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Financial impacts of statutory trusts in the building and construction industry

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Executive Summary

The building and construction industry is the third largest in New South Wales (NSW) contributing over \$39.1 billion to gross state product in 2018 and employing over 336,000 people on a full-time basis.¹ However, despite the importance and contribution of the building and construction industry, it also experiences the highest rate of insolvencies out of all industries in NSW. Its rate of insolvency is approximately twice that on average of the next largest industry contributor to NSW insolvencies, being accommodation and food services.

Contributing to the high rate of insolvencies is the pyramidal contracting chain where subcontracting relationships can extend several levels deep. This industry structure creates a dependency on upstream businesses to make payments promptly so that subcontracting businesses downstream can be paid, and in turn meet their payment commitments.

However, participants in the construction industry often experience late payments that impose additional financing and other costs on downstream subcontractors. The contracting chain also makes the construction industry susceptible to cascading insolvencies that result from downstream businesses becoming insolvent because of upstream businesses going insolvent.

To address the problem of poor payment practices and poor payment security in the NSW building and construction industry, the NSW government is considering a range of options, including implementing statutory trusts. This report considers the financial impact of establishing statutory trusts to guarantee subcontractor payments. The statutory trust proposal would require a contractor to place expected subcontractor payments in a trust account separate from other business funds until there are sufficient funds to pay the owed amounts.

HoustonKemp has been asked by the Department of Finance, Services and Innovation to examine the financial impacts of the statutory trust proposal, and possible alternative options for a number of key features of the proposal.

How will the statutory trust proposal affect the construction industry?

We believe that the statutory trust proposal will have four main effects, namely:

- imposing additional administration costs on construction businesses, including additional bank fees to establish and manage trust accounts, and additional bookkeeping and one-off trustee legal and advisory costs needed to meet the proposal obligations;
- lowering financing costs to businesses in the industry overall, being the net effect of:
 - > larger contractors with lower financing costs no longer being able to use funds destined for subcontractors as their own working capital, thereby increasing their working capital costs; while
 - > smaller contractors with higher financial costs receiving more prompt payment therefore lowering the amount of working capital they would otherwise need to finance;
 - > principals no longer needing to finance delays caused by subcontractor insolvencies;
- avoiding direct and indirect insolvency costs as the statutory trust proposal reduces insolvencies along the contracting chain with resultant reductions in insolvency fees paid to receivers, administrators and liquidators, as well as reduced exposure to the consequences of upstream insolvencies; and

¹ ABS, 6291.0.55.003 *Labour Force, Australia, Detailed, Quarterly, Table 05. Employed persons by State, Territory and Industry division of main job (ANZSIC)*, December 2018.

- affecting competition within the building and construction industry by changing the costs of both contractors and subcontractors.

The statutory trust proposal is expected to benefit principally small and medium sized construction businesses

We have estimated the financial impacts of the statutory trust proposal on businesses in the construction industry. Construction businesses with turnover of under \$5 million will most likely be financially better off following the introduction of the statutory trust proposal. This is expected to be achieved through lower financing costs and reduced cascading insolvencies, which will likely outweigh the associated compliance costs.

However, there are uncertainties about key drivers of costs and benefits that may arise under the statutory trust proposal. Under more conservative assumptions, some businesses incur net costs from the implementation of the statutory trust proposal, principally because they incur costs but do not themselves realise benefits. Under more positive assumptions some of these same businesses will enjoy a net benefit.

Our analysis highlights that:

- the key beneficiaries of the statutory trust proposal are expected to be small and medium sized businesses;
- larger businesses (ie, with an annual turnover of over \$5 million) are expected to incur more compliance costs than the expected benefits. This reflects that many of these businesses are likely to be head contractors that are now no longer able to make use of the funds placed in the statutory trust, and also incur costs associated with administering the trust obligation; and
- the key benefits result from reductions in the costs resulting from insolvency, followed by working capital costs for small and medium sized businesses in the construction industry.

Aggregating to the state level, we find that most of the financial costs and benefits flow to businesses with turnover of between \$50,000 and \$2 million. This is because 78 per cent of businesses in the construction industry and approximately half of industry turnover is captured in this range.

A contract threshold may be appropriate

We considered how our results may change or impact a business in the construction industry if the statutory trust obligation was limited by a project or contract value threshold.

In general, our analysis highlights that the benefits of the statutory trust proposal accrue to construction businesses down the contracting chain, while the costs are incurred higher along the contracting chain. In addition, we find that the costs that are likely to be incurred are generally fixed in nature, while the benefits are related to the total value of payments affected by the statutory trust obligation. There is likely to be a crossover point for businesses engaged at lower contract values where the costs that are incurred to comply do not exceed the benefits further along the contracting chain.

This presents strong grounds to consider applying a minimum contract value threshold to the statutory trust proposal to manage these financial impact risks, particularly for smaller construction companies further down the contract value chain.

We have been unable to estimate the precise contract value threshold where the costs begin to outweigh the benefits, due to data limitations. That said, obtaining a better understanding of the typical portfolio of construction projects by contract value and project value for businesses within turnover bands, would assist with informing this threshold value.

In the absence of contract value data, we considered how our financial impact assessments change for a threshold applied to businesses with different turnover values. We find that the range of benefits are more

likely to be positive across the industry in total if a minimum turnover threshold of \$200,000 is applied in the first instance. Lower thresholds may also be beneficial, and the suitability of such options could be assessed as part of transitional arrangements.

Excluding residential construction work from the statutory trust obligation has a similar effect to applying a contract threshold

Residential construction projects are included in the industry statistics used to model the potential financial outcomes detailed above. Therefore, the same principles and outcomes can be extended to residential construction companies within the relevant turnover bracket.

In practical terms, applying an exemption to residential work would reduce the number of projects to which the statutory trust proposal obligations would apply. This will lower both the administration costs to construction companies that no longer incur the obligation, while simultaneously lowering the financial benefits.

Residential construction projects are likely to have a low average project value relative to non-residential construction. Contracts entered into in the residential construction sector will be of still lesser value. The exclusion of residential construction work from the statutory trust proposal can be expected to have an effect like the imposition of a contract threshold. For example, a contract threshold set at a value of \$200,000 would likely exclude contracts agreed under most residential construction projects.

Implementing the statutory trust proposal in a staged manner will assist the industry with preparing for compliance

Options to implement statutory trusts in the building and construction industry need to consider aspects such as:

- the length of time needed prior to the commencement of any legislation to allow industry participants to prepare for compliance obligations;
- the need to stage the imposition of the statutory trust obligation by either:
 - > project value threshold;
 - > contract value threshold; or
 - > construction business turnover; and
- the number of stages and threshold/turnover values to be applied.

We believe that the statutory trust obligation should be implemented in a staged manner, as follows:

- providing a 6 to 12-month pre-implementation period to allow construction businesses to prepare to comply with the trust obligations. This will also provide sufficient time to implement education and support information about trust obligation requirements to the industry;
- staged on the basis of contract value or business turnover, to allow for small and medium businesses to be given a longer preparation time period prior to incurring the statutory trust obligation;
- be implemented over two stages, with a period of at least 12 months between the stages to allow for insights to be gained from the first stage implementation; and
- be applied first to businesses with a turnover (or equivalent contract value) of over \$5 million, with the second stage applying to businesses at the minimum compliance threshold determined for the statutory trust proposal.

We believe that this implementation approach strikes an appropriate balance between managing impacts on the construction industry while seeking to achieve the benefits expected to result from the implementation of the statutory trust obligation.

Finally, our analysis has been limited by the lack of evidence to support some of the assumptions that have been made, and the lack of data on the number of contracts by value across the industry. There would be merit in further consultation with stakeholders to confirm the assumptions that have been made and to obtain improved data to support the analysis of contract value threshold levels.

1. Introduction

HoustonKemp has been engaged by the New South Wales (NSW) Department of Finance, Services and Innovation (the Department) to investigate the financial impact of a proposal to introduce statutory trusts in the building and construction industry. This project builds upon work that has been undertaken as part of detailed inquiries into proposed statutory trusts for the industry, to address concerns about the payment of subcontractors within the industry given the relatively high rates of construction business insolvency.

The purpose of the project is to undertake a financial impact analysis of a statutory trust proposal to oblige contractors in the construction sector to place funds owing to subcontractors into a statutory trust. In addition to estimating the costs and benefits of the proposal on participants in the building and construction industry, we have also considered the financial impact of possible limitations on the operation of the statutory trust proposal by applying the statutory trust obligation only to projects or contracts above a given value threshold.

In addition to this work, we have considered the financial impact of implementing a statutory trust to include residential work, should the exemption for residential work under the *Building and Construction Security of Payment Act 1999* be removed.

Our approach has involved considering how the proposal will likely impact each of the key stakeholders within the industry, both in terms of the likely administrative and compliance costs involved, as well as possible financial benefits. This has allowed us to quantify the potential financial impacts across businesses within the building and construction industry.

Relevantly, our financial impact analysis has been limited by a lack of data on the number of construction projects by project and/or contract value. We have used data on business turnover as a proxy for this information. However, we believe there is merit in engaging further with the industry to obtain an improved understanding of construction project and/or contract values to validate the financial impact estimates developed as part of this project.

Finally, throughout this report we have used the term 'contractor' to mean both head contractors and subcontractors, as relevant, who themselves engage subcontractors and may therefore have obligations under the statutory trust proposal.

The remainder of this report sets out our draft results, and is structured as follows:

- section 2 briefly describes how payments are typically structured within the building and construction industry;
- section 3 sets out how the proposed statutory trusts are likely to impact on stakeholders in the industry, through the imposition of costs and delivery of benefits;
- section 4 presents the quantitative results of our analysis of financial impacts; and
- section 5 sets out proposed transitional arrangements.

Appendix A1 provides a more detailed description of our approach to quantifying the financial impacts of the proposed statutory trust.

2. An overview of the building and construction industry in New South Wales

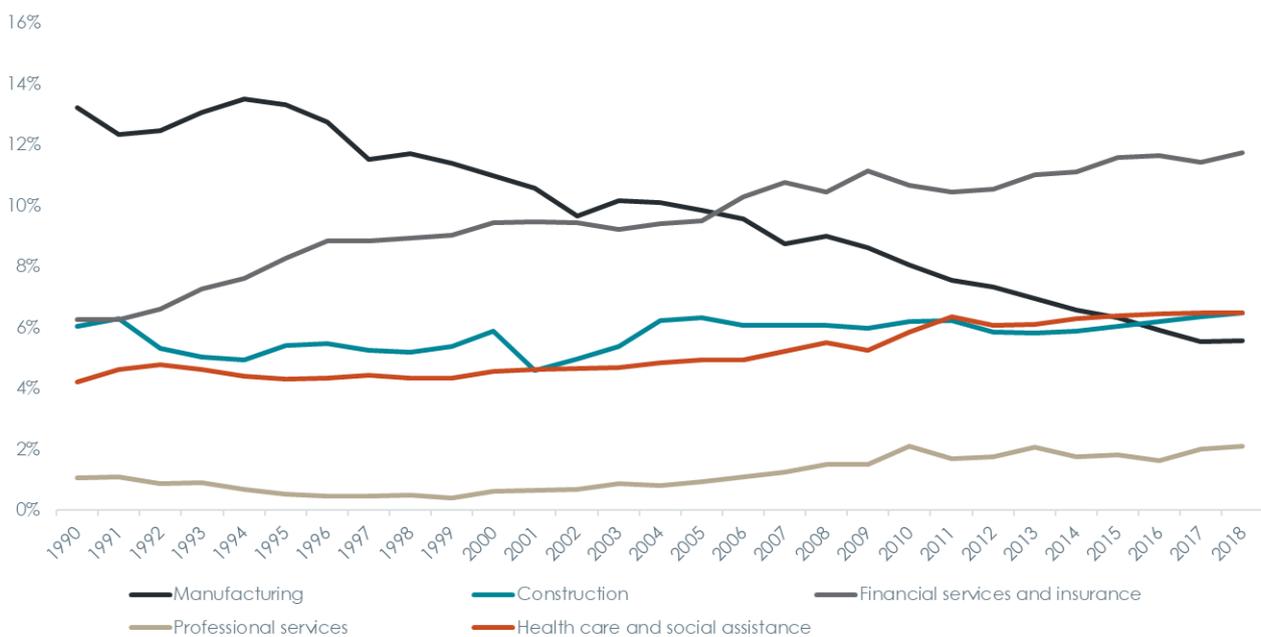
In this section, we provide a short overview of the building and construction industry, and the nature of payments and interrelationships between businesses, as relevant to the statutory trust proposal.

2.1 The building and construction industry in New South Wales

The building and construction industry is a significant part of the NSW economy contributing over \$39.1 billion² to gross state product (GSP) of \$604.4 billion in 2018.³ It is the third largest industry sector (6.5 per cent) in NSW after financial and insurance services (11.8 per cent), and professional, scientific and technical services (7.7 per cent) and the largest non-services sector of the economy.⁴

Figure 2-1 below shows the share of GSP for the top five industries in NSW between 1990 and 2018.

Figure 2-1: Share of GSP for the top five Industries in NSW



Source: ABS, 5220.0 Australian National Accounts: State Accounts, Table 2 Expenditure, Income and Industry Components of Gross State Product, New South Wales, Chain volume measures and current prices, November 2018.

As an industry, the construction sector in NSW employs approximately 336,000 people on a full time basis and nearly 60,000 on a part time basis. This makes the construction sector the third largest industry in NSW

² ABS, 5220.0 Australian National Accounts: State Accounts, Table 2 Expenditure, Income and Industry Components of Gross State Product, New South Wales, Chain volume measures and current prices, November 2018, A2714262K.

