Asbestos Contamination: Governance and Financial Reporting Issues in the Public, Private and Not-for-Profit Sectors

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Key words: Asbestos, long-tail liabilities, restoration, risk, materiality

Data Availability statement: Data sharing is not applicable to this article as no new data were created or analysed in this study.

Conflict of Interest: The authors have no conflict of interest to declare in relation to this research.

JEL: M41

SEO: 110199, 150199

FOR: 350107, 350103

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Abstract

We explore implications of asbestos for the measurement and reporting of liabilities, assets and expenses by diverse entities. We argue that entities in both public and private sectors are failing to recognise or appropriately measure liabilities related to asbestos and that the implications of asbestos for assets and expenses in financial statements are rarely reported. While we focus on recognition and measurement implications for Australian entities, we also examine relevant requirements in other jurisdictions and for sustainability reporting.

INTRODUCTION

Entities face increasing pressure to identify and manage material business and operating risks because they impact stakeholder decisions about resource allocation. This focus has crystalised in recent years due to a range of factors, including increased global scrutiny of the financial services industry (FSRC 2019; Härle et al. 2016), continued efforts to understand the longer term implications of climate change for business (Li et al. 2019; Deitz et al. 2016), and the devastating impact of COVID 19 on businesses, markets and economies (Baker et al. 2020; Fernandes 2020).While these risks have recently captured media attention, there is a wide range of additional material risks that are important to stakeholders.

Asbestos-related issues pose continuing risks for many companies and are of particular importance in Australia. Asbestos was mined in Australia until 1984. Through the mid-1980's, Australia had one of the highest rates of asbestos use per capita (Allen et al. 2017: 15, ASEA 2017). Risks to entities associated with asbestos include not only continuing liabilities related to treatment of former employees who developed diseases such as mesothelioma due to their exposure to asbestos on the job, but also obligations arising from the requirement to properly handle asbestos contamination in extant structures as they are maintained, renovated, or demolished. Importantly, the latter can exist without the former.

Importation and use of asbestos in Australia have been banned since 31 December 2003. However, the historically high usage of asbestos in construction and manufacturing is significant and there is a considerable amount of asbestos currently in use. As a result, a high percentage of residences, commercial buildings, hospitals, schools, and government buildings contain asbestos. For example, the La Trobe Valley Asbestos Taskforce recently reported that 74% of homes in the Valley contain asbestos (La Trobe Valley Asbestos Taskforce 2020:3), and there is evidence to suggest that other infrastructure in the region was similarly constructed (Taylor-Lynch, 2021). Further, many of the structures across the country that contain large amounts of asbestos are coming to the end of their useful lives, which increases the importance of asbestos-related accounting recognition and measurement issues.

Entities typically discuss risks outside of their financial statements, either in a separate *Sustainability Report*, or in sections such as the *Directors Report* or the *Annual Review* within the annual report (AASB/AuASB 2018). Recent research evidence indicates that information about firm-level climate risk exposure is relevant to investors (e.g. Berkman et al. 2021; Engle et al. 2020). In this study, we focus on asbestos, and argue that risks associated with asbestos likely meet the materiality criterion for disclosure in financial statements. Further, even in cases where entities have historically argued that the numerical impact of asbestos on financial results is likely to be low, the recent release of the AASB Practice Statement 2 *Making Materiality Judgements* (2017) (APS 2) increases the likelihood that asbestos-related risks should be disclosed. Under APS 2, 'qualitative external' factors such as the nature of the industry and expectations of users must be considered when making materiality judgements. An obvious consequence is that some risks will be considered material and warrant recognition and disclosure in financial statements, even when the numerical impacts on financial position and performance in the short term are expected to be minimal. Given continuing health risks related to asbestos and escalating remediation costs as building stocks are repaired or replaced, it is difficult to argue that associated costs are minimal or that requirements under APS 2 are not satisfied. This is particularly the case since recent court decisions have tended to extend, rather than reduce, asbestos-related obligations for corporations.[1]

In addition to the need for better disclosure about climate risks, we know from prior research that present and potential environmental liabilities matter to users of financial statements. Even where companies elect to omit disclosure of liabilities based on asserted measurement difficulties, financial report users appear to impute environmental liabilities in assessing the entity (e.g. Barth and McNichols 1994). Further, where disclosure does occur, research provides evidence that users of financial statements will typically assess a higher liability than is disclosed. This suggests firms may be strategically underestimating their exposure (Barth and McNichols, 1994:43). Consistent with these findings and in the context of nuclear decommissioning liabilities, D'Souza et al. (2000) find that markets pay attention to decommissioning costs even when they are not disclosed. In addition, there is considerable evidence to indicate that disclosure regulation enhances the relevance of disclosed information to market participants (see also Berkman et al. 2021; Doran and Quinn 2008; Miihnkinen 2012).

Our primary aim in this paper is to explore the implications of asbestos for measurement and reporting of liabilities, assets and expenses by diverse entities. We argue that entities in both public and private sectors are failing to recognise or appropriately measure liabilities related to asbestos and that the implications of asbestos for assets and expenses are rarely considered. While we focus on recognition and measurement implications for Australian entities, we also consider relevant requirements in other jurisdictions and for sustainability reporting.

BACKGROUND

As a result of mining activities and extensive use of asbestos in buildings through the mid-1980's, Australia has the second-highest mesothelioma death rate in the world (Bianchi and Bianchi 2014).

Asbestos does not pose an immediate health hazard if it is in a non-friable form (i.e. not soft and crumbly). However, when asbestos sources are disturbed or damaged through demolition or replacement activities, or if the materials otherwise deteriorate over time, materials that were previously non-friable can become friable and hazardous.[2] Due to potential health concerns, proper handling and disposal of items that contain asbestos is extremely costly.[3] This is particularly the case when asbestos contamination comes as a surprise during demolition or renovation.

Many people die each year from asbestosis or mesothelioma, diseases directly resulting from exposure to asbestos, or from cancers such as lung cancer, ovarian cancer or laryngeal cancer which may also have asbestos as their cause. According to various sources nearly 4,000 people died in Australia from asbestos related illness during 2018.[4] In 2018 alone there were 699 new diagnoses of mesothelioma (AIHW 2019:1). Australia is not alone in facing the problem of asbestos contamination. Globally, asbestos exposure is the No. 1 cause of work-related deaths, with approximately 90,000 people dying from asbestos-related diseases each year (MC 2020, see also HSE 2020).

In Australia almost all asbestos-contaminated waste is currently disposed in landfill. While landfill sites generally document and report to government the quantities of asbestos containing material received, it can be difficult to gain a precise understanding of the nature and extent of asbestos consumed in cases where asbestos waste is mixed with building demolition materials or soil (Donovan and Picken 2018:3). Precise measurement issues notwithstanding, the reported quantity of asbestos-contaminated waste removal reported nationally between 2014 and 2018 ranges from 683,521 tonnes in 2013-14 to 1,616,733 tonnes in 2017-18 (ASEA 2019:25).

