

GOVERNANCE VERSUS POLITICS CONSTRUCTION CONTRACTORS ARE CAUGHT BETWEEN

Matt Stevens¹, John Smolders², and Mark Whybro³ ^{1,2,3} Western Sydney University

Abstract

The New South Wales government adds to the inherent chaos of the construction industry with its incoherent policy and poor project owner practices. Problems such as regulatory "noise", inexperienced construction bureaucrats, consistent cost blowouts, and significantly increased infrastructure spending create a two-tier system, i.e., those without political power. This results in misaligned dynamics. This paper analyses available information about Australia's NSW governmental actions and their effect on its construction industry with two well-established frameworks. Differences in the vision of political parties are a significant factor, as well as regulatory capture of the bureaucracy by special interests and the inherent conflict of interest in a regulator that also builds. This research adds to the body of knowledge by assessing New South Wales's governance history and project management practices. Further investigation of the dynamics of construction bureaucracies acting as project owners and regulators is needed.

Keywords: construction policy, contractor regulation, government-industry conflict, public-private collaboration Introduction

1. Introduction

The built environment significantly affects a country's quality of life. Additionally, due to climate change effects and rapid urbanisation, construction capability will be needed so the least able citizens are not harmed. An increased amount of quality-minded construction appears necessary for an improved future in Australia. From workers to managers, the industry must achieve increased proficiency; otherwise, social, economic, and environmental results will be suboptimal, and communities will suffer (Stevens and Smolders 2024d)

The Australian construction industry has endured the same problems for decades regardless of the political perspective of the majority party. The government has ineffectively addressed construction's continuing problems. The industry has:

- Employed women at 14% or less of its workforce since 1985. (ABS 2024a) Lower than the other three Goods Producing Industries. Currently, Agriculture Forestry & Fishing is second at approximately 30%
- Produced the highest bankruptcy rate for the last ten years (ASIC 2024)
- Suffered the highest combined fatality and illness rate (Safework Australia 2024)
- Generated the highest lost last job rate (ABS 2024a)
- Endured the Highest Suicide Rate. Data from MATES in Construction (2023) has shown that men in the construction industry are 53% more likely to take their own lives than other employed men across the country.

The construction industry did not arrive in this chaotic place recently. By analogy, the Hillsborough soccer stadium's riot and fire resulted in 97 deaths and 162 hospitalisations. Maggie Thatcher asked the Police Commissioner, "What will you do about these hooligans?" His answer was, "Those are your hooligans, Mrs. Thatcher". This resembles the government's multi-decade malaise toward dodgy developers, builders and contractors. These bad actors are the bureaucracy's creation with generous interpretations of strict laws and non-enforcement behaviour. They have doomed citizens to many poorly constructed living spaces with significantly higher maintenance and operating costs. At the extreme, this low-performance results in consumer financial ruin. Furthermore, the government punishes the best firms by allowing the worst companies to compete.

The government appears to manifest "noise" in its decision-making. This can be defined as high variability or inconsistent accuracy. Using an archery analogy, the arrows land in all target sectors, including the centre ring, but are unpredictable (Kahneman et al. 2021). The default for politics is to be seen as "doing something." This amounts to a mix of initiatives, some pleasing to special interests, that may not be supported by programs that align with the goal articulated.

Politicians are a vital component of governments. While bureaucratic officials have a role in implementing policies, the bureaucracy, politicians, and society influence the success or failure of a policy. State administration is a continuation of the political process, so if circularity occurs, it will result in an administrative bureaucracy (Ishaka 2020). Any Western government can coerce the mightiest of its citizens. The state can seize money only by the method that is permitted. An industry group's main aim can be to solicit the government for a direct money subsidy. Secondarily, commonly sought by an industry is control over entry by new rivals (Stigler 1971)

2. Literature Review

This paper will review and analyse four dimensions of the government-construction industry relationship as shown in the literature: 1) Trustworthiness of Australian government institutions, 2) Regulation formulation responsiveness, 3) Regulation enforcement, and 4) NSW Government Project Owner Practices.