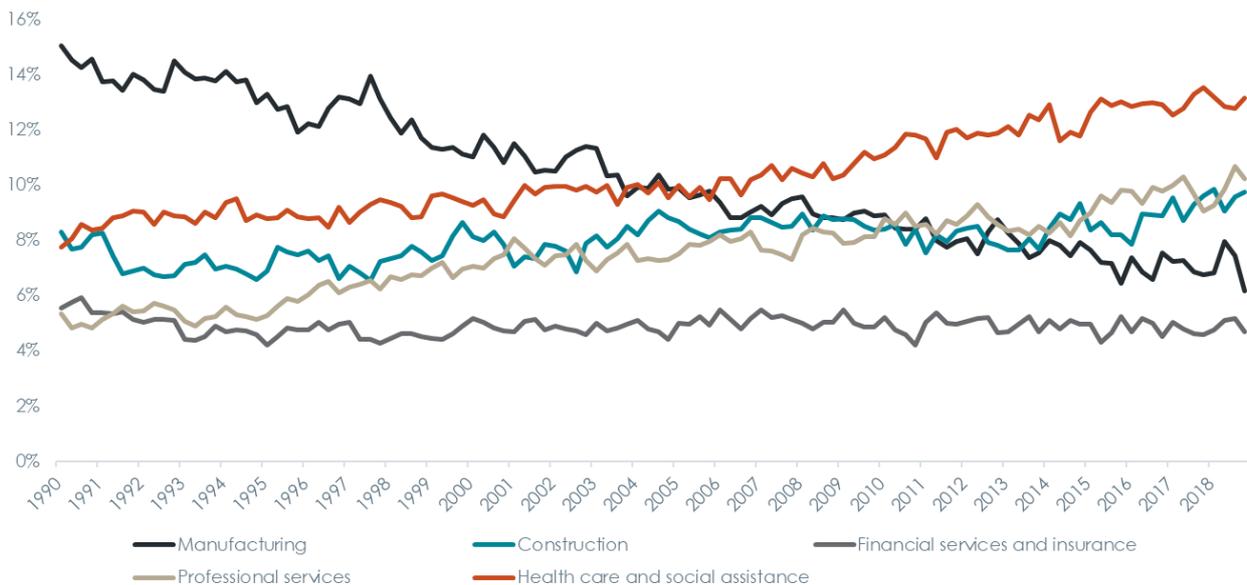
³ ABS, 5220.0 Australian National Accounts: State Accounts, Table 2 Expenditure, Income and Industry Components of Gross State Product, New South Wales, Chain volume measures and current prices, November 2018, A83748443A.

⁴ ABS, 5220.0 Australian National Accounts: State Accounts, Table 2 Expenditure, Income and Industry Components of Gross State Product, New South Wales, Chain volume measures and current prices, November 2018, A83748443A.

by employment⁵ and responsible for total labour income of \$19.3 billion in the 2018 financial year.⁶ Given that some construction businesses are national or international, the NSW industry also contributes to employment in other states and overseas.

Figure 2-2 below shows the share of employment for top five industries in NSW between 1990 and 2018.

Figure 2-2: Share of NSW employment for the top five Industries



Source: ABS, 6291.0.55.003 Labor Force, Australia, Detailed, Quarterly, Table 05. Employed persons by State, Territory and Industry division of main job (ANZSIC), November 2018.

The construction industry in NSW is characterised by large numbers of small and medium sized businesses. At the end of 2017, there were 119,000 construction businesses in NSW. Over 61,000 of these businesses were sole traders while the remainder predominately consisted of small businesses employing between one and 19 employees. Only two per cent of businesses in the sector employ 20 or more people.⁷ Reflecting the small and dispersed nature of the industry, nearly 93 per cent of construction businesses generate turnover of less than \$2 million of which 61 per cent have turnover of less than \$200,000.⁸

The geographic distribution of construction businesses between Greater Sydney and the rest of NSW is relatively similar as set out in table 2-1. Differences do exist for the distribution of medium and large businesses between Greater Sydney and the rest of NSW. A slightly larger proportion of the Greater Sydney construction industry are large businesses, while the rest of NSW have slightly larger proportions of medium sized businesses.

⁵ ABS, 6291.0.55.003 Labor Force, Australia, Detailed, Quarterly, Table 05. Employed persons by State, Territory and Industry division of main job (ANZSIC), December 2018.

⁶ ABS, 5220.0 Australian National Accounts: State Accounts, Table 2 Expenditure, Income and Industry Components of Gross State Product, New South Wales, Chain volume measures and current prices, November 2018, A2714260F.

⁷ ABS, 8165.0 Counts of Australian Businesses, including Entries and Exits, June 2013 to June 2017, Businesses by Main State by Industry Class by Employment Size Ranges, June 2016 and June 2017, February 2018. We assume that businesses with ANZSIC industry codes between 3000 and 3300 in NSW are in the construction sector for the purposes of our analysis.

⁸ ABS, 8165.0 Counts of Australian Businesses, including Entries and Exits, June 2013 to June 2017, Businesses by Main State by Industry Class by Turnover Size Ranges, June 2016 and June 2017, February 2018. We assume that businesses with ANZSIC industry codes between 3000 and 3300 in NSW are in the construction sector for the purposes of our analysis.

Table 2-1: Proportion of small, medium and large construction businesses across NSW

Area	Small businesses	Medium businesses	Large businesses
Greater Sydney	55 per cent	41 per cent	3 per cent
Rest of NSW	55 per cent	44 per cent	2 per cent

Note: these proportions do not sum to 100 per cent due to rounding.

Source: ABS, 8165.0 Counts of Australian Businesses, including Entries and Exits, June 2013 to June 2017, Businesses by Main State by Industry Class by Turnover Size Ranges, June 2016 and June 2017, February 2018.

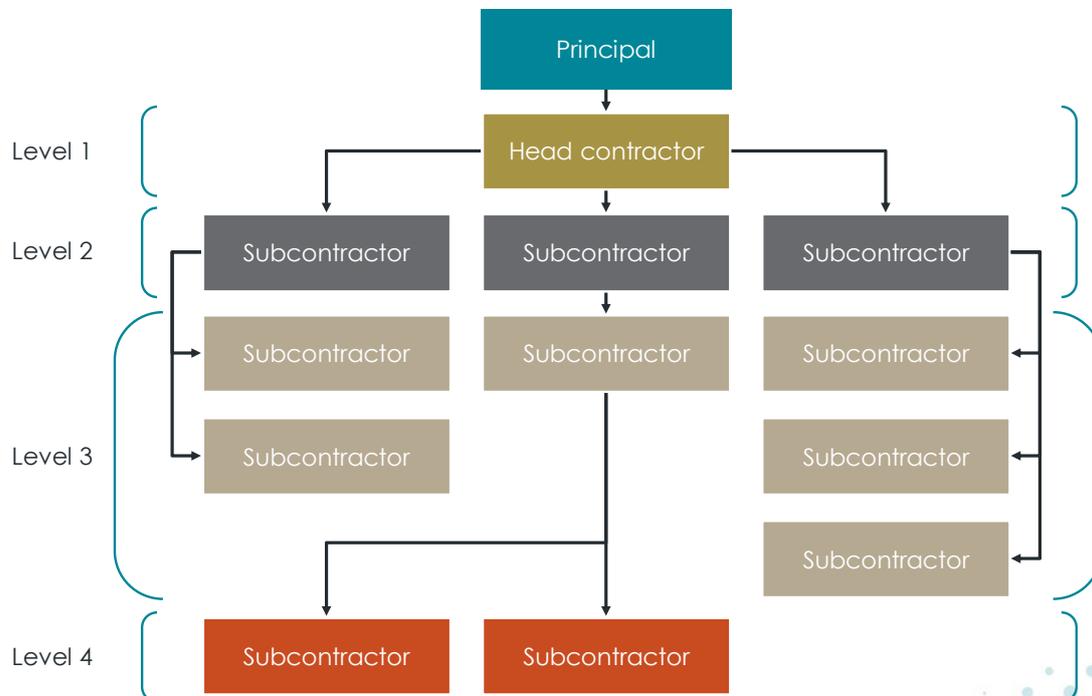
2.2 Contractual arrangements in the building and construction industry

Contractual relationships in projects affect the way in which payments are distributed to businesses participating in the project. If there is an issue with payments at any point along the contracting chain this can have a significant effect on the solvency of subcontractors.

It is typical for a principal who is seeking to commission a construction project to engage a head contractor, who will in turn engage subcontractors to perform construction work. These subcontractors themselves may contract work out to other businesses. The large number of small and medium sized businesses in the NSW construction industry can create a pyramid structure in which large numbers of small and medium size businesses may be engaged on a single construction project.

Figure 2-3 sets out an illustrative example of a contracting chain in which a head contractor is supported by three intermediate subcontractors, who in turn are supported by a third and fourth layer of subcontractors.

Figure 2-3: Simple example of a contracting chain in the construction industry



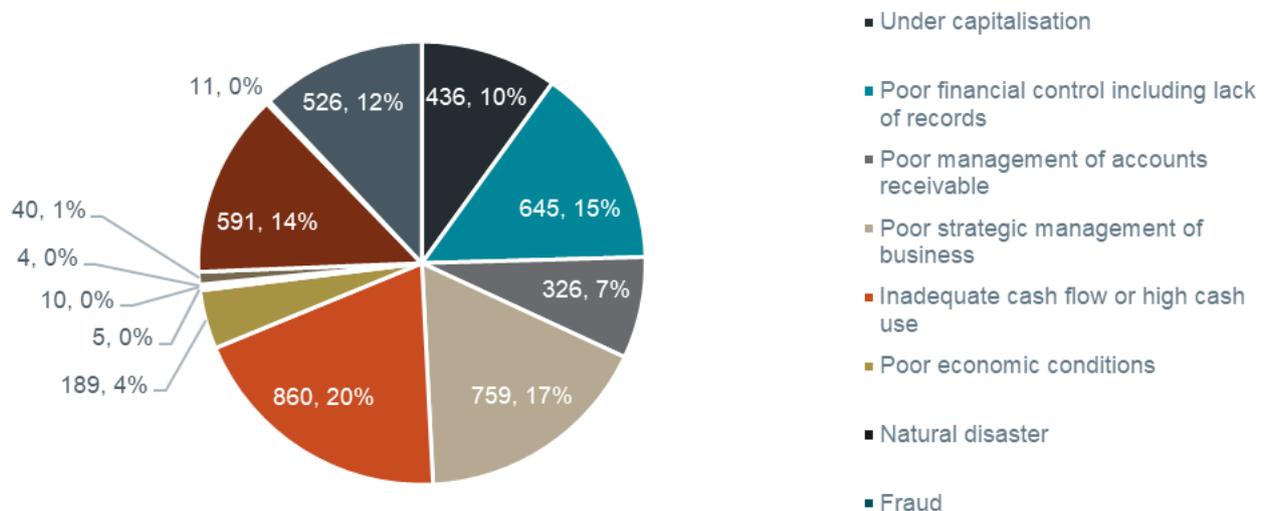
2.3 The building and construction industry has the highest rate of insolvency in NSW

Subcontractors rely on payments from businesses higher up the contracting chain. This makes them vulnerable to the practices and solvency of businesses through which payments from the principal must pass. In part, the effect of a contractual pyramid structure and poor payment practices between different parts of the contractual chain manifests itself in at least two ways, namely:

- **poor management of accounts receivables:** debt incurred by subcontracting firms is more difficult to collect, especially for businesses at the bottom of the subcontracting chain, since they are reliant on payments filtering from further up the chain that can be (and often are) delayed; and
- **inadequate cash flow or high cash use:** being unable to collect on accounts receivable in a timely way negatively affects cashflows, often leading to a need to find alternate financing for the working capital for the business.

While there are several causes of insolvency for businesses, the largest reported cause for construction businesses is inadequate cash flow or high cash use. This represents 20 per cent of industry insolvencies while a further 7 per cent are due to poor management of accounts receivables, as shown in figure 2-4 below. Together, these two causes of business insolvency account for 27 per cent of business failures in the construction industry in NSW.

Figure 2-4: Causes of business insolvency in the NSW construction industry

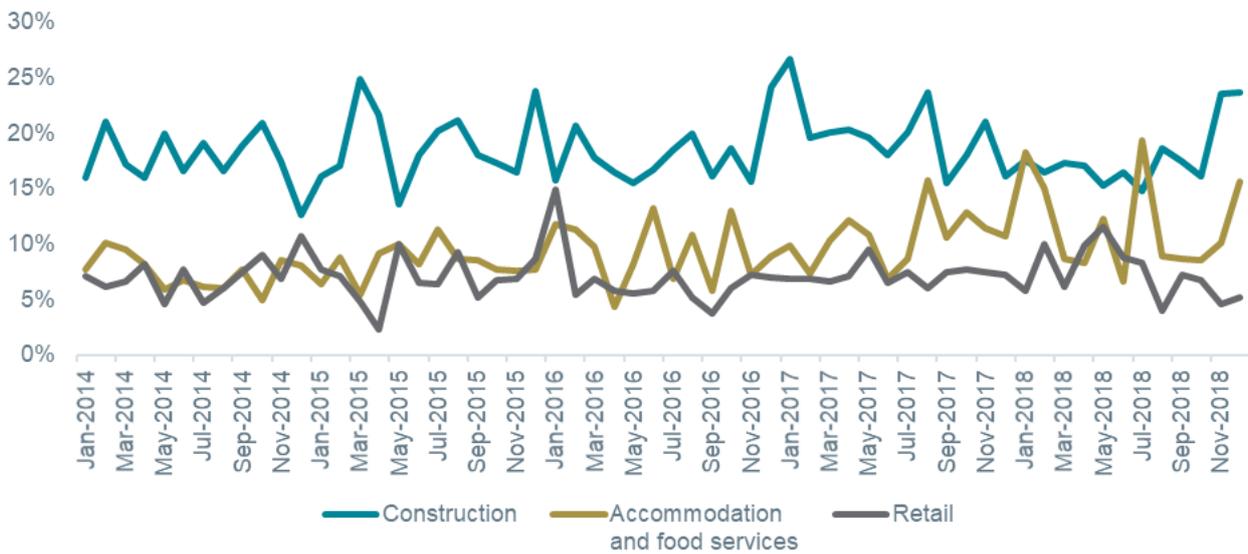


Source: ASIC, *Insolvency statistics – Series 3 External administrator reports, Series 3.2 – selected industries, 2017-2018*.