In Australia, the enduring legacy of asbestos mining and contamination from its use led to a December 2003 zero tolerance ban on asbestos importation and use. The regulation also instigated controls over registration and management of existing exposures.[5] Although the regulation has helped to reduce continued use of asbestos, it has not eliminated many of problems associated with asbestos' legacy. The high historical usage of asbestos in construction and manufacturing has had a significant and continuing impact in Australia. There is a large quantity of asbestos still embedded in extant assets, the specific magnitude of which is uncertain. Commercial buildings and residential homes built prior to 1990 are particularly likely to contain asbestos sheeting and/or asbestos cement, in gutters, downpipes, concrete footings, cladding for walls and ceilings, insulation in roofs and conduits, and various tiling-related products (ASEA 2020; Kember 2018). The asbestos content of many of these products may not be commonly understood.[6] Government-owned buildings are also rife with asbestos. For example, the NSW Education Department recently noted that 2,185 state schools contained asbestos, with more than 1,000 containing asbestos materials that are "damaged in some way" and 109 containing friable asbestos. The presence of asbestos in school buildings outside NSW is also significant.[7]

Management of asbestos presents real and ongoing challenges for employers, regardless of sector. Much of the asbestos in buildings remains hidden until it is revealed during renovation or demolition. Although health impacts can take years to appear, due to public health legislation in Australian states and Territories, employers (including government agencies) have specific roles and responsibilities with respect to identification and management of risks associated with asbestos. These requirements for identification and management of asbestos do not specifically extend to reporting, even though application of existing financial reporting requirements would likely result in identification of events that have accounting and/or disclosure implications.

The reach of asbestos extends beyond issues associated with current infrastructure. Australia is one of the few countries in the Asia/Pacific region that has a zero-tolerance ban on all types of asbestos. Despite the now widely known threats to human health, local standards in many countries allow low levels of some types of asbestos to be used for manufacturing, even though these goods might subsequently carry the label 'asbestos free' (ABF 2020). This practice creates problems for importing a range of goods into Australia and contributes to a continuing source of asbestos exposure for Australians.[8]

The planned and orderly removal of asbestos is expensive, requiring licenced professionals to identify, remove and facilitate orderly disposal. Removal when unexpectedly discovered during demolition or renovation is significantly more costly. Importantly, many assets affected by asbestos were constructed when use of asbestos was ubiquitous and many of these assets are now approaching the end of their economic lives. This situation is exacerbated by technological obsolescence. For example, telecommunication pits containing asbestos require replacement since they are inadequate for newer network technologies.

GOVERNANCE AND DISCLOSURE IMPLICATIONS OF ASBESTOS

Governance

Given the pervasiveness of asbestos in extant infrastructure and ongoing health-related issues associated with its use, we argue that absent evidence to the contrary, organisations should assume they face asbestos-related risks (Moerman and van der Laan 2015b). Managers should ensure that they have governance systems in place to manage asbestos risks, since once asbestos has been detected, they face a number of responsibilities. Key to this is preparation of an asbestos register[9] and development of an asbestos management plan, which must be maintained and regularly updated (WHS 2016:10). According to SafeWork Australia, the asbestos management plan must include decisions made about the management of asbestos at the workplace, procedures to be followed in the event of incidents and emergencies involving asbestos, including who is responsible for what. An asbestos management plan might also include additional information, such as how any risks will be controlled and the timetable for their regular monitoring. Asbestos management should also be a consideration in planning for any renovation or demolition of facilities.

Disclosure

The stated objective of financial reporting is to provide financial information about the reporting entity that is useful to users of financial reports in making decisions about providing resources to the entity (AASB 2019d: OB2, and Aus OB2.1). Report users include existing and potential resource providers (such as investors, lenders and other creditors, donors and taxpayers), recipients of goods and services (such as members of the community) and parties performing a review or oversight function on behalf of other users (such as regulatory bodies, advisers and members of parliament).

Existence of material asbestos contamination has multiple implications for financial reporting. In addition to the recognition and measurement of assets, liabilities and expenses shown in the financial statements, existence of asbestos risks should result in additional required disclosures. Safe handling and removal of asbestos can reduce the size of estimated financial statement adjustments but does not remove the immediate need to recognise a material liability for restoration that exists now, nor the need to assess possible impairment of assets, adequacy of the residual values for depreciable assets, and estimated economic lives of those assets or their depreciation. Failure to do so may result in a material misstatement in financial reports, which, even when corrected, can expose entities and their directors to tarnished reputations and costly lawsuits.[10] In the remainder of this section, we explore specific disclosure implications of asbestos contamination, considering the overarching objective of financial reporting and additional reporting requirements found in existing accounting standards and other documents.

In exploring the relevant implications for disclosure, we note there is considerable complexity based upon local and time specific conditions unique to individual entities. As such, to draw out relevant themes we develop two disclosure scenarios (Appendix A) based on our review of disclosures in the management commentary (or similar) sections in annual reports of diverse entities. The scenarios differ in the nature and level of asbestos exposure and subsequent consequences for the entities and therefore, the implications for governance and reporting. Next, we identify key features of the scenarios and focus on disclosure implications. A key purpose is to highlight the considerable care needed in constructing communications for both scenarios.

Scenario 1: Benign Case

In the first scenario, the presence of asbestos in the industry has led to a localised testing and assessment programme to understand exposure and/or associated risks. Testing has identified small amounts of asbestos, which have been recorded in the asbestos register. An asbestos management plan has been developed, which specifies handling and removal of the asbestos at the end of the (unaffected) economic life of the facility. Initial assessment of the implications for the preparation of financial statements deems that the impacts are immaterial. Consistent with the relevant Code of Practice, the company commits to regular review in the future and to reporting any material change in the condition of existing asbestos that has been identified, or the details of asbestos that has been removed, enclosed, or sealed.[11]

Implications for financial statements

Having no material levels of contamination, it is unlikely there are immediate implications for the valuations of the entity's assets. At the same time, there is little doubt that, even in a seemingly benign situation, the assessments involved are non-trivial and costly. Although not separately disclosed, related assessment costs would be a component of activities reflected in disclosed SG&A expenses. Implicit in the disclosure is that the costs associated with the eventual handling and removal of the asbestos are immaterial. In such instances it is unlikely that any revision to estimates of useful life or salvage value of the relevant assets are required, suggesting depreciation calculations will also be unaffected.

Scenario 2: The More Complex Case

Disclosure issues are more fully characterised by our second, more complex scenario, where a company has material levels of asbestos contamination. In this case, disclosure comprises details of the steps undertaken to identify and quantify exposure, along with the fines paid. In addition to known civil claims for financial damages related to asbestos exposure, issues associated with recognition and measurement of the entity's assets, expenses and liabilities arising from the removal of the asbestos can arise.

Implications for financial statements

There are several obvious implications for the preparation of financial statements. For example, at a broad level, entities listed on the ASX have continuous disclosure obligations when the entity's management becomes aware of any information that could materially impact the price or value of the entity's securities (ASX 2019: Chapter 3). In addition, several issues arise for recognition and measurement of liabilities relating to pending civil suits, including associated legal fees. Perhaps less obvious are likely provisions required for significant and spiralling future costs of removing asbestos in existing structures and restoration and rehabilitation of the land and surrounds (Taylor 2019).

The potential impacts for assets are equally significant. Reassessments of fair values are required to allow for present and potential asbestos contamination, likely resulting in recording of significant reductions in carrying values and corresponding impairments charges. In addition, there is almost certainly a reduction in estimates of the useful lives and salvage values of depreciable assets. Where asbestos contamination arises in connection with the acquisition of another business, potential warranty claims made against insurers may give rise to an asset, albeit measured at discounted amounts where any claims made are subject to dispute from insurers.

Beyond specific recognition and disclosure issues, there are several broader implications for disclosures. For example, there are likely to be adjustments required to correct accounting errors stemming from not having assessed the exposure to asbestos contamination in a timely manner. The potential for class actions also increases depending on whether the financial statements of the company for the years prior to the discovery and disclosure of exposure to asbestos contamination were prepared in accordance with accounting standards and showed a true and fair view. Assessing the merits of any such actions, or estimating the potential exposure is difficult.

Finally, in the more complex case, specific and ongoing interactions with auditors are likely on serious issues, including the existence of material uncertainties and perhaps, even going concern. These issues arise because there are many matters requiring a large degree of judgement when making estimates relating to the carrying amounts of liabilities and assets impacted by the existence of asbestos, consequent expenses, and future cash flows.

