

Is mandatory disclosure an effective panacea for buyer beware?

Effective
panacea for
buyer beware

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Received 24 July 2023
Revised 7 October 2023
Accepted 8 December 2023

Abstract

Purpose – The purpose of this paper is to examine whether mandatory disclosure of information accompanying the sale of real estate achieves its aim of informed purchasers.

Design/methodology/approach – Using a case study approach focused on mandatory disclosure in South Australia data was collected from interviews and focus groups with key personnel in the property industry involved in the production of information required to fulfil vendors' disclosure obligations.

Findings – The authors found that purchasers are ill-served by a long and complex form of mandatory disclosure with a short time frame that prevents the use of the information provided. Without good form design and increased digital affordances provided by the cadastral and conveyancing systems, mandatory disclosure is insufficient to ensure minimisation of information asymmetry between vendor and purchaser.

Originality/value – To the best of the authors' knowledge, this is the first Australian qualitative study that examines the utility of mandatory vendor disclosure in real estate sales and the first to consider the impact of the digitalisation of cadastral and conveyancing systems upon the efficacy of mandatory disclosure regimes.

Keywords Real estate purchase, Information asymmetry, Mandatory disclosure, Digitalisation, Design

Paper type Research paper

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The research outlined in this article was commissioned and funded by the Department of the South Australian Attorney-General. The authors also acknowledge the support provided by the South Australian Commissioner for Consumer and Business Affairs in identifying and facilitating access to the key institutions and organisations which participated in the research outlined in the article.



1. Introduction

For most people, the purchase of land is the most important investment they will make. Unsurprisingly, they want as much information as possible about the property they intend to purchase to ensure their investment is safe and prudent. Unfortunately, this imperative clashes with the traditional common law doctrine of “buyer beware” – a doctrine that saddles purchasers with the risk of buying a defective property.

There are good reasons why we should abandon buyer beware in real estate transactions. Purchasers will be less familiar with the property than vendors and will have limited opportunities to identify risk. Not only is the cost of finding and understanding information regarding the property’s condition and value high, but it is also complicated and time-consuming. Some information, such as knowledge of structural defects, may only be known by the vendor, and so the purchaser is highly dependent on the vendor’s honesty, failing which they must invest time and money in third-party investigations. This asymmetry of information places substantial financial risk on the buyer and makes purchasing property unattractive.

Consequently, during the course of the twentieth century many jurisdictions have introduced statutory vendor disclosure schemes to reverse buyer beware and remedy the information asymmetry involved in real estate purchase. This article outlines research undertaken in South Australia (SA) to examine the efficacy of these schemes in achieving this objective.

1.1 *The objectives of this research*

The article focuses on the disclosure of prescribed information by a vendor-completed form. We have termed this form of mandatory disclosure the “prescribed information model.” The article compares the prescribed information model with a stand-alone general duty against misleading conduct. Drawing upon qualitative research undertaken with real estate institutions and firms in SA, it examines how the prescribed information is conveyed and the timing of disclosure. While the research uses SA as an exemplar jurisdiction it also compares the SA regime with the regulatory framework in other jurisdictions.

Additionally, the article considers the implications arising from digitalisation of cadastral and conveyancing systems. We are of the view that digital conveyancing, along with the uptake of a multipurpose digital cadastre, will make much of the information currently subject to mandatory disclosure accessible at low cost to vendors and purchasers alike. By presenting data in a layered form that can be linked to user-friendly multimedia, digital technologies may also be used to support better purchaser decision-making. Considering this digitalisation, we argue that regulation requiring vendor provision of documents containing extensive information needs review.

More broadly, the article contributes to scholarly debate regarding the efficacy of mandatory disclosure regimes. It is generally believed that mandatory disclosure by vendors of land ensures a more efficient real estate market, encourages vendors to act diligently and honestly and leads to better purchasing decisions (Christensen *et al.*, 2007; Bar-Gill and Porat, 2020). There is empirical support for this view (Frondele *et al.*, 2020; Tandel *et al.*, 2022; Nanda and Ross, 2012; Walsh and Mui, 2017). However, there is also a substantial body of literature indicating that mandatory disclosure cannot achieve its regulatory goals if the intended beneficiaries of disclosure are unable to effectively use the information they are mandated to receive (Ben-Shahar and Schneider, 2014; Schwarcz, 2004; Loewenstein *et al.*, 2014; Weil *et al.*, 2013). Better purchasing decisions and a more efficient real estate market require timely and fit-for-purpose disclosure. Consequently, the primary

aim of this article is to explore whether current mandatory disclosure regulation meets its aim of supporting better purchasing decisions.

2. The prescribed information model of disclosure in real estate transactions

2.1 *The relative advantages and disadvantages of various mandatory disclosure models*

In this section, we discuss the prescribed information model of disclosure and how it differs from other approaches to mandatory disclosure, which are set out in [Table 1](#).

As [Table 1](#) highlights, the models of mandatory disclosure each have strengths and weaknesses. Provided it extends to any failure to disclose, a stand-alone duty not to mislead or deceive is likely to capture most information that a purchaser would consider material and, therefore, deter vendors and their agents from concealing known defects. Sections 18 and 30 *Australian Consumer Law* (ACL), which prohibit misleading and deceptive conduct and false and misleading representations in relation to the sale of land regarding title, price, location, land characteristics, land use and facilities, are examples of such a duty as are Regulation 6 United Kingdom's *Consumer Protection from Unfair Trading Regulations*, Article 444 *German Civil Code*, Article 19a *Sweden's Land Code* and Article 7.17 *Dutch Civil Code*.

As well as applying false representation about a property [1], liability under these provisions extends to maintaining silence regarding the property's defects. Examples include the following:

- Failure to disclose a road widening proposal and legal proceedings instituted by the tenant in relation to a contract for the sale of a service station and convenience store breaches the then-equivalent provisions of the Australian Consumer Law [2].
- Failure to disclose suspicion of land contamination due to past usage breaches Article 444 *German Civil Code* [3].
- Failure to inform the purchaser that a building was not suitable for its intended use as a restaurant breaches Article 7.17 *Dutch Civil Code* [4].

Nonetheless, in Australia, one of the primary limitations of Sections 18 and 30 ACL is that they only apply where the impugned conduct occurs in trade and commerce. Therefore, while agents acting in trade in commerce can be liable, vendors of residential land will generally be excluded from liability [5]. Moreover, a failure to stipulate what should be disclosed makes it hard for the vendor to ascertain what might be characterised as material, and without indicative prompting, it becomes equally hard for the purchaser to communicate what they regard as material to the vendor. As outlined, this is likely to lead to under-compliance and avoidable disputation. These limitations are, therefore, significant reasons why statutory disclosure regimes were established in several Australian states.