The contractual pyramid structure and poor payment practices in the construction industry contribute to the highest incidence of insolvencies of any industry sector in NSW. Figure 2-5 sets out the percentage share of insolvencies in NSW by the top three contributing industries. It shows that the construction industry is consistently the largest source of insolvencies in NSW. It represents on average twice the rate of insolvencies as the next largest contributors, being accommodation and food.⁹

⁹ Figure 2-5 shows that the average rate of insolvency for the construction industry is approximately 15 per cent, while the average rate of insolvency for the accommodation and food services is approximately 7 per cent.

Figure 2-5: Share of NSW insolvencies by the top three contributing industries



Source: ASIC, *Insolvency statistics – Series 3 External administrator reports, Series 3.1 – by region and industry, 2017-2018*.

The level of insolvencies in the construction industry has motivated reviews that seek to understand the drivers for insolvency and proposals to mitigate the effects of insolvency on the economy. These include:

- the National Review of Security of Payment Laws 2018 (the Murray review);
- Security of Payment Reform in the WA Building and Construction Industry (the Fiocco report) 2018;
- Senate Economics References Committee – Insolvency in the Australian construction industry 2015;
- the Independent Inquiry into Construction Industry Insolvency (the Collins Inquiry) 2012; and
- the Law Reform Commission of Western Australia Review into Financial Protection in the Building and Construction Industry (the LRCWA Review) 1998.

Each of these reviews has recommended consideration and/or implementation of a scheme for statutory trusts in the construction and building sector.

3. How will the statutory trust proposal affect the building and construction industry?

In this section, we describe how the statutory trust proposal is likely to operate and how it will affect businesses in the building and construction industry. This qualitative assessment is the basis for the subsequent quantification of the financial impacts, which we undertake in section 4 below.

3.1 Statutory trust proposal

The government is assessing the impact of a statutory trust proposal as a means of addressing problems arising from poor payment practices and the high incidence of insolvencies in the construction sector. While details of the proposal are under consideration and subject to public consultation, a broad outline of its features is set out in table 3-1 below.

Table 3-1: Features of the statutory trust proposal

Feature	Description
Fiduciary trust obligations	Payments received by contractors with subcontracting relationships in relation to a construction contract are required to be placed in a trust. Contractors would become trustees who are responsible for administering funds held on trust and would have fiduciary duties to subcontractors.
Separate bank account for trust funds	Payments received from principals or contractors are deposited into the company's separate trust bank account. One trust account will be established to cover multiple projects and contractors. The separate bank account for trust funds can be the same bank account used to hold retention payments held on trust.
Withdrawal of funds from trust account as long as subcontractors can be paid	Contractors can withdraw from the trust account to cover their own expenses and profit as long as there are sufficient funds to pay subcontractors amounts owed to them.

While precise features of the statutory trust proposed are not finalised, we believe the features presented in table 3-1 above provide a reasonable basis for a workable statutory trust scheme upon which our analysis can be based.

To illustrate how the statutory trust proposal would work, figure 3-1 below sets out an illustrative project, showing how the cascading trust accounts provide security of payment for all subcontractors. Necessarily, the figure is simplified for general understanding and is not indicative of the complexity of arrangements in the construction industry. It assumes a project with a value of \$5 million, and work is shared among five construction businesses: a head contractor, a civil engineer, a builder, a plumber and an electrician.



Figure 3-1: Operation of the statutory trust proposal with sufficient funds available for all parties

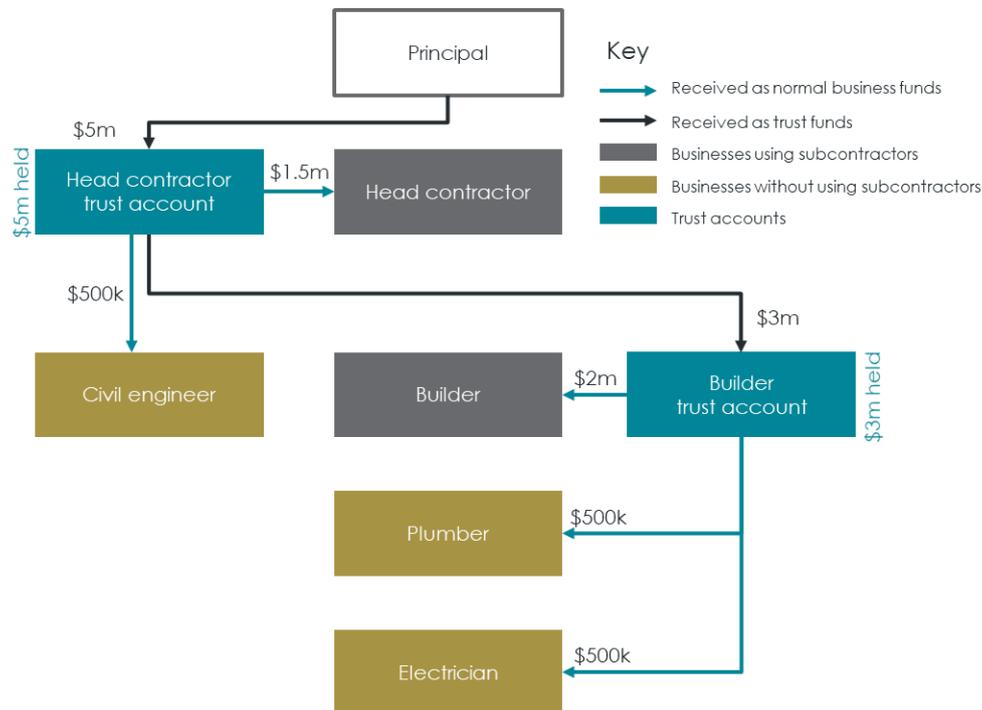


Figure 3-1 shows that the principal will first pay \$5 million to the head contractor’s trust account. Of that amount, \$500,000 is paid from the head contractor’s trust account to the civil engineer, who receives the money as normal business funds. \$3 million is also paid to the builder’s trust account, which is received as trust funds.

The head contractor can withdraw the residual from the trust fund for its own margin and operations if there are sufficient funds in the head contractor’s trust account to pay the civil engineer and the builder.

The \$3 million paid to the builder’s trust account from the head contractor’s trust account is used to pay the plumber (\$500,000) and electrician (\$500,000) who receive the funds as normal business funds. The builder can withdraw from available trust funds after allowance is made for payments to the plumber and electrician.

3.2 Effect of the proposed statutory trust model

The statutory trust proposal described in section 3.1 is expected to impose administration costs on contractors with subcontracting relationships. However, this is offset through savings obtained from lower financing and insolvency costs.

The statutory trust obligations are expected to change contractor payment practices, meaning that either financing is not needed for those down the chain, finance costs are less for other contractors in the chain and insolvency costs are either avoided or minimised. This change may be driven directly by placing statutory trust obligations on contractors or indirectly by giving subcontractors more effective options in securing their receivables (ie, providing payment security).

A change in contractor payment practices may lead to several effects that create costs and savings for the construction industry. These costs and savings can be broadly grouped into:

- **administration costs:** relating to the cost of maintaining a trust account;

- **financing costs:** relating to how financing burdens change between contractors and subcontractors, as well as any financing costs relating to project delays;
- **insolvency costs:** concerning the direct costs of insolvency services and loss of deposits by principals; and
- **competition changes:** relating to changes in competition within the construction industry.

Figure 3-2 describes the relationship between the problem that the statutory trust proposal is seeking to address, and the subsequent expected changes of behaviour in the industry and potential effects.

Figure 3-2: Relationship between the problem, the statutory trust proposal, changes in behaviour in the construction industry and potential effects



Each of these costs and savings, including our quantitative estimation methodology, are described in more detail in the remainder of this section.

3.2.1 Administration costs

Introducing the statutory trust proposal to the construction industry will impose costs on contractors with subcontracting relationships. These costs may arise in the form of either increased expenditure or additional time and effort, to:

- establish and maintain a trust bank account;
- keep up to date accounting records; and
- discharge trustee obligations.

We also discuss the potential for additional costs to be incurred in reviewing whether businesses are complying with their obligations under the statutory trust proposal.

Bank accounts

To fulfil the proposed trust obligation a business that engages subcontractors would need to establish a dedicated standard Australian business transaction bank account for the trust funds. Fees for these accounts are typically \$120 per annum (\$10 per month), which allows the account holder to perform an unlimited number of electronic transactions.

We assume that each contractor with statutory trust obligations will be required to maintain a single trust account for all projects. We estimate that these contractors will incur an additional \$120 of bank fees each year, except those who already have trust accounts to satisfy existing retention payment obligations.

The proportion of businesses that will face obligations under the statutory trust proposal is likely to vary depending on the business size. Many small construction businesses may not engage subcontractors and therefore will not need to open a new bank account. Some larger businesses will already have trust accounts for retention payments and will not need to open new accounts.

Table 3-2 below sets out our assumptions as to the proportion of businesses that would be required to open new bank accounts under the statutory trust proposal.

Table 3-2: Proportion of businesses requiring new bank accounts

Business turnover	Proportion
Between 0 and 50k	50 per cent
Between 50k to less than 200k	75 per cent
Between 200k to less than 2m	100 per cent
Between 2m to less than 5m	100 per cent
Between 5m to less than 10m	100 per cent
More than 10 million	0 per cent

Bookkeeping costs

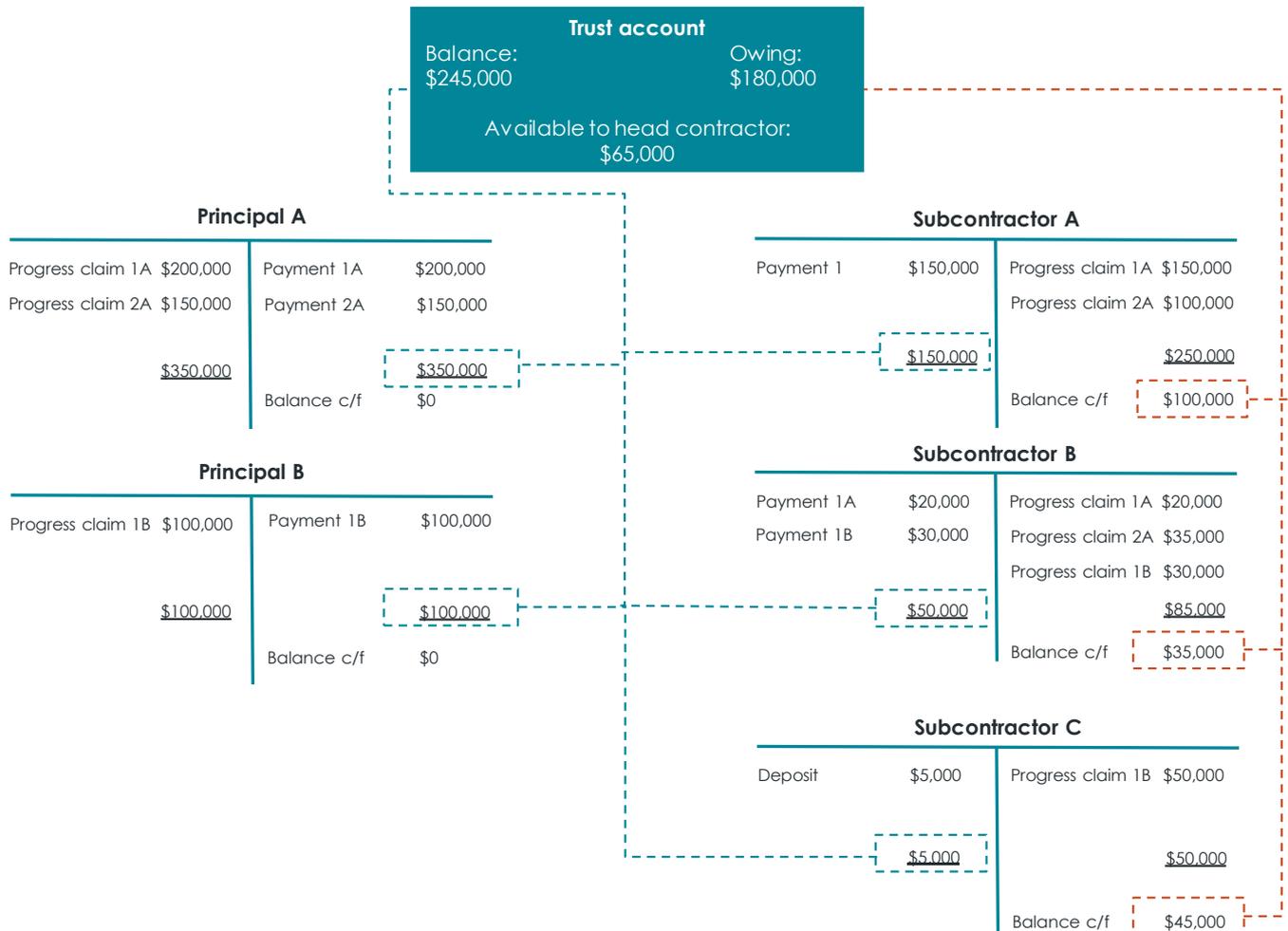
The administration and maintenance of a trust account will require contractors to perform bookkeeping tasks on a regular basis.