Implicit in the above, is that the entity is from the private sector. If the example entity were a public sector organisation, additional disclosures could focus on impacts on school children, hospital patients, members of the public using a public facility (e.g. a library or departmental building), and public servants and other government stakeholders as well as the entity's financial statements. Political risk would also be very high.

As noted above, the accounting problems associated with asbestos are particularly acute for liabilities, assets, and expenses. We next consider these issues in detail.

Liabilities

Recognition and measurement of asbestos-related liabilities is challenging, with potential implications for both the short- and long-term. The existence of asbestos contamination gives rise to liabilities. Asbestos-related disclosure implications exist regardless of whether there are presently known civil lawsuits and despite the best efforts of management to maintain an asbestos register and to comply with legal obligations concerning the removal of harmful asbestos.

(i) Accounting Liabilities v Legal Liabilities

While the existence of a legal obligation is not a necessary precursor to recognition of a liability in financial statements, it is most likely that any legal liabilities arising from asbestos contamination will comprise accounting liabilities or be subsumed into them. Legal liabilities will tend to be revealed by present claims, proceedings, and the findings of civil and criminal cases, or through contracts with affected parties.

Accounting liabilities are present obligations to disburse the assets of an organisation because of past events. Their recognition can and often should, come well before legal liabilities crystallise and are even likely to exceed legal liabilities. For example, accounting liabilities may be brought to account in circumstances in which court cases do not eventuate or where legal requirements might only be provoked in extreme circumstances. In understanding accounting liabilities that may arise in relation to asbestos exposure, it is crucial to understand: (a) the existence; and (b) the measurement of obligations. A liability may exist because of a past action but may be uncertain as to the timing of any asset disbursement and the amount of such disbursement.

Under AASB 137 *Provisions, Contingent Liabilities and Contingent Assets*, a provision is a type of liability required to be brought to account where the timing or amount of the liability are uncertain (AASB 2019b: para 10). It has been clear for many years In the extractive, chemical and other industries, that entities must recognise a provision for restoration liabilities, whether reporting under Australian Accounting Standards (AAS), International Financial Reporting Standards (IFRS) or US GAAP. The events that produce restoration liabilities in these industries echo circumstances associated with asbestos-related liabilities, particularly where asbestos contamination must be mitigated. Required accounting for restoration liabilities for these industries can thus inform accounting treatments required of companies facing asbestos-related issues.

Under accounting requirements such as those specified in AASB 137, a liability comes into existence when a mining company sinks a well that damages the environment and which ‘more likely than not’

(AASB 2019b: paras 14 and 15) will have to be restored and rehabilitated at some time in the future. The accounting liability exists from the time the damage is done, and a provision should be raised when a reliable estimate can be made of the cost of restoration/rehabilitation of the asset. Restoration is typically made in due course and no legal intervention may ever take place, even though an equitable liability (one capable of being pursued at law) may arise if damage is not acquitted adequately. Mining companies understand that tracking restoration costs is needed for the proper costing of their products.

Measurement of a restoration/rehabilitation liability can be very difficult, since the nature, components, and means of restoration and rehabilitation may change markedly over time and may occur many decades into the future. Restoration and rehabilitation costs can also vary significantly depending on the setting in which the land was used, particularly where the land is culturally important to local communities, including Traditional Owners. By implication, since accounting standards require the provision to be measured at the best estimate of the costs required to settle the obligation, this requires recognition and initial measurement of the provision, and remeasurement over time as circumstances change[12] or as better estimates of future cash flows are made.

Under AAS and IFRS, the liability is calculated at the end of each reporting period by discounting estimated future cash flows using an appropriate discount rate (e.g. AASB 2019b: para 45). Entity-specific risk is incorporated in the calculation, either via the estimated future cash flows or in the discount rate that is used (para 47). In line with AAS and IFRS, the result is a provision measured based on the 'current best estimate' by the entity rather than historical value, the currency of which is re-assessed at each reporting period end (para 59).

Under US GAAP, the liability is measured initially at fair value and the initial amount is adjusted only for subsequent changes in the estimated amount or timing of cash flows (FASB Accounting Standards Codification (ASC) Topic 410-20). Provisions are not typically discounted in the US except in limited circumstances, which signals a point of difference from AAS and IFRS. Where discounting does occur, the discount rate is not kept current for the amount originally recognised. Subsequent to initial measurement, increases in estimated cash flows are measured using the current discount rate at the time of measurement and decreases in estimated cash flows are measured using the discount rate used at initial measurement of the liability. This results in a layering approach, the consequence of which is that the aggregate carrying amount of the liabilities is not recognised at fair value *per se*, but rather at the weighted average of the discount rates that applied when the layers were recognised. This method is more appropriately viewed as being based on historical cost.[13]

Entities in many industries will have obligations to dismantle, remove or restore non-current assets such as property plant and equipment, which are covered by various accounting guidance.[14] These obligations can include, restoring chemically contaminated sites for a power generator, a chemical company, or for various forms of heavy industry. The use of asbestos in the construction of property or equipment, in insulation, or in ways that contaminate land, is indistinguishable from other causes of asset retirement and restoration obligations. Asbestos contamination therefore comprises a form of damage to the environment that is already dealt with by the accounting standards covering obligations for asset retirements and restoration. Importantly, a liability comes into existence when the damage is done by installation of asbestos by an entity and should be recognised in the financial statements of the entity from that point. The liability should be measured in the same way as for other provisions; at a current value, determined by calculating the present value of estimated future cash flows, using a relevant discount rate (AASB 2019b: paras. 45-47).

A recent accounting standard issued by the Canadian Public Sector Accounting Board (CPSAB) mirrors this view:

> *Asbestos is regulated in all jurisdictions in Canada. Those regulations require the entity to handle and dispose of the asbestos in a prescribed manner when it is disturbed. Although the timing of the removal may be sometime in the future, a legal obligation to perform asset retirement activities still exists. The ability to postpone the asbestos removal does not relieve the entity of the obligation. The asbestos will eventually need to be removed and disposed of because the tangible capital asset containing asbestos has a finite life. Even if the tangible capital asset containing asbestos were sold, the price would reflect the obligation to retire it* (CPSAB 2018: Basis for Conclusions).

The above statement by the CPSAB is particularly relevant given the similarities in the regulatory frameworks in Australia and Canada for dealing with asbestos. The amount of the liability may or may not be material relative to total assets or sales reported for the current period and may not be easy to measure. Regardless, in such circumstances, a liability has been incurred and requires estimation.

Note also, that existence of insurance cover does not impact recognition and measurement of a liability. According to accounting standards, insurance recoveries may give rise to a separate asset if recognition criteria are met. In such instances, off-setting of the asset and the associated liability is not permitted.[15]

As a final caution on liabilities, Australia's zero tolerance bans on the use and importation of asbestos may lead to liabilities for non-compliance penalties. Directors would need to ensure they have the processes and controls in place to prevent such use or importation and be wary about assets or entities which they buy from others.

(ii) Assets and Expenses

The existence of asbestos contamination has a variety of implications for accounting for assets. These include the possibility of mismeasurement of fair value, which can occur upon acquisition of an asset or assets; upon acquisition of a business; when assessing impairment of an asset; and/or when revaluing assets. The implications of asbestos contamination are also significant when accounting for assets over time, such as when accounting for depreciable non-financial assets, including when estimating useful lives, residual amounts, and periodic depreciation charges.