The lack of specificity inherent in a stand-alone duty not to mislead or deceive can be mitigated by providing "soft law" guidelines to vendors and their agents. Although soft law lacks independent legal effect, it is cheaper to generate than regulation, is more adaptable to changing industry needs and may be more flexible in application ([Marchant et al., 2020](#)). However, when dominated by industry interests, soft law's legitimacy may be questioned ([Hagemann et al., 2018](#)), and due to its non-binding nature, it can be difficult to determine whether appropriate levels of compliance have been achieved.

Soft law guidelines may be produced privately or publicly. The Home Buying and Selling Group (HBSG), a mix of representatives from the finance, legal and property sectors in the UK, produces privately generated guidance. In 2021, HBSG introduced an online system for standardising disclosure in residential property sales known as the Buying and Selling Property Information (BASPI) data set. The BASPI aims to provide all information that a

Table 1.
Models of mandatory disclosure in real estate transactions

Model	Advantages	Disadvantages
General duty not to mislead or deceive	A general duty of disclosure can be tailored by the vendor and its agents towards the individual purchaser's informational needs without the necessity of <i>ex ante</i> stipulation, which is likely to over- or under-regulate what must be disclosed	<ul style="list-style-type: none"> • Uncertainty regarding when disclosure or omissions of disclosure are misleading or deceptive can impede compliance and result in increased disputation • A general duty not to mislead or deceive does not regulate the mode or timing of disclosure. The mode and timing of disclosure may be as significant as the contents of disclosure to the informational needs of purchasers
Duty to supply specific documentation (<i>e.g. copies of certificates of title, planning consents, details of utilities infrastructure, strata scheme documents, regulatory notices, etc.</i>)	Imposing a duty on a vendor to provide the purchaser with stipulated documentation ensures that the purchaser is aware of key matters affecting the property. Requiring the original documentation to be provided rather than a vendor-completed form also ensures that the relevant information is not "lost in translation"	<ul style="list-style-type: none"> • This duty is heavily reliant upon the accuracy and comprehensiveness of information contained in the stipulated documentation. However, material information related to the property's condition (<i>e.g.</i>, the structural integrity of buildings) may not be included in the documentation • To mitigate against under-inclusiveness, in some jurisdictions such as the Australian State of New South Wales, the duty to supply specific documentation is supplemented with mandatory warranties related to its accuracy – <i>e.g.</i> that there are no other proprietary interests other than what is contained in the certificate of title, that all buildings on the land comply with relevant planning consents, that the land is not subject to adverse possession, <i>etc.</i>
Duty to supply prescribed information (the "prescribed information model")	Prescribing what must be disclosed makes vendor obligations clear and is, therefore, likely to reduce future disputation. It also provides guidance to purchasers regarding the type of information that should be considered when making purchasing decisions. Purchasers (especially one-off residential purchasers) may not otherwise know what information could affect the property's amenity or value	<ul style="list-style-type: none"> • The prescribed information may be over- or under-inclusive of the informational needs of purchasers • Extensive disclosure may be counterproductive if purchasers find it difficult to read and comprehend the information provided. This can be problematic if the cost of producing the information is high – suggesting that the costs of imposing an obligation to produce an extensive array of prescribed information may outweigh the informational benefits to purchasers

Source: Created by authors

home purchaser might need and to enable vendors' agents to comply with the *Consumer Protection from Unfair Trading Regulations*. The data set is pre-populated with public data, completed with vendor-supplied information, and then made publicly available at the point of marketing.

By contrast, in addition to mandating disclosure of certain information and documentation [6], the Australian State of Victoria has established public soft law guidance for disclosure, which is enforceable pursuant to ss 12 (d) and 12A *Sale of Land Act 1962* (Vic). These publicly produced guidelines can thus overcome issues related to legitimacy and enforceability.

2.2 South Australia as a case study in assessing the efficacy of prescribed information models

Under s 7 *Land and Business (Sale and Conveyancing) Act 1994* (SA) stipulated particulars must be provided to the purchaser by the vendor at least 10 clear days before settlement by both residential and non-residential vendors. If the property is sold by auction, the information must be made available at least three days beforehand. The prescribed contents for the SA form are set out in Schedule 1, *Land and Business (Sale and Conveyancing) Regulations 2010* (SA). Matters that must be disclosed include the following:

- encumbrances on the land;
- leases;
- caveats and liens;
- general heritage orders;
- development matters;
- taxes;
- regulatory orders;
- safety notices;
- Aboriginal heritage issues;
- development plans;
- land management agreements;
- environmental authorisations;
- fire safety notices;
- enforcement orders and proceedings;
- soil contamination;
- site remediation orders;
- improvement notices;
- orders governing fruit and plant protection;
- highways access;
- native vegetation approvals;
- water restriction;
- public health matters;
- building insurance;
- asbestos in workplaces; and
- the use of flammable cladding.

Where the purchase involves community/strata title, particulars related to contributions must be disclosed, as well as copies of the minutes of body corporate meetings for the last two years, statements of account, policies of insurance and the community/strata constitution.

The current form is 60 pages long and covers around 100 data points. The material is presented in text form and classified according to a legal source of origin, for example, whether the relevant information arises under the *Planning, Development and Infrastructure Act 2016* (SA) or the *Native Vegetation Act 1991* (SA). Most of the data points require a tick the box “yes” or “no” answer as to whether the items are applicable. Consequently, disclosure by the SA form is essentially a “red-flag.” Upon sighting a red flag, purchasers must still undertake further inquiries, for example, regarding the impact of environmental contamination that may have been disclosed by the vendor.

3. Research methodology

To understand the operation of the SA regime, data was collected using focus groups, individual interviews and document analysis.

3.1 Focus groups

We undertook seven focus groups in person or online via Zoom with stakeholders including members of the Local Government Association (23 persons), staff from the Registrar-General’s Office (seven persons) and Land Use and Planning Services (four persons), representatives from the Law Society of SA (four persons) and members of the Australian Institute of Conveyancers: SA Division (7–10 persons × 3). Focus groups lasted between one and one and a half hours. Each of the focus groups was recorded and transcribed or summarised in writing.

3.2 Interviews

In addition, nine interviews were undertaken in person or via Zoom with representatives from firms involved in completing Form 1s, staff from the Real Estate Institute of SA (two persons) and Land Services SA (three persons), a representative from the Strata Community Association and with representatives from other South Australian government agencies. Interviews lasted approximately 1 h. Each of the interviews was recorded and transcribed.