2.1 Trustworthiness of Australian Government Institutions

Trust in party-political institutions has declined, but not for apolitical institutions like the police or judiciary. This suggests that the decrease in citizen's institutional confidence was not a broad secular trend but was possibly the result of factors specific to party politics (Kumove 2024). There are two channels through which the government gains or loses trust. One is "signalling," which is the trustworthiness of politicians who stand for election and bureaucrats who do not. The other channel is labelled "enforcement." (Kumove 2024) Bureaucrats function as critical signalers about the behavioural standard of society. If they are perceived as corrupt, those regulated will internalise a message that 'to get ahead in life one must be engaged in various forms of corruption' (Rothstein and Stolle 2008). Stigler (1971) cautioned that regulation is eventually overtaken by the industry it governs. As the industry matures, this is more likely to happen. He asserted, "The machinery and power of the state is a potential resource or threat to every industry in the society. With its power to prohibit, compel, take, or give money, the state can and does selectively help or hurt many industries." Kumove (2024) asserts that institutional trust might affect community trust through the 'enforcement' channel, which influences the setting of minimum behaviour and punishes those who do not meet that standard. The reaction to building failures reveals many things about public policy since it is usually under stressful circumstances. The success of this reaction is contingent on the government's understanding of the cause, nature and consequences of the gap between human behaviour and governmental activities (Schneider 1992). Between 1983 and 2007, Australia had just three prime ministers. Between 2007 and 2018, there were six PMs; none served a full term. This, coupled with rising economic pessimism, has caused the citizenry's satisfaction with its democracy to decrease precipitously, reaching the lowest level recorded since the 1970s in 2019. Each national used to be among the most pleased democrats in the world, but currently, there is evidence of widespread discontent. (Cameron (2020) asserted, "The bureaucrats don't want change, and ministers do not seem motivated to push change".

Disturbingly, there is an inherent conflict of interest in situations where governments, as project owners, are responsible for policing their compliance with necessary laws and regulations. This issue was severe enough to warrant examination by The Independent Commission Against Corruption (ICAC) in 2007 (Ombudsman NSW 2020).

2.2 Regulation Formulation Responsiveness

A nation's government's primary purpose is a community service institution, often not realised optimally. Democratic systems usually experience disorientation from their primary task. This dysfunction is caused by several internal and external factors in the bureaucracy (Ishaka et al.z 2020).

In Australia, numerous studies were commissioned between 1981 and 2019 to improve quality and compliance, positively impacting the construction industry's performance. Table 2 highlights recommendations concluded by panel members. These include Royal Commissions, Inquiries and Reports commissioned by either State or Federal governments. Conclusions have varied, including design documentation, licencing, and professional standards for high-rise construction, compliant building materials, and effective regulatory control. Former Treasury Secretary of the NSW Government, Michael Lambert, said the government did not act upon his central review of the home building industry in 2015. and that the government commissioned 18 reports urging industry reform over the past two decades (Cummins 2019). Furthermore 2019, after the Mascot and Opal Towers Scandals, the Federal and NSW State governments commissioned two reports, the Lambert and Shergold-Weir. The non-action on their recommendation is a telling example of the government's failure to accept commissioned experts' recommendations. This malaise changed in 2019 when NSW experienced two seminal events—the Opal and Mascot Towers defect crisis.

The receivership's current estimate is that those rectifications will cost more than AUD 40 million each (9News Staff, 2023).

2.3 Regulation Enforcement

The NSW Government has not actively advanced construction quality assurance and quality control for many years, thus not protecting the public from defect scandals. Given that the Federal and NSW governments have a documented history of indifference, the population seemed to have taken a libertarian viewpoint of the government's inadequacy in regulated interpersonal transactions in the construction sector. Thus, consumer buying of residences is sub-optimal (Stevens and Smolders 2023c).

New South Wales's recent construction regulatory transformation may be an instructive example of Australia's journey toward built environment quality. Until recently, it appeared to be declining. The government and industry published numerous studies focused on several areas, including economics, workforce and quality-of-life; however, these two groups seemed paralysed about the path forward. Therefore, root causes of poor building outcomes emerged. Subsequently, two highly visible apartment buildings were discovered to have many structural, operational and other defects in 2018-19. It was a scandal. From this point, the government's strong focus on improving the industry steadily occurred, starting in the apartment sector. They appointed a person from the industry to enable an enforcement scheme. Chandler's work as a construction professional and Building Commissioner seems to have catalysed the transformation of government action to appoint a bold reformer. (Stevens and Smolders, 2023c).