Entities often overlook the need to regularly reassess the residual values of depreciable assets. Potential complications associated with the existence of asbestos exacerbate the need to do so. Asbestos contamination can lead to material differences in residual values (and even to negative residual values), with obvious and significant implications for depreciation that is being charged. The problem worsens when assets are revalued or when economic lives are reassessed as being much shorter, which can happen when the existence and assessment of asbestos contamination cause changes in the plans for replacement of infrastructure. For example, the initial work to remove asbestos may stimulate a plan to rid the organisation of the problem in its entirety (Kagi 2020).

Public Sector Disclosure Issues

(iii) Public sector

Although the More Complex Case posed was for a listed company facing continuous disclosure requirements, little would change for other types of entity. In the public sector, there are particular problems in accounting for asbestos contamination.

Governments at the Commonwealth, State, and Territory levels in Australia prepare consolidated financial statements for their controlled entities. Unlike in the private sector, consolidated whole- of-government reports are required to use current values to account for assets where the accounting standards otherwise provide a cost or fair value option for measurement (AASB 2019c: para 13-14). The objective of the requirement is to harmonise, to the extent possible, consolidated whole-of-government financial statements and Government Finance Statistics (GFS), which are prepared in estimated current market price terms.

This requirement means that at the whole-of-government level, reporting entities cannot use the cost option in the accounting standards for property plant and equipment and intangibles when preparing financial statements. It is normal for the assets at the controlled organisation level (e.g., department or agency) to be revalued to facilitate the whole-of-government level, even though at that level the accounting standards continue to provide a usable cost or fair value option. It is much easier to consolidate revalued assets than to try to revalue at the whole-of-government level because of the granularity of the information available at the individual entity level.

The consequence of these requirements is that fair value accounting is much more common in the public sector than in the private sector for property plant, equipment and, to the extent they are recognised, intangibles. This means that the scope for over-valuation of asbestos-affected assets is also much greater. Such over-valuation may be masked by materiality levels at the consolidated level but is more likely to be material (when judged against reported totals for assets) at the level of the entities being consolidated.

The public sector has a greater likelihood of facing material asbestos issues than the private sector for several reasons. First, given the type and age of the current inventory of public sector assets such as educational, health, prison, administrative, and defence facilities, there is a high likelihood that building materials used to construct the assets contained asbestos. Further, based upon use of the assets by large numbers of people, some of whom are quite vulnerable, there is the potential for much lower tolerance of asbestos risk exposure.

Further, there tends to have been an historical “bunching” in the timing of major expansions of public sector infrastructure. In some cases, checks and maintenance have not kept pace with expansions (e.g. Le Messurier 2019). Criticism has come from various sources about the safety of school infrastructure with respect to asbestos, and a number of governments have undertaken significant programmes to urgently upgrade hospitals and schools.[16]

These factors have two implications. First, the useful lives of the assets in question are expiring, most likely at a similar rate. Second, and related, the likelihood of finding or creating friable asbestos during maintenance activities and upgrades is increased. This results in shifts in the estimates of useful lives, requiring residual values and depreciation to be recalibrated.

A unique aspect of not-for-profit public sector reporting is that impairments of non-financial assets are not determined by assessing financial flows stemming from the assets, but rather by assessed decreases in the physical service potential of the asset. This can mean that relative to other sectors, impairments are less frequent and when they do occur, they tend to be later in the life of assets as their utility drops off more markedly.

Discovery of asbestos contamination in assets of a not-for-profit public sector organisation can signify a reduction in the service potential of those assets, with a concomitant requirement to recognise not only impairment, but also effects on residual values and depreciation. Under these circumstances, there is no distinction from accounting for impairments in for-profit entities.

Asbestos can also impact public sector entities who are responsible for waste. For example, if asbestos is included in a landfill controlled or regulated by a local government, there will be a need to seriously consider any contamination. In the nuclear waste storage industry, it has been documented that assumptions about the techniques used for containment have been found wanting, with resulting consequences for disclosure of material issues.

ASBESTOS DISCLOSURES – CURRENT PRACTICE

There is considerable variation in asbestos disclosure practices and approaches. To better understand current practice, we first examined ASX listed entity reports for the year ending 2019 and found few examples of disclosure specifically relating to asbestos. This is despite the widespread existence of asbestos, and the size and growth in the asbestos removal, transport, and hygiene industries. A considerable number of entities reported on the policies in place for identifying and managing hazardous materials such as asbestos. Several entities acknowledged the existence of subsidiaries/associates that have been, and/or continue to be the subject of litigation relating to the handling of, or exposure to asbestos, also typically indicating that such circumstances are unlikely to require the reporting entity to recognise any contingent exposure in respect of asbestos liabilities. Few occasions were noted where present or potential asbestos exposure explicitly impacted recognition and disclosure practice.[17] One exception is CSR Ltd. In its 2019 Annual reports, CSR include $268m ($289m 2018) in its product liability provision for “all known asbestos claims and reasonably foreseeable future claims” (p.71). CSR acknowledges the complexity involved with measuring the provision, stating that it reviews the adequacy of the provision on a six-monthly basis (p.72).[18]

Another listed company uncovered in our examination and worthy of note here is James Hardie Ltd. The reporting practices of the entity have been examined in depth elsewhere (e.g. Moerman and van der Laan 2015b), so we do not do so here. What is interesting to note here is that in reporting performance for the year ending March 31, 2020, the company strips out its asbestos obligation, reporting a ‘net operating profit’ of $US352.8 million, an increase of more than 17 percent from the previous year (AAP 2020). It is difficult to discern whether the company is opportunistically reporting results in this way (Young 2014), or simply attempting to communicate an underlying permanent earnings result.

A cursory review of disclosure practices in other jurisdictions shed further light on the complexities associated with asbestos. The difficulties associated with measuring long-tail liabilities are clear since assumptions made significantly impact their magnitude. In a recent US example, the SEC found that 15 current or previous directors or officers associated with Honeywell International were responsible for underestimating the company's asbestos liability for the year ending December 2017 (Bardash 2020). The core issue was that the entity estimated a portion of its obligation using a 5-year window, when industry standards and the US accounting guidance ASC 450 indicate a 215-year window to be more common. The result is that the provision was deemed to be understated by around $US1b.

We also reviewed public sector financial statements. For this review, a key information source was general press and the relevant asbestos registers for governments in states and territories. Our review revealed few examples of recognition and measurement practices reflecting obligations associated with asbestos, even where subsequent evidence indicates the presence of asbestos.[19] As an example, the Royal Perth hospital has been widely documented as having significant levels of asbestos exposure (Kagi 2020). The financial statements that embed the Royal Perth Hospital are those of the Eastern Metropolitan Health Service - a WA government entity. The 2018-19 financial statements do not appear to include any non-current liabilities that could possibly relate to restoration for the impacts of asbestos. A report prepared by PwC regarding plans for the upgrade of the hospital confirms the existence of asbestos and the resulting non-compliance with relevant modern building standards (PwC 2018). However, the report also notes that the asbestos content is safe in its current condition and is carefully monitored. In doing so, the restoration liability, and/or the negative impact on the residual value of the property is largely ignored (for further reading, refer Kagi 2020). We then reviewed the WA Whole of Government 2018/19 financial statements. The statements contain several references to potential restoration/rehabilitation costs and include specific provisions for decommissioning and restoration costs. The amounts for provisions (across the whole public sector) are relatively small - $351m for decommissioning and $50m for restoration. Details of the assets to which the provisions relate are not provided, although within the context of contingent liabilities, the notes contain references to certain assets that are contaminated. We found no specific references to Royal Perth Hospital.

BROADER INFLUENCES ON PERIODIC REPORTING

The discussion to this point has largely considered requirements in accounting standards when accounting for the consequences of asbestos contamination. These standards are directed at the financial statements of reporting entities in all sectors. Financial statements are usually incorporated in annual or other periodic reports by the entity.

Additional possible sources of asbestos-related guidance for Directors to consider include the Corporations Law, the Australian Charities and Not-for-Profit Commission, the ASX, and the Directives of Ministers. For example, it is possible that Directors' Reports, Management Commentary, disclosures to capital markets or similar will be impacted by asbestos contamination.[20]

In addition to traditional sources of guidance for broader business reporting, entities provide disclosures under other reporting initiatives, such as sustainability reporting. Although generally broad in scope, these types of reports should reflect issues that are important to the entity's stakeholders and should thus include disclosure of material exposure to asbestos-related issues. Further, a growing number of investors (including lenders) engage in what has broadly been called "impact investing", that is, investors that include social or environmental impacts of industries or entities in their investment criteria. We next discuss disclosure issues related to sustainability reporting and impact investing.

SUSTAINABILITY REPORTING

Sustainability reporting involves disclosure of a wide range of environmental, social, and governance factors as well as discussion of how these aspects impact value creation by companies. Soderstrom, Khan, and Solano (2020) discuss the breadth of disclosure frameworks and their evolution. In general, the disclosure frameworks do not explicitly mention asbestos. An exception is the Global Reporting Initiative (GRI).

Taken together, several GRI standards, set out a broader framework to facilitate enhanced disclosure regarding important environmental topics such as the presence of asbestos exposure. For example, an important concept in the GRI standards is that of 'material topics', which are defined as those that '…reflect an organisation's significant economic, environmental and social impacts; or that substantively influence the assessments and decisions of stakeholders.' (GRI Standard 103-1-a). Justification of why a topic may be considered material can be based on the associated economic, environmental, and social impacts in light of the reasonable expectations and interests of stakeholders regarding the topic, and the process, such as due diligence, that the organisation used to identify the impacts related to the topic (GRI Standard 103-1-a). For each material topic, GRI Standard 103-1 requires:

a) An explanation of why the topic is material;

b) A description of where the impacts occur; and

c) [a description of] the organisation's involvement with the impacts.

Asbestos exposure likely constitutes a material topic for many entities, particularly based upon the last requirement; an organization's involvement can occur when it 'has caused or contributed to the impacts or is directly linked to the impacts through its business relationships.'

Additional GRI Standards are more specific with respect to reporting implications for asbestos. For example, Standard 403 requires a range of disclosures in respect of work-related hazards, which are defined as '…source[s] or situation[s] with potential to cause injury or ill-health,' (GRI Standard 403: Glossary). Standard 403 is explicit about requiring data on work-related health issues to include information on work-related hazards. This is due to the many cases of long-latency work-related ill health that arise over time. Indeed, the Standard cites asbestos exposure as a specific example of where a significant and lasting impact can emerge after the worker has left the company (GRI Standards 403-10).

Other sustainability-related reporting approaches and frameworks internationally typically do not separately identify required disclosures for asbestos. However most frameworks encourage disclosure and analysis of environmental risks, and metrics and plans relating to those risks. Although these sustainability standards are not binding in Australia, their use in public filings such as UK Strategic Reports,[21] EU Non-Financial Reporting Directive (Directive 2014/95/EU),[22] and in the Management Discussion and Analysis section of US company 10-K filings,[23] could lead to pervasive trends that affect Australian reporting via generally accepted practices, or ultimately local regulation.[24] An organisation that finds it has, or could have, asbestos contamination should review these sustainability standards and consider asbestos-related disclosures beyond the demands of current mandatory legal and financial reporting standards.

We note that the IFRS Foundation Trustees are in the process of forming an International Sustainability Standards Board to work alongside the International Accounting Standards Board. In June 2021 The Trustees have recently called for nominations for the Chair and Vice-Chair of the proposed new Board.[25] Time will tell when and how asbestos-related issues are incorporated into disclosures developed by the new Board.

IMPACT INVESTING

In addition to financial returns, impact investors intentionally seek investments that generate positive financial returns and measurable positive social and/or environmental impact (World Economic Forum 2013). The Australian market for impact investments has grown tremendously. Between 2015 and 2018, the market increased fourfold, to $6 billion (Uribe 2018).

There are many opportunities for companies and governments to develop impact investing models to facilitate timely identification and removal of contaminating materials like asbestos. The potential for the use of social impact bonds in these settings is significant. This is particularly so, given the probable likely positive implications of the timely identification and removal of asbestos for surrounding communities and the reduced financial burden over the longer term for governments. Crowd-based funding approaches also have obvious potential.[26] Regardless of whether an entity seeks funds via traditional or impact investment funding vehicles, or via crowd-based approaches, poor records of managing and reporting asbestos-related risks and consequences of asbestos contamination will deter major investors and inhibit the flow of funds.

CONCLUDING COMMENTS

This paper provides insights into the implications of asbestos for measurement and reporting of liabilities, assets and expenses by entities. Driven by regulatory requirements and obvious physical health implications and concerns, many entities continue to focus on identification and management of asbestos, perhaps incorrectly comforted by the knowledge that they have registered their encountered asbestos and have put plans in place to ensure that asbestos is safely handled and eventually removed. However, there are immediate and significant accounting implications related to the presence of asbestos that do not appear to be reported by entities examined for the purpose of this study. This is potentially a very dangerous position for the affected entities and their directors. Good governance requires a much more proactive stance to identify objectively whether exposure exists and to document processes employed in that identification. Implicit in this is that exposure extends beyond existing and known civil claims for compensation for asbestos exposure, to include the removal of asbestos and the restoration and rehabilitation of associated assets. Proper recognition/disclosure of asbestos-related issues is crucial to ensure compliance with accounting requirements and production of general purpose financial statements that are useful to users.

APPENDIX A: Communications that Directors might have needed to make for the scenarios posed in the paper.

The Benign Case

In view of the prevalence of the use of asbestos in our industry, your directors instigated a programme of assessment and testing to establish whether the organisation has been exposed to asbestos in any way. The programme was conducted by an accredited organisation in this field, assisted by suitably qualified engineers from your organisation, and found only very limited incidences of asbestos contamination in part of a single storage facility. That asbestos had been included in the required asbestos register. The history of that facility was carefully reviewed to see whether any risks might have been present for employees or others (including customers for product held in the facility), or whether any instances of non-compliance with requirements occurred, and no evidence of any such risks or instances was found. A plan has been put in place for safe use of the facility, and for the handling and removal of the asbestos concerned at the end of the (unaffected) economic life of the facility. The dollar amounts involved in the necessary management, handling and removal of the asbestos found are immaterial for the financial statements, including in relation to recognised liabilities, assets, expenses and disclosures. Nevertheless, asbestos contamination will be regularly reviewed in the future and reported upon if there is any material change in circumstances.

The More Complex Case

In view of the prevalence of the use of asbestos in our industry, your directors instigated a programme of assessment and testing to establish whether the organisation has been exposed to asbestos contamination in any way. The programme was conducted initially by suitably qualified engineers in your organisation and their findings were then independently assessed by XYZ consultants, experts in asbestos management and remediation.

As required under our continuous disclosure obligations, we informed the market that we had, in the first instance, discovered evidence that indicated we may have experienced material exposure to asbestos contamination. We followed up on that disclosure, on a timely basis, on three further occasions, as we were better able to assess the extent of the problem and measure its consequences.

A parallel process of disclosures to the relevant State Agency occurred to inform them that the asbestos register was found to be incomplete. After testing, the register was found to contain items (cement sheeting) that did not contain asbestos, but, more significantly, to have omitted the contamination uncovered by the reviews undertaken. The company has paid the penalties for non-compliance (see note www).

The financial statements herewith are consistent with our disclosures to the market and show that we have a liability for restoration of the factory buildings in West Town in which asbestos contamination was found in structures and in insulation, and in land thereunder. Further, your Directors have discovered that adjacent buildings which were demolished five years ago, but which were built together with the existing buildings, in the same way, must have also had asbestos contamination. Those buildings were in poor repair and unused for some years and were demolished without considering the issue of possible asbestos contamination.

Following disclosure of the above to the market, the Company has received a claim for damages from a storeman who worked in the demolished buildings and assisted in their demolition. He is confirmed as suffering from asbestosis and claims that he had no other exposure to asbestos in his working life, which was spent with the company.

Following detailed examinations by the company's medical advisors and other investigators we employed, the Directors have accepted the claim made and agreed to pay $xxxx.

The Directors are unaware of any other claims from existing or former employees, but we have communicated with all such employees to explain the claim made. It is possible that further claims will be received.

We have also reviewed the possibility that product passing through the storage facilities may have been impacted by exposure to asbestos fibres. Though the product was pre-sealed before storage, there remained the possibility that fibres may have settled on packed product and affected those handling its transportation and unpacking. We have found no evidence of untoward consequences (including claims) in this area but have informed service providers and customers that the possibility of contamination was considered in our review.

The liability for restoration to remove asbestos contamination and the liability for the civil claim are shown in note xxx to these statements. The former has been determined by calculating the cost in 5 years' time of safely demolishing the West Town remaining buildings, decontaminating the land and the unavoidable, incremental cost of managing the liability for exposure to asbestos in the meantime. The civil liability reflects the agreement with the other party in the claim mentioned above. That amount was reassessed on two occasions as further information was received and the claim amended (9).

The Directors have considered the possibility that we should provide for further claims. However, we have no evidence upon which we could assess that a past event has occurred that will give rise to a claim. Asbestos related diseases do not arise predictably among populations of exposed people. Our best information is that no more than 210 employees, tradesmen or other people were possibly exposed. A worst-case scenario, based on the case already brought, is that the company would face a liability of up to $GGG.

References

AAP Newswire (AAP) 2020, 'James Hardie profit up but no dividends', Available at: https://www.sheppnews.com.au/finance/2020/05/19/1179194/james-hardie-fy-profit-up-6, accessed 17 August, 2021.

Allen, L.P., Baez, J., Stern, M.E.C. and George, F. 2017, 'Asbestos Economic Assessment of Bans and Declining Production and Consumption', *World Health Organization*, Available at: http://www.euro.who.int/__data/assets/pdf_file/0009/341757/Asbestos_EN_WEB_reduced.pdf%3Fua%3D1, accessed 17 August, 2021.

Asbestos Safety and Eradication Agency (ASEA) 2020, 'Asbestos in the Workplace', Available at: https://www.asbestossafety.gov.au/find-out-about-asbestos/asbestos-workplace, accessed 17 August, 2021.

Asbestos Safety and Eradication Agency (ASEA) 2019, 'National Strategic Plan for Asbestos Management and Awareness 2014-2018' Final Report, Available at: https://www.asbestossafety.gov.au/sites/default/files/documents/2019-05/National%20Strategic%20Plan%20for%20Asbestos%20Management%20and%20Awareness%202014%20-%202018%20Final%20Report.pdf, accessed 17 August, 2021.

Asbestos Safety and Eradication Agency (AESA) 2017, 'National Asbestos Profile for Australia' Available at https://www.asbestossafety.gov.au/sites/default/files/documents/2017-12/ASEA_National_Asbestos_Profile_interactive_Nov17.pdf, accessed 17 August, 2021.

Australian Accounting Standards Board (AASB) 2017, AASB Practice Statement 2 *Making Materiality Judgements*, AASB, Victoria.

Australian Accounting Standards Board (AASB) 2019a, AASB 116: *Property, Plant and Equipment*, AASB, Victoria.
Australian Accounting Standards Board (AASB) 2019b, AASB 137: *Provisions, Contingent Liabilities and Contingent Assets*, AASB, Victoria.
Australian Accounting Standards Board (AASB) 2019c, AASB 1049: *Whole of Government and General Government Sector Financial Reporting*, AASB, Victoria.
Australian Accounting Standards Board (AASB) 2019d. *Framework for the Preparation and Presentation of Financial Statements*. AASB, Victoria.
Australian Accounting Standards Board and Auditing and Assurance Standards Board (AASB/AUASB) 2018, *Climate-related and other emerging risks disclosures: assessing financial statement materiality using AASB Practice Statement 2*, AASB and AUASB, Victoria.
Australian Border Force (ABF) 2020, 'Prohibited Goods: Asbestos', Available at: https://www.abf.gov.au/importing-exporting-and-manufacturing/prohibited-goods/categories/asbestos, accessed 17 August, 2021.
Australian Institute of Health and Welfare (AIHW) 2019, *Mesothelioma in Australia 2018*, AIHW, Available at: https://www.aihw.gov.au/reports/cancer/mesothelioma-in-australia-2018/contents/table-of-contents, accessed 17 August, 2021.
Australian Medical Association Western Australia (AMA WA) 2020, 'Asbestos containing materials discovered at Osborne Park Hospital', AMA WA, Available at: https://www.amawa.com.au/blog/asbestos-containing-materials-discovered-at-osborne-park-hospital/, accessed 17 August, 2021.
Australian Securities Exchange (ASX) 2019, *ASX Listing Rules*, Available at: https://www2.asx.com.au/about/regulation/rules-guidance-notes-and-waivers/asx-listing-rules-guidance-notes-and-waivers, accessed 17 August, 2021.
Australian Securities Exchange (ASX) 2014, *Corporate Governance Principles and Recommendations*, 3rd ed., ASX, Melbourne.
Baker, S. R., Bloom, N., Davis, S. J. and Terry, S. J. 2020, *Covid-induced economic uncertainty* (No. w26983). National Bureau of Economic Research.
Bardash, E. 2020, 'Derivative Suit Accuses Honeywell Directors of Losing Millions Through Asbestos Liability Misrepresentation', *New Jersey law Journal*, 226 (25): 22.
Barth, M. E. and McNichols, M. F. 1994. 'Estimation and market valuation of environmental liabilities relating to superfund sites', *Journal of Accounting Research*, 32: 177-209.
Bianchi, C. and Bianchi, T. 2014. 'Global mesothelioma epidemic: Trend and features', *Indian Journal of Occupational Environmental Medicine,* May-Aug; 18(2): 82–88.
Berkman, H., Jona, J., and Soderstrom, N. S. 2021. 'Firm-specific climate risk and market valuation', Available at SSRN 2775552.
Boisvert, E. 2020, 'Asbestos victim with mesothelioma from home renovations beats James Hardie liability appeal', *ABC News*, Available at: https://www.abc.net.au/news/2020-12-22/mesothelioma-sufferer-beats-james-hardie-appeal-payout-reduced/13006422, accessed 17 August, 2021.
Caldwell, F. 2017, 'Asbestos register for Queensland state schools updated', *Brisbane Times*, Available at: https://www.brisbanetimes.com.au/national/queensland/asbestos-register-for-queensland-state-schools-updated-20170111-gtpibi.html, accessed 17 August, 2021.
Canada Public Sector Accounting Board (CPSAB) 2018, *Asset Retirement Obligations: Basis for Conclusions*. Available at https://www.cpacanada.ca/en/business-and-accounting-resources/cpa-canada-handbook-the-standards-and-guidance-collection/cpa-canada-public-sector-accounting-handbook, accessed 17 August, 2021.
Commonwealth of Australia 2017, *Interim Report: Protecting Australians from the threat of asbestos*, Economics References Committee, Commonwealth of Australia, November.
Dietz, S., Bowen, A., Dixon, C. and Gradwell, P. 2016, '"Climate value at risk" of global financial assets', *Nature Climate Change,* 6(7): 676-79.
Donovan, S. and Picken, J. 2018, *Australia Stocks and Flows Model for Asbestos*, Available at: https://www.asbestossafety.gov.au/research-publications/australian-stocks-and-flows-model-asbestos-research-paper, accessed August 17, 2021
Doran, K. L., and Quinn, E. L. 2008. 'Climate change risk disclosure: A sector by sector analysis of SEC 10-K filings from 1995-2008', *North Carolina Journal of International Law & Commercial Regulation*, 34: 101-147.