The main additional task is the regular reconciliation of the trust account so that trust fund cash balances and amounts owed to subcontractors can be known in a timely manner. Other administration type tasks (such as bills processing, payroll and compliance) are assumed to be similar regardless of whether a statutory trust obligation is imposed. Consistent with this, the Murray review stated that the administrative burden would not be onerous, because businesses would already be performing much of the bookkeeping and accounting tasks required by a statutory trust.¹⁰

This does not mean that bookkeeping tasks related to maintaining trust accounts are trivial. A contractor would have to undertake regular reconciliations of the trust account. This involves posting claims and payments to subledgers for each subcontractor in the trust account. Figure 3-3 below illustrates this process with an example in which a head contractor engages three subcontractors for projects undertaken on behalf of two separate principals.

¹⁰ Murray, *Review of Security of Payment Laws – Building Trust and Harmony*, December 2017, p 308.

Figure 3-3: Bookkeeping for trust accounts from a head contractor's perspective



In this example, a head contractor claims and receives a total of \$450,000 from two principals, of which it pays \$150,000 to Subcontractor A, \$50,000 to Subcontractor B and \$5,000 to Subcontractor C. This leaves a balance of \$245,000 in the trust account ($\$450,000 - \$150,000 - \$50,000 - \$5,000 = \$245,000$).

However, the head contractor has not yet paid all its subcontractor payables and still owes \$100,000 to Subcontractor A, \$35,000 to Subcontractor B and \$45,000 to Subcontractor C. In total, the head contractor owes subcontractors \$180,000 ($\$100,000 + \$35,000 + 45,000 = \$180,000$). This leaves \$65,000 ($\$245,000 - \$180,000$) in the trust account that is available to the head contractor for its operations.

Figure 3-3 provides a simple example of how the bookkeeping for a trust fund might work. However, actual bookkeeping may be more complicated once the number of projects and subcontractors increase or when retentions, disputes, part payments and thresholds are considered.

We adopt two sets of assumptions to estimate incremental bookkeeping hours. The first set of assumptions is informed by a working paper from the Australian Small Business and Family Enterprise Ombudsman (ASBFEO) that developed ongoing bookkeeping requirements for reconciliation (among other tasks).¹¹ ASBFEO estimates that smaller firms with turnover of \$200,000 will have incremental bookkeeping tasks of

¹¹ Australian Small Business and Family Enterprise Ombudsman: Australian Small Business and Family Enterprise Ombudsman, *Cascading deemed statutory trusts in the construction sector*, November 2018, pp 27-28.

approximately 65 minutes per week, while businesses with turnover of between \$400,000 and \$10 million will require an additional 48 minutes a week. ASBFEO estimates are set out in table 3-3.

Table 3-3: ASBFEO estimates of ongoing bookkeeping hours per year¹²

Revenue	\$200,000	\$400,000	\$1 million	\$4 million	\$10 million	\$20 million
Status quo	28	84	84	84	84	168
Statutory trust case	84	126	126	126	126	168
Incremental hours	56	42	42	42	42	0

As turnover categories used in ASBFEO estimates and those used by the ABS differ, we assumed the smallest businesses would have the highest level of incremental hours as they are likely to be the least prepared to absorb additional bookkeeping tasks. On the other hand, the largest businesses would not have any incremental bookkeeping hours, since larger firms are likely to be able to undertake tasks arising from statutory trusts as part of their existing accounting operations.

The second set of assumptions adopts the opinion of the Murray review and its predecessor reviews that the administrative burden of a statutory trust scheme is unlikely to be onerous. We assume that businesses with turnover of \$200,000 would incur one additional hour of bookkeeping costs per fortnight to comply with statutory trust obligations. The number of hours is assumed to be lower for businesses with higher revenues because larger businesses are more likely to have existing processes and systems to efficiently handle trust account reconciliations.

Both sets of assumptions are presented in table 3-4 below.

Table 3-4: Annual incremental bookkeeping requirement estimates by business turnover

Estimate	Less than 50k	Between 50k to less than 200k	Between 200k to less than 2m	Between 2m to less than 5m	Between 5m to less than 10m	More than 10 million
High	56 hours	42 hours	42 hours	42 hours	42 hours	0 hours
Low	26 hours	21 hours	16 hours	11 hours	6 hours	0 hours

We estimate the cost per hour of bookkeeping to be \$40 per hour. This reflects market rates for bookkeeping services, which can range between \$30 per hour to \$50 per hour depending on the complexity of the task.¹³

We assume that some businesses with turnover under \$200,000 do not engage subcontractors and so will not incur incremental bookkeeping fees, consistent with our approach to bank account costs. Table 3-5 below sets out the proportions of construction businesses that we assume would incur incremental bookkeeping costs.

¹² High compliance cost estimates of ongoing bookkeeping hours are based on reconciliation bookkeeping requirements developed for a working paper from Australian Small Business and Family Enterprise Ombudsman: Australian Small Business and Family Enterprise Ombudsman, *Cascading deemed statutory trusts in the construction sector*, November 2018, pp 27-28.

¹³ Hourly bookkeeping costs based on figures sourced from <https://www.serviceseeking.com.au/blog/cost-of-bookkeeping/>.

Table 3-5: Proportion of businesses incurring incremental bookkeeping costs

Business turnover	Proportion
Between 0 and 50k	50 per cent
Between 50k to less than 200k	75 per cent

Legal and trustee costs

The establishment of statutory trusts requires legal documentation and advice on trustee obligations. This is particularly the case where contractors may not understand their trustee duties and obligations during the initial introduction of the statutory trust obligation.

We assume that businesses that are required to comply with statutory trust obligations would need to incur legal costs related to establishing the trust and advice on trustee obligations. These costs are assumed to be approximately one-off amounts of \$1,200 for each business that is subject to maintaining a statutory trust for subcontractors.

We assume that some contractors would either not need to comply with statutory trust obligations or already operate trust accounts. Consistent with our approach to bookkeeping costs, these businesses would not incur incremental bookkeeping costs. We set out these assumptions in table 3-6 below.

Table 3-6: Proportion of businesses incurring one off legal and trustee costs

Business turnover	Proportion
Between 0 and 50k	50 per cent
Between 50k to less than 200k	75 per cent
Between 200k to less than 2m	100 per cent
Between 2m to less than 5m	100 per cent
Between 5m to less than 10m	100 per cent
More than 10 million	0 per cent

Compliance and enforcement costs

It is likely that there will need to be some mechanism to ensure compliance of businesses within the construction sector with their statutory trust obligations. However, our assessment of administration costs does not include the costs of any such arrangements. There are a number of approaches that could be taken to ensure compliance with the statutory trust obligation, each with different associated costs with the specific form not having yet been determined.

The most expensive approach to assessing compliance is likely to be a requirement to conduct regular targeted audits. Audit costs are estimated to range between \$3,000 and \$10,000 per year depending on the complexity of the trust account.¹⁴ Costs of this magnitude are not likely to be proportionate to the benefits that the statutory trust proposal would realise, and so such an approach would therefore require some targeting.

¹⁴ DFSI, *Securing payments in the building and construction industry – a proposal for ‘deemed’ statutory trusts: Consultation Paper*, August 2018, p 17.

There are likely to be lower cost approaches to investigating compliance with statutory trust obligations, including (but not limited to) investigations that are:

- undertaken randomly with the frequency of these determined by a risk-based assessment of the likely benefits of compliance (or the costs of non-compliance) with obligations;
- triggered by complaints received in relation to payment practices; or
- initiated by subcontractors using information that would be disclosed by contractors in relation to their use of statutory trusts.

The best review mechanism is likely to be one that is most cost-effective in achieving the potential benefits of the statutory trust proposal.

3.2.2 Avoided financing cost

The need to finance projects and construction work occurs at every level in the construction sector. The introduction of a statutory trust obligation for payments to subcontractors is likely to:

- shift some of the requirement to raise working capital from subcontractors to contractors by improving the timeliness of payments to subcontractors; and
- reduce the expected impact on principals arising from delays due to subcontractor insolvencies.

Working capital financing

The NSW construction industry generated turnover of approximately \$122 billion in 2016-17 of which over 90 per cent covered overheads, materials and labour costs.¹⁵

The requirement to finance working capital is shared amongst head contractors and subcontractors along the contracting chain. A disproportionate amount of working capital is financed by subcontractors near the end of the chain due to the pyramid structure of the contracting chain, power imbalances in contracting and poor payment practices. At the same time, subcontractors near the bottom of the chain are generally smaller with more limited means to access financing on favourable terms. Larger contractors and subcontractors at the top of the contracting chain can often access financing using a variety of means, at lower cost.

Larger contractors can be advantaged by delaying payments to subcontractors. Contractors can use funds received from principals, which are intended to be used to pay subcontractors, as their own temporary working capital. This reduces financing requirements for contractors but increases it for subcontractors.

It follows that larger businesses, who are more likely to have access to lower cost financing, can shift part of their financing requirement onto smaller businesses who have higher financing costs. This suggests that the overall financing costs for the construction industry may be higher than could be the case if prompt payment practices were in place across the board.

The introduction of a statutory trust obligation for subcontractor payments is likely to reallocate the financing costs up the contracting chain by placing funds received by contractors into a trust. This prevents contractors from using funds for downstream payments as their own temporary working capital. In turn, this removes the incentives for contractors to delay payments to subcontractors.

The introduction of statutory trusts would be expected to shift financing costs from smaller businesses with higher financing costs to larger businesses with lower financing costs. This raises the prospect of reduced financing costs for the industry overall.

¹⁵ The construction industry achieved a profit margin of 9.7 per cent in 2016-17, which implies that approximately 90.3 per cent of industry turnover of \$122 billion needs to be financed from working capital. See ABS, *8155.0 – Australian Industry, 2016-17, Australian industry by division, Table 4*, May 2018 for profit margin and ABS, *8155.0 – Australian Industry, 2016-17, Australian industry by division, Table 6*, May 2018 for turnover of \$122 billion.

To estimate the savings or costs from a reallocation of the financial costs of working capital, we make assumptions regarding:

- the proportion of work that is supplied from principals; and
- work that is subcontracted down the contracting chain for businesses with different turnovers.

The two sets of assumptions set out in table 3-7 below reflect a low financial benefit outcome, and a high financial benefit outcome.

Table 3-7: Key assumptions for working capital financing calculation

Business turnover	Low financial benefit Proportion of work from principals	Low financial benefit Proportion of work subcontracted	High financial benefit Proportion of work from principals	High financial benefit Proportion of work subcontracted
Between 0 and 50k	0 per cent	10 per cent	10 per cent	0 per cent
Between 50k to less than 200k	10 per cent	20 per cent	20 per cent	10 per cent
Between 200k to less than 2m	20 per cent	30 per cent	30 per cent	20 per cent
Between 2m to less than 5m	40 per cent	40 per cent	40 per cent	30 per cent
Between 5m to less than 10m	60 per cent	50 per cent	50 per cent	40 per cent
More than 10 million	80 per cent	60 per cent	60 per cent	50 per cent

We also assume that payments in the construction industry are paid 30 days past due, on average.¹⁶ With the statutory trust proposal in place, we assume that this improves to 15 days past due. Financing costs for different sized businesses (by turnover) are based on unsecured borrowing costs for small and large businesses published by the Reserve Bank of Australia.¹⁷

Avoided project delay financing

Subcontractor insolvencies can cause delays for a construction project because the project manager must organise alternative businesses to undertake incomplete work. The time required to get a project back on track from a delay caused by an insolvent subcontractor must be financed by the principal.

We expect the statutory trust proposal to reduce subcontractor insolvencies, particularly those caused by poor cashflow or receivables management. The reduction in subcontractor insolvencies in turn would be expected to mitigate some project delays and the need for principals to finance them.

We estimate the cost of financing for project delays by first estimating the rate of insolvencies arising from cashflow or receivable problems based on insolvency statistics from the Australian Securities and Investments Commission (ASIC),¹⁸ and the number of construction businesses in the state.

We apply this rate to industry turnover to estimate the value of work affected by subcontractor insolvency. We calculate the financing cost of delay to principals by multiplying that amount with a financing rate over 30

¹⁶ The Murray review notes that while 30 day payment terms are the most common, survey results suggest many construction industry contractors are not receiving payment until at least 60 days after work has been completed (see Murray review, Review of Security of Payments Laws – Building Trust and Harmony, December 2017, pp 14-15). We have adopted an assumption of 30 days overdue to reflect this finding.

¹⁷ RBA, *Lending Rates – F5*, February 2019. Available from RBA’s website: <https://www.rba.gov.au/statistics/tables/>

¹⁸ ASIC, *Insolvency statistics – Series 3, External administrator reports, Series 3.2 – selected industries*, November 2018. Available from ASIC’s website: <https://asic.gov.au/regulatory-resources/find-a-document/statistics/insolvency-statistics/insolvency-statistics-series-3-external-administrator-reports/>

days, being the assumed duration of an expected delay. To calculate the savings for principals from avoiding delays, we also assume that the whole cost of delay can be avoided.

3.2.3 Avoided insolvency costs

Insolvencies impose direct costs on subcontractors when they experience bad debts from contractors, and when they become insolvent themselves. The introduction of statutory trusts could help reduce insolvency costs for the construction industry by providing payment security to subcontractors.

Insolvency fees

Insolvencies involve professional fees when administrators, receivers or liquidators are appointed to wind up an insolvent business. These costs are recovered through the realisation of assets in the insolvent business.

A statutory trust obligation could be expected to reduce expected professional fees charged to subcontractors (and their creditors) by reducing the number of insolvencies caused by cashflow problems or poor receivables.

We estimate avoided insolvency fees by calculating an annual rate of insolvencies in construction businesses from inadequate cashflows and receivables. We assume that the statutory trust scheme will reduce insolvencies from inadequate cashflows and receivables by 50 per cent. We estimate savings of insolvency fees for the NSW construction industry as the number of fewer insolvencies multiplied by an average insolvency fee of \$5,000.¹⁹

Avoided bad debts for subcontractors

Contractor insolvencies adversely affect subcontractors by creating uncollectable receivables, or bad debts, which represent a financial loss for a subcontractor.

In principle, statutory trusts in the industry will significantly enhance the ability of subcontractors to claim funds for work that they have performed and invoiced. The increased security for subcontractor claims arises because they are the beneficiaries of a trust whose assets cannot be claimed by other creditors. This effectively gives subcontractors priority to claim any funds paid to contractors at the expense of other (secured and unsecured) creditors.

We calculate avoided bad debts for subcontractors as the product of:

- the amount of work (as measured by turnover) derived from relationships with contractors; and
- the average rate at which business turnover is affected by contractor insolvencies.

Key assumptions for this calculation are set out in table 3-8. These assumptions include contractor insolvency rates for low financial benefit and high financial benefit outcomes.

Table 3-8: Key assumptions for avoided bad debts calculation

Business turnover	Low financial benefits	High financial benefits
	Exposure to upstream insolvency	Exposure to upstream insolvency
Between 0 and 50k	7.50 per cent	5.00 per cent
Between 50k to less than 200k	1.00 per cent	1.50 per cent
Between 200k to less than 2m	0.15 per cent	0.25 per cent

¹⁹ A liquidator is entitled to be paid reasonable fees of up to a maximum of \$5,000 excluding GST if fees are not approved by creditors, committee of inspection or the court. See <https://asic.gov.au/regulatory-resources/insolvency/insolvency-for-creditors/liquidation-a-guide-for-creditors/>

Between 2m to less than 5m	0.10 per cent	0.10 per cent
Between 5m to less than 10m	0.05 per cent	0.05 per cent
More than 10 million	0.01 per cent	0.01 per cent

The proportion of work earned from contracting relationships is consistent with the proportion of work from principals in table 3-7. It reflects our expectation that smaller firms will be more likely than larger firms to work as subcontractors.

We assume that the contractor insolvency rate is higher for small firms with lower turnover. We expect this to be the case because those firms will tend to be more thinly capitalised and reside at the end of the contracting chain. This compares to large firms with higher turnover who are more likely to function as the head contractor and have greater access to capital that assists with maintaining solvency.

3.2.4 Competition changes

As a general principle, increasing the cost of doing business will cause firms to leave the industry, while reducing the cost of business will cause firms to enter. The statutory trust proposal could potentially affect competition due to its effect on the costs and risks for principals, head contractors and subcontractors, and for other participants in the construction industry.

Under a statutory trust obligation, construction businesses are likely to incur additional costs and make cost savings. The net effect of these will generally depend on the size of the business and its relative reliance on revenues received from contractors as against its use of subcontractors.

Larger businesses (with turnover greater than \$5 million) are expected to experience a net increase in costs under the statutory trust proposal, due to an increase in working capital financing costs. This is despite the relatively low administration costs that these businesses will incur to comply with the statutory trust obligation.

The increase in net costs for larger businesses suggests that competition between larger businesses may be negatively affected because their costs would increase. In principle, this could lead to potential reductions in competition among large contractors and adversely affect offerings for principals.

In contrast, the net costs for medium and small construction businesses (with turnover below \$5 million) are likely to be lower due to avoiding costs related to financing working capital and insolvency. These cost savings arise from:

- improvements in the timeliness of payments that reduce the need to finance disproportionality large working capital balances;
- reductions in the expected costs of insolvency services that a business might require and the cost of bad debts owed by insolvent contractors; and
- more secure claims on receivables overcoming information asymmetry and trust issues in contracting.

Apart from its effects on principals, contractors and subcontractors, the statutory trust proposal could also affect other participants in the construction industry. The statutory trust effectively elevates subcontractors' claims on contractors' cash and bank assets to the highest-ranking claim, outranking both secured and unsecured creditors. This may give rise to further, indirect, effects on businesses in the construction industry that are not accounted for above.

For example, a change in the ranking of claims against a contractor is likely to increase insolvency costs for other participants in the construction industry such as general trade creditors and financiers (as noted in section 3.2.3). It is reasonable to expect that this would lead to changes in their behaviour that could include:

- trade creditors charging higher prices for materials and services to compensate for the increase in expected insolvency costs related to doing business with subcontractors; and
- financiers increasing the cost of borrowing or imposing higher levels of collateral to compensate for additional insolvency risks from lending to subcontractors.

While the quantum of these effects is not known, it is reasonable to expect that diminished payment security for trade creditors and financiers would cause them to raise their prices (ie, prices of goods and services, and lending rates). This could affect the cost for construction businesses with the potential to negatively affect competition in the construction industry, including offsetting some of the gains to competition identified above for subcontractors.

Table 3-9 sets out the expected effects on competition from introducing statutory trusts.

Table 3-9: Effect on competition from introducing statutory trusts

Industry participant	Administration costs	Financing costs	Insolvency costs	Overall change in cost	Effect on competition
Principals	N/A	↓	N/A	↓	N/A
Contractors and subcontractors					
Between 0 and 50k	↑	↓	↓	↓	+
Between 50k to less than 200k	↑	↓	↓	↓	+
Between 200k to less than 2m	↑	↓	↓	↓	+
Between 2m to less than 5m	↑	↓	↓	↓	+
Between 5m to less than 10m	↑	↑	↓	↑	-
More than 10 million	↑	↑	↓	↑	-

The overall net effect of changes from introducing a statutory trust model on competition in the construction industry is unclear. While there are likely to be improvements in competition amongst small to medium sized businesses, these may be offset by reductions in competition amongst large businesses.

Further, while any of these changes to competition are important considerations they are not likely to change the overall conclusions from our analysis of the financial impacts. We expect the incremental increase in competition for small to medium sized businesses is likely to be small given that there are already over 115,000 construction businesses in that size range in NSW. There are a further 3,400 larger sized construction businesses with turnover of over \$5 million.

In light of the considerations above, the effects of changes in competition are not likely to be a material factor influencing the estimates of financial impacts of the statutory trust proposal accruing to participants in the construction industry. That said, they are important for understanding how the statutory trust proposal may affect the structure of the industry into the future.

4. Financial impacts of the proposed statutory trust proposal

In this section, we set out the results of our analysis of the financial impacts of the statutory trust proposal for businesses in the building and construction industry.

4.1 The statutory trust proposal is expected to benefit principally small and medium sized construction businesses

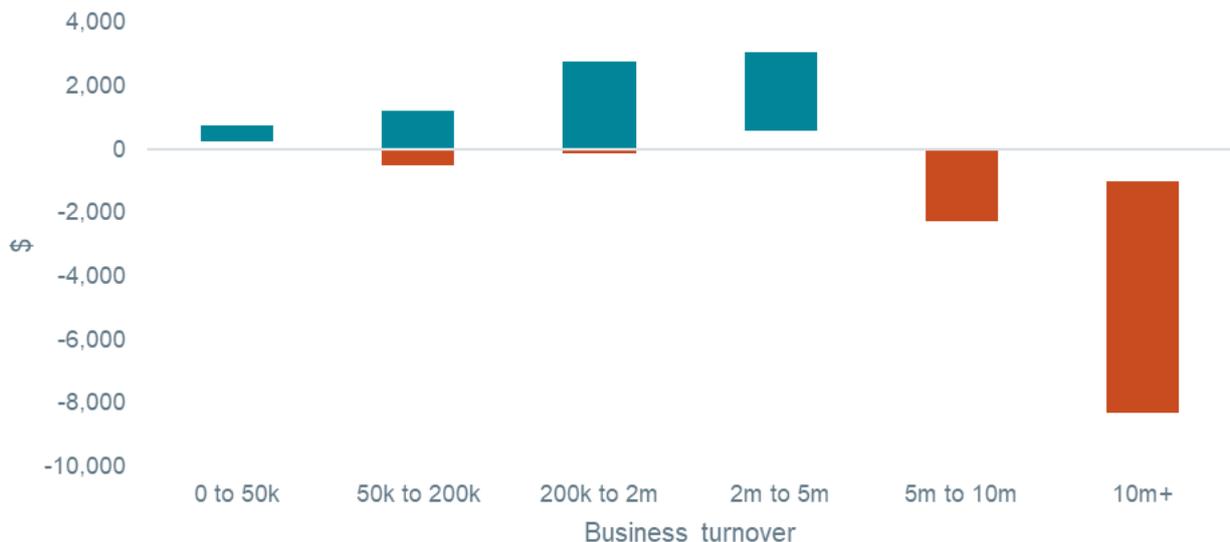
The statutory trust proposal imposes compliance costs on construction businesses, but these are expected to be offset by a range of financial benefits. On balance, small to medium sized businesses are expected to enjoy net financial benefits, while larger businesses are more likely to incur net financial costs.

One of the biggest factors determining whether construction businesses will be financially better or worse off is the quantum of administration costs that are likely to be incurred to satisfy the statutory trust obligations.

Given uncertainties about the underlying assumptions, we have estimated a range of net financial benefits for the statutory trust proposal, with the range reflecting uncertainties about the underlying assumptions.

Figure 4-1 sets out our estimates of the plausible range of financial impacts for individual construction businesses based on business turnover, resulting from implementing the statutory trust proposal. The results highlight our conclusion that businesses with high turnover (ie, over \$5 million) are expected to incur net financial costs from the statutory trust proposal. In contrast, we expect small and medium sized businesses with revenues below \$5 million to incur net savings or small net costs from the statutory trust proposal.

Figure 4-1: Range of ongoing annual net savings and costs for individual businesses by turnover



The results highlight that subcontractor payments made under the statutory trust proposal has the effect of imposing costs on those construction businesses higher up the contracting chain (which tend to be larger) to deliver financial benefits to those businesses further down the contracting chain (which tend to be smaller).

These cost transfers reflect principally a shift in working capital financing costs between businesses within the contracting chain. Specifically, we estimate that the working capital financing cost transfer is most likely between larger businesses to medium sized businesses, as shown in figure 4-2 below.

While the estimated costs of statutory trusts to large businesses are higher than for smaller construction businesses, it represents a relatively small proportion of larger businesses' turnover. For example, the expected incremental financing costs for a large business with turnover of \$10 million is approximately \$8,600, which represents less than 0.1 per cent of its turnover.

Apart from savings in working capital financing costs, the statutory trust proposal is also expected to generate financial savings from reducing the number of insolvencies in the construction industry.

Figure 4-2 provides a breakdown of ongoing annual financial impacts for individual businesses. We find that small to medium sized businesses gain most of the financial benefits because of avoided insolvency costs, relating to lower exposure to upstream insolvencies and increased payment security. Importantly, the reduction in exposure of construction businesses to insolvencies may come at the expense of other participants in the construction industry, such as other trade creditors and financiers. This is because the statutory trust proposal changes the priority of claims on funds in the insolvent business.

One of the biggest factors determining whether a business will be financially better off following the implementation of the statutory trust proposal is the size of administration costs incurred to satisfy the trust obligations. If the administration costs of maintaining a trust are sufficiently low (as reflected in the high or upper bound results in figure 4-2), most small and medium sized businesses are expected to accrue a net benefit. However, if administration costs are significant relative to the size of a business (as reflected in the lower bound results in figure 4-2), then some medium sized business will incur net costs in satisfying the trust obligations.

Figure 4-2: Breakdown of ongoing annual net financial impacts for individual businesses by turnover



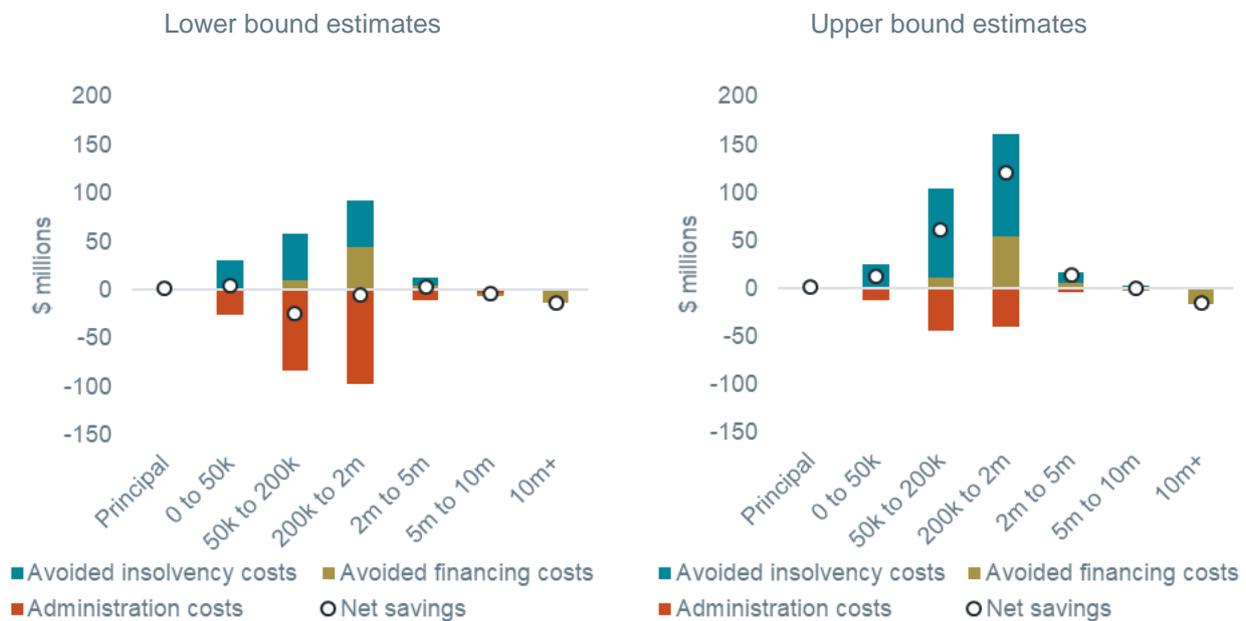
Table 4-1 sets out the range of financial impacts for individual businesses by turnover.

Table 4-1: Estimated range of annual net financial impacts for individual businesses by turnover

Financial impact range	Less than 50k	Between 50k to less than 200k	Between 200k to less than 2m	Between 2m to less than 5m	Between 5m to less than 10m	More than 10 million
Upper bound	\$749	\$1,226	\$2,785	\$3,071	-\$41	-\$8,289
Lower bound	\$268	-\$493	-\$107	\$588	-\$2,257	-\$7,293

Figure 4-3 presents the aggregate financial impacts for each turnover category. Given the large numbers of small and medium size construction businesses, we find that most of the costs and savings accrue to businesses with turnover of between \$50,000 and \$2 million. This reflects that 78 per cent of businesses in the construction industry and approximately half of industry turnover lies within that range.

Figure 4-3: Range of ongoing annual net savings and costs for NSW principals and construction businesses



In addition to the financial impacts to construction businesses resulting from implementing the statutory trust proposal, we also expect there to be financial impacts for principals commissioning construction projects. These financial impacts arise from avoided construction project delays that would have otherwise resulted from those insolvencies that are now avoided. We expect that the size of these financial benefits to be small, equating to around \$2 million per year.

We estimate that the introduction of the statutory trust proposal will result in net financial impacts ranging from between a net cost of \$400 million, to net financial benefits of \$1.4 billion in net present value terms over a period of 10 years.

The spread of net financial benefits (or costs) are likely to be relatively evenly spread across the state between regional and urban areas. This is because the proportions of small, medium and large construction businesses are relatively evenly spread with only some variation. The greater Sydney area was found to have a slightly higher proportion of large businesses and a lower proportion of medium sized businesses

compared to the rest of NSW (see table 2-1). This suggests that the statutory trust proposal may benefit regional NSW slightly more than the Greater Sydney area. However, we do not expect the differences between regional and urban areas to be significant given the similar proportions of small, medium and large businesses.

4.2 How are the results affected by limits on the operation of the statutory trust proposal?

We also investigate how the financial impacts change under alternative options for limiting the operation of the statutory trust proposal by testing if:

- the trust obligation is imposed only on projects or contracts that exceed a particular value; or
- the exception for residential works is removed.

We discuss the implications of these changes to the statutory trust proposal on our estimates in greater detail below.

4.2.1 Impact of applying a threshold to the statutory trust proposal

We were asked to assess the financial implications of statutory trusts applying either to projects, or to contracts, that exceed a particular monetary value.

Contract thresholds are likely to be a better option than project thresholds

The most important cost categories under the statutory trust proposal are administration costs. These relate to costs for establishing and maintaining trust bank accounts, keep up to date account records and discharge trustee obligations. These costs will be incurred by any business that must comply with statutory trust obligations.

By contrast, the most important benefit categories under the statutory trust proposal are the avoided costs related to financing and insolvency. These benefits will only be realised on projects or contracts where statutory trust obligations apply.

It follows that the application of a threshold which exempts a contractor from compliance with the statutory trust regime for one project or contract, where it must comply for other projects or contracts:

- will not affect to any material degree the administration costs that the contractor would incur; yet
- will affect the benefits to subcontractors that would otherwise have arisen because of the statutory trust obligation for that project or contract.

Given these characteristics of costs and benefits, if a threshold is to be applied, it will generally be preferable to apply it based on contract value, rather than project value. We draw this conclusion because we assume that small businesses are likely to:

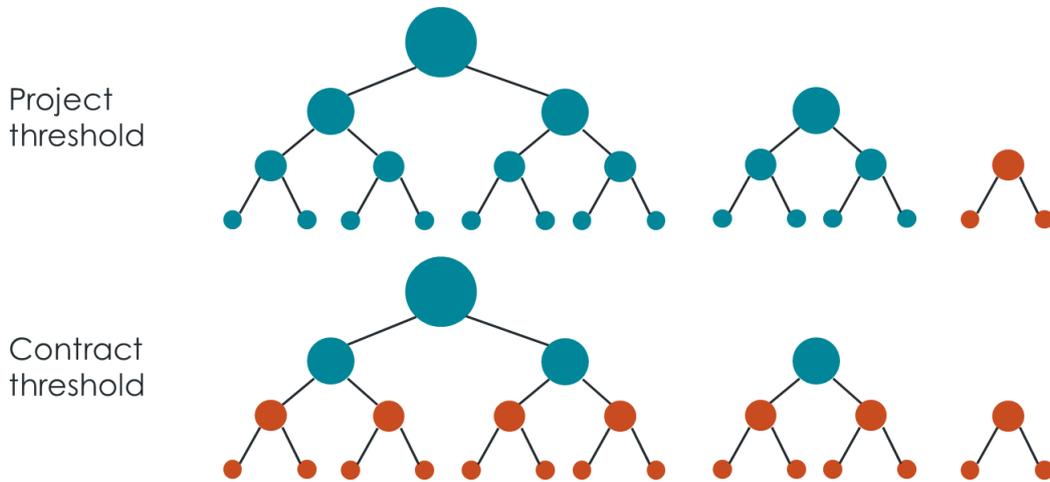
- engage in contracts that are commensurate with their size; yet
- engage in projects that vary substantially in size, including projects both above and below a potential threshold.

Under this assumption, a contract threshold is likely to be a more effective means by which to identify and exempt small businesses from the costs of complying with trust obligations, while continuing to realise the benefits of the obligations in circumstances where those costs are incurred.

These concepts are demonstrated visually in figure 4-4 below, comparing the implementation of the statutory trust proposal with a project threshold and a contract threshold. The figure illustrates highly simplified

contract chains for different sized projects, indicating contracts with statutory trust obligations in blue, and contracts without statutory trust obligations in red.

Figure 4-4: Comparison of a threshold applied on a project and contract basis



The figure above illustrates that the project threshold imposes a trust obligation on relatively small contracts, which we assume small businesses enter into. However, the same threshold excludes other contracting arrangements, potentially entered into by the same businesses, from this obligation. The contract threshold ensures that small contracts are exempt from trust obligations regardless of the size of the project.

Further, ABS statistics collected for non-residential building works approved by certifying authorities (and valued at \$50,000 or more) suggest that most projects are relatively small.²⁰ Table 4-2 shows that over half of these projects are valued at less than \$250,000, while less than two per cent are valued at more than \$20 million.²¹

Table 4-2: Total number of New South Wales non-residential building jobs approved

Value of project	2016	2017	2018
\$50,000 to \$250,000	4,238	4,265	4,279
\$250,000 to \$1 million	2,012	2,017	2,031
\$1 million to \$5 million	853	953	996
\$5 million to \$20 million	211	280	302
\$20 million to \$50 million	85	89	82
\$50 million or more	33	50	45

Source: ABS, 8731.0, Building Approvals, Table 60: Number of Non-residential Building Jobs Approved, by Value Range, Original - New South Wales, January 2019.

The data in table 4-2 reinforce the potential for a project threshold to expose many construction businesses to a trust obligation, whilst not resulting in the obligation applying to most projects.

²⁰ These projects are only a proportion of relevant construction projects. For example, these do not include projects that were not approved by local authorities, projects under \$50,000 in value or residential projects undertaken by developers. Nonetheless, we consider that these data are useful in identifying the likely distribution of project sizes.

²¹ The proportion of projects that are greater than \$20 million is likely overestimated by these data, since they exclude projects of less than \$50,000 and projects that were not approved by local authorities, which on average would likely be smaller projects.

Assessing the impact of applying a threshold

The key consideration in determining the basis for an effective threshold is to ensure that, where the costs of statutory trust obligations are incurred, their benefits are also realised. Project and contract thresholds achieve this in different ways, with contract thresholds being a more direct and reliable means of identifying businesses and promoting this outcome.

While the ABS provide some information about project sizes, we have been unable to find any basis to inform the average size of construction contracts or the extent of contract chains in the construction industry. Further, the information about project sizes is not linked to the breakdown by turnover that we use elsewhere in this report. This raises challenges for undertaking a detailed assessment of the impact of different project and contract thresholds.

Throughout this report, we identify businesses of different sizes by reference to their turnover, as reported by the ABS. We consider that the use of this information is appropriate for undertaking an analysis of the impact of applying a threshold to the trust obligation. Such an analysis can provide potentially useful insights about the level at which a contract threshold might be set. Figure 4-5 sets out the estimated range of financial impacts under different alternative business turnover thresholds.

Figure 4-5: Aggregate annual net financial benefits range by alternative turnover thresholds

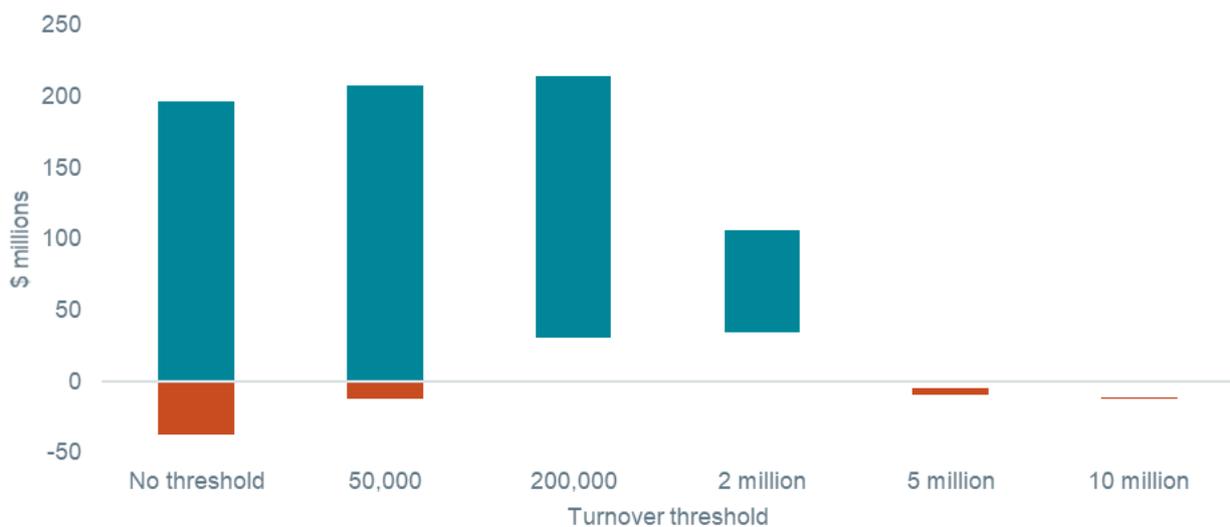


Figure 4-5 shows that the range of net financial impacts arising from the statutory trust proposal are positive for businesses with annual turnover greater than \$200,000. For smaller businesses, the direction of the financial impact is uncertain and encompasses both positive and negative outcomes.

This suggests that a contract threshold which tends to exclude firms with annual turnover of less than \$200,000 is likely to be a sensible basis for the design of the statutory trust proposal. To estimate this requires information about the number and size of contracts entered into by construction businesses of different sizes. However, we do not have access to reliable information on the number or size of construction contracts.

One approach to this lack of information may be to assume that small construction businesses enter, on average, one contract a year, such that the contract threshold is set at \$200,000. This would have the effect of setting the threshold conservatively to exempt a relatively large number of small construction businesses from trust obligations. We discuss in section 5 how it would be possible to seek to collect additional

information on the operation of the statutory trust scheme during a transition period. The design of the scheme could be refined, including the threshold, if this information shows that the scheme could be beneficially applied to smaller businesses.

4.2.2 Impact of amending the exemption of residential work

The final statutory trust proposal change that we consider is providing an exemption to the trust obligation for projects that are defined as 'residential'. The proposed exemption would apply to:

- construction contracts between an owner-occupier as the principal and a head contractor, be it a builder, or any type of contractor that the owner-occupier directly contracts with; and
- any construction contracts subsequently entered into by the builder or other contractors with subcontractors to perform work associated with the main contract with the owner-occupier.

The proposed exemption would not apply to the construction of a residential dwelling where the principal to a construction project is not intending to reside. This would be the case for developers subdividing land and building multiple residential dwellings for the purpose of sale to others.

In practical terms, the residential work exemption would reduce the number of projects to which the statutory trust proposal obligations would apply. This will lower both the administration costs to construction companies that no longer incur the obligation, while simultaneously lowering the financial benefits.

It is important to note at the outset that the results that we set out at section 4.1 above are based on aggregate construction industry statistics which do not exclude residential construction projects as defined above. It follows that the effect of applying the statutory trust proposal to such projects is already captured in these results.

Unlike for non-residential projects, there is limited information available about the distribution of project sizes for residential construction projects. Table 4-3 below shows ABS data for the number and value of residential construction projects approved by local authorities.

Table 4-3: Total number and value of New South Wales residential building jobs approved

Dwelling type	Measure	2016	2017	2018
Houses	Number	29,532	29,511	31,599
	Value	\$9.3 billion	\$9.7 billion	\$11.0 billion
	Average	\$314,578	\$329,533	\$347,090
Units	Number	8,058	10,676	9,662
	Value	\$11.5 billion	\$10.5 billion	\$9.0 billion
	Average	\$1,425,133	\$983,996	\$934,039
Other	Number	43,691	42,140	36,223
	Value	\$13.5 billion	\$13.5 billion	\$11.8 billion
	Average	\$310,011	\$319,959	\$325,987

Source: ABS, 8731.0, Building Approvals, Table 22: Dwelling Units Approved in New Residential Buildings, Number and Value, Original - New South Wales, January 2019.