Severe defects in NSW rose to 53% in 2023 from 39% in 2021. Also, Strata companies reported defects rose to 34% in 2023 from 15% in 2021. The total number of buildings reporting defects rose to 642 in 2023 from 492 in 2021 (NSWGov). This appears to be part of the government's effort to build a "disclosure culture" (Edmondson 2019) among facility managers and residential buyers. Part of the triumphant progress since 2019 made in NSW appears to be due to several initiatives. They are part of the OBC's broader goal to increase public confidence in the multi-storey apartment sector by improving regulatory compliance and increasing professional responsibility. However, this trajectory continues to be a challenge. Bureaucracies tend to be slow-moving and adverse to "collecting enemies"; therefore, reform is not a default but one that is often forcefully achieved. This force disrupts the status quo, and people's outrage is the catalyst.

This may indicate an opportunity for reform-minded leaders inside and outside the construction industry. Moreover, as documented failures are publicised, so is the probability that a responsible governing body will react and address needed problem areas. However, there is always a danger of overregulating an industry to raise costs to unaffordable levels. This is a standard free market concern and a question of balance.

In 2022, government officials asked Building Commissioner Chandler to resign. This was a shock to the general community and the construction industry. Unsurprisingly, he was kept in office by significant industry and public support. However, Chandler will voluntarily resign in October 2024. The replacement has not been named. However, it is doubtful that the person to succeed him will have the same or better public profile, body of industry work and confidence of all parties.

Industrial relations within the construction industry have had a checkered past. According to Smolders (2016), unions have brought some genuine progress that benefits construction workers. However, their actions have also demonstrated coercion, intimidation, bullying and substantial property damage. These issues have been widespread knowledge, according to industry sources. Government action has been slow to react and govern accordingly. Consequently, contractors have stayed clear of publicly expressing their views in fear of retaliation by union members. The Heyden Royal Commission of 2015 examined the impact of union control over construction and, as a result, created the Australian Building and Construction Commission (ABCC). The Commission's role was to "promote understanding and enforcing workplace relations in the building and construction industry", as per their website. However, the ABCC was disbanded when the ALP came into power in 2023

2.4 NSW Government Project Owner Practices

Infrastructure is not a free good, as many citizens believe. Its costs are clouded by several funding mechanisms for its development and operation. The public purse is less disciplined than capital markets and private construction service buyers (Garvin and Bosso 2008). Bankruptcy statistics show a significantly lower ratio of insolvencies to turnover in infrastructure than in non-infrastructure sectors (ASIC 2024)

Additionally, the average infrastructure wages and salaries per employee are more than double (AUD129,564 versus 61,425) those of the non-infrastructure sector. This suggests a distortion of the labour market (ABSc 2024). See Table 3.

Sector	NSW Bankruptcy % 2023-24 (ASIC 2024)	NSW Sector Volume% (ABSc 2024)	Annual Wage / Salary - Australia (ABSc 2024)
Non-Infrastructure, i.e. Institutional, Commercial Residential, Refurbishment	94.5% (996)	56.1% (\$48.64 billion)	\$61,425
Infrastructure, i.e. Bridge, Road, Rail, Electrification, Communication etc.	5.5% (58)	43.9% (\$38.07 billion)	\$129,564

Table 1 - Selected Australian Construction Metrics.

Budget blowouts are well-documented across the world. The overall average globally is 20+% on roads and 40+% on rail projects than estimated. Per Flyvbjerg (2017), the blowouts are so predictable around the globe that he describes the phenomenon as the "Iron Law of Megaprojects". The Grattan Institute (2020 asserts that Australian infrastructure projects valued at \$20 million and above were completed in the last two decades; project costs exceeded budgets by 21 per cent.

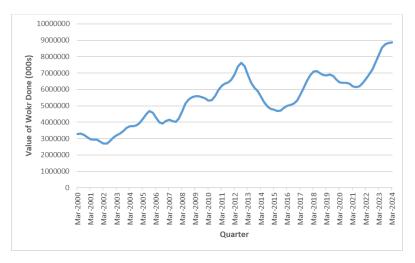


Figure 1. New South Wales's Value of Engineering Work Done; Chain Volume Measures - Trend. Source: ABS 2024

The NSW government procured approximately 300% more engineering work quarterly (inflation-adjusted) in 2024 than in 2000 (see Figure 1). However, the state's population increased by 24.8% in the same period.

3. Results

We analysed industry information using established frameworks from Porter (2004) and Dagnino (2021). This will show the construction industry's unpredictable nature.

