An Institutional Understanding of Triple Bottom Line Evaluations and the use of Social and Environmental Metrics

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Measuring social and environmental metrics of property is necessary for meaningful triple bottom line (TBL) assessments. This paper demonstrates how relevant indicators derived from environmental rating systems provide for reasonably straightforward collations of performance scores that support adjustments based on a sliding scale. It also highlights the absence of a corresponding consensus of important social metrics representing the third leg of the TBL tripod. Assessing TBL may be unavoidably imprecise, but if valuers and managers continue to ignore TBL concerns, their assessments may soon be less relevant given the emerging institutional milieu informing and reflecting business practices and society expectations.

Introduction

There is increasing evidence suggesting that environmental and social criteria are impacting the market in complex ways. This is highlighting the need for a more sophisticated approach to the appraisal of commercial office buildings in particular. One of many such influences stem from the emergence of 'green building' performance codes in Europe, America, and now Australia.[1] Performance codes address a range of environmental efficiency based criteria, while implicitly raising broader questions about social responsibility and the distinction between public and private goods. This is occurring at a time of heightened scrutiny of corporate and public administration practices,

and the proliferation of independent watchdogs. Moreover, these developments are driving greater self-regulation, helping to explain the escalation of ethical guidelines released by various governing bodies. These trends illustrate a shift in the institutional landscape that the property industry looks to for legitimacy. This is causing the market, viewed as an institution in that it is essentially a socially constructed system of rule-based economic exchange, to likewise shift. Moreover, the new codes are a clear indication that 'sustainable construction' has an important role to play in the international sustainable development agenda.

All this is raising questions that are difficult to grapple with, particularly for valuers, investors and others concerned with the economic implications for commercial buildings. Nevertheless, these questions urgently need to be asked given that what we are seeing is not only confined to widespread institutional changes. The corporate world has demonstrated a willingness to respond to public pressure for improved performance on non–economic issues by embracing Triple Bottom Line (TBL) principles. And it's not all self-indulgent media releases and imaginative annual reporting. Recent research indicates that for a variety of reasons, companies adopting TBL reporting are making changes to the way they do, or at least think about, business (Deegan, Rankin and Voght, 2000). These changes need to be documented independently and objectively, especially if they relate to physical and procedural changes to entities businesses preside over.

The complex ways in which TBL concepts reflect subtle changes in the market demands more than qualitative explanations in appraisal reports or itemised

contingency additions and subtractions. One reason for this is that TBL formulations cannot be comfortably couched within a structural – agency dichotomy, and therefore defy compartmental approaches. TBL clearly has material elements, but these components only make sense in terms of process, policy and practice. In other words, TBL is a combined material and ideational project that is framed by norms rather than the market, and therefore only has applications for the appraisal process is approached from a stakeholder's integrative perspective. What all this means is that a TBL valuations benefit from detailed measurement against relevant criteria in the already established green building codes. And like these codes, which are designed to award a colour or star based grading to indicate overall performance, similar provision should be made in appraisal reports. Such an approach however will require a corresponding effort in the development of social metrics for buildings (Fiksel, 2001:168). This challenge is taken up here by identifying social building benchmarks relevant to valuers.

TBL has its roots in shareholder activism commencing in the late 1960s. Shareholders with vested interests progressively called company executives to account, and have in this way become influential in generating community values that have sponsored 'new' corporate values that reach beyond narrow economic constructs. While ultimately important from a business point of view, profit taking now competes for elbowroom at the board table along with a raft of priorities that relate to continuity, efficiency, legitimacy, and morality. Indeed, there is now clear evidence that these ostensibly non-tangible elements of business are having significant impacts on economic assessments in terms of demand and supply factors – the major determinants

of market value. This has implications for market transactions, and prompts suggestions that both shareholders and investors are informing the market in a way that reflects the advancement of institutional economics. And from a valuation perspective, this 'institutional' process is clouding various input variables.

The first section of this article explores TBL from a critical perspective, prior to explaining how it fits in to the institutionalism evident in the commercial office building market in particular. The following sections shortlist and discusses the major social and environmental performance variables impacting market value. The work of the Global Reporting Initiative is helpful in this respect.[2] It is argued that working out how relevant determinants are influencing values will help valuation techniques keep abreast of changes in the commercial property market, while contributing to the wider debate that takes the social and environmental bottom line seriously. It will also provide a way forward for approaching commercial property from an asset management, total life-cycle perspective, which has clear implications for public administrators.

