

Theoretical Foundations for Integrating Sustainability in Property Investment Appraisal

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Abstract:

A good deal of research undertaken recently confirms that sustainable construction has net-positive cost–benefits. However, this is not flowing through to real estate valuation practices. Indeed, valuers appear to be ‘locked-in’ to traditional ideas about what creates value, meaning that costly innovative design features aimed at reducing resource inputs and enhancing efficiencies are often discounted. This is proving to be a major deterrent to sustainability investment. Increasingly though, there is evidence to suggest that sustainability initiatives actually enhance value, or at the very least are value-neutral. This is explained as the accumulation of environmental and social capital being transferred into asset worth, and understood in this paper as ‘psychic income’. It is argued here for a number of reasons that psychic income should not be assessed as an extra variable, as has been inferred by recent efforts grappling with the problem of valuing sustainability in real estate assets. The question then is how do we account for the added value, which results from sustainability efforts, of such things as reputation enhancement, the preservation of a more natural environment, productivity gains and increases in well-being?

This paper looks to transaction cost and property rights literature for answers, and makes the case for an ‘integrated approach’ to property investment appraisal. Psychic income is clearly an increasing factor in property-related contracting, but it takes time and learning for it to be accepted as an integrated part of the asking price. The sooner these two elements are factored in to negotiations, the earlier that psychic income will be represented as a premium and agreed to by contracting parties, and by implication, the faster sustainability investment will take-off.

Keywords:

Sustainability, psychic income, property investment appraisal, social and environmental capital, transaction costs, property rights, externalities, governance, partnerships

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Introduction

In this paper I am reluctant to present yet another version of the rise of sustainability as a major public interest concern of the late 20th C. Such accounts are typically churned out with most papers broaching the subject, but for those who require such an introduction in the context of sustainable property investment, Lutzkendorf and Lorenz (2005) is recommended. By way of introduction it is perhaps sufficient to point out that most businesses make property-related decisions and that sustainability is the ultimate goal for socially responsible corporate citizens. It needs to be realised however that sustainability is not so much an end to be achieved anytime soon, but the means to an end – a journey towards intergenerational equity in terms of resource availability and environmental quality. This has meant that sustainability has been largely pursued for its social and environmental outcomes, while the economics of sustainability has received much less attention. And this has not been helped by lingering preconceptions suggesting that sustainability efforts are a liability to a company balance sheet.

Nevertheless, there is a growing conviction within senior management of many businesses that sustainability has positive economic benefits in as much as it helps build social capital in a variety of ways. In particular, sustainability can translate into brand enhancement, open up niche markets, and contribute to the ‘psychic income’ of employees, understood as the non-material benefit or self-image of working a particular job, and can result in higher productivity and a lower rate of churn. However the precise economic worth of sustainability-related efforts are not clearly understood or reported (Deni Greene Consulting 2001). While triple bottom line frameworks are increasingly used for integrated environmental, social and economic accounting, they remain underdeveloped, particularly in a financially measured sense (Carroll 2000:474). This shortcoming is a major impediment to the widespread adoption of triple bottom line approaches.

The Global Reporting Initiative have produced guidelines and lists of generic indicators to measure ‘non-economic’ and ‘non-tangible’ aspects of business, but there is much disparity in the way these are applied and measured. This is also a significant obstacle to both the deepening and widening of triple bottom line assessment. Thus, research that develops more comprehensive measures of social responsibility, making it more consistently possible to apply value in real terms to sustainability both in respect to practices and in its expression in real assets, is clearly much needed for both business and government (Carroll 2000:473-4).

Far less advanced than sustainability reporting, are methods of accounting for sustainability in real estate valuation. As such, this paper engages with Robinson, and Boyd and Kimmet’s attempts presented at recent PRRES conferences. In particular I take up Robinson’s point that “the property market continues to be unsure about the benefits of environmentally sustainable development (ESD) and accordingly ESD is not usually reflected in the property valuation and analysis process” (2005:2). More specifically, this paper responds to Robinson’s call for further research into the influence of psychic income on market value (2005:10). By this Robinson is referring not so much to employee benefits but to market evidence which has demonstrated that “a psychic element of income can increase prices paid for properties by reducing the initial yield” required by an investor (2005:2).

Baum and Crosby explain that investment return is a function of income, capital return and psychic income understood as “a positive feeling induced by investment ownership” (1995:7) and suggest that building naming rights is a tangible expression of this (1995:30). I agree with Baum and Crosby’s view that the appraisal of psychic income is not straightforward but strongly contend their assertion that it isn’t a vital component of investment pricing and valuation (1995:7). However, we need to be careful about going too far as clearly Robinson has done in ‘commanding’ that appraisals reflect a normative element indicative of what a purchaser should be paying irrespective of sales evidence (2005:2). This error, which is grounded in wealth maximisation economics and opposes property rights precepts appears to have informed the inclusion of “staff saving” in his residual valuation model of an environmentally sustainable development (ESD) building (2005:9). Staff saving is certainly a legitimate and measurable component of an ESD building but it must be reflected in the contracted gross rental return. It is recognising the value of staff saving and having this incorporated in the rent, and thereby being stipulated as a property right, which is the challenge facing advocates for ESD.

What I propose to do here is to build a better understanding of this normative, psychic element, which will help valuers determine what has been paid for it and what can be reasonably expected to be paid for it over time. This, I argue, will not dictate to the market, but will encourage the market to select for this quality through the observation of property rights. I will do this not by positioning psychic income as a third ‘unknown variable’ (staff saving) in the property investment equation, but by theoretically demonstrating the integral role it plays in determining income and capital return, particularly over the longer term. It is envisaged that further, much-needed research in this area will help demonstrate this in a more practical sense with sales and lease evidence, which in the Australian context commenced with the work of Maguire and Robinson (2000). However, what’s needed at this early stage is the development of methods supported by robust theoretical constructs. Indeed, to submit methodologies for peer review that are not tied to the very significant broader literature informing real estate valuation would be premature and unhelpful.

Psychic Income and Sustainability Appraisal

First coined by Fisher (1906), psychic income has been traditionally applied to labour inputs in economic theory, and is seen as an adjunct to the contractual income stream leading to income maximisation. The implication is that while it clearly contributes to attitudes towards work, psychic income makes little difference to the analysis of labour supplies in a financial sense (Thurow, 1978:142). The term is used in a slightly different way in relation to property investment because instead of an element contributing to the sale of labour, psychic income refers more to a purchasing decision. Thus it is useful from the perspective of property investment to draw on the way it is defined in a marketing sense. The online *Dictionary of Marketing Terms* defines it as “the intangible gratification or value that is derived from products, services, or activities, such as the improvement in a consumer’s self image as a result of purchasing certain highly desirable products”. This is what is more commonly referred to as ‘brand power’, and as already pointed out, there is increasing evidence to suggest that at least certain businesses derive a good deal of reputation enhancement from not only engaging in sustainable practices, but by demonstrating this in a tangible way by the kind of property investment and accommodation choices they make.

This marketing take on psychic income also alludes to the nature of environmental costs as externalities, which was first theorised in an organisational sense by Coase (1937) and came to be known as transaction cost economics. This is essentially the articulation of the thinking, planning, and contracting costs of transactions largely ignored by neoclassical economics. According to Coase, learning about and actually doing the deal is the main cost of transacting in the market. Williamson takes the analysis of these costs further in a number of publications, introducing the idea of integration, which acts to 'lock out' elements of the market, resulting in enhanced self-interest for those remaining 'locked in', and the consequent reduction of transaction costs. What Williamson refers to as "relational contracting" (1985) is played out in an ESD context where there is limited, albeit expanding provision, generally targeting only certain types of interested organisations.

From this perspective, the problem of determining the ESD transaction cost, understood generally as a premium that the purchaser should reasonably be expected to pay, arguably is solvable with the assistance of insights offered by the property rights literature. The theoretical ideas developed in this literature differ from transaction cost economics by focussing on the role of physical assets in a contractual relationship, and how the costs and benefits associated with these assets are distributed to the contracting parties. Importantly, property rights theory contends that unless specifically articulated by contract, control of assets resides with the owner. This means that the owner can assume an interest in the operation and use of those assets by the contracted party unless otherwise specified in the contract. This is where integration, and by implication, internalisation is complete, and by all intents and purposes, a partnership is formed. However, it must be emphasized that property rights frameworks distinguish between the possession of residual control of assets and entitlement to the profit stream emanating from the use of those assets, and that integration on this point remains a function of contractual negotiations (Hart 1996:357).

And it is also worth theorising about whether and how the ownership of physical assets leads to the control of human assets, and if this can be explained by property rights. Taking an ESD building for example, will a worker occupying the building seek to maximise opportunities for energy and resource efficiencies to a greater extent under the direction of the building owner/ manager, or for their employer? Property rights theory suggests that the worker will make a greater effort for their employer out of self-interest, because it puts them in a stronger bargaining position. This is the same conclusion that Coase reaches using very different logic. Coase suggests that employers control the human assets of their firm simply because of a master – servant legal relationship (1996:103). However, this introduces metering and monitoring problems, and hence increases transaction costs, defeating the purpose of contracting for efficiencies.

The problem with a building lease arrangement though is that the owner has a greater interest in reducing outgoings than the gross lease paying tenant unless those costs are redistributed to the tenant by contract. This means that the employer is less likely to insist on worker cooperation in terms of resource use efficiency. And it explains precisely why integration and internalisation of externalities, or what I suggest here looks more like an ESD partnership, can be so much more effective for creating efficiencies in these types of relationships.

How property rights inform our concept of psychic income is another matter entirely. Psychic income normally pertains to a limited number of actors in a select market because it arises from some special, often emotive qualities that are not valued equally in the wider market place, ie. a restaurant that evokes sentimental memories to a prospective purchaser. However, if we were to complicate the transaction by including a 3rd party – say a property developer who is also looking to buy a number of adjoining premises, then a number of constructs can be projected. For starters, rights may not be equally competed for within an open market where the sentimental purchaser under normal circumstances cannot justify the payment of a certain premium that may be either asked for by the vendor or offered by a competing purchaser. This occurs despite the sentimental purchaser valuing the rights to an existing place or business under its current use more highly than the higher bidder from a psychic income perspective, simply because of an inability to extract the required profit stream (Block 1995:65). In this case the usual income stream plus psychic income remains insufficient to acquire the entity. However, if the owner resists the offers of the developer due to personal attachment to the property and settles for a lesser rent from the highest bidding, but equally competing restaurateurs, then we can assume that the income stream to the owner plus the psychic income of attachment outweighs the offer from the developer.

By comparison, ESD differs significantly from traditional conceptions of psychic income because they are generally less emotive, and can often be promoted by a range of large socially responsible-minded corporates and businesses that are sensitive to environmental or social issues. The ‘ESD market’ is conceptually much larger than traditional conceptions of psychic income markets, and therefore the task of attracting a purchaser who can justify paying the premium asked for is potentially much easier. ESD decisions appear to be informed by cost-benefit analysis, or as Lawn calls it – ‘net psychic income’, understood as “the psychic benefits generated by the stock of human-made capital minus the psychic disbenefits associated with its production and maintenance” (Lawn, 2005; Daly, 1979).

To revisit the restaurant example above to further explain the market’s role in the distribution of property rights outside of a psychic income context, we find that the number of tables in the restaurant is optimised by the manager based on what the market will stand. Overcrowding will discourage many from returning, while too few tables will limit the potential income. If foldaway tables were a by.o. (bring your own) item at the restaurant, we may expect congestion at times, and at other times relative sparseness. This situation where individuals become a negative externality to other users is replicated any place that is commonly accessed, and is experienced most vividly on our roads during peak hour. However, in privately owned areas such as restaurants, the number of customers can be strictly regulated in order to maximise returns. In other words, property rights can be regulated by the owner of the rights.

Reintroducing the psychic income influence and assuming that there are a number of restaurants amongst the premises that the developer has unsuccessfully attempted to acquire, then we would expect that each would target a particular culinary niche and draw income from a regular and passing clientele based on the psychic qualities each has to offer. The restaurant is therefore a type of property rights provider that appeals to some but not all of the market, and confidently imposes a comfortable profit margin on its business of distributing rights to its tables. If however one restaurant sells only organic food for example, which is more expensive to source than the food purchased by the adjoining restaurateurs, it is forced to sell its meals at a higher price

than the competition in order to enjoy a similar profit margin. However, neither the owner nor the customer can expect to be subsidised for the fact that this restaurant does not represent the same negative externality to the rural production system in terms of fertilizer and pesticide inputs, residues and run-offs. But if it is the case that regular organic food eaters live on average a longer and healthier life, then it can be said that the subsidy is actually represented by a price premium, and the customer internalises the extra cost in the expectation of long-term benefits.

The Hidden Value of Internalising Externalities

Like the organic restaurant, the sustainability market is characterised by a demanding, although clearly growing customer base, positioning the ESD provider indirectly rather than directly in competition with other mainstream developers. The ESD customer expects to pay more for a quality product that will provide superior long term returns that compound over time. However, the property investor differs from the meal purchaser in a very important respect – the amount of time and extra capital that is tied up before receiving the benefit as opposed to decisions supported by a relatively trivial disposable income. In normal market conditions we can expect the more astute property investor to select for the higher returns. However this is offset by the requirement to maximise short term profits, and the reality that many investors are averse to tying up capital for long periods despite the promise of higher returns or the more immediate consequences of contributing to negative externalities if they invest in cheaper alternatives. So while the restaurateur is internalising externalities by distributing and regulating property rights to optimise the eating experience of customers who are likewise internalising negative health externalities by choosing a more expensive but superior product, can it be said that the ESD provider and purchaser internalise externalities?

An affirmative answer to this question, according to Block, depends on whether private property rights are allowed (1995:105). When we think about externalities imposed on a large number of individuals, say for example pollution from a factory that impacts an entire community, then we understand from the restaurant example that the owner as distributor/regulator is a more appropriate actor than the self-interested customer to mitigate or internalise this externality. This need for self-regulation is accentuated when we see repeatedly that regulators struggle to uphold the property rights of individuals who do not wish to be invaded by trespassing particulates because of the very large transaction costs of dealing with the many impacted parties (Block, 1995:110). Regulators and externality producing businesses alike vigorously contest claims for compensation for this reason. What tends to assert itself is a market model in which the price of residential real estate is reduced the closer it is located to the source of pollution, or to use Lawn's equation, the average price of a dwelling (including the psychic benefits for residents living at a particular location) less the psychic disbenefits of being located close to a polluter.

The opposite occurs with an ESD property which more closely resembles the restaurant analogy of the distribution of rights by an externality internalising provider to self-interested customers prepared to pay a premium for a superior product that will increasingly benefit them over time. The psychic income of the provider equates in financial terms to the premium paid by customers enjoying a psychic benefit. And if the benefits are truly substantive and widely recognised, we can stretch the model to its logical conclusion and assume that eventually non-ESD property will be likened to the dwelling located near a polluter. Those who commit to inferior non-ESD

accommodation will be compensated by the market for the disbenefits of inefficiency and staff/ user deprivations.

Before we jump to this conclusion though we should take a closer look at the nature of direct and indirect competition relating to sustainable construction, and particularly how it relates to the distribution of property rights. An important premise here is that competition is necessarily cooperative in order to promote the interests of competitors in advancing their particular industry. On the other hand, violations of property rights retard industries (Block 1995: 116-7). Say for instance that a group of mainstream developers worried about ESD developers attracting an increasing share of the market agreed to deliver buildings at a cheaper cost, or even more drastically, engaged in some form of widespread low-scale industrial vandalism to increase the costs of the ESD developers. We can assume that either the reduced cost of mainstream developments or the increased cost of ESD development will have only a marginal impact on sales because of the relational nature of the contracting between ESD providers and purchasers. Indeed, we could expect that such a strategy would be harmful for the industry as a whole because the benefit gained from the intervention would be less than the cost of carrying it out, not only from a financial point of view but in terms of risk, legal costs and loss of reputation to name a few of the possible implications.

We can say then that the ESD transaction is typically 'relational' due to a mutual effort by both developer and purchaser to internalise externalities. Both the developer and owner act as the regulator of property rights to the occupants, who respond in kind because of the psychic benefits they enjoy. The direct nature of this cooperative arrangement minimises transaction costs that when understood, contributes to a 'self-regulative partnership', and further isolates indirect competitors. The key though is understanding this arrangement, which is a function of experiential learning over time, and is the catalyst for trust and the flow of useful information. This has meant that while business and increasingly government tend base decisions on the economic return of investment, internal knowledge building has been under-valued. This has occurred because the governance of assets beyond traditional conceptions of management have until recently not been widely considered. But as the emerging 'ESD community' are discovering, effective governance characterised by more complete information, increases the value of an entity to both owners and users simply by enhancing desirability.

To help us understand the relationship between information, the distribution of property rights, and prices, it is useful to draw upon Hayek's insights in his article 'The Use of Knowledge in Society' (1945). Hayek asserts "that economic problems arise always and only in consequence of change" (1996:68), and claims that perfect knowledge reduces economic problems to a logical and mathematical form. Hayek is then quick to point out that this is "emphatically" not the case in society simply because the relevant "data" is never representative of the whole of society. Indeed, he describes this data as "dispersed bits of incomplete and frequently contradictory knowledge which all the separate individuals possess" (1996:67). The problem then as Hayek sees it is reduced to how knowledge is communicated to the regulators of property rights to allow the best possible decisions to be made. Hayek argues that the problem can either be solved by the decentralisation of decision-making to those with 'hands on' knowledge, or by the price system. Hayek favours the price system because decentralisation essentially increases transaction costs.

However, because the social and environmental aspects of property are not, at least yet, accorded prices that fluctuate according to the market, the price system remains invalid. What valuers need to use in the meantime instead of prices is an allowance for the added value of effective governance of property rights. This should be viewed as an intrinsic component of ownership in cases where externalities are internalised, thereby creating value to those who are self-interested in contracting for these types of benefits.

To take Hayek's imperfect knowledge framework further, we can conclude that optimal social and environmental benefits are derived when uninhibited communication is taking place concerning the performance and efficiency of an asset. This leaves objectives and outcomes open-ended, and emphasizes the importance of process and dialogue while deflecting the focus from an ISO 14000-type minimum standards approach to environmental management. Or to take a philosophical view, this is simply "confronting the values realized with the values aimed at" (de Beauvoir, 1948:152).

Perhaps it is also worth questioning whether Hayek's assumption that all decentralisation increase transaction costs. Is it safe to assume, for example, that once dispersed knowledge cannot be cohesively and comprehensively gathered up and delivered to property rights regulators? The answer surely is no and it is suggested here that comprehensive, sensitive, and mutually benefiting information collection processes can surpass the efficacy afforded by the market. Moreover, 'informed governance' facilitates the provision of public goods, inviting participation from a wide variety of 'stakeholders', understood in the broadest terms. Indeed, to centralise information gathering invites inadequate, under-specified, narrow-minded actions and reactions anywhere along the complex information chain feeding into asset governance resulting in sub-optimal asset performance.

Making information available to property stakeholders and consultants can of course be a contentious issue in the relatively secretive world of property investment. This is where the integration of governance in summation exercises undertaken by valuers not only more accurately reflects the market, but can play an important role in schooling stakeholders and the property market alike in the value of transparency. As transparency is enhanced, the quality, impartiality and reliability of information for valuers is increased, which will of course not only bring good things to light, but for the very reason why much information is currently suppressed, will also uncover a lot of 'bad news'. However, it is the "bad news ... [where in] the greatest part of the scope for rapid improvement actually lies" (Leaman and Bordass, 2004:11). And improvement in the context written about here is conceptualised as the further internalisation of externalities by property rights regulators.

Finally, if we are to treat the construction, distribution and management of built assets as the science that it is rapidly becoming, then a much more sophisticated understanding of what actually creates value, and by implication, how we measure it, is clearly overdue. Over time it is reasonable to assume that this will oblige those who own and distribute property rights "to learn from successes and mistakes, to eschew what Wools (1970) has called the 'cuckoo mentality' in which buildings are laid like eggs of that irresponsible bird and then hopefully abandoned" (Lee, 1976:48).

Conclusion

What this paper has aimed to advance is a theoretical platform explaining how and why sustainability initiatives impact on the value of assets generally and buildings in particular. In doing this I have elevated civics, loosely described here in terms of psychic income, as a predictor of economics, and debunked assumptions that markets operate in some sort of vacuum impervious to the constantly evolving normative structures within society (Putnam, 1993:6). The paper has also alleged that while far from perfect, property rights constructs are very useful for understanding these normative structures in the context of ESD property. I have argued that the socially responsibly distribution of property rights by owners encourages the creation of virtuous cycles of effective and continuous learning and trust building, benefiting direct stakeholders significantly, and the wider community to a lesser extent. And I have shown that those that buy these rights enter into 'self-regulative partnerships' out of self-interest motivated by an expectation of benefiting out of it.

I have also demonstrated that the provision, sale and use of sustainable buildings is largely a function of relational contracting in which information is knowledge that provides the building blocks for a whole new architecture characterised by effective and efficient governance. This architecture remains fundamentally under-valued though out of a failure to recognise what it is – the object of partnerships that enhance the prospects of inter-generational equity. Addressing this lack of appreciation is not just a moral obligation of this generation to the next, nor should it be some financial impost imparted from 'outside' a property contract. It is in actuality already hidden in the cost of an ESD-related property investment contract, and needs to be identified using analytical methods that accurately apportion value to property rights that internalise externalities.

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