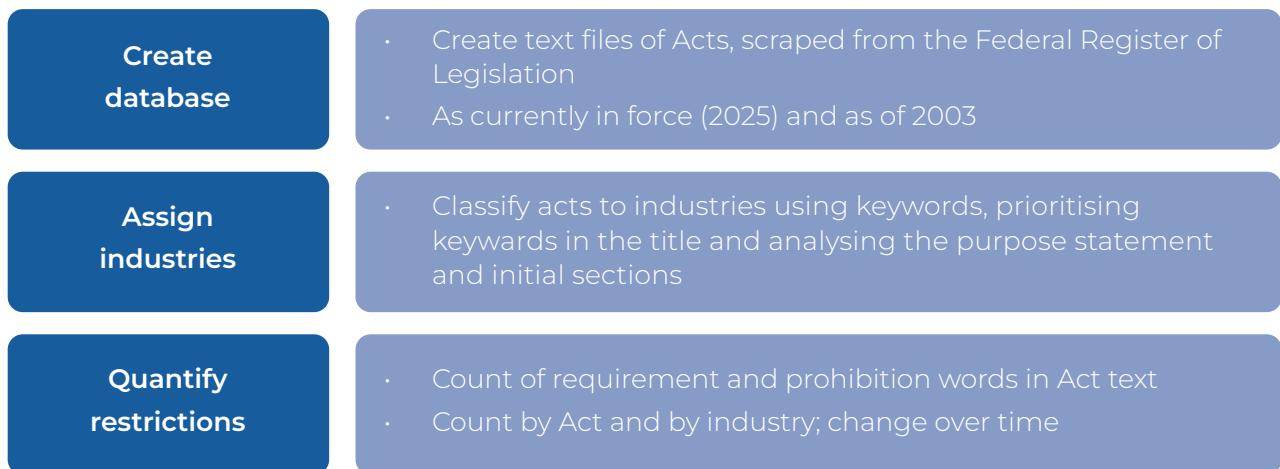
To make substantive changes to the underlying drivers of increases in regulatory barriers, this would need to go beyond reinforcing existing processes such as Regulatory Impact Statements. It could include new processes, such as creating a Senate committee that reviews regulatory burdens for one portfolio each year, similar to the oversight provided by the Joint Committee of Public Accounts and Audit.

Many areas for further work arise from this analysis, including looking at state and territory legislation, analysing enforcement of legislation and looking at the costs of compliance.

Appendix: Method

Following the published analytical approach of *RegData*,¹² we used natural language processing and text analytics to classify and quantify the restrictiveness of regulation by industry (Figure A1). Text scraping and analysis were undertaken using the Python programming language, with AI used to support coding.

Figure A1: Analytical approach to tracking regulatory restrictions in federal Acts by industry



To compile a dataset of federal legislation, a scraping algorithm was used to download the full text of Principal Acts published on the Federal Register of Legislation website. This data source offers a comprehensive source of digitised legislation, and allows for the filtering of legislation by year, accommodating the comparison of past and present regulation.

To monitor changes in regulation over time, two snapshots were taken. First, all Acts in force as of September 2025 were downloaded and converted into text files, capturing the current stock of regulation. As a source of comparison, all Acts in effect as of January 2003 were also collected. This reference point was chosen to align with the release of the OECD Product Market Regulation indicator. The choice of comparison year was also based on concerns regarding the reliability of pre-1990 data.¹³

Once collected, Acts were classified by industry using a dictionary-based textual analysis model. First, a list of industry-specific keywords was developed using one-digit ANZSIC industry definitions (Table A1).¹⁴ For example, for mining, key words included “mining”, “minerals” and “resources”. Second, textual analysis was used to identify the industry relevance of each Act, based first on the title, then on the purpose and first three sections of each Act.

Based on the distribution of keywords, the model assigns industries and predictive scores to each act. The predictive score captures the degree of certainty associated with the Act being relevant to that industry. From these predictive scores, each act is classified as relevant to a single industry, multiple industries, all industries or none.

Classified Acts are then analysed for their concentration of restrictive language. This technique is adapted from the approach used in *RegData*,¹⁵ where for each Act, the number of requirement and prohibition words within the text is counted and totalled as a proxy for regulatory restrictiveness (Table A2). Industry values are calculated by aggregating the results of all Acts classified to each industry, providing a picture of the level and change in restrictions by industry.

The results do not change substantially when using a broader range of keywords to measure regulatory restrictions. We undertook sensitivity analysis using the list of 184 ‘constraining’ terms in

the Loughran-McDonald dictionary, which is a standard dictionary used for textual and sentiment analysis.¹⁶ This showed a slightly bigger increase in restrictive terms between 2003 and 2025 (just over a 40 per cent increase for all industry-relevant restrictions).

The ordering of industries with the biggest increase in regulatory restrictions was largely maintained, with one exception being Financial and Insurance Services, which saw a substantially bigger increase in constraining terms to rank fourth highest for the increase in restrictions by industry.

Table A1: Dictionary keywords by one-digit ANZSIC2006 code

ANZSIC code	Keywords
A: Agriculture, Forestry and Fishing	'agriculture', 'agricultural', 'farming', 'farm', 'crop', 'livestock', 'cattle', 'sheep', 'dairy', 'poultry', 'pig', 'fishing', 'fisheries', 'aquaculture', 'forestry', 'timber', 'wood', 'rural', 'primary producer', 'horticultural', 'pastoral', 'grain', 'beef', 'wool', 'cotton', 'wheat', 'vineyard', 'orchard', 'plantation'
B: Mining	'mining', 'mine', 'mineral', 'minerals', 'coal', 'iron ore', 'gold', 'copper', 'uranium', 'petroleum', 'oil', 'gas', 'exploration', 'extraction', 'quarry', 'resources', 'geological', 'drilling', 'seismic', 'prospect'
C: Manufacturing	'manufacturing', 'factory', 'industrial', 'assembly', 'processing', 'fabrication', 'automotive', 'pharmaceutical', 'chemical', 'textile', 'food processing', 'machinery', 'equipment', 'product', 'plant', 'facility'
D: Electricity, Gas, Water and Waste Services	'electricity', 'electric', 'power', 'energy', 'gas', 'water', 'waste', 'utility', 'sewage', 'treatment', 'distribution', 'generation', 'renewable', 'solar', 'wind', 'hydro', 'nuclear', 'transmission', 'grid', 'pipeline'
E: Construction	'construction', 'building', 'residential', 'commercial', 'infrastructure', 'contractor', 'planning', 'zoning', 'architect', 'engineer', 'builder', 'project', 'site'
F: Wholesale Trade	'wholesale', 'distribution', 'supply chain', 'trading', 'import', 'export', 'dealer', 'distributor', 'supplier', 'bulk', 'inventory', 'customs'
G: Retail Trade	'retail', 'shop', 'store', 'consumer', 'sales', 'merchandise', 'customer', 'commercial', 'trade', 'market', 'shopping'
H: Accommodation and Food Services	'hotel', 'accommodation', 'tourism', 'restaurant', 'food service', 'hospitality', 'catering', 'lodging', 'tourist', 'visitor'
I: Transport, Postal and Warehousing	'transport', 'transportation', 'freight', 'logistics', 'shipping', 'postal', 'mail', 'delivery', 'warehouse', 'aviation', 'maritime', 'rail', 'road', 'airport', 'port', 'cargo', 'passenger', 'navigation', 'airlines', 'railways', 'seafarer'
J: Information Media and Telecommunications	'telecommunications', 'broadcasting', 'media', 'internet', 'communication', 'television', 'radio', 'radiocommunications', 'digital', 'technology', 'data', 'network', 'spectrum', 'mobile', 'telephone', 'broadband', 'communications'
K: Financial and Insurance Services	'banking', 'bank', 'banks', 'financial', 'insurance', 'credit', 'loan', 'investment', 'fund', 'superannuation', 'pension', 'money', 'deposit', 'prudential', 'APRA', 'ASIC', 'unclaimed money', 'ADI', 'life insurance'

L: Rental, Hiring and Real Estate Services	'rental', 'lease', 'property', 'real estate', 'land', 'estate', 'housing', 'residential', 'commercial property', 'tenancy', 'landlord'
M: Professional, Scientific and Technical Services	'professional', 'consulting', 'technical', 'scientific', 'research', 'legal', 'accounting', 'engineering', 'veterinary', 'architectural', 'design', 'advisory', 'specialist', 'expert'
N: Administrative and Support Services	'support services', 'staffing', 'recruitment', 'office', 'clerical', 'security', 'cleaning', 'maintenance'
O: Public Administration and Safety	'government', 'public', 'administration', 'civil', 'defence', 'security', 'police', 'law enforcement', 'public safety', 'emergency', 'national security', 'intelligence', 'military', 'ADF', 'AFP', 'ASIO'
P: Education and Training	'education', 'school', 'university', 'training', 'student', 'teacher', 'academic', 'learning', 'curriculum', 'higher education', 'tertiary', 'vocational', 'skills', 'qualification', 'universities'
Q: Health Care and Social Assistance	'health', 'medical', 'hospital', 'healthcare', 'patient', 'treatment', 'pharmaceutical', 'medicine', 'therapy', 'care', 'social', 'welfare', 'disability', 'aged care', 'mental health', 'public health'
R: Arts and Recreation Services	'arts', 'culture', 'recreation', 'sport', 'entertainment', 'museum', 'library', 'heritage', 'creative', 'performance', 'festival', 'gambling', 'gaming', 'lottery', 'marine park', 'national park'
S: Other Services	'repair', 'personal', 'community', 'religious', 'civic', 'union', 'association', 'organisation', 'service', 'maintenance'
All Industries	'GST', 'customs', 'tariff', 'excise', 'competition', 'consumer', 'trade practices', 'workplace', 'employment', 'fair work', 'privacy', 'corporations', 'business', 'commercial', 'regulatory', 'compliance', 'standards', 'quality', 'environmental protection', 'industrial relations'
No Industries	'electoral', 'parliament', 'referendum', 'supply act', 'appropriation', 'judicial', 'federal circuit', 'family court', 'procedural', 'administrative law', 'income tax', 'interpretation'

Table A2: Keywords used for restrictions count

Term	Keywords
Requirement	'must', 'shall', 'required', 'mandatory', 'obliged', 'compulsory', 'necessary', 'duty', 'obligation', 'liable', 'responsible'
Prohibitive	'prohibited', 'forbidden', 'banned', 'unlawful', 'illegal', 'shall not', 'must not', 'cannot', 'may not', 'restricted'

Note: Sensitivity analysis also undertaken using a much broader range of 'constraining' terms (184 in total) from the Loughran-McDonald dictionary of terms for textual analysis. This did not substantially change the measured increase in industry-relevant restrictions.

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