D'Souza, J., Jacob, J. and Soderstrom, N. S. 2000, 'Nuclear decommissioning costs: The impact of recoverability risk on valuation', *Journal of Accounting and Economics*, 29(2): 207-230.
Engle, R. F., Giglio, S., Kelly, B., Lee, H., and Stroebel, J. 2020, 'Hedging climate change news', *The Review of Financial Studies*, 33(3): 1184-1216.
Ferguson, J. 2015, 'Asbestos checks on 5pc of imports', *The Australian,* March 11.
Fernandes, N. 2020, 'Economic effects of coronavirus outbreak (COVID-19) on the world economy', Available at: *https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3557504,* accessed 17 August, 2021.
Financial Accounting Standards Board (FASB), Accounting Standards Codification (ASC) 410 *Asset Retirement and Environmental Obligations*.
Financial Reporting Council (FRC) 2018, *Guidance on the Strategic Report*, FRC, Available at: https://www.frc.org.uk/getattachment/fb05dd7b-c76c-424e-9daf-4293c9fa2d6a/Guidance-on-the-Strategic-Report-31-7-18.pdf, accessed 17 August, 2021.
Financial Services Royal Commission (FSRC) 2019, *Final Report of the Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry*, Commonwealth Government of Australia, Available at: https://treasury.gov.au/publication/p2019-fsrc-final-report, accessed 17 August, 2021.
Global Reporting Initiative (GRI) 2016, *GRI 103: Management Approach*, GRI, Available at: https://www.globalreporting.org/standards/media/1038/gri-103-management-approach-2016.pdf, accessed August 17, 2021.
Global Reporting Initiative (GRI) 2018, *GRI 403: Occupational Health and Safety, Available at: https://www.globalreporting.org/standards/media/1910/gri-403-occupational-health-and-safety-2018.pdf, accessed August 17, 2021.*
Hamilton, V. 2018, 'Asbestos Related Disease facts and figures Australia 2018', Available at: https://gards.org/asbestos-related-disease-facts-and-figures-australia-2018/, accessed 17 August, 2021.
Härle, P., Havas, A. and Samandari, H. 2016, *The future of bank risk management*, McKinsey & Company, Available at: https://www.mckinsey.com/business-functions/risk/our-insights/the-future-of-bank-risk-management, accessed 17 August, 2021.
Health and Safety Executive (HSE) 2020, 'Asbestos-related disease statistics in Great Britain, 2020', Available at: https://www.hse.gov.uk/statistics/causdis/asbestos-related-disease.pdf, accessed 17 August, 2021.
Kagi, J. 2020, 'Secret plans reveal Royal Perth Hospital could be demolished and replaced with $2b facility', *ABC News*, Available at: https://www.abc.net.au/news/2020-08-09/royal-perth-hospital-redevelopment-plans-revealed/12526338, accessed 17 August, 2021.
Kember, L. 2018, 'Asbestos Exposure Risks Lurk in Australian Hospitals', *Asbestos.com*, Available at: https://www.asbestos.com/blog/2018/02/27/asbestos-australian-hospitals/, accessed 17 August, 2021.
La Trobe Valley Asbestos Taskforce, 2020, *Estimating the Volume of Residential Asbestos Remaining in the La Trobe Valley,* Available at: https://www.asbestostaskforce.net/publications/, accessed August 17, 2021.
Le Messurier, D. 2019, 'Asbestos checks in schools dropping', *Daily Telegraph*, October, 2.
Li, A., Michaelides, M., Rose, M. and Garg, M. 2019, 'Climate-related Risk and Financial Statements: Implications for Regulators, Preparers, Auditors and Users', *Australian Accounting Review*, 29(3): 599-605.
Mesothelioma Centre (MC) 2020, *Mesothelioma Death and Mortality Rate*, Available at: https://www.asbestos.com/mesothelioma/death-rate/, accessed 17 August, 2021.
Miihkinen, A. 2012. 'What drives quality of firm risk disclosure?: The impact of a national disclosure standard and reporting incentives under IFRS', *The International Journal of Accounting*, 47 (4):437-468.
Moerman, L. C. and van der Laan, S. L. 2015a, 'Silencing the noise: Asbestos liabilities, accounting and strategic bankruptcy', *Critical Perspectives on Accounting*, 27: 118-28.
Moerman, L. and van der Laan, S. 2015b, 'Toxic products and hazardous waste: The global asbestos issue', in Dr D Crowther & M. Azizul. Islam (eds.), *Sustainability after Rio* (pp. 103-120). Bingley, UK: Emerald Group Publishing Limited.
Northern Territory Government. 2017, 'Asbestos found at Old Darwin Hospital site', *Media Release* October 28, 2017, Available at: https://mediareleases.nt.gov.au/mediaRelease/23844, accessed 31 May, 2021.
PricewaterhouseCoopers (PwC) 2018, *Royal Perth Hospital Feasibility Study,* December.
Richardson, J. 2012, 'Asbestos checks for schools', *The Examiner*, January 11.
Soderstrom, N., Khan, A. and Solano, R. 2020, 'The management accounting (r)evolution in sustainability reporting, *China Management Accounting Review,* 13(3): 120-31

Taylor, M. 2019, 'Huge cost of James Hardie's asbestos legacy', *Daily Telegraph*, 11 March, Available at: https://global-factiva-com.eu1.proxy.openathens.net/redir/default.aspx?P=sa&NS=18&AID=9UNI026900&an=NLDLTW0020190311ef3b0035z&cat=a&ep=ASI, accessed 17 August, 2021.

Taylor-Lynch, Z. 2021, *Asbestos in the La Trobe Valley*, The Australian Asbestos Network, Available at: https://www.australianasbestosnetwork.org.au/asbestos-history/asbestos-la-trobe-valley/, accessed August 17, 2021.

Uribe, A. 2018, 'Australian social impact investment market hits $6 billion', *Financial Review*, Available at: https://www.afr.com/companies/financial-services/australian-social-impact-investment-market-hits-6-billion-20180718-h12tnx, accessed, 17 August, 2021.

Victorian School Building Authority (VSBA) 2020, 'Asbestos Safety Program', *Department of Education and Training*, Available at: https://www.schoolbuildings.vic.gov.au/Pages/About-Us.aspx, accessed 17 August, 2021.

Victorian School Building Authority (VSBA) 2019, 'Case Study: The largest ever school asbestos removal program in Victoria', *Department of Education and Training*, Available at: https://www.asbestossafety.gov.au/research-publications/case-study-victorian-government-worksafe-victoria-victorian-school-building, accessed: 17 August, 2021.

Work Health and Safety (WHS) 2016, *How to Manage and Control Asbestos in the Workplace: Code of Practice*, Commonwealth of Australia.

World Economic Forum 2013, *From the Margins to the Mainstream: Assessment of the Impact Investment Sector and Opportunities to Engage Mainstream Investors*, Available at: http://www3.weforum.org/docs/WEF_II_FromMarginsMainstream_Report_2013.pdf, accessed 17 August, 2021.