3.1 Industry Analysis

Construction is markedly different from other formally recognised industries. Firstly, it is considered a goodsproducing industry, not a service one (USBLS n.d.). Also, contractors install materials directed by the client's team, assisted by tools and machines available to competitors. Contractors create but do not own the product of their work; their client does. Other goods-producing industries, namely agriculture. forestry, fishing, mining, oil, gas, and manufacturing own their output and can sell it when and where they want. Additionally, construction organisations suffer from chaotic work availability, uneven mutual dependence, and unpredictable negotiating power; these are industry norms (Stevens and Smolders, 2023a). Also, nine industry barriers to construction contracting innovation include single-digit margins, low single-digit market share of the industry leaders, fluid workforce dynamics (highest "lost last job" of all Australian sectors) and personal guarantees resulting in a high percentage bankruptcy business (Stevens and Paracha 2022). Part of the industry's chaos is due to its highly diverse product demand, i.e. customisation is required for individual clients. For example, houses, offices, infrastructure, and processing facilities are customised to meet many requirements, such as client preferences, site location, and local governance regulations.

Porter (2004) provided a framework for analysing an industry. His guide implies that the construction industry is not equal to others. The authors used his ten most applicable points to articulate the sector's dynamics.

1. *Ease of entry*—Construction contractors can easily enter the business without requiring significant qualifications such as advanced education, capital and years of verified experience. Craft skill is not learned in a classroom but is the number one value that construction firms provide.

2. *Critical nature of product or service* – whether new, remodelled or emergency, sheltered living space is an essential requirement and is a significant contributor to a society's quality of life

3. *The transaction size is large*—the end product is the largest personal investment and a top-three corporate investment, so scrutinising the purchase and its creation (the building process) is normal. This results in each monthly billing being disproportionally significant.

4. *Experience is available* – many field and office people gain a significant understanding of the construction process during employment. Many inputs (clients, materials, equipment, methods etc.) are evident to them, including the process (work acquisition, project operations, finance) that creates the project.

5. *Numerous and equally balanced competitors*—in many markets, the highest market share of any firm is two per cent or less, and over 98% are employ 20 people or less (ABSb 2024).

6. *Slow industry growth*—the constant dollar value of construction has grown an average of 1% a year. Over ¼ of all 3-month periods measured experience negative total turnover. (ABSc 2024)

7. Lack of differentiation – construction knowledge is observable and shared widely due to high employee turnover –

8. *Switching costs*—Engaging a different construction company to build the next project will incur little or no switching costs due to a lack of proprietary systems.

9. *High strategic stakes*—The few projects a company must construct make each risky since the profit margin is single digits (ABS 2023).

10. *High exit barriers*—Many small and medium construction contractors have personal guarantees with suppliers and banks. Therefore, when in financial stress, they appear to act desperately to avoid losing their company and individual wealth.

3.2 Temporary Competitive Advantage Dynamics

Highly regulated industries have fewer competitors than lightly regulated ones. Economists have long argued that consistent industry suboptimisation is characterised by Temporary Competitive Advantage (TCA) dynamics. (Dagino et al. 2021). Defined as a characteristic in industries when its companies have a resource that is both valuable and rare but not expensive to imitate. Resources that can only be acquired by one or very few companies are considered rare and produce a commercial edge. However, this advantage is usually short-lived in TCA industries, as the industry's organisations can quickly acquire or imitate the resource without too much trouble. TCA enablers are:

- A. Globalisation rising interdependence and integration in the domestic or international market (Cuervo-Cazurrra 2017); Construction is an industry that suffers worker shortages. This enables market integration since paying a higher salary or hour wage is an easy strategic move to attract talent. This prompts a free flow of management and skilled workers between companies. Additionally, it experiences the "highest lost last job rate" of all 16 sectors (ABS 2024a)
- B. Demand uncertainty when demand uncertainty is high, it is unlikely that firms realise superior performance over time (Foss and Lyngsie 2014). In Australia since 2000, the construction industry has suffered over 100 recessions in Work Type/Region with approximately 1/3 lasting 9 to 15 months (Stevens and Smolders 2023a). IBISWorld (2022) identified Key Success Factors (KSF) for a construction business that indicate nimbleness is critical. The top KSFs include 1. Ability to expand and

curtail operations rapidly in line with market demand. 2. Operators must be able to quickly alter labour force numbers to match short-term cycles in market demand

- C. Technological uncertainty the rate of technological change affects organisational., performance (Johnson et al. 2012). According to McKinsey & Company, in 2022, the number of construction technology firms doubled since 2017, and the percentage offering five or more applications increased from 13% to 20%. This was fuelled by increased investment activity in our sector, i.e., construction technology investment was USD 8 billion between 2009 and 2014 and grew to USD 25 billion between 2015 and 2019. Additionally, the advancement of production equipment leads to further confusion of its project fit
- D. Competitive intensity—firms experience concentrated and rapid attacks from rivals (Ajamieh et al. 2016). There are 5+ times more construction organisations than manufacturers (499,000 versus 90,000), even though the total sector income is approximately the same (ABS 2024b). The new entry percentage was 6.3 for the fiscal year ending 2023 (ABS 2023). This is the highest of the four goods-producing industries. Table 2 shows the changing nature of organisation leaders by volume over nine years.

Table 2. ENR's Top 5 Contractors in Selected Years Source: ENR				
Rank	2015	2019	2023	
1	Bechtel	Bechtel	Turner	
2	Fluor	Fluor	Bechtel	
3	Turner	Turner	Mastec	
4	C B & I	AECOM	Kiewit	
5	Kiewit	Whiting-Turner	STO Building	

Table 2. ENR's Top 5 Contractors in Selected Years Source: ENR

In 2015, AECOM and Whiting-Turner were 8th and 9th, respectively, but STO and Mastec were not in the top 200. In 2019, Kiewit was 6th. Interestingly, McDermott merged with CB&I; however, it ranked 9th, and STO was 14th. In 2023, Whiting-Turner was 7th, AECOM 14th and McDermott (CB&I) dropped out of the top 20 (ENR 2024).

Furthermore, the volatility of a company's existence is more evidence of TCA dynamics. Construction firms are at the highest risk for insolvency than other economic sectors because of many factors, including project variability and tight completion deadlines (Cheng et al. 2021). Gerber and Ong (2013) note that project owners emphasise price, terms and conditions as most important for their construction tenderers. They often view price as the primary criterion for contract award and sometimes encourage many contractors to tender for a project. From 2022 to 2024, construction suffered approximately 60% more bankruptcies annually than the second-worst sector (ASIC 2024)

4. Discussion

The Government is the only stakeholder that can settle the industry's chaos. It has the levers of regulation, supporting programs, and normalising project owner practices. NSW bureaucrats must provide more stable and predictable construction business conditions if they expect the industry to improve. Contractors must be able to operate consistently to increase their capability to meet NSW's future environmental and economic challenges. Industry new risks via regulatory fiat only add to the bankruptcy rolls. The construction industry suffers from TCA's characteristics. Reducing it should be one of the government's strategic goals (Stevens and Smolders 2024d).

When viewed together—higher employment compensation, cost blowouts, and fewer insolvencies infrastructure projects have less chaotic dynamics and more forgiving contracting relationships. This confirms the inherent conflict of interest, i.e., the industry's regulation intensity affects tender cost. The wage differential between infrastructure and non-infrastructure projects translates into trouble for hiring and keeping above-average talent.

Finding a new construction operation-minded Building Commissioner will signal to the industry the future direction of enforcement. Specific trends may add to this narrative, such as the continuing high rate of insolvencies in non-infrastructure construction. More cost blowouts, extreme compensation and material price inflation will confirm the business-as-usual approach to NSW project owner practices.

5. Conclusions

Australia's built environment significantly affects its quality of life. Due to this century's ongoing climate change effects and rapid urbanisation, the importance of the construction industry will increase. The industry must achieve

increased proficiency from workers to managers to owners; otherwise, social, economic, and environmental results will be suboptimal and detrimental to communities.

The NSW government appears unaware of its responsibility and significant effect on the construction industry's inherent unruliness. It will change enforcement leadership at the end of 2024, but no one has been named. A construction contracting experienced replacement may indicate a continuation and endorsement of its progress. Alternatively, the bureaucracy may become a case study between active and passive construction governance. If their pre-Chandler era behaviour is a trustworthy guide, the regulator activity will de-energise enforcement and rule-making after his departure. Culmatively, the current mix of disproportional infrastructure demand, unaddressed conflict of interest and consistent cost blowouts may add to the chaos.

We recommend further investigation of the dynamics of construction bureaucracies acting as both project owners and regulators is needed. The focus should be on bureaucrats' construction experience, separating the construction procurement from the regulatory focus and lessening the economic impact of the infrastructure from the non-infrastructure sector.

