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The Triple Bottom Line and Sustainable Economic Development Theory and Practice

Janet Hammer[1] and Gary Pivo[2]

Abstract

The triple bottom line refers to economic, environmental, and social value of an investment and is related to the concept of sustainable development. The triple bottom line is increasingly salient to economic development related disciplines, yet the topic has received little attention within the field of economic development. This study offers three substantive responses to that gap. First, triple bottom line economic development is introduced and defined. Second, research regarding whether and how practitioners prioritize and engage in triple bottom line economic development is presented. Third, implications for the field are considered, including the centrality of the concept to economic development and recommendations to advance theory and practice in this regard.

Keywords

sustainability, economic development theory, community development, state and local ED policy, sustainable economic development, sustainable development

Overview

The triple bottom line (TBL) refers to the social, environmental, and economic value of an investment. The concept is increasingly salient to economic development related fields such as business, finance, planning, and real estate. Aspects of the TBL concept are addressed in economic development literature; however, a clear definition of TBL economic development is lacking. Furthermore, little research has been conducted regarding how economic development professionals view and practice the concept. This study addresses those gaps, paving the way for more productive engagement with an important and timely topic. The study begins with an introduction to the TBL concept, defines TBL economic development, explores TBL economic development in practice, and concludes with a consideration of implications to theory and practice.

The Triple Bottom Line Concept

The *triple bottom line* term was coined in the 1990s by business consultant John Elkington to describe economic, environmental, and social value of investment that may accrue outside a firm's financial bottom line (Elkington, 2004). The TBL approach aims to more accurately value assets and leverage resources, so that capital is employed as efficiently and effectively as possible. The concept is sometimes referred to as the 3Ps (people, planet, profit), triple value adding (Roberts & Cohen, 2002), and blended value (Emerson, 2003).

Triple bottom line thinking is informed by and relates to the concept of sustainable development—the premise that development should occur in ways that meet the needs of current generations while maintaining conditions and opportunities for future generations to do the same (World Commission on Environment and Development, 1987). Inherent in the definition of sustainable development are concepts of environmental stewardship and inter- and intragenerational equity. Efforts to define and address sustainability were born from the recognition that existing development patterns cannot proceed without jeopardizing the environmental systems necessary to sustain life and economies, and that significant disparity within and between generations is neither sustainable, ethical, nor in tune with development goals.

Triple bottom line and sustainability concepts have gained traction in fields related to economic development including business, planning, finance, and real estate. This is evidenced by the growing number of journals, books, professional organizations, certifications, and conferences addressing sustainability in related topics such as impact investing, responsible property investment, and corporate responsibility.[1] As discussed below, aspects of the TBL are addressed in economic

[1]Portland State University, Portland, OR, USA
[2]University of Arizona, Tucson, AZ, USA

Corresponding Author:
Janet Hammer, College of Urban and Public Affairs, Portland State University, Portland, OR 97207-0751, USA.
Email: janethammer@gmail.com

development theory and practice; however, the concept is not as well developed as in related fields.

Defining Triple Bottom Line and Sustainable Economic Development

Economic development spans rural and urban contexts, developed and emerging economies, and local, regional, and national scales. Regardless of the focus, economic development is traditionally defined in terms of wealth creation measured in terms such as jobs, per capita income, tax base, and gross domestic product (GDP) (Blakely & Bradshaw, 2002; Koven & Lyons, 2010). The terms *economic development* and *economic growth* are often used interchangeably; however, distinctions between the two have been made for decades and are essential to the concept of TBL economic development (Arndt, 1987; Blakely & Leigh, 2010; Felsenstein, 2001; Flammang, 1979; Greenwood & Holt, 2010; Shaffer, Deller, & Marcouiller, 2006).

When distinctions are made between economic growth and economic development, the former generally refers to a change in the size of the economy, whereas the latter refers either to a change in the structure of the economy facilitative of economic growth or a qualitative improvement in societal conditions stemming from economic activity. Conflation of the terms has roots in the belief that structural economic development is a precursor to economic growth, as well as the belief that economic growth is a precursor to improved well-being (development). However, the premise of inextricable positive links between growth and development has been the subject of much debate. As detailed below, questions relating to growth and development primarily fall into three related but distinct categories: those that consider the relationship between economic growth and human well-being, those that consider the role of natural capital in sustaining economies, and those that consider the process by which economic development occurs.

Questions regarding the contribution of economic performance to human well-being are the subject of significant research and debate (Diener, Helliwell, & Kahneman, 2010; Easterlin & Angelescu, 2012; Sacks, Stevenson, & Wolfers, 2010; Stiglitz, Sen, & Fitoussi, 2009a, 2009b). Sources of debate include differences in definition and measurement (e.g., measuring well-being in terms such as *economic welfare*, *life span*, *standard of living*, *life satisfaction*, or *happiness*), as well as varying interpretations of evidence and questions regarding the appropriateness of extrapolation based on historical circumstances and priