



AUSTRALIAN
CONSTRUCTORS
ASSOCIATION

ALL RISK

NO REWARD

Fixing the building
industry's profitless
boom



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About the Australian Constructors Association

The Australian Constructors Association is the only representative body for contractors delivering vertical and horizontal construction projects, as well as undertaking infrastructure asset management. Our members construct and service the majority of major infrastructure projects built in Australia every year. Our goal is to create a more sustainable construction industry.

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This report – at a glance

Building firms are entering administration at more than twice the rate of other industries. This reflects some deeply troubling financial conditions. Profit margins have fallen to 1% and liquidity to 5%. Over half of all large builders now meet a technical definition of insolvency.

Why is Australia's building sector so dysfunctional? Because the rules of the game are fundamentally unfair and drive builders broke.

Healthy markets need two things to function properly: (1) that the buyer knows exactly what they want, and (2) that the seller knows exactly how much it costs to produce. Under these conditions, the normal rules of commerce work well. Buyers specify their requirements upfront and sellers put a hard price on them.

The typical vehicle is the 'fixed price contract' and it works well for buying a fleet of cars or an office lease. This model does not work well for transactions with high uncertainty—say, a building project. It fails because the fixed price contract transfers all the uncertainty in cost and design onto the seller. When those risks are realised, they are funded out of profits.

The model of total risk transfer across the building sector has produced a deeply unstable industry—systemically weak financials, a myopic focus on the short-term and an adversarial culture. A lawyer's playground. This is a bad outcome for everyone. Builders are in constant survival mode, struggling to eke out a margin. Clients are in a constant battle to maintain feasibilities in the face of recurring disputes and variations. In the worst case, the builder collapses and the client is forced to retender an incomplete project, wiping-out its profits.

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There is a better way. Win-win construction contracts are becoming commonplace in other corners of the industry such as infrastructure. Their value in delivering more certain and better outcomes is proven. There are three key ingredients:

- » Involve the contractor in the design process at the earliest opportunity - this not only delivers firmer costs but also usually a lower price.
- » Do not set a formal cost at the start—invest in developing a price jointly with a contractor and consultant before launching into delivery.
- » Consider incentivising collaborative out-performance - use a 'painshare/gainshare' model to share risks and rewards among the parties.

These lessons apply to both public and private sector clients, but government must show the way. All public building works should be procured with these principles in mind - because a profitable building industry is in everyone's interests.



CONTENTS

- Australia's building sector is broken 1**
- Market failure in the building sector 3**
- Correcting market failure in
the building industry 5**
- Not reinventing the wheel 6**
- Moving forward together 7**

Australia's building sector is broken

Building is one of the largest and most important sectors of Australia's economy, responsible for delivering the wide range of structures that make up our 'vertical' built environment. This includes houses and other residential dwellings, as well as the many types of non-residential buildings such as schools, hospitals, shops and offices.¹

Australian building firms directly employ 350,000 people but indirectly create employment for a further 530,000 through its subcontractors, consultants and the broader supply chain. Through their activities, building firms were responsible for creating \$155 billion in value for Australia in 2021-22.²

Yet Australia's building sector is clearly broken.

Building firms enter administration at a rate more than twice that of other industries (see Figure 1).³ These insolvency statistics are the symptom of a much deeper financial dysfunction within the Australian building sector.

Data from credit rating agency Equifax reveals that profit margins in the building sector have fallen from around 3% to below 1%. Liquidity has fallen from 15% to below 5%.⁴ Perhaps the most concerning datapoint is that more than half of all large builders are now carrying current liabilities in excess of current assets—a technical definition of insolvency.

How is it that one of the largest and most important sectors of the national economy could have become so dysfunctional?