It is important to note that many of the projects captured in table 4-3 above are not residential projects as defined for the purpose of the statutory trust proposal. Many houses, and almost all multi-unit buildings would not have been commissioned by the ultimate resident of the property. Table 4-3 shows that the value of new house building projects is in the order of \$300,000 to \$350,000.

This appears likely to overstate the size of an average residential construction project. There are also likely to be a large number of residential building projects that are not captured in table 4-3 above which would have a lower average value. For example, alterations and conversions (as opposed to new dwellings) make up about 10 per cent of approved residential construction by value.²² Further, these data exclude projects that are not approved by local authorities, which are likely to have lower average value.

Notwithstanding deficiencies in the availability of data, residential construction projects are likely to have a low average value relative to non-residential construction. Contracts entered into in the residential construction sector will be of still lesser value. It follows that the exclusion of residential construction work from the statutory trust proposal would have an effect similar to the imposition of a contract threshold. For example, a contract threshold set at a value of \$200,000 would likely exclude the vast majority of residential construction projects.

4.3 Effect of statutory trusts on other parties

The statutory trust proposal is likely to affect parties who are not construction businesses and principals. This section discusses the effect of the statutory trust on government tax revenues, employees in the construction sector and other suppliers to the construction industry.

The proposal is likely to have offsetting effects on these parties:

- to the extent that the statutory trust proposal lessens the rate of insolvencies in the construction industry, it can be expected to improve the ability of these parties to be able to collect on funds that they are owed by businesses in the construction sector; but
- in the event of insolvency, the introduction of the statutory trust proposal may reduce the ability of these parties to recover funds that they are owed because it places subcontractor payments ahead of other creditors.

4.3.1 Government tax revenues

Government revenue from GST and corporate income tax will likely be affected by the statutory trust proposal.

The statutory trust proposal is expected to reduce bad debt expenses for construction sector businesses and increase tax receipts by both the state and federal government. We estimate that this impact is:²³

- between \$12 million and \$22 million per year for GST revenues collected from NSW construction businesses; and
- between \$37 million and \$65 million per year for corporate income tax revenue collected from NSW construction businesses.

These direct changes in tax receipts may also be indirectly affected by the extent that payments to other suppliers to the construction industry are also affected by the statutory trust proposal. We discuss these impacts further in section 4.3.3 below.

There is also the potential for the statutory trust proposal to reduce the rate of insolvencies in the construction sector and increase the collection of tax revenues from businesses that would otherwise be insolvent. In our view, this effect is unlikely to materially add to benefits from the scheme, since businesses that are insolvent are unlikely to have been profitable or in a tax payable position.

²² ABS, 8731.0, Building Approvals, Table 30: Value of Building Approved, New South Wales, January 2019.

²³ Bad debts are estimated to be between \$136 million and \$238 million and tax rates applying to most construction businesses is 27.5 per cent.

4.3.2 Construction business employees

Payments to construction sector employees will likely also be affected by the statutory trust proposal.

Employees in the construction industry current lose approximately \$22 million to \$104 million of entitlements per year due to insolvency.²⁴ If the statutory trust proposal reduces the rate of insolvencies caused by inadequate cashflows and receivables, it is likely that some part of these losses could be mitigated. The benefits of the statutory trust proposal to employees would likely range between \$3 million and \$12 million each year.²⁵

However, these benefits may also be offset by costs to employees, since the statutory trust proposal effectively places subcontractor payments ahead of all other creditors. The current rate of recovery of employee entitlements from insolvencies in the construction industry may be between 64 per cent and 92 per cent.²⁶ If the statutory regime lessened the rate of recovery by 5 per cent, the expected cost to employees would be \$14 million each year.

In summary, there are likely to be both benefits and costs to employees in the construction industry arising from the introduction of the statutory trust proposal. We estimate that these benefits and costs are small in magnitude compared to the effects on businesses that are obliged to take action under, or benefit from, the statutory trust proposal.

4.3.3 Other suppliers to the construction industry

Payments to suppliers to the construction industry will likely be affected by the statutory trust proposal. As with employees, suppliers would be expected to:

- increase recoveries as a result of the statutory trust proposal improving payment practices in the construction industry and by avoiding insolvencies that would otherwise have occurred; but
- reduce recoveries from insolvencies that occur despite the statutory trust proposal, since it would place subcontractors in front of other creditors in the event of an insolvency.

We expect that the net effect of these effects is likely to be small in magnitude and may be either marginally positive or negative in aggregate.

²⁴ ASIC, *Australian insolvency statistics, Table 3.2.2.1 - Initial external administrators' reports for Construction industry—Size of company as measured by number of FTEs by region (1 July 2017–30 June 2018)*. See <https://asic.gov.au/regulatory-resources/find-a-document/statistics/insolvency-statistics/insolvency-statistics-series-3-external-administrator-reports/>

²⁵ On average, 23 per cent of insolvencies in the construction industry in NSW relate to poor cashflows or poor receivables management. Introduction of a statutory trust is assumed to eliminate 12 per cent of losses to employees (23 per cent of insolvencies relating to poor cashflows or poor receivables x 50 per cent), which are currently between \$22 million and \$104 million per year.

²⁶ Expected employee entitlements affected by insolvencies is estimated to be approximately \$289 million of which between \$22 million and \$104 million is lost. This translates to recovery of employee entitlements of between 92 per cent and 64 per cent respectively.

5. Options for transitional arrangements

The last matter that we have been asked to consider is the impact of transitional arrangements when implementing the statutory trust proposal to allow appropriate time for the industry to comply with the obligations.

In this section, we first outline the principles that are relevant to a consideration of transitional arrangements, before explaining various options for further consideration.

5.1 Principles relevant to a consideration of transitional arrangements

In general, there is likely to be merit in adopting transitional arrangements where:

- there is a need for stakeholders affected by a proposed change to put in place measures that require time to implement to comply with a proposed change;
- the implementation requirements or timeframes may differ for different stakeholders affected by a proposed change; and/or
- there are uncertainties about the impacts of a proposed change, and so there is merit in applying it to a smaller subgroup of stakeholders initially to maximise learning and minimise the risk of unintended consequences.

Relevantly, the statutory trust proposal satisfies each of these circumstances, because:

- time will be required to prepare to comply with the statutory trust proposal, particularly to deliver the cultural changes desired from the reform;
- the construction industry is characterised by a diverse range of businesses, both very large and small and the preparations length is likely to differ between these diverse stakeholders; and
- there remain uncertainties about the specific financial impacts of the proposed change, particularly for small construction businesses (ie, businesses with a turnover less than \$50,000 each year).

Options for transitioning to statutory trusts can be considered to reduce any potential impacts to businesses.

5.2 Options for transition

Several options are available to implement statutory trusts. In our opinion, a business turnover or contract value basis for staging the implementation of the statutory trust obligation should be preferred over a project value basis. This reflects our expectation that smaller businesses in terms of turnover (and by implication contract value) are likely to require a longer period to prepare for trust obligations. Using a project value basis does not provide sufficient flexibility to manage the implementation of the trust obligation for smaller construction businesses.

In coming to this conclusion, we have considered:

- the length of time needed to allow industry participants to prepare for the statutory trust obligation;
- the need to stage the imposition of the statutory trust obligation by either:
 - > project value threshold;
 - > contract value threshold; or
 - > construction business turnover; and
- the number of stages and threshold/turnover values to be applied.

We explore each of these aspects further below.

5.2.1 The lead time prior to implementation of the statutory trust obligation

The first consideration involves allowing sufficient lead time prior to implementation of the statutory trust obligation. The purpose of this pre-implementation period is to allow industry participants to prepare for the statutory trust obligations while also providing an opportunity to build awareness of the obligations and what is required for compliance.

In practical terms this period would involve a set of activities, including:

- developing plain English explanatory materials provided through several communication channels, including the development of a dedicated information explanatory website, written materials for industry associations and advisors (eg, legal, accounting, etc);
- providing opportunities to engage directly with legal and accounting advisors, to respond to questions and improve clarity of understanding of the obligations;
- developing responses to frequently asked questions; and
- putting in place the business systems and processes to monitor and manage financial flows in compliance with the statutory trust obligation.

The choice of length for this pre-implementation period should be informed by an understanding of the activities that will need to be undertaken to prepare to comply with the statutory trust obligation.

In our opinion, this period should be at least six months and no longer than 12 months. The specific length choice is likely to be longer if there is no staged implementation and shorter if the implementation is staged.

5.2.2 The basis for staging the implementation of the statutory trust obligation

The second consideration is a staged implementation of the statutory trust obligation. The purpose of staging implementation is to minimise implementation risks given uncertainty about the specific financial impacts on industry participants.

There are several potential options for staging the implementation of the statutory trust obligation including:

- project value;
- contract value; or
- construction business turnover.

Each of these staging basis options provides flexibility to provide longer lead times for compliance with the statutory trust obligation for lower value projects, contracts or business turnover.

A staged implementation of statutory trusts could be initially put in place for high project/contract values or business turnover. This could then be followed incrementally across lower value project/contracts/turnover. We consider the number of stages and the values of each stage in the following section.

The project value and contract value will likely be the same for head contractors, where they have sole responsibility for a construction project. However, differences arise between applying a project or contract value basis for subcontractors. Under a project value basis, small businesses with a relatively low contract value would incur a statutory trust obligation in circumstances where they are working as part of a high value project.

Similarly, under a contract value basis, small businesses with a relatively low contract value would not incur a statutory trust obligation if they are working as part of a high value project. Only those contractors with a contract above the threshold within the project would incur the trust obligation.

Finally, a business turnover basis will allow the targeting of specific business sizes for the implementation of the statutory trust obligation.

5.2.3 The number of stages, values and timing for each stage

Finally, consideration needs to be given to the number of implementation stages, the threshold/turnover values and the length of each stage.

These choices would ideally be informed by information on:

- the similarity of construction businesses and whether there are natural groups of business sizes where a longer timeframe prior to implementation is warranted; and
- the length of time industry participants need to prepare, and any learning/feedback from earlier stages of the implementation.

We believe that the statutory trust proposal should be implemented over two stages reflecting the industry structure of a small number of large businesses and a majority of small businesses. This opinion reflects an expectation that smaller businesses will require a longer timeframe to prepare for implementation, and the relatively small number of larger businesses are likely to be well set up to quickly implement systems and processes to comply with the trust obligations.

Based on our current understanding of the construction industry, a business turnover level of \$5 million would seem appropriate. We believe that this strikes the right balance between providing sufficient implementation preparation time for small to medium construction businesses while moving towards the achievement of benefits from the implementation of the statutory trust proposal.

With further information on the relationship between contract values and business turnover this could be translated into an equivalent contract value threshold should this be easier for implementation.

5.3 Post-implementation

Following the implementation of the statutory trust obligations, monitoring and enforcement activities will commence. This will involve investigating reported breaches of trustee obligations and commencing enforcement action as needed.

There is merit in the near term to continue to provide some ongoing industry education and engagement to facilitate compliance with the trust obligations. The nature of this education will likely involve:

- reporting the number and frequency of trust obligation breaches;
- monitoring construction industry insolvencies, to determine whether the trust obligations are having a material impact on insolvencies into the future; and
- providing case studies on specific breaches of obligations.

The aim of this engagement would be to provide industry participants with incentives to comply, while also evaluating the effectiveness of the statutory trust obligations.

5.4 Summary of proposed implementation option

In summary, we believe that the statutory trust obligation should be implemented in a staged manner, as follows:

- provide a 6 to 12-month pre-implementation period to allow construction businesses to prepare to comply with the trust obligations;
- staged based on business turnover or contract value, to allow for small and medium businesses to be given a longer preparation time period prior to incurring the statutory trust obligation;

- be implemented over two stages, with a period of at least 12 months between the stages to allow for insights to be gained from the first stage implementation; and
- be applied first to businesses with a turnover (or equivalent contract value) of over \$5 million, with the second stage applying to businesses at the minimum compliance threshold determined for the statutory trust proposal.

We believe that this implementation approach strikes an appropriate balance between managing impacts on the construction industry while seeking to achieve the benefits expected to result from the implementation of the statutory trust obligation.

A1. Appendix – Detailed estimation methodology

We have estimated the financial impact of introducing statutory trusts in the construction industry by investigating how costs are likely to change across three cost categories, namely:

- **administration costs:** these costs relate to bank fees, bookkeeping costs and trustee costs that would be incurred for construction firms to meet their trust obligations;
- **avoided financing costs:** these costs relate to financing of working capital by contractors and subcontractors, and financing project delays by principals; and
- **avoided insolvency costs:** these costs relate to expected insolvency costs incurred by subcontractors from exposure to upstream insolvencies, and for insolvency practitioner fees incurred by the building industry.

The net financial impact for each size of business is estimated by the sum of administration costs, avoided financing cost, and avoided insolvency cost. The methodology we have adopted to estimate each of these costs is set out in detail below.

A1.1 Administration costs

Bank account fees

It is assumed that introducing statutory trusts for subcontractor payments will require contractors with subcontracting relationships to establish a separate bank account. The cost of this bank account is one component of the overall administration costs.

Incremental bank account fees arising from introducing statutory trust regime is a function of:

- annual cost of bank accounts; and
- the number of businesses required to incur incremental costs to comply with new trust obligations.

Bank fees on business transaction accounts are estimated to be \$120 per year per account,²⁷ and there are just over 119,000 construction businesses in NSW. However, not all construction businesses would need to incur incremental bank fees:

- the largest construction firms with turnover of over \$10 million are assumed to avoid incurring incremental bank fees as they would likely already maintain trust accounts for retention payments; and
- a proportion of businesses with turnover of below \$200,000 are assumed to have no subcontracting relationships and therefore would not be subject to trust account obligations. Specifically, 50 per cent of businesses with turnover of below \$50,000 and 25 per cent of businesses with turnover of between \$50,000 and \$200,000 are assumed to not have subcontracting relationships.

Estimated incremental bank account fees for each businesses size by turnover are set out in table A-1 below.

²⁷ The cost of \$120 per year for a bank account is based on the cost of business transaction accounts offered by ANZ, Commonwealth, NAB and Westpac.

Table A-1: Bank fees by business turnover

	Less than 50k	Between 50k to less than 200k	Between 200k to less than 2m	Between 2m to less than 5m	Between 5m to less than 10m	More than 10 million	Total
Number of businesses	17,739	49,671	43,677	4,593	1,661	1,802	119,140
Proportion of businesses requiring new bank accounts	50 per cent	75 per cent	100 per cent	100 per cent	100 per cent	0 per cent	
Incremental number of new bank accounts	8,870	37,253	43,677	4,593	1,661	1,802	97,856
Estimated incremental bank fees	\$1,064,340	\$4,470,390	\$5,241,240	\$551,160	\$199,320	\$0	\$11,526,450

Bookkeeping costs

Maintaining a trust account for subcontractor payments will require additional bookkeeping to track money received for and paid to subcontractors. Incremental bookkeeping costs for the construction industry are a function of:

- the annual incremental bookkeeping requirement, expressed in hours;
- the rate of bookkeeping services; and
- the number of businesses required to incur incremental costs to comply with new trust obligations.

We adopted our high estimate of annual bookkeeping requirement (expressed in hours) based on those developed by the Australian Small Business and Family Enterprise Ombudsman (ASBFEO).²⁸ These estimates are presented in table 3-3 above. As noted in section 3.2.1, we have only adopted an incremental reconciliation requirement under a statutory trust regime as other accounting tasks are assumed to be similar to situations where the statutory trust regime is not introduced.

We also developed a low estimate of bookkeeping requirements, reflecting some opinions that the burden of statutory trust accounts is not onerous. These estimates are presented in table A-2 below.

Table A-2: Annual incremental bookkeeping requirement estimates by business turnover

Estimate	Less than 50k	Between 50k to less than 200k	Between 200k to less than 2m	Between 2m to less than 5m	Between 5m to less than 10m	More than 10 million
High	56 hours	42 hours	42 hours	42 hours	42 hours	0 hours
Low	26 hours	21 hours	16 hours	11 hours	6 hours	0 hours

Both the high requirement and low requirement estimates assume (to different degrees) that the incremental bookkeeping requirement decreases as business size increases. This reflects the assumption that larger businesses will have more systems and processes that can absorb trust account bookkeeping tasks into its existing operations. We assume the largest businesses would not incur additional bookkeeping hours and

²⁸ ASBFEO, *Cascading deemed statutory trusts in the construction sector – Working Paper*, November 2018, pp 27-28.

would be able to absorb any additional bookkeeping requirements into their existing operations. This is because they are likely to be subject to trust obligations for retention payments.

The cost of the estimated incremental bookkeeping requirement is calculated by multiplying the bookkeeping requirement by a rate that reflects the market rate for bookkeeping services.²⁹ Table A-3 sets out the high and low estimates of hourly bookkeeping costs adopted in our modelling.

Table A-3: Hourly bookkeeping cost estimates

Estimate	Bookkeeping rates
High	\$50 per hour
Low	\$40 per hour

Like bank fees, the number of businesses that are expected to incur bookkeeping costs will depend on whether they have subcontracting relationships or whether their existing systems and processes can absorb additional administrative tasks within their existing operations. Table A-4 sets out the incremental number of businesses we have assumed would incur additional bookkeeping costs.

Table A-4: Incremental number businesses requiring additional bookkeeping

	Less than 50k	Between 50k to less than 200k	Between 200k to less than 2m	Between 2m to less than 5m	Between 5m to less than 10m	More than 10 million	Total
Number of businesses	17,739	49,671	43,677	4,593	1,661	1,802	119,140
Proportion of businesses requiring additional bookkeeping	50 per cent	75 per cent	100 per cent	100 per cent	100 per cent	0 per cent	
Incremental number of businesses requiring additional bookkeeping	8,870	37,253	43,677	4,593	1,661	0	97,856

Legal and trustee costs

Establishing a trust will involve incurring one off legal fees and advice for trustees, which we call legal and trustee costs. Trustee costs for the construction industry is a function of:

- trustee costs; and
- the number of businesses required to incur incremental costs to comply with new trust obligations.

We assume that businesses that are required to comply with statutory trust obligations would need to incur legal costs related to establishing the trust and advice on trustee obligations. These costs are assumed to be approximately one-off amounts of \$1,200 for each business that is subject to maintaining a statutory trust for subcontractors, while the number of businesses required to incur incremental legal and trustee costs is the same as those for bookkeeping as set out in table A-4 above.

²⁹ See ServiceSeeking.com.au: <https://www.serviceseeking.com.au/blog/cost-of-bookkeeping/>.

A1.2 Avoided financing cost

Working capital financing

The statutory trust proposal for subcontractor payments is expected to shift the burden of working capital financing from small businesses with higher financing costs to larger businesses that have access to lower financing costs. While there are transfers of financing costs between different levels of subcontractors it is expected that net financing savings can be achieved. The cost of working capital financing is a function of the:

- working capital requirement;
- proportion of work from principals;
- proportion of work subcontracted; and
- number of days past due that payables and receivables are settled.

We calculate the working capital requirement for the NSW construction industry as a whole based on turnover of \$122 billion³⁰ and a profit margin of 9.7 per cent.³¹ These figures imply an annual working capital requirement of \$110 billion required to pay employees, subcontractors and suppliers. The \$110 billion is then allocated to business size categories based on turnover and the number of businesses in each business size category. Table A-5 sets out the working capital estimate for each business size by turnover, and how it is derived.

Table A-5: Allocation of working capital to business size by turnover

Business size by turnover	Number of businesses	Business size weighting by turnover	Working capital estimate
Between 0 and 50k	17,739	0.40 per cent	\$0.4 billion
Between 50k to less than 200k	49,671	5.63 per cent	\$6.2 billion
Between 200k to less than 2m	43,677	43.57 per cent	\$48.1 billion
Between 2m to less than 5m	4,593	14.58 per cent	\$16.1 billion
Between 5m to less than 10m	1,661	11.30 per cent	\$12.5 billion
More than 10 million	1,802	24.51 per cent	\$27.0 billion
Total	119,143	100.00 per cent	\$110.3 billion

The working capital for each business size category calculated in table A-5 is then used to calculate how much a business would need financing working capital for by considering the proportion of work sourced from principals (and therefore upstream contractors) and the proportion of work subcontracted to other businesses (and therefore how much work is done by a business itself). The proportions adopted in our modelling are set out in table A-6 below.

³⁰ ABS, 8155.0 – Australian Industry, 2016-17, Australian industry by division, Table 6, May 2018.

³¹ ABS, 8155.0 – Australian Industry, 2016-17, Australian industry by division, Table 4, May 2018.

Table A-6: Lower and upper bound assumptions for working capital financing calculation

Business size by turnover	Lower bound		Upper bound	
	Proportion of work from principals	Proportion of work subcontracted	Proportion of work from principals	Proportion of work subcontracted
Between 0 and 50k	0 per cent	10 per cent	10 per cent	0 per cent
Between 50k to less than 200k	10 per cent	20 per cent	20 per cent	10 per cent
Between 200k to less than 2m	20 per cent	30 per cent	30 per cent	20 per cent
Between 2m to less than 5m	40 per cent	40 per cent	40 per cent	30 per cent
Between 5m to less than 10m	60 per cent	50 per cent	50 per cent	40 per cent
More than 10 million	80 per cent	60 per cent	60 per cent	50 per cent

The amount of working capital required to be financed is then multiplied by the number of days that financing is required, depending on industry payment practices before and after introducing the statutory trust regime. We assume that payments in the construction industry are paid 30 days past due, on average.³² With the statutory trust proposal in place, we assume that this improves to 15 days past due. Financing costs for different sized businesses (by turnover) are based on unsecured borrowing costs for small and large businesses published by the Reserve Bank of Australia.³³

Avoided project delay financing

Avoided project delay financing relates to savings that could be realised by principals from avoiding the need to finance project delays. We estimate the cost of financing for project delays by first estimating the rate of insolvencies arising from cashflow or receivable problems based on insolvency statistics from ASIC,³⁴ and the number of construction businesses in NSW.

We apply this rate to industry turnover to estimate the value of work affected by subcontractor insolvency. We calculate the financing cost of delay to principals by multiplying that amount with a financing rate over 30 days, being the assumed duration of an expected delay. To calculate the savings for principals from avoiding delays, we also assume that the whole cost of delay can be avoided.

A1.3 Avoided insolvency cost

Insolvency fees

Avoided insolvency fees are paid to insolvency practitioners for winding up an insolvent business, and is a function of the:

- rate of insolvencies in the construction industry in NSW that are due to poor cashflows or receivables collection; and
- average fee charged by insolvency practitioners.

³² The Murray review notes that while 30 day payment terms are the most common, survey results suggest many construction industry contractors are not receiving payment until at least 60 days after work has been completed (see Murray review, *Review of Security of Payments Laws – Building Trust and Harmony*, December 2017, pp 14-15). We have adopted an assumption of 30 days overdue to reflect this finding.

³³ RBA, *Lending Rates – F5*, February 2019. Available from RBA's website: <https://www.rba.gov.au/statistics/tables/>

³⁴ ASIC, *Insolvency statistics – Series 3, External administrator reports, Series 3.2 – selected industries*, November 2018. Available from ASIC's website: <https://asic.gov.au/regulatory-resources/find-a-document/statistics/insolvency-statistics/insolvency-statistics-series-3-external-administrator-reports/>

The rate of insolvency in the construction industry due to poor cashflows or receivables averages around 0.38 per cent between 2014 and 2017.³⁵ This implies that 451 businesses will become insolvent due to poor cashflows or receivables each year, out of approximately 119,000 construction businesses in NSW.

We assume that a statutory trust proposal would reduce insolvencies from inadequate cashflows and receivables by 50 per cent and that each insolvency costs an average of \$5,000 in insolvency practitioner fees.³⁶

With these assumptions, we can derive an estimate of the amount of insolvency fees incurred by the construction industry currently and what might be incurred under a statutory trust scheme. Estimated insolvency fees incurred by the construction industry is then allocated to each business size category (ie, turnover) weighted by the number of businesses in each size category.

Avoided bad debts for subcontractors

The statutory trust proposal is expected to reduce the exposure of subcontractors to upstream insolvencies and therefore reduce expected bad debts and financial losses for subcontractors. Bad debts for subcontractors are a function of:

- the amount of work (as measured by turnover) derived from relationships with upstream contractors; and
- the average rate at which business turnover is affected by contractor insolvencies.

The amount of work is estimated by allocating industry turnover of \$122 billion into each business size category by turnover using the same weightings set out in table A-5 above. Then the turnover is multiplied by an assumption of the proportion of work a business receives from upstream contractors, which produces an estimate of receivables due from upstream contractors, as seen in table A-7.

Table A-7: Assumed receivables from upstream contractors

Business size by turnover	Turnover	Proportion of work from upstream contractors	Receivables from upstream contractors
Between 0 and 50k	\$491,409,667	80 per cent	\$393,127,734
Between 50k to less than 200k	\$6,879,984,658	70 per cent	\$4,815,989,260
Between 200k to less than 2m	\$53,237,792,495	60 per cent	\$31,942,675,497
Between 2m to less than 5m	\$17,813,081,011	45 per cent	\$8,015,886,455
Between 5m to less than 10m	\$13,804,015,844	30 per cent	\$4,141,204,753
More than 10 million	\$29,951,639,435	15 per cent	\$4,492,745,915
	\$122,177,923,109		\$53,801,629,614

A rate of exposure to upstream insolvencies (set out in table A-8) is then applied to estimates of receivables from upstream contractors, which represents the expected value of receivables that are lost or not collected due to upstream insolvencies. Smaller firms will have a higher rate of exposure being further down the contracting chain with more levels of contractors above them that could become insolvent. Larger firms have lower rates of exposure as there are less levels of upstream contractors above them.

³⁵ ASIC, *Insolvency statistics – Series 3, External administrator reports, Series 3.2 – selected industries*, November 2018. Available from ASIC's website: <https://asic.gov.au/regulatory-resources/find-a-document/statistics/insolvency-statistics/insolvency-statistics-series-3-external-administrator-reports/>

³⁶ A liquidator is entitled to be paid reasonable fees of up to a maximum of \$5,000 excluding GST if fees are not approved by creditors, committee of inspection or the court. See <https://asic.gov.au/regulatory-resources/insolvency/insolvency-for-creditors/liquidation-a-guide-for-creditors/>

Table A-8: Assumed exposure to upstream insolvency

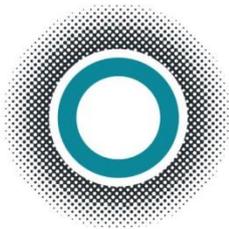
Business turnover	Low financial benefits Exposure to upstream insolvency	High financial benefits Exposure to upstream insolvency
Between 0 and 50k	7.50 per cent	5.00 per cent
Between 50k to less than 200k	1.00 per cent	1.50 per cent
Between 200k to less than 2m	0.15 per cent	0.25 per cent
Between 2m to less than 5m	0.10 per cent	0.10 per cent
Between 5m to less than 10m	0.05 per cent	0.05 per cent
More than 10 million	0.01 per cent	0.01 per cent

A1.4 Net present value calculation

Net present value results have been calculated based on 10-year period with the annual result repeated each year of those ten years, except for trustee costs that is assumed to occur once in year one of the analysis.

A zero-growth rate in the industry has been assumed, while a discount rate of six per cent is applied.





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