TBL as Institutionalism

There are three TBLs identified in relevant literatures. Two have design and problem solving connotations, and a third is associated with accountancy jargon. Each has essentially the same meaning, but with different applications. For instance, architects derive their understanding of TBL from the tripod symbology of cost, aesthetics, and performance, which implies taking equal account of ecology, equity and economy (McDonough and Braungart, 2002:153). Likewise, many administrators and managers are

beginning to use an interwoven triad of ecology, society and economy as a conceptual approach to decision making. And within the accountancy profession, TBL reporting is the disclosure of information about an entity's economic, social and environmental performance. Because of its measurement capacity, it is this third sense as a reporting tool, rather than its prescriptive potential, which largely concerns valuers, although there are instances where TBL's design and planning functions will help to shape the valuation approach.

Not all commentaries on the usage of TBL principles and practices have been supportive, and taking a critical view will help clarify not only what it is, but its limitations. Craig Deegan and his colleagues for instance have looked at why some Australian companies have markedly improved the disclosure of information in their annual reports, and found that it can be traced to major social and environmental incidents (Deegan, Rankin and Voght, 2000). From the results of this study it is reasonable to assume that "management considers annual reports to be a publicity device that may reduce the adverse perceptions of some sections of the community toward modern corporations" (Owen and Lehman, 2000:2). Deegan's cynicism is even more evident in his assertion that while TBL is reformist, it is really only an extension of traditional accounting practice that favours the restriction of corporate disclosures to issues related to economic performance (1999:40). Jeff Everett and Dean Neu (2000) make more fundamental criticisms of TBL-type accounting. They argue that Environmental Accounting (EA), which is essentially TBL reporting without explicit social and economic components, focuses on win-win, technocratic and procedural solutions to problems created by slavish devotion

to capital accumulation. From this perspective TBL is essentially a 'bandaid' approach to a crisis created by economically structured flaws in corporate and social relationships relating to the environment. They present a case that EA (and by extension – TBL) links up with a dominating discourse that assures us that progress is being made with social and environmental solutions, while it "distracts us from asking the difficult questions regarding the role of environmental accounting in perpetuating unequal and exploitative social relations"(2000:5).

Everett and Neu's argument positions 'sustainable development' as a business opportunity to expand into emerging markets, possibly make short-term profits, and most certainly assist survival in an increasingly competitive corporate world (Singh and Howes, 1999). Such motivations clearly encourage the 'greenwashing' of business activities, and TBL presents itself ideal for this purpose. As Everett and Neu (2000:6) point out, "the end result [of EA – TBL] is often similar to that which Neimark observed regarding the 'business of ethics': that 'the official discourse of business ethics reassures us that the system is working'" (1994:85). Furthermore, Everett and Neu's reasoning that the calculation of the economic values of nature is 'economizing' the environment, and is therefore a form of economic rationalism is entirely defendable. It follows that TBL sits comfortably within neo-liberal discourses appealing "to voluntary action and market mechanisms, which come to be seen as a means of enhancing rather than undermining environmental quality"(Everett and Neu, 2000:9). And what Harvey says about ecological modernization appears to also apply to TBL:

> "As a discourse, ecological modernization internalises conflict….It is reformist in its objectives…[but]… poses no

> deeply uncomfortable questions to the perpetuation of capital accumulation, though it does imply strict regulation of private property rights. Such a discourse can too easily be corrupted into yet another discursive representation of dominant forms of economic power" (1998:343).

William McDonough and Michael Braungart agree that businesses "assess their health as they always have – economically – and then tack on bonus points for eco-efficiency, reduced accidents or product liabilities, jobs created, and philanthropy" (2002:153-4). However, they see a significant difference when business practices commence from a TBL platform, rather than consider it as an afterthought (2002:154). This is aligned with the emerging literature associated with resource efficiency and cleaner production (Hawken et al, 1999; von Weizacker et al, 1997), notwithstanding a large preceding body of research dating back to at least the 1960s. This literature underscores the importance of measuring and valuing the environment for the purpose of schooling industry in the art of environmental friendliness, and assumes the sustainability of systems of capital exchange enlarged by human, social and moral criteria. As Paul Greenfield and Tor Hundloe (2000:5) explain, this type of capitalism "encompasses the variety of institutions and behaviours that go to form a society". They explain that "some types of institutions and arrangements tend to work better than others in promoting social harmony and, as a consequence, greater economic and environmental well-being" results (2000:5). Reporting on the progress towards harmonizing industry with its human and natural environment is therefore seen by many TBL advocates as a worthwhile thing to do.