3.3 Document analysis

Analysis of internal documents provided by Consumer and Business Services, the Registrar-General, Land Services SA and the Australian Institute of Conveyancers, as well as copies of correspondence from individual conveyancers, contributed to the understanding of the operation of the SA regime. A comprehensive literature review to understand issues that are recognised as being matters of concern for vendor disclosure schemes was also undertaken.

3.4 Thematic analysis

Using NVIVO 2020 (Jackson and Bazeley, 2019), the transcripts and summary notes produced by the researchers were subject to thematic analysis. This analysis used a four-step process:

- (1) Each of the researchers read sample transcripts, and themes relevant to the research objectives and common to informants were identified and defined.

- (2) Using the identified themes, the transcripts were coded in NVIVO 2020 by four of the researchers to identify commonalities and differences in views across stakeholder cohorts.
- (3) Inter-rater reliability testing was undertaken to validate the coding.
- (4) The themes were refined and consolidated.

From the range of themes considered, six primary themes were identified. These themes comprising of informational purpose, legal issues, function, production processes, nature of disclosure and digital integration.

4. Research findings

4.1 Informational purpose

Reflecting assumptions regarding the well-informed rational consumer (Ulen, 1999), the prescribed information model emerged in SA in the 1970s, influenced by law and economics philosophy that diagnosed market failure as primarily a problem of information asymmetry (Schwartz, 1995; Akerlof, 1970). First enacted by s 90 *Land and Business Agents Act 1973* (SA), initially, SA's provisions focussed upon defects in title. According to the Attorney-General of the time, the purpose was "to protect the purchaser against the danger of paying for land which is subject to encumbrances or restrictions which affect its value and utilities [7]."

Following its initial implementation, the scope of SA's prescribed information expanded over time. The expansion was driven by a "more is better" approach, which assumes that the more information provided to purchasers, the better their purchasing decisions will be (Oehler and Wendt, 2017). However, rather than operating as a mechanism of consumer protection, stakeholders told us that the original informational rationale of SA's mandatory disclosure regime had been sublimated by vendor risk avoidance and formal compliance modality.

Following receipt of Form 1, purchasers are given a two-day cooling-off period [8]. Once the cooling-off period expires, they are obliged to proceed with the contract of purchase. If a purchaser can show that the Form 1 they received did not contain the prescribed information, the purchaser can rescind the contract and negotiate a new contract [9].

According to stakeholders, most purchasers did not read the form provided to them. Of those who read the form, most did not understand its contents. Instead, purchasers usually paid scant attention to the form until they wanted to renegotiate or exit the contract of purchase. It was only at that point, well after the expiration of the cooling-off period, that purchasers might scour the form for any defect to leverage a concession from the vendor. As one of our stakeholders stated, this meant:

[. . .] there's a paranoia about making the slightest mistake, therefore rendering the contract void or at the option of the purchaser to request a new Form One so that they can have the opportunity to cool off [. . .].

And so:

I think that's what leads to the oversupply of information that's given to the purchaser because people cover themselves. Conveyancers and solicitors cover themselves by including everything conceivable to make sure that they don't miss a slight little thing.

4.1.1 The rise of specialist providers. One striking effect of this focus on vendor risk and compliance has been the growth of specialist Form 1 providers. When the form was introduced in SA, real estate agents prepared it on behalf of the vendor. However, as the form became more complex and the consequences of a defective form were made clear [10],

real estate agents often engaged conveyancers to prepare the form and check its information. Subsequently, specialised firms which provide form preparation and checking have emerged. This outsourcing of Form 1 preparation has increased the transactional cost of property sale, which is particularly concerning given our findings about the minimal informational usage that Form 1 appears to offer.

4.2 Legal issues

For many stakeholders, the issue of who was required to verify the information contained in Form 1 and take legal responsibility for its accuracy was a thorny one. Most agreed that lay vendors were unable to complete Form 1 themselves. They also told us that even when the form was completed on their behalf, vendors usually did not understand the form. Yet under s 9 *Land and Business (Sale and Conveyancing) Act 1994* (SA), either the vendor or the vendor's agent must verify the form's contents.

Stakeholders told us that although legal responsibility for the form remains with the vendor and its agents, in fact, many real estate agents delegate the act of verification to conveyancers or Form 1 providers [11]. Consequently, we found a gap between legal responsibility for the accuracy of the form and the practical ability of those with legal responsibility to discharge it effectively. As the form has increased in both scope and complexity, this gap has become more problematic.

Another legal issue raised by our stakeholders related to whether it would be better to embed the prescribed contents of the form into regulation. Lawyers, Form 1 companies and conveyancers wanted to embed form requirements directly into regulation. They were of the view that guidelines would generate more disputation and because of the necessity for industry consultation, they were not convinced that guidelines would be less expensive than regulation to produce. Contrastingly, institutional stakeholders favoured the flexibility of regulation enforcing publicly generated guidelines that could be reviewed and adapted in consultation with consumers and the property industry as required.

The materiality of the breach was another issue of concern. Conveyancers, particularly, believed that purchasers should not be able to use trivial breaches of the mandatory disclosure obligation as a basis for rescinding their contract of purchase. In their view, purchasers' rights should be limited to those found in s 15 *Land and Business (Sale and Conveyancing) Act 1994* (SA), which provides that aggrieved purchasers can apply to a court for redress when they have suffered prejudice due to a failure to disclose. However, as there was no data indicating how many purchasers leveraged Form 1 because of non-material breach and a dearth of case law, whilst acknowledging that the focus on risk and compliance permeated conveyancing practice, we were unable to determine the actual extent to which vendors were disadvantaged. It was also unclear whether requiring the initiation of litigation to remedy material breach might undermine compliance as many purchasers would be unable to afford expensive legal proceedings.

4.3 Function

As the Introduction states, the primary function of SA's Form 1 is to enable better purchasing decisions. However, our stakeholders believed that this function was subverted by over inclusion of non-material information and under-inclusion material information. This is partly driven to service both residential and non-residential purchases. Accordingly, insofar as residential purchasers are concerned, there is much information of value that the form fails to address, including subsidence, the presence of salt damp or mould, compliance with swimming pool regulation, fire alarm compliance and natural hazards risk profiles. Encroachment on the property (unrelated to easements) was cited as another missing matter to us.

Consistent with the findings of an earlier study (Johnston and Leshinsky, 2018), lawyers and community title stakeholders were especially concerned by the lack of information regarding the purchase of residential property to be built in the future, i.e. off-the-plan purchase. Risks that naïve residential purchasers may not be aware of include risks that:

- the built property will not meet expectations;
- the built property will have unanticipated flaws such as insufficient insulation against heat or cold;
- the development will not proceed or that it will be substantially delayed; and
- governance and management fee structures will not be put in place until the building is complete.

By contrast with the under-inclusion of information about the property and its fixtures, according to most of our stakeholders, much of the information sought from vendors was inapplicable or irrelevant to purchaser decision-making. As one conveyancer mentioned:

Half the items I've never used and I've done 23,000 Form One's in the last 10 years so if I haven't used them, and I've done them all around the state, I doubt many other people have used half these items, either.

4.4 Production processes

The fourth theme that emerged from the research related to the array of information sources that needed to be drawn upon by vendors when completing Form 1. This issue is illustrated in Table 2, which sets out the relevant data sources required by the form consolidated by the responsible agency or utility.

The above excludes the additional information required where the purchase involves strata and community title [12].

In addition, stakeholders told us that the accessibility and integrity of some data sources were problematic. They found obtaining data from local government the most troublesome. Notably, there are 68 local government councils in SA, and each has a distinctive means of providing information that Form 1 requires [13]. For example, some councils provide information regarding structural approvals and ongoing conditions relevant to those structures, whereas others do not. Furthermore, each council may have different ways of structuring or classifying their data, and each may have different levels of automation in place. Consequently, particularly in regional areas, sometimes data must be sourced in hard copy from off-site data archives. This is difficult for vendors and, according to local government stakeholders, is also problematic for the councils as they lack the resources to maintain these databases and the staff necessary to extract the data when required.

4.5 Nature of disclosure – length, format and timing

As presaged above, due to its length, poor comprehensibility and the timing of its delivery, stakeholders involved in advising vendors and purchasers told us that purchasers rarely scrutinise Form 1 carefully. As one stakeholder stated:

People don't tend to read documents because they're not encouraged to read them and they don't understand why they need them. They won't read their contracts [...] they don't read their bank mortgages. They'll read a brochure the real estate agent gives them but they won't do a Form One.

Thus, the format and timing of the disclosure were seen to undermine the objectives of the regime. In the following part, we unpack each of these aspects.

Data source	Frequency	Proportion (%)	
Vendor	576	40.82	
Local councils	194	13.75	
Dept of Environment and Water	106	7.51	
Regional Landscape Board	104	7.37	
Attorney-General's Dept	104	7.37	(n = 6)
Land Services SA	74	5.24	82.06
Environment Protection Agency (SA)	59	4.18	17.94
Dept of Health and Wellbeing	34	2.41	(n = 23)
SA Water	22	1.56	
Community Corporation	17	1.20	
Dept of Premier and Cabinet	17	1.20	
Strata Corporation	14	0.99	
Dept of Primary Industries and Regions	13	0.92	
Housing SA	13	0.92	
Dept of Aboriginal Affairs	11	0.78	
Dept of Energy and Mining	11	0.78	
Dept of Treasury and Finance	6	0.43	
Dept of Infrastructure and Transport	6	0.43	
Alano Utilities Pty Ltd	5	0.35	
Lightsview Re-Water Supply Co P/L	5	0.35	
Phylloxera and Grape Industry Board	5	0.35	
Robusto Investments Pty Ltd	5	0.35	
Tenant	5	0.35	
Qualco Sunlands Ground Water C/Trust	3	0.21	
Central Irrigation Trust	1	0.07	
ElectraNet	1	0.07	
Epic Energy	1	0.07	
SA Power Networks	1	0.07	
South East Australia Gas Pty Ltd	1	0.07	

Table 2.
Form fields by data
source (consolidated)

Source: Created by authors

4.5.1 Length. It is commonly accepted that the successful operation of any disclosure regime will be limited where too much information is provided to the recipient. This is referred to as “information overload” (Oehler and Wendt, 2017; Ripken, 2006; Paredes, 2003; Schulz, 2014). As a result of information overload, many consumers will avoid reading long disclosure documents or skip over large parts of them, instead relying on heuristic judgments that require less time and cognitive processing (Ben-Shahar 2009). The Australian Securities and Investment Commission reports, for example, that only 20% of users read financial product disclosure documents (Australian Securities and Investments Commission and Dutch Authority for the Financial Markets, 2019).

Information overload becomes more challenging as the extent and detail of information provided to consumers grows and is therefore highly pertinent to the vendor disclosure regime in SA. Yet during our stakeholder consultations, several stakeholders told us that when completing Form 1s, parties acting for the vendor typically attached lengthy documentation to help explain how a matter might affect the property. This meant that in addition to the 60 pages of Form 1, purchasers often received many more pages of material to comprehend within a short time frame.

4.5.2 Format. Conveyancers and Form 1 providers told us that residential purchasers did not fully comprehend the implications of the information they were given for the

amenity and value of the property. According to one of these stakeholders: “you [...] had all this information given to you, it still needs a conveyancer or somebody to interpret for you.” Another noted: “And to my mind, purchasers . . . can’t read and understand the information in the form because it’s so convoluted.” In part, these problems derive from the way the information is conveyed as a set of tick box flags in a lengthy hard copy form and in part from classification of the information according to named legislation. Lay one-time purchasers are unlikely to be aware of the significance that flagging legislation may have for the value and amenity of the land.

4.5.3 Timing. A third issue was the timing of disclosure. Under the *Land and Business (Sale and Conveyancing) Act 1994* (SA) except for sales by auction, vendors do not need to provide the form to purchasers until 10 days before settlement. To align the service of the form with cooling off rights, most SA purchasers, therefore, receive the form at the time they sign their contract of purchase. If the sale is by auction, the form must be available three days beforehand, but there is no cooling-off period post-auction. This poses challenges because the information cannot be easily digested and assessed within the short two-day cooling-off period or the short time available before the auction.

Several studies show that delaying disclosure until after contract execution or just before auction substantially diminishes the utility of disclosure (Stern, 2005; Moore *et al.*, 1992). By that stage, purchasers have already made a commitment to proceed with their purchase and are unlikely to dispassionately assess what might be disclosed. As a result, and consistent with practice applicable in the UK, most stakeholders we spoke with favoured making information about the property available as soon as the property was placed on the market.

4.6 Digital integration

Several stakeholders emphasised the importance of the digitalisation of geospatial information and information related to legal rights attached to land that has occurred over the past decade and which is continuing to advance. This not only provides consumers with easy-to-use GPS navigation and information about local conditions (e.g. the weather or traffic congestion), but it also creates opportunities for exploiting cadastral, title, land use and structural information that were not previously available when records were held in hard copy in various free-standing data warehouses. The European Land Information Service [14], which provides global access to the online property registration, European authorities such as the Kadaster [15] in The Netherlands and Sweden’s Landmäteriet [16] exemplify these developments. The Landmäteriet and the Kadaster provide mapping, boundary, registration, information about restrictions on land use, information about legal interests in land (e.g. leaseholds and mortgages) and allied geodata services which are primarily used by land agents, lenders and conveyancers. The Kadaster also provides purchase price information, allowing purchasers to compare prices for homes sold in the same area and information regarding pipes and cabling that may affect excavation on the property.