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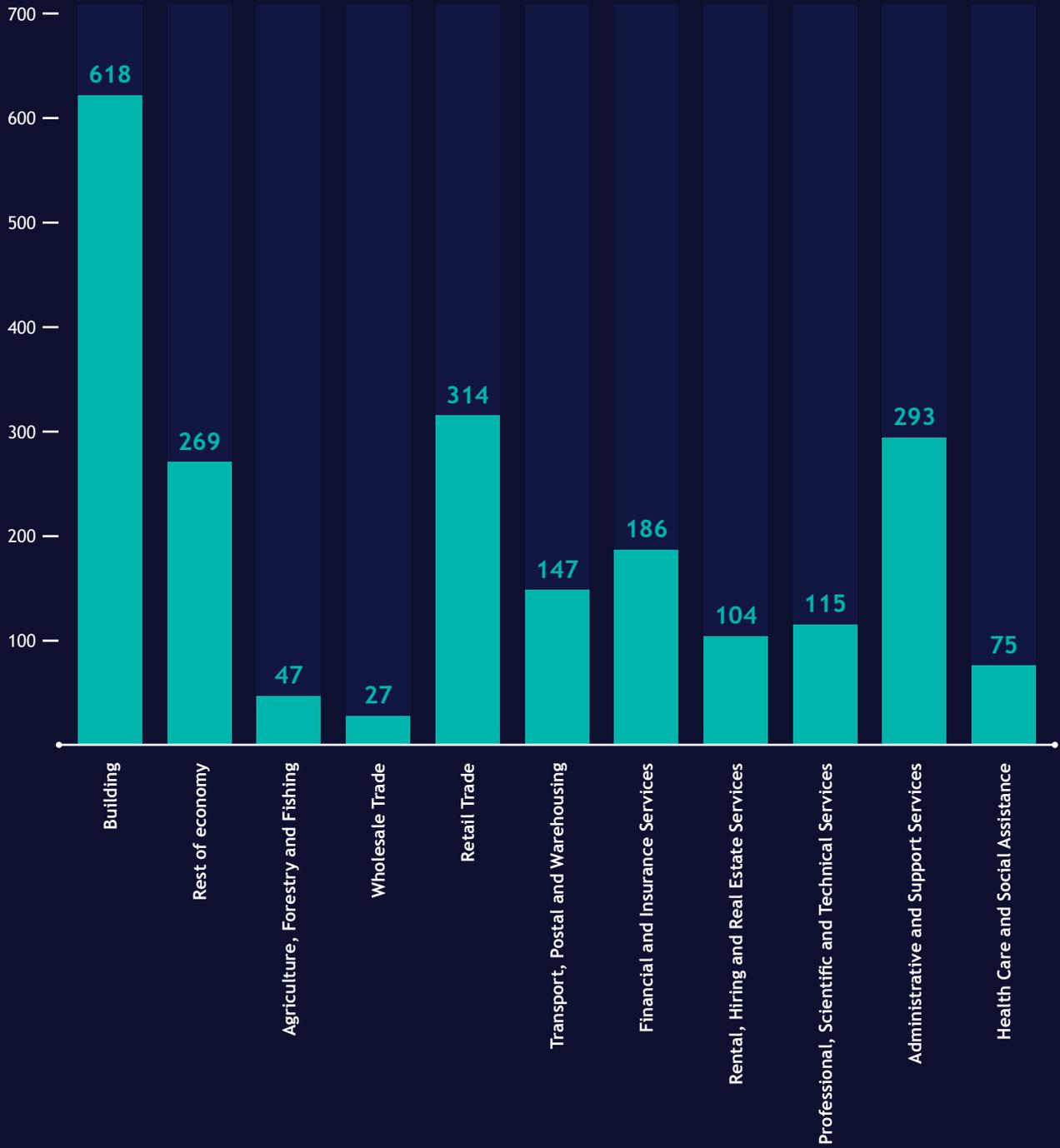
It is not enough to point to the competitiveness of the Australian building market. Many industries are fiercely competitive, yet margins are often healthy and insolvencies contained. Professional services firms, for example, enjoy pre-tax profit margins four times as high as builders, while suffering one-fifth the rate of insolvencies.⁵

Something else is going on.



FIGURE 1: INSOLVENCY RATES

Insolvencies per 100,000 firms, year to March 2023



Market failure in the building sector

The great promise of competitive markets is that they deliver win-win outcomes—the buyer receives a value greater than the price they pay, and the seller receives compensation above the cost of production.

In most circumstances markets deliver precisely that. Occasionally, though, they fail to work as advertised. The reasons why are well understood by economists.

Markets function best when the buyer knows everything they need to know about how the product will perform, and the seller knows their production costs. This implies a level of certainty and transparency that allows production risks to be priced. It also helps if there are many buyers and sellers, and the product is easily substitutable, so that parties can enter and exit transactions easily. These are the conditions of an efficient, competitive market.

It will be clear to anybody familiar with construction that these ‘win-win’ conditions rarely apply to a building project. Two features of Australia’s building sector mean that it almost always fails to operate like a normal, well-functioning market:

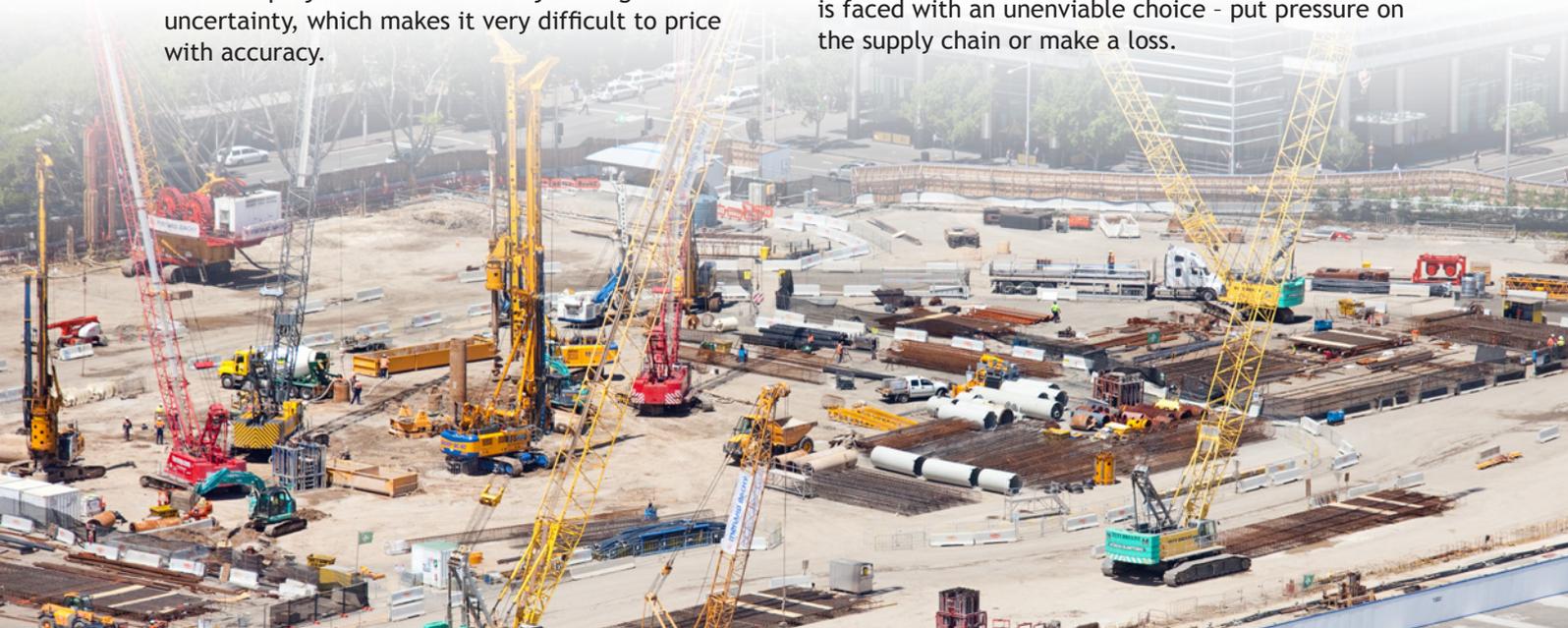
- » **Unquantifiable risks**—the building process is laden with uncertainty. There are risks related to approval processes, design, ground conditions, weather, input costs and third-party interfaces. Many risks cannot be known with confidence at the time of contracting - they can only be quantified through the process of construction. The ultimate cost of a project is therefore subject to great uncertainty, which makes it very difficult to price with accuracy.

- » **Lock-in**—it is very costly for parties to a building contract to exit the transaction once the contract has been let. From the client’s perspective, the significant costs and additional risk associated with switching contractors makes the proposition commercially unviable. As a result, building contracts are virtually never terminated except in the case of insolvency or, in rare cases, a serious dispute.

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This structure creates the conditions for some deeply dysfunctional industry dynamics.

The most prominent and problematic of these is the fixed price contract. It is natural that parties will seek to minimise their exposure to the unquantifiable risks inherent in building. Yet under a fixed price contract, this entire burden of risk is transferred to the builder. And because building is normally a ‘buyer’s market’—due to high levels of competition—contractors tend to accept that burden in order to secure revenues. However, if enough of that risk is realised, the builder is faced with an unenviable choice - put pressure on the supply chain or make a loss.



Occasionally, construction becomes supply-constrained and a 'seller's market' emerges. Under these conditions, contractors are often able to manage their own risk exposure by simply refusing to participate in a fixed price regime. In these circumstances, it may be difficult for clients to deliver even the most feasible and well-financed projects. The only alternative is to offer the contractor a more attractive risk allocation, such as a 'cost-reimbursable' contract. However, an unconstrained cost-reimbursable contract can create the opposite risk for the client—the uncertainty of final cost may make the project 'unbankable.'

The 'locked-in' nature of a building contract also creates problems. Often the only option is to resolve difficulties that arise through a dispute process which negatively impacts all parties - clients upstream, main contractors in the middle, and subcontractors and suppliers downstream.

These are the dynamics of a failed market. They have led directly to the adversarial and litigious approach to building in Australia and are the direct cause of the industry's poor financial performance and high rates of business failure.

These dysfunctional dynamics are also a key cause of the poor productivity performance of the construction industry. Without sustainable financial performance, contractors are unable to make the necessary investments to drive innovation.

Achieving sustainable value in the building industry requires transforming this lose-lose conflict into win-win cooperation - a challenging though not impossible task.



Correcting market failure in the building industry

Fundamentally, maximising the chances of a win-win outcome on a building project requires that contracting becomes far more relational than transactional. Building is not a spot-market transaction; it is an ongoing process of interaction between parties throughout delivery—a relationship.

No contract can account for all the unexpected events that will complicate a building project as it unfolds, but it can incorporate mechanisms to encourage the client and contractor to resolve them fairly and reasonably. The overriding goal of contracting must shift from a focus on transferring all risks to the contractor at the outset—particularly unquantifiable risks—to establishing the rules by which the parties will jointly manage these risks as they inevitably arise throughout delivery.

Resolving these issues in practice has attracted considerable interest from experts in economics and law. The literature offers a clear conclusion: collaborative procurement strategies are almost always preferred to fixed-price contracts for projects with high uncertainty.

While a wide variety of arrangements and contract forms are available to promote win-win outcomes, a few simple principles create the conditions for success.

PRINCIPLES FOR SUCCESS



INVOLVE THE CONTRACTOR IN THE DESIGN PROCESS AT THE EARLIEST OPPORTUNITY

Regardless of contract form, a contractor must be involved at the outset. This provides for the fullest assessment of the project's risk profile and, by extension, the most accurate cost estimate. Contractors are also best placed to provide constructability and value engineering input to consultants and client, leading to a more efficient design and construction methodology.



DO NOT SET A FORMAL COST AT THE START

Rather than asking the contractor to provide a guaranteed fixed price based on minimal information, clients should commission contractors on a fee-for-service basis to jointly develop the design with consultant. This allows the contractor to quantify as much risk as possible and develop a genuine fixed price for the project. The delivery contract can then be let on more conventional terms.



CONSIDER INCENTIVISING COLLABORATIVE OUT-PERFORMANCE

To promote even greater collaboration, client, contractor and consultant can use the design and planning phase to progressively develop a 'target cost' as the design matures. The delivery contract can implement a 'painshare/gainshare' regime whereby any difference between the target and actual cost is shared among the parties. These arrangements can also be used to incentivise non-cost performance, such as improved environmental or schedule outcomes.

Not reinventing the wheel

There are many examples of project outcomes being improved through contract models that employ the principles proposed in this paper.

It is becoming routine for these principles to be applied to civil infrastructure projects across Australia and overseas. Several forward-thinking vertical building clients, including the NSW Department of Health and the Department of Defence, are also capturing the benefits of these more mature procurement practices.

The two-stage competitive Early Contractor Involvement (ECI) framework is one popular model that has been repeatedly shown to outperform traditional fixed-price delivery models by facilitating a high level of interaction and collaboration between contractor and client. Under this model, a builder is contracted to participate in the planning and design phase separately to the subsequent delivery contract. Once the design is

settled and an accurate price is determined, a separate contract for project delivery can be let to the same or different contractor.

The 'Managing Contractor' (MC) model is a variation on this theme. Under this model, a contractor is competitively selected to collaboratively manage the full lifecycle of the project with the client. The contractor typically only performs management and advisory services, subcontracting all design and construction functions to third parties in close consultation with the client. Unlike a conventional fixed price contract, the client reimburses the contractor for reasonable payments to subcontractors while separately paying the contractor a management fee.



Moving forward together

Around 80% of building work, excluding housing, is completed for private sector clients.⁶ The private sector therefore clearly has an important role to play in maturing Australia's approach to building contracting. However, the private market is highly fragmented and subject to market forces that make it difficult for individual clients to change practices in isolation.

While a smaller aggregate buyer, government is best positioned to lead the way. Public sector clients are less constrained by the market and present a much more consolidated group of buyers. The government, as sovereign, also accepts a responsibility to leverage its spending for higher goals. This 'fiduciary' role is well accepted in other areas of public policy such as indigenous participation, training and diversity. It should be extended to productivity by requiring collaborative procurement models on all publicly-funded projects.

By committing to these new rules of engagement, government clients will not only improve their relationships with the supply chain but will also drive positive change in one of the economy's most important and troubled industries. Changing these practices will create the conditions for improved productivity and a healthier industry. Value for money, in the fullest sense of the word, will be significantly enhanced for the taxpayer.

A profitable construction industry is in everyone's interests and should be a key priority for all governments.

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Endnotes

- 1 The 'building sector' is defined here in line with the ABS ANZSIC standard to encompass firms engaged in the construction of houses and other residential dwellings, as well as offices, schools, hospitals and other non-residential structures. Subcontractors are excluded from this definition as are heavy and civil contractors. Also excluded are professional services firms that consult to the building sector, such as engineers.
- 2 These figures reflect the supply and uses of the residential and non-residential building industries as reported in *Australian National Accounts: Input-Output Tables, 2020-21* (ABS cat no. 5209.0.55.001). The 'Total Australian Production' measure of output is used in preference to the 'Gross Value Added' measure because it captures all goods and services used by building firms, including those of subcontractors and suppliers.
- 3 Building sector insolvency rate = 619 per 100,000 firms per year; rest of economy rate = 270 per 100,000 per year; building sector risk ratio = 2.29. Source: ABS cat no. 8165.0 year to March 2023; ASIC insolvency statistics (series 1), as at March 2023.
- 4 Liquidity is defined here as the ratio of operating cashflow to current liabilities.
- 5 Professional services, which includes engineering, design and other consulting firms, is the industry most economically-comparable to construction in terms of employment, firm count and gross value added.
- 6 Source: ABS cat no. 8752.0.





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