Young, S. 2014, 'The drivers, consequences and policy implications of non-GAAP earnings reporting'. *Accounting and Business Research,* 44(4), 444-465.

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[1] For example, a recent decision by the Full Court of the Supreme Court of South Australia extended James Hardie Industries legal liability to 'to all those who may come into contact' with its products (Boisvert 2020).

[2] https://www.cancer.org.au/cancer-information/causes-and-prevention/workplace-cancer/asbestos (accessed 17 August, 2021).

[3] There are extensive requirements for registering the presence of asbestos and for its safe handling and removal. They exist both at the Commonwealth and State levels. Refer to the Safe Work Australia *Code of Practice* February 2016, pages 48-49 for an Asbestos register template and example. Not surprisingly, the safe handling and removal of asbestos requires highly skilled, licensed professionals. In Victoria alone at the time of writing there are 55 'Class A' removalists licensed by WorkSafe Victoria (WorkSafe), able to conduct friable asbestos removals (http://www1.worksafe.vic.gov.au/vwa/serviceproviderdirec.nsf/Search?CreateDocument&List=Asbestos+-+Licensed+Removalists&ListType=Sub&Cat=Main+1&Start=1&Sort=Resource+Name, accessed 17 August, 2021).

[4] According to the AIHW, nearly 700 deaths occurred because of mesothelioma, with over 3,300 also dying from other asbestos-related illnesses (3,017 Asbestos Related Lung Cancer; 140 Asbestos Related Ovarian Cancers; 48 Laryngeal Cancers; 77 Asbestosis). For further reading, refer: AIHW 2019; Hamilton 2018.

[5] Key to this has been the establishment of the National Asbestos Exposure Register in June 2013 (https://www.asbestossafety.gov.au/national-asbestos-exposure-register/online , accessed 17 August, 2021).

[6] In recognition of the lack of general knowledge about asbestos risks and management, in 2013, the Australian government's Environmental Health Standing Committee issued guide for homeowners to help identifying and dealing with asbestos in homes (https://www1.health.gov.au/internet/publications/publishing.nsf/Content/CA2578620005D57ACA2579FB0008A15F/$File/asbestos-feb13.pdf , accessed 17 August, 2021)

[7]This, and other asbestos-related data are obtained from the NSW Government Schools Asbestos register (https://education.nsw.gov.au/about-us/strategies-and-reports/our-reports-and-reviews/schools-asbestos-register, accessed 17 August, 2021). In Victoria, a 2018 audit of public schools revealed that "most" contained asbestos in their buildings (https://www.asbestos.com/news/2018/01/08/australia-asbestos-schools-audit/, accessed 17 August, 2021, also VSBA 2020), while in Queensland schools the presence of asbestos is also significant (Caldwell 2017).

[8] The Australian Border Force provides further detail about the types of imported goods that are likely to contain asbestos, as well as a list of countries, not confined to the Asia Pacific region, from which goods containing asbestos have been detected in recent times (https://www.abf.gov.au/importing-exporting-and-manufacturing/prohibited-

goods/categories/asbestos, accessed 17 August, 2021). Importation of materials containing asbestos continues to be a major concern for the Australia Federal Government (e.g. Commonwealth of Australia 2017; Ferguson 2015).

[9] An asbestos register is not required to be prepared if the relevant building was constructed after 31 December 2003, if no asbestos has been identified in the workplace, and/or no asbestos is likely to be present at the workplace over time. (https://www.safeworkaustralia.gov.au/asbestos, accessed 17 August, 2021)

[10] The potential for lawsuits relating to asbestos exposure is considerable, with possible actions including personal injury and wrongful death. For further reading, see: https://www.asbestos.com/mesothelioma-lawyer/lawsuit/, accessed 17 August, 2021.

[11] Government authorities with responsibility for overseeing the management of asbestos in workplaces, typically develop Codes of Practice which contain specific rules to guide entities and their management. These authorities and the resulting Codes are typically State-based.

[12] For example, a change in relevant interest rates is an example of an event that will commonly trigger the need to re-measure the provision.

[13] Note the experiences of the long running saga of James Hardie Ltd and asbestos contamination. The measured amounts of estimated claims have had to be reconsidered many times, as recently as May 2018 (by a reported \$195m increase – *Sydney Morning Herald* 22 May, 2018), despite intense focus on those amounts in the past.

[14] Relevant accounting guidance covering the recognition and measurement of obligations for restoration, rehabilitation of assets includes AASB 116 *Property, Plant and Equipment*, AAB 137 *Provisions, Contingent Liabilities and Contingent Assets* and AASB Interpretation 1 *Changes in Existing Decommissioning, Restoration and Similar Liabilities*.

[15] For further reading, see AASB 137 *Provisions, Contingent Liabilities and Contingent Assets*, (Guidance) and IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*, para.53.

[16] For example, the VSBA report that in 2016, the Victorian State government spent \$200m on the largest ever programme to remove asbestos from Victoria's government schools (VSBA 2019). Various other governments are also funding and/or subsidising the cost of asbestos checks in schools (Richardson 2012). There are also challenges with respect to asbestos identified in public hospital buildings around the country (e.g. AMA WA 2020; Kagi 2020; Kember 2018; Northern Territory Government 2017).

[17] We acknowledge that recognition of an obligation associated with asbestos contamination may on occasion be subsumed within the general provision raised by an entity. To address this possibility, we also reviewed all reports for any indication that provisions or other liabilities included amounts relating to hazardous materials in their calculation.

[18] Another example is Contact Energy Ltd., which in its 2019 *Notes to the financial statements* include in its *Restoration and Environmental Rehabilitation Provision* an amount for the estimate of the '…expected costs … to remove asbestos from properties.' (Contact Energy 2019: Note E5)

[19] We identified several examples in public schools where significant levels of asbestos were found to be present, and no provision for the associated obligations for removal and restoration/rehabilitation of the associated assets was recognised.

[20] ASX Corporate Governance Principle 7 requires listed companies to "Recognise and manage risk ". A listed entity should establish a "sound risk management framework ", and periodically review the effectiveness of that framework (ASX 2014: 8). Also required by the ASX is that listed entities should disclose whether they have any material exposure to economic, environmental and social sustainability risks and, if so, how they manage or intend to manage those risks (ASX 2014: Recommendation 7.4). Material exposure is defined as: "a real possibility that the risk in question could substantively impact the listed entity's ability to create or preserve value for security holders over the short, medium or long term."

[21] https://www.fca.org.uk/publication/policy/ps20-17.pdf, accessed 1 May, 2021. Also, guidance on the preparation of Strategic Reports in the UK is provided by the UK Financial Reporting Council. Particularly, Section 5 of this guidance includes discussion of the concept of materiality, noting the importance of non-financial information as well as potential risks in making materiality judgements (FRC 2018).

[22] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014L0095, accessed 31 May, 2021.The general tenet of the Directive is to expand and improve environmental and social disclosures by entities, with a view to 'identifying sustainability risks and increasing investor and consumer trust' (Directive 2014/95/EU, p.2).

[23] https://www.sec.gov/rules/final/2020/33-10825.pdf, accessed 31 May, 2021.

[24] There are many examples of SASB 'standards that contain requirements relevant to asbestos exposure in various industries, including *Extractives and Minerals Processing*, *Infrastructure* and *Renewables*, in the context of specific topics such as *Air Quality* and *Waste and Hazardous Materials* Management.

[25] https://www.ifrs.org/projects/work-plan/sustainability-reporting/, accessed 17 August, 2021

[26] There are a number of examples of initiatives relating to the timely identification and/or removal of asbestos that have benefitted from innovative crowd-based funding in recent years. See for example: http://www.2masbestos.co.uk/crowd-funding-investment-bid-asbestos-detector, accessed 17 August, 2021.