TBL ideas are clearly embedded in theoretical frameworks that challenge the virtues of unrestricted capitalism. Rather than regulating against companies,

TBL is seen as a method of 'socialising' economics and modifying corporate behaviour through institutional pressure and self-regulation. We can therefore look to institutional theory with confidence to explain TBL's current influence on the market, and see if it helps to predict change in the way the market is likely to be reconstructed over time. Nobel laureate in economics, Douglass C. North, sees institutions as:

> "the rules of the game of a society, or more formally, are the humanly devised constraints that structure human interaction. They are composed of formal rules (statute law, common law, regulations), informal constraints (conventions, norms of behavior, and self imposed rules of behavior); and the enforcement characteristics of both" (1992:4).

North argues that the cost and influence of transactions "and specifically property rights" are pivotal determinants of the efficiency of markets, which simply means that "institutions matter"(1990). While North's work provides "essential scaffolding" towards a theory of institutional change (1992:7), it is perhaps too blunt to explain what is going on with what is undeniably a normatively driven TBL.

For a more useful explanatory framework we can look to normative institutional theory usually associated with James March and Johan Olsen (1989, 1995). Their work is illuminating because of its emphasis on norms and rules in behaviour formation, and for the coining of the expressive notion, 'logic of appropriateness', to describe actions shaped by institutional values. In short, normative institutional theory asserts that institutions will react to changes in the environment by initiating reforms and welcoming greater complexity. This is evident in the growth of independent watchdog agencies, while more traditional institutions are also taking 'appropriate' steps,

particularly in support of corporate governance initiatives. For example, the recent release of the Australian stock exchange's 75page guideline blueprint is clearly an attempt at self-regulation emerging from the turmoil of corporate scandals and collapses. And as mentioned at the outset, green building performance codes based on TBL design concepts have also appeared on the institutional landscape. Developers of the built environment therefore no longer focus exclusively on supplying demand, but are obliged to compete for the 'moral high-ground' that is shaping demand., and thereby avoiding some unwanted transaction costs simply by being seen to act in an 'appropriate' manner.

Because the logic of appropriateness informs the market place as an institution, it is helping determine the actions of the supply side, while also shaping demand. Those companies reporting and performing well on a TBL basis should therefore enjoy increasing market-share. On the other hand, those businesses that resist pressure to embrace TBL are likely to suffer a loss of investor and consumer confidence over the longer term. The important question then is how does this dynamic play out in real valuation terms? And compounding this is the paradox of accounting for the observation that despite all the talk about environmental and social issues, it still appears to be business as usual in the market place.

The answer to this problem lies in the realization that business proceeds as usual because market forces are constantly adjusting to the place in which they operate. The new competitive, and highly managed institutional corporate environment creates stability, and ensures that supply and demand factors

keep abreast of the mutual learning taking place in the market place. In this view, most entities will not step ahead of, or fall behind the market, negating the requirement to progressively add or subtract value in relation to TBL performance. This is something the market will determine over time. What valuers need to do though is understand the integrative nature of TBLs emergence, and specifically the way modern society institutionally responds to change. This understanding will help valuers to grasp the intricacies of quantifying some of the more ‘esoteric’ social dimensions of TBL in regard to commercial property entities, while at the same time providing a deeper appreciation of the institution we call the market. In short, the integration of identified determinants supersedes the practice of itemised contingency valuations, which are potentially messy, exhaustive and notoriously difficult to verify.

TBL is a convenient tool for competitive business operating in an environment characterised by progressive learning. As TBL increasingly becomes the underpinning rationale of the market, so to will valuers need to appraise property accordingly. TBL is not an instrument for sustainability, nor is it an easy road to adding value. If anything, it’s just the latest way of convincing us there’s nothing to worry about. Nevertheless, TBL is being taken very seriously because of its appeal to common sense in modern business practice, and its influence on the market is significant and must not be dismissed. It is with this in mind that this article turns its attention to the benchmarks most pertinent to commercial office buildings and suggests how to account for them.