References

- Ajamieh, A., Benitez, J., Braojos, J. and Gelhard, C. (2016). IT infrastructure and competitive aggressiveness in explaining and predicting performance. Journal of Business Research, 69, pp. 4667–4674.
- Australian Securities and Investment Commission (ASIC) (2024) Australian Bankruptcy Statistics. Accessed June 9, 2024.

https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fdownload.asic.gov.au%2Fmedia%2 Faddoe1xo%2Fasic-insolvency-statistics-series-1-and-series-2-published-4-june-2024.xlsx&wdOrigin=BROWSELINK

- Australian Bureau of Statistics (ABSa) (2024) Australia, Labour Force, Detailed. Accessed June 9 2024. https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-force-australiadetailed/latest-release
- Australian Bureau of Statistics (ABSb) (2024) Counts of Australian Businesses, including Entries and Exits. Accessed June 10, 2024. https://www.abs.gov.au/statistics/economy/business-indicators/counts-australianbusinesses-including-entries-and-exits/latest-release
- Australian Bureau of Statistics (ABSc) (2024) 8155.0 Australian Industry Construction, by industry subdivision, 2022-23
- Cameron, S. (2020). Government performance and dissatisfaction with democracy in Australia. Australian Journal of Political Science, 55(2), 170–190. https://doi.org/10.1080/10361146.2020.1755221
- Carrigan, C., & Coglianese, C. (2015). "George J. Stigler: The Theory of Economic Regulation". The Oxford handbook of classics in public policy and administration, 287, 292-93.
- Cheng, M.Y., Hoang, N.D., Limanto, L. and Wu, Y.W. (2014), 'A novel hybrid intelligent approach for contractor default status prediction', Knowledge-Based Systems, Vol. 71, pp. 314-321
- Cuervo-Cazurra, A., Mudambi, R. and Pedersen, T. (2017) Globalization: Rising skepticism. Global Strategy Journal, 7, pp. 155–158
- Cummins, J.S., Megan Gorrey, C, (2019) Pressure grows on the NSW government to act on reform of the building industry [WWW Document]. Syd. Morning Her. URL https://www.smh.com.au/national/nsw/pressure-grows-on-nsw-government-to-act-on-reform-of-building-industry-20190808-p52fat.html(accessed 2.13.23).
- Dagnino, G. B., Picone, P. M., & Ferrigno, G. (2021). Temporary competitive advantage: a state-of-the-art literature review and research directions. International Journal of Management Reviews, 23(1), 85-115.
- Edmondson, AC 2019, The Fearless Organisation: Creating Psychological Safety for Learning Innovation and Growth. John C. Wiley, Hoboken, New Jersey.
- Engineering News Record (ENR) (2024) Top 400 Contractors. Accessed June 10, 2024. https://www.enr.com/toplists/2024-Top-400-Contractors-1-preview
- Ferrier, W.J., Smith, K.G. and Grimm, C.M. (1999). The role of competitive action in market share erosion and industry dethronement: A study of industry leaders and challengers. Academy of Management Journal, 42, pp. 372–388.
- Flyvbjerg, Bent, Introduction: The Iron Law of Megaproject Management (2017). Bent Flyvbjerg, 2017, ed., The Oxford Handbook of Megaproject Management, Oxford University Press, Chapter 1, pp. 1-18.

- 2.
- Foss, N.J. and Lyngsie, J. (2014). The strategic organization of the entrepreneurial established firm. Strategic Organization, 12, pp. 208–215.
- Garvin, M. J., & Bosso, D. (2008). Assessing the Effectiveness of Infrastructure Public—Private Partnership Programs and Projects. Public Works Management & Policy, 13(2), 162-178. https://doi.org/10.1177/1087724X08323845
- Gerber, P., and Ong, B., (2013), 'Best practice in construction disputes: avoidance, management and resolution', LexisNexis Butterworths, North Ryde, NSW
- Grattan Institute (2020) The Rise of Megaprojects: counting the costs. Terill, Emsily, and Moran, eds.
- Heimans, J. and Timms, H. (2018) New Power: how power works in our hyperconnected world and how to make it work for you. Double Day, New York.
- Hughes-Morgan, M. and Ferrier, W.J. (2017). 'Short interest pressure' and competitive behaviour. British Journal of Management, 28, pp. 120–134.
- Ishaka, N., Hasibuanb R. & Arbanic T. (2020) Bureaucratic and Political Collaboration Towards a Good Governance System. Jurnal Bestuur. Vol.8, Issue.1, August, 2020 DOI: 10.20961/bestuur.42922
- Johnson, J.L., Martin, K.D. and Saini, A. (2012). The role of a firm's strategic orientation dimensions in determining market orientation. Industrial Marketing Management, 41, pp. 715–724.
- Kahneman, D., Sibony, O. and Sunstein, C. 2021, Noise: a flaw in human judgement, William Collins, London.
- Kumove, M. (2024). Political crisis and social trust: the case of Australia. Australian Journal of Political Science, 1– 18. https://doi.org/10.1080/10361146.2024.2352044
- MATES In Construction (2023) The Australian Building And Construction Industry Blueprint For Better Mental Health And Suicide Prevention Audit Tool And People At Work: Construction Survey Results Overview. Griffin University, Queensland https://mates.org.au/media/documents/23130-MIC-%E2%80%93-Blueprint-%E2%80%93-Roundtable-Report-%E2%80%93-Survey-Results.pdf
- McKinsey and Company, (2022) Rise of the platform era: The next chapter in construction technology. Published October 30, 2022. Accessed July 17, 2023 https://www.mckinsey.com/industries/private-equity-and-principal-investors/our-insights/rise-of-the-platform-era-the-next-chapter-in-construction-technology.
- New South Wales Government (NSWGov) (2023) 2023 Strata Defects Report. Office of Building Commissioner. https://nsw.gov.au/building-commissioner First published: November 2023
- Ombudsman NSW (2020) An inherent conflict of interest: councils as developer and regulator. State of New South Wales, 15 December 2020. ISBN 978-1-925885-24-8
- Porter, M.E. 2004 Competitive Industry: techniques for analysing industries and competitors. Free Press. New York
- Safework Australia (2024) Data and Research. Accessed June 10, 2024. https://www.safeworkaustralia.gov.au/dataand-research
- Schneider, S.K. (1992) Governmental Response to Disasters: The Conflict between Bureaucratic Procedures and Emergent Norms. Public Administration Review, Vol. 52, No. 2 (Mar.-Apr. 1992), pp. 135-145
- Stevens, M. Alashwal, A. and Smolders, J. (2024) Project Length Determination: One Root Cause Of Construction's Dysfunctions. The Fourteenth International Conference on Construction in the 21st Century (CITC-13) Rio de Janiero, Brazil. September 2-4 2024
- Stevens, M. and Smolders, J. (2023a) Stakeholder Power and Mutual Dependence: Construction Contractors are caught in an Economic Vise. The Thirteenth International Conference on Construction in the 21st Century (CITC-13) Arnhem, The Netherlands. May 8 – 11, 2023
- Stevens, M. & Smolders, J. (2023b) Understanding Australian Construction Contracting: a guide for emerging professionals. Routledge. London.
- Stevens, M. & Smolders, J, (2023c) A Regulatory Transformation Case Study in Construction: Past Tense and Future Perfect, The Thirteenth International Conference on Construction in the 21st Century (CITC-13) Arnhem, The Netherlands May 8 – 11, 2023
- Stevens, M. & Smolders, J. (2024d) Construction Contracting Business Management: Improving Organisational Performance in an Increasingly Complex Industry. 925 pages.
- Stevens, M. (2022). Nine innovation barriers in Australian construction contracting. Proceedings of the 31st Annual Conference of the International Group for Lean Construction (IGLC30), Edmonton, Canada.
- Stigler, G. J. (1971). The Theory of Economic Regulation. The Bell Journal of Economics and Management Science, 2(1), 3–21. https://doi.org/10.2307/3003160
- Sydney Morning Herald (2023) Secret report reveals \$1 billion-plus cost blowout in bungled NSW trains project. https://www.smh.com.au/national/nsw/secret-report-reveals-1-billion-plus-cost-blowout-in-bungled-nsw-trains-project-20230203-p5chpo.html

- U.S. Bureau of Labor Statistics (USBLS) (n.d.) Industries at a Glance. Accessed July 9, 2023. https://www.bls.gov/iag/tgs/iag06.htm
 Williams, S., Thomson, J., 2019. Only a death will make government fix the problem of high-rise safety [WWW
- Williams, S., Thomson, J., 2019. Only a death will make government fix the problem of high-rise safety [WWW Document]. Aust. Finance. Rev. URL https://www.afr.com/news/only-a-death-will-make-government-fixtheproblem-of-highrise-safety-20190102-h19mz3