In SA these digital services are more fragmented and less developed. SA has established an online South Australian Property and Planning Atlas (SAPPA) [17]. Managed by the government agency, Planning and Law Use Services, the SAPPA is a publicly accessible, map-based online portal that displays planning spatial layers and land ownership information.

The SAPPA is complemented by the South Australian Integrated Land Information System (SAILIS) owned and operated by Land Services SA, a private enterprise appointed by the SA government as the exclusive provider of a range of transactional land services and property valuation services. Through SAILIS, Land Services SA also offers a Property Interest Report (PIR), a pre-populated template that collates information from the Land Services SA land registry and selects government agencies. It includes the following:

- information related to title and valuation;
- any registered or unregistered documents lodged within the last 90 days on the property;
- a copy of a register search for the certificate of title; and
- government interests associated with the land.

When the vendor's agents order the PIR, SAILIS automatically notifies other government bodies and councils which hold further information relevant to the property and these bodies then directly provide the vendor with information that can be used to complete the mandatory disclosure form.

Simultaneously, in SA, e-conveyancing became mandatory for almost all land dealings from August 2020. However, unlike Landmäteriet in Sweden and the Kadaster in The Netherlands, the SAPP, SAILIS and e-conveyancing systems have not yet been fully integrated. Consequently, we estimate that despite the existence of the PIR, the vendor is still required to complete 52% of other information fields in Form 1 to fulfil disclosure requirements.

The future vision of Australian policymakers is to create a fully integrated "cadastral system that enables people to readily and confidently identify the location and extent of all rights, restrictions and responsibilities related to land and real property." [ICSM \(2015\)](#) This vision encapsulates a system that will provide access to a dynamic, three-dimensional digital representation of the spatial environment, fully integrated with all legal and social interests affecting tenure, value, development and use. It is also anticipated that this future cadastral engine will use application programming interfaces to link to financial institutions, local councils, utilities, state revenue bodies, developers, mortgage brokers and real estate agents. If implemented, such linking will provide vendors and purchasers with a seamless conveyancing experience at a low cost. Along the way, the foreshadowed integration and linking will capture land asset histories.

Making land asset history accessible online clearly has the potential to affect the utility of current Form 1 disclosure, which assumes the manual production of a paper-based form physically served on the purchaser or provided as a downloadable document. However, only a few stakeholders believed that progressive digitalisation and open data might eliminate the need for most mandatory disclosure. Conveyancers, real estate agents and Form 1 service providers invested in existing Form 1 production were often critical of the ability of current digital systems to provide accurate information due to lagging data input and noted there were still substantial amounts of non-digitised material required to fulfil mandatory disclosure obligations – particularly older data held by local councils and other government agencies. These stakeholders were also sceptical of public and private bodies' ability to fund the investment required to realise the aspiration of full digital capture of cadastral, title and conveyancing data and to manage cybersecurity and privacy issues.

However, if we assume that current problems associated with historical and lagging data are transitory, over time, the argument that vendors should be obliged to provide a comprehensive account of information available in open databases becomes less compelling. As one of our stakeholders stated:

(W)hy do you have a Form One in the first place if all the information is readily available through something like Searchlight? Why create an obligation on one party to provide it?

5. Discussion: implications of findings for mandatory disclosure schemes

Despite the challenges regarding SA's vendor disclosure regime, almost all stakeholders favoured retaining the prescribed information model. Their reasons reflect the advantages of

clarity, minimisation of disputation and the focus of purchaser attention on matters that otherwise might not have been considered. This starting point is consistent with quantitative studies examining the efficacy of prescribed information regimes including a study conducted by Moore and Smolden (2000), which involved a survey of two samples of real estate purchasers in 1990 ($n = 110$) and 1996 ($n = 96$). Most of the respondent buyers in the Moore and Smolden study, who received their vendor statement prior to commencing negotiations to purchase the property, felt that the items disclosed allowed them to make more informed purchasing decisions. In other studies, regression analysis was used to demonstrate a link between disclosures related to environmental hazard or environmental efficiencies and their impact on housing prices (Pope, 2008; Hino and Burke, 2020; Myers *et al.*, 2022).

Nonetheless, our research found stakeholder support for paring back the contents of the current form to reduce information overload and for customising the form for different categories of purchaser. Given the vast amount of publicly accessible information now found in digital cadastral and planning online portals, much of the information currently contained in SA's form could be downloaded and attached with a certification from the government or private organisation responsible for maintaining the relevant database, thus obviating the need for vendor verification. Instead, the form could be reduced and confined to non-publicly available matters exclusively known (or ought to be known) by the vendor and likely to be material to purchasers, such as non-visible structural defects, land encroachment not visible on the title (e.g. arising from wrongly placed fencing), the presence of site contaminants not reported to the Environmental Protection Agency, infestation, the management or disposal of waste materials and resources (e.g. greywater) on the land, unregistered easements, unconnected services e.g. sewage or broadband networks and neighbourhood issues which may not be immediately apparent upon inspection (e.g. nearby sinkholes). To reduce uncertainty regarding materiality, we would also recommend that enforceable guidance as to the form's contents be provided by a public agency in much the same way as currently applies in the Australian State of Victoria. If the prescribed form was substantially reduced in content to focus upon information known to the vendor, the costs of production would be substantially reduced and the vendor's legal obligation and ability to verify the disclosed information would be better aligned.

Separating the material known exclusively to the vendor and providing publicly certified material from online databases would also make the material easier for purchasers to comprehend. While it may be simpler to provide purchasers with a single form because this results in a lengthy document, our stakeholders assert that many purchasers will not read it. In other words, where mandatory disclosure schemes are concerned, more is not better, and it is preferable to present material in a series of smaller, accessible chunks.

Most stakeholders were in favour of customising disclosure according to the following categories:

- commercial;
- residential;
- strata/community title; and
- off-the-plan.

Ideally, these different categories would inform customised development of the content of our recommended public guidelines and, thus, the questions and information accompanying the proposed streamlined form.

Our research findings also raise good lessons regarding form presentation both for the vendor when completing the form and for the purchaser when reading the form's contents. Converting to an online form is likely to enable the pre-population of structured data and

incorporation of interactive explanations for vendors unfamiliar with the nature of their disclosure obligations. The interactive online form guide produced by US firm, Sellers Shield, incorporating definitions, advice and examples provides an illustration of the possibilities afforded by moving to a digital form [18].

Given the complex nature of the information provided, it is necessary from the purchaser's perspective to provide signals and contextual information to guide understanding of the form overall with clearly structured and easily accessible information. It is possible to do this by presenting disclosures in categories that are less reliant on legal source of origin, more meaningful to users, and more visually salient (Zoubir *et al.*, 2022; Passera and Haapio, 2013; Berger-Walliser *et al.*, 2017; Jenkins, 2011). The visual design of the document can also be enhanced by the use of labels, coloured tables, icons and images (Hogarth and Merry, 2011; Jenkins, 2011).

Digitising the form will allow greater responsive to user needs by providing access to different levels of increasing detail through hyperlinks. The inclusion of more advanced navigation and searchability tools could also improve users' ability to find material of interest to them. Studies of the utility of information delivery have shown that it increases when users are able to choose and adjust relevant input parameters and display different results (Gunaratne and Nov, 2017). Allowing user interaction with complex material has also been shown to increase understanding and lead to better decision-making, especially among novice non-repeat users (Gunaratne and Nov, 2017).

Existing technology already has the potential to improve accessibility to information, to make the information more searchable and to simplify the user experience, for example, by enhancing document navigation or highlighting specified information. Additionally, as Houde *et al.* (2022) argue, emerging and evolving generative artificial intelligence (AI) technologies present opportunities to assist in the process of modernising legacy systems, such as those found in the property domain, to enhance user experience. Other contemporary and emerging technologies offer the potential for improved access to important visual data, including three-dimensional modelling, which could be applied to land and structures or offer further opportunities to enhance information retrieval and accessibility to users (Barzegar *et al.*, 2020).

However, the risks associated with the documented flaws in these technologies must also be considered and accounted for if, or when, they are adopted in cadastral and conveyancing systems. In relation to AI tools, chief amongst those risks are the tendency of large language models (LLMs) to hallucinate (Bender *et al.*, 2021; Fischer, 2023) and the lack of explainability inherent in all machine learning systems (Minsky, 1991), not just LLMs. Given these risks, at this stage, it may be better for individual purchasers and vendors to decide whether they will use these tools and leave their development to the market (as value-added services) rather than build them into mandatory-use centralised systems.

Our research also produced useful insights about the importance of the timing of disclosure. Studies agree that mandatory disclosure is best fulfilled before the time the purchaser makes an offer to purchase real estate, securities or other assets (Stern, 2005; Edwards, 2004; Kiattikulwattana and Pattanapanyasat, 2023). Permitting disclosure after the contract has been concluded, as is the case in SA, requires the purchaser to review a decision already made, whereas insights from behavioural law and economics show that once a contract is formed, purchasers will view their decision as a "done deal." Consequently, purchasers committed to the purchase of a property are unlikely to search for information that may disconfirm their beliefs, resulting in an unwillingness to diverge from their initial contractual choice despite the availability of information indicating their choices

will be more costly than initially realised (Zamir and Teichman, 2018; Hoffman and Wilkinson-Ryan, 2013; Stern *et al.*, 2020).

Exacerbating the difficulty of disclosure timing, in SA a purchaser's review following disclosure can be undertaken only in a very small window of time before the expiration of cooling-off rights or when bidding via an auction commences. After that time, the purchaser's commitment is sealed (unless the purchaser can establish defective disclosure). Arguably two, three or even five days is insufficient to read, understand and seek further advice in response to information red-flagged by the lengthy disclosure of arcane material, particularly when purchasers are simultaneously reviewing complex contractual terms and liaising with financial institutions to fund their purchase.

Generally, therefore, mandatory disclosure should occur when the beneficiary of the disclosure is best able to use the information. By contrast with the SA approach, which fails this criterion, the approach in the UK, where information is provided to purchasers and lenders when the property is first put on the market using the BASPI form developed by the HBSG, provides an exemplar. This approach to disclosure timing could mitigate the psychological impact of sunk costs and anchoring which are baked into the SA regime (Stern *et al.*, 2020).

When it was developed, the BASPI aimed to assist vendors by accelerating the property purchasing process and reducing the number of cancelled sales because material facts about the property were not disclosed too late in that process (Fouzder, 2023). However, while its primary aim was to advance the interests of vendors, purchasers also benefitted by having information available when they were considering making a purchase offer or anticipating bidding at auction. The availability of information when the property is first put on the market also provides more time to undertake investigations raised by the disclosed information. Providing complex information in "just in time" tranches thus reduces the likelihood that purchasers will be unable to cognitively process the information they receive as part of the mandatory disclosure process.

6. Conclusion

This article's title asked the question: Is mandatory disclosure an effective panacea for buyer beware? Despite the best of policy intentions, the answer in SA appears to be no. As we have found, this has not been caused by the adoption of the prescribed information model but by a failure to take heed of good form design principles to ensure that the information provided is delivered at the most useful time for purchaser decision-making, and the failure to take advantage of the increasing digitisation and accessibility of cadastral, title and land transaction information.

Our research shows that the availability of a user-friendly form provided to purchasers at the right time would increase the likelihood that the rationale for mandatory disclosure would be met. Conversely, requiring vendors to produce a lengthy form comprised of ticked boxes related to government interest that can only be read and absorbed in a limited time frame may cause vendors and those involved in form production to focus on risk and compliance, but it is unlikely to assist purchasers.

6.1 Implications for practice

The practical implications of our research are that policy and lawmakers should consider introducing an obligation of disclosure once real property is placed on the market, limiting the vendor's disclosure obligations to what might be material to purchasers and what the vendor knows about the property they are selling and providing enforceable public guidance regarding what might be material disclosure for particular classes of purchaser.

Digital technologies, both existing and emerging, may offer the opportunity to provide the means to meet such obligations while also delivering improvements to user access and user experience.

6.2 Limitations and future research

We acknowledge that assessing mandatory disclosure through selective, qualitative means largely focussed on industry and institutional stakeholders within a relatively small jurisdiction such as SA may not present a complete picture of the prescribed information model's efficacy, thus providing scope for future research with more research participants including property purchasers and vendors using broad-based surveys as well as quantitative data analysis of the kind used by [Fonseka et al. \(2020\)](#) and [Frondele et al. \(2020\)](#) who respectively examined the impact of environmental information disclosure on the cost of debt and the effect of energy rating disclosure on housing prices.

The potential to deliver some of the changes required to allow property disclosure systems to be simplified and modernised would also benefit from additional user research, including the testing of system changes. Where archival material is digitised, there are opportunities to undertake research to test how emerging technologies could enhance user experience.