Social metrics for the valuation of commercial buildings

Much of the social reporting that private companies do lacks direct implications for the building, owning, managing and disposal of commercial office buildings. This perspective appears to have a spillover to the public sector, which clearly does have obligations to be socially responsible with what are under reported public assets (Kimmet, 2003b). In contrast, the reputation of private owners is not generally viewed as a priority, who unlike many of their tenants, often have a low public profile anyway. Obviously, public managers of commercial office buildings are concerned about how they're perceived by the public, meaning that some social metrics will be weighted differently depending on the ownership structure.

Staff and worker considerations in buildings is another area that contrasts to company social reporting, with construction, maintenance, cleaning and security services often procured by contract, and are not seen as central to the business engaged in. This is problematic for effecting change as a company image project, and requires the introduction of socially responsible clauses in out-sourcing and service contracts. And it is important to be aware of the complexities of staffing arrangements because it is the working conditions of tenant employees and others they hire, together with support infrastructure for tenant visitors and customers that are a primary concern of social metrics. What is labeled here as 'working conditions' actually frames 4 of the 10 social indicators selected as an appropriate checklist for valuers. Half of these are *instructional*, and the other 2 have *structural* qualities. The *instructional* metrics are:

1. Disclosure of health and safety records, including initiatives undertaken to proactively minimize the number and nature of accidents, complaints, and building related illnesses/absenteeism. Are joint health and safety committees comprising building management and worker/tenant representatives formed and functioning satisfactorily?
2. Is the level of training and awareness optimizing the use of building features sufficient, and is there detailed information available regarding the provision and monitoring of equal opportunity and disabled access features and amenities?

The 2 working condition metrics that are more structural in nature are:

3. Is there satisfactory provision of facilities, amenities, lobby and common space and furniture for the visiting public, allowing diverse uses with non-competitive demands?
4. Is there available and sufficient public transport, bikeways and walkways for workers and visitors, within close proximity, and is there easy access to open space, natural features, public parks, greenways, plazas or malls, and do carpooling – share parking arrangements exist?

The second group of 3 indicators relate to society impacts in a broader sense. These benchmarks position the building within its local human environment, while also taking into account the nature and impacts of tenant businesses. Such criteria assume that a socially responsible tenant actually adds value to

a premises, while tenants involved in industries such as weapons manufacturing or tobacco sales actually detract from the building's social responsibility as an entity from an investor's point of view. While this is undeniably a contentious claim, the notion of social responsibility understood literally and taken to its logical conclusion bears this out. The society impact metrics for commercial office buildings are:

5. Are there appropriate policies for managing stakeholder interests/impacts in the local precinct, with respect to pedestrian and vehicular traffic, and the visiting public?
6. Is there sufficient transparency in the marketing and management negotiations and arrangements between tenants, agents and owners (including naming rights), and is this compromised by the socially responsible nature of tenant businesses?
7. Is there adequate insurance cover for workers, maintenance crews, and the general pubic?

Overarching all TBL criteria relating to commercial office buildings is the issue of transparency and disclosure (Mansley, 2000:124). Without adequate and reliable information, premised on a capacity of the building manager to acquire such information, not only are appraisals compromised, but the ability of management to make decisions concerning efficiency savings, asset replacement and refurbishment for example, is seriously curtailed. This twofold impact strikes at the heart of discourses promoting good corporate governance, which is perhaps the best way of describing this 8th criterion:

8. What level of disclosure and accountability of management details relating to staff, structure, contract agreements, audits, and asset maintenance, has been achieved?

There may also be minor human rights issues at stake. And perhaps more importantly in a modern Western context, an awareness of values and morals is important, particularly for security officers. To ensure compliance with this benchmark, training in human rights and behavioural norms may need to be specified as a pre-requisite in security contracts. It reads:

9. Has human rights and behaviour management training been undertaken by appropriate personnel?

And finally, symbolically acknowledging the traditional owners of land is also increasingly becoming a desirable practice (Kimmet 2003a). A social metric relating to this would be:

10. Does the building maintain or acknowledge prior structure, use, economy, ownership, occupation, story or history, sensitively and effectively, and thereby protects, rediscovers or rekindles cultural values?

To recap, social metrics is not all about attempts to quantify the social dimensions of entities, but ensuring that important social benchmarks are appropriately accounted for. This is not merely an exercise in political correctness, but is based on mounting evidence that improved social

conditions are linked to increases in productivity, and enhanced psychological and physical well being (Heerwagen, 2001). If more research in this area comes up with similar findings, the rise to prominence of social metrics appears inevitable.

Environmental performance valuation indicators

All the environmental performance indicators of relevance to valuers are incorporated in most green building codes. They fall into the categories of materials, energy, water, emissions, effluents, waste, transport, disclosure and overall natural environment rating. As green building codes continue to take effect, much of the valuer's work will have already been done. In many cases all that will be required will be the identification of the relevant criteria, outlined below, and collation of the itemised performance ratings to find an average score. However, working out how this overall score impacts on the market value is the difficult part, and is the next issue to be addressed. The relevant indicators are:

1. Various impacts of materials used (can be ascertained by using LCA Design[3] or similar software package)
2. Average and actual differentiated consumption, relativity to similar buildings, programs and measures for savings, efficiency, alternative supplies, cogeneration, renewables etc.
3. Availability and comparison of building's energy consumption footprint (annualised lifetime energy requirements)
4. Water consumption, recycling and water capture measures, wastewater discharge report

5. Availability and comparison of building's greenhouse, ozone, and other significant gas emissions report

6. Nature and impacts associated with any hazardous and non-hazardous waste and effluent creation, recycling and/or removal

7. Disclosure of non-compliance with any environmental regulations, and any other environmental expenditure of any type

8. Quality of overall built natural environment, internally in terms of worker satisfaction, and externally in relation to aesthetics and visual blending

9. Evaluate the building's 'celebration', 'utilization ', 'connection', 'contribution' and 'appropriation' of its street frontage and precinct

Factoring in the TBL

Developing a standard multiplier that can be applied to a single economic bottom line valuation in order to calculate a TBL figure is a task fraught with danger. This is why a metrics approach that allows for a graduated assessment of many different criteria makes good sense. The evaluation process can be facilitated by using a simple matrix that plots each metric against a star, number or colour-based grade. The sum of the grades divided by the number of metrics measured delivers an overall rating. And a high rating may justify an added premium to the economic valuation, while a low score may well have a negative influence on the property value. The actual adjustment will depend on the nature of the building, its age, size, location and many other variables that the appraiser deems appropriate. In general however, the newer and more significant the structure, and the more central and prestigious its location, the greater the influence its metric performance

will likely have on its economic value.

Some innovative buildings actually target the 'TBL market', such as the refurbished late 19th century built '8 star' 60L building[4] in Melbourne, which is attracting premium rents from tenants who derive benefits from being located in a highly sustainable built environment. At the other end of the scale, buildings that rate poorly according to performance codes are likely to find it more difficult to attract quality tenants, impacting adversely on market value. Thus, adjustments will need to be made to the appraisal of buildings located at the performance spectrum margins. The size of adjustment should be determined by supply and demand factors relative to the individual merits of the building.

Many buildings though may not have to be adjusted at all, especially those that perform adequately against most of the benchmarks. This is not only because sales and lease evidence is expected to reflect changes in the market over time as has been argued here, but because it really makes no sense to talk about a TBL that is measured in single bottom line (economic) terms. The real worth of TBL then is not its calculation as a sum that represents net present value, but its utility as a guide to investors and managers interested in maximizing future returns. As the renowned sociologist Robert Putnam has articulated on a broader level, "economics does not predict civics, but civics does predict economics, better even than economics itself" (1993:6). It follows that as an assessor of economic entities, valuers would benefit from researching the civic components of those entities, which in this paper is understood as social and environmental metrics.

Endnotes

[1]The prominent codes in Europe and North America are BREEAM and LEED respectively. In Australia the ABGRS is currently operational, while NABERS is also competing for recognition.

[2] The website of the Global Reporting Initiative is: www.globalreporting.org/

[3] LCA Design is a software package design tool being developed in sister project to this research as part of the 'Cooperative Research Centre for Construction Innovation'. For more details go to the website: www.construction-innovation.info

[4] The 60L (stands for 60% less energy) project green building partnership details can be accessed at: www.60lgreenbuilding.com/

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