Future research could also explore the law, regulation and institutional arrangements affecting disclosure of information in other jurisdictions, particularly those which do not adopt the prescribed information model but where digitalisation of the cadastral and conveyancing systems are more integrated and advanced than in SA such as the Netherlands and Sweden.

Notes

1. See, e.g. *Lord Buddha Pty Ltd (in liq) v Harpur* (2013) 41 VR 159 – misleading and deceptive conduct established where undeveloped land was sold for the purpose of constructing a centre to be occupied by tenants already lined up by the vendor, whereas the land was not ready for development and there were no tenants seeking occupation.
2. *CH Real Estate Pty Ltd v Jainran Pty Ltd; Boyana Pty Ltd v Jainran Pty Ltd* (2010) 14 BPR 27,361.
3. *Urteil des v Zivilsenats vom 21.7.2017 - V ZR 250/15*.
4. *Plaintiff v Municipality of Kampen*, ECLI:NL:HR:2008:BF0407 – Judgment 14/11/2008.
5. *O'Brien v Smolonogov* (1983) 53 ALR 107; *Argy v Blunts & Lane Cove Real Estate Pty Limited* (1990) 26 FCR 112; *Gladio Pty Ltd v Buckworth* [2015] NSWSC 922 [152 – 6].
6. Sections 32 – 32I *Sale of Land Act 1962* (Vic).
7. South Australia, Parliamentary Debates, House of Assembly, 4 October 1973, p. 1081. See further *Cheshire v Jennings (No 2)* [2021] SASCFC 11, (Peek, Doyle and Livesey JJ), [54 – 56].
8. *Land and Business (Sale and Conveyancing) Act 1994* (SA), s 5 (8) (a). If the sale is by auction the form must be made available 3 days beforehand and no cooling off rights apply.
9. *Highfield Property Investments Pty Ltd v Commercial and Residential Developments (SA) Pty Ltd* [2012] SASC 165, [123] (Blue J).
10. For example, *Myles Pearce & Co v Leuci* [1997] SASC 6360 (Doyle CJ, Duggan & Bleby JJ); *Highfield Property Investments Pty Ltd v Commercial and Residential Developments (SA) Pty Ltd* [2012] SASC 165 (Blue J) and *Cheshire & Anor v Jennings & Anor (No. 2)* [2021] SASCFC 11 (Peek, Doyle & Livesey JJ).

11. Delegation of verification is permissible pursuant to s 37 *Land and Business (Sale and Conveyancing) Act 1994* (SA).
12. *Land and Business (Sale and Conveyancing) Regulations 2010* (SA), Regs 13, 8 (f); Schedule 1, Divisions 2 & 3.
13. *Land and Business (Sale and Conveyancing) Act 1994* (SA), s 12; *Land and Business (Sale and Conveyancing) Regulations 2010* (SA), Regs 13 & 16, Schedule 3.
14. European Commission, European Land Information Service, available at <https://joinup.ec.europa.eu/collection/egovernment/solution/european-land-information-service-eulis> [accessed 3 October 2023].
15. Kadaster available at www.kadaster.nl/ [accessed 3 October 2023].
16. Landmäteriet available at www.lantmateriet.se/en/ [accessed 3 October 2023].
17. South Australian Planning and Property Atlas, available at <https://sappa.plan.sa.gov.au/> [accessed 2 May 2023].
18. See <https://sellersshield.com/home/home-sellers/> [accessed 22nd May, 2023].

References

- Akerlof, G.A. (1970), "The market for 'lemons': quality uncertainty and the market mechanism", *The Quarterly Journal of Economics*, Vol. 84 No. 3, pp. 488-500.
- Australian securities and investments commission and Dutch authority for the financial markets (2019), "Disclosure: why it shouldn't be the default".
- BAR-Gill, O. and Porat, A. (2020), "Disclosure rules in contract law", *The Journal of Legal Studies*, Vol. 49 No. 1, pp. 103-152.
- Barzegar, M., Rajabifard, A., Kalantari, M. and Atazedah, B. (2020), "3D BIM-enabled spatial query for retrieving property boundaries: a case study in Victoria, Australia", *International Journal of Geographical Information Science*, Vol. 34 No. 2, pp. 251-271.
- Bender, E.M., Gebru, T., McMillan-Major, A. and Shmittchell, S. (2021), "On the dangers of stochastic parrots: can language models be too big?", in FAccT 21: conference on fairness, accountability and transparency, pp. 610-623.
- Ben-Shahar, O. (2009), "The myth of the 'opportunity to read' in contract law", Vol. 5 No. 1, pp. 1-28.
- Ben-Shahar, O. and Schneider, C.E. (2014), *More than You Wanted to Know: The Failure of Mandated Disclosure*, in Ben-Shahar, O. and Schneider, C.E. (Eds), Princeton University Press, Princeton, NJ.
- Berger-Walliser, G., Barton, T.D. and Haapio, H. (2017), "From visualization to legal design: a collaborative and creative process", *American Business Law Journal*, Vol. 54 No. 2, p. 347.
- Christensen, S., Duncan, W. and Stickley, A. (2007), "Evaluating information disclosure to buyers of real estate-Useful or merely adding to the confusion and expense?", *Law and Justice Journal*, Vol. 7, pp. 148-177.
- Edwards, M.A. (2004), "Empirical and behavioral critiques of mandatory disclosure: socio-Economics and the quest for truth in lending", *Cornell JL and Pub. Pol'y*, Vol. 14, p. 199.
- Fischer, J.E. (2023), *Generative AI Considered Harmful*, CUI '23: proc. 5th int. conf. *Conversational User Interfaces*, Eindhoven, Netherlands, Article 7.
- Fonseka, M., Tian, G.L. and Al Farooque, O. (2020), "Impact of environmental information disclosure and real estate segments on cost of debt: evidence from the Chinese real estate industry", *Economics of Transition and Institutional Change*, Vol. 28 No. 1, pp. 195-221.
- Fouzder, M. (2023), "National conveyancing week: upfront information 'myths' debunked [online]", available at: www.lawgazette.co.uk/news/national-conveyancing-week-upfront-information-myths-debunked/5115508.article (accessed 6 October 2023).

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- Frondel, M., Gerster, A. and Vance, C. (2020), "The power of mandatory quality disclosure: evidence from the German housing market", *Journal of the Association of Environmental and Resource Economists*, Vol. 7 No. 1, pp. 181-208.
- Gunaratne, J. and Nov, O. (2017), "Using interactive 'nutrition labels' for financial products to assist decision making under uncertainty", *Journal of the Association for Information Science and Technology*, Vol. 68 No. 8, pp. 1836-1849.
- Hagemann, R., Huddleston Skees, J. and Thierer, A. (2018), "Soft law for hard problems: the governance of emerging technologies in an uncertain future", *Colo. Tech. LJ*, Vol. 17, p. 37.
- Hino, M. and Burke, M. (2020), *Does Information about Climate Risk Affect Property Values?*, National Bureau of Economic Research, available at: www.nber.org/papers/w26807 (accessed 18 December 2023).
- Hoffman, D.A. and Wilkinson-Ryan, T. (2013), "The psychology of contract precautions", *U. Chi. L. Rev.*, Vol. 80, p. 395.
- Hogarth, J.M. and Merry, E.A. (2011), "Designing disclosures to inform consumer financial decisionmaking: lessons learned from consumer testing", *Federal Reserve Bulletin*, Vol. 97 No. 3, (online).
- Houde, S., Ross, S.I., Muller, M., Agarwal, M., Martinez, F., Richards, J., Talamadupula, K. and Weisz, J. D. (2022), "Opportunities for generative AI in UX modernization", *Joint International Conference on Intelligent User Interfaces Workshops: APEX-UI, HAI-GEN, HEALTHI, HUMANIZE, TExSS, SOCIALIZE*.
- Intergovernmental Committee on Surveying And Mapping (ICSM) (2015), "Cadastre 2034—powering land and real property: cadastral reform and innovation for Australia—a national strategy", Canberra, Australia.
- Jackson, K. and Bazeley, P. (2019), *Qualitative Data Analysis with NVivo: Windows and Mac*, in Jackson, K. and Bazeley, P. (Eds), Sage Publications, London; Los Angeles; Thousand Oaks, CA.
- Jenkins, J. (2011), "What constitutes effective disclosure? A case study in designing accessible product information for investors", *Information Design Journal*, Vol. 19 No. 3, pp. 233-248.
- Johnston, N.R. and Leshinsky, R. (2018), "Gatekeeping information in the multi-owned property environment: stymieing buyers' rights to discover and decide", *Property Management*, Vol. 36 No. 5, pp. 506-520.
- Kiattikulwattana, P. and Pattanapanyasat, R.P. (2023), "Market reactions to timing and information of mandatory disclosures", *Journal of Accounting in Emerging Economies*.
- Loewenstein, G., Sunstein, C.R. and Golman, R. (2014), "Disclosure: psychology changes everything", *Annual Review of Economics*, Vol. 6 No. 1, p. 391.
- Marchant, G., Tournas, L. and Gutierrez, C.I. (2020), "Governing emerging technologies through soft law: lessons for artificial intelligence—an introduction", *Jurimetrics*, Vol. 61, p. 1.
- Minsky, M. (1991), "Logical versus analogical or symbolic versus connectionist or neat versus scruffy", *AI Magazine*, Vol. 12 No. 2, pp. 34-51.
- Moore, G.M. and Smolden, G. (2000), "Real estate disclosure forms and information transfer", *Real Estate Law Journal*, Vol. 28, pp. 319-337.
- Moore, G., Smolen, G. and Conway, L. (1992), "The effects of an informational disclosure form on the real estate agency representation model", *Journal of Real Estate Research*, Vol. 7 No. 2, pp. 217-226.
- Myers, E., Puller, S.L. and West, J. (2022), "Mandatory energy efficiency disclosure in housing markets", *American Economic Journal: Economic Policy*, Vol. 14 No. 4, pp. 453-487.
- Nanda, A. and Ross, S.L. (2012), "The impact of property condition disclosure laws on housing prices: evidence from an event study using propensity scores", *The Journal of Real Estate Finance and Economics*, Vol. 45 No. 1, pp. 88-109.

- Oehler, A. and Wendt, S. (2017), "Good consumer information: the information paradigm at its (dead) end?", *Journal of Consumer Policy*, Vol. 40 No. 2, pp. 179-191.
- Paredes, T.A. (2003), "Blinded by the light: information overload and its consequences for securities regulation", *WaSh. ulQ*, Vol. 81, p. 417.
- Passera, S. and Haapio, H. (2013), "Transforming contracts from legal rules to user-centered communication tools: a human-information interaction challenge", *Communication Design Quarterly*, Vol. 1 No. 3, pp. 38-45.
- Pope, J.C. (2008), "Do seller disclosures affect property values? Buyer information and the hedonic model", *Land Economics*, Vol. 84 No. 4, pp. 551-572.
- Ripken, S.K. (2006), "The dangers and drawbacks of the disclosure antidote: toward a more substantive approach to securities regulation", *Baylor L. Rev*, Vol. 58, p. 139.
- Schulz, K.B. (2014), "Information flooding", *Indiana Law Review*, Vol. 48 No. 3, p. 755.
- Schwarcz, S.L. (2004), "Rethinking the disclosure paradigm in a world of complexity", *University of Illinois law review*, p. 1.
- Schwartz, A. (1995), "Legal implications of imperfect information in consumer markets", *Journal of Institutional and Theoretical Economics*, Vol. 151, pp. 31-48.
- Stern, S. (2005), "Temporal dynamics of disclosure: the example of residential real estate conveyancing", *Utah L. Rev*, p. 57.
- Stern, S., Lewinsohn-Zamir, D. and Demaine, L.J. (2020), *The Psychology of Property Law*, NYU Press, New York, NY.
- Tandel, V., Gandhi, S., Nanda, A. and Agnihotri, N. (2022), "Do mandatory disclosures squeeze the lemons? The case of housing markets", *The Case of Housing Markets* (October 20, 2022).
- Ulen, T.S. (1999), "Rational choice theory in law and economics", *Encyclopedia of Law and Economics*, Vol. 1, pp. 790-818.
- Walsh, P. and Mui, P. (2017), "Contaminated sites and information in hedonic models: an analysis of a NJ property disclosure law", *Resource and Energy Economics*, Vol. 50, pp. 1-14.
- Weil, D., Graham, M. and Fung, A. (2013), "Targeting transparency", *Science (American Association for the Advancement of Science)*, Vol. 340 No. 6139, p. 1410.
- Zamir, E. and Teichman, D. (2018), *Behavioral Law and Economics*, Oxford University Press, Oxford.
- Zoubir, M., Wessel, D., Schrills, T., Franke, T. and Heine, M. (2022), "Making tax eForms less taxing—comparing evaluation measures of User-Experience, usability, and acceptance in public sector eForms", *Proceedings of the 21st Congress of the International Ergonomics Association (IEA 2021)*, Vol. 5, Methods and Approaches 21, Springer, pp. 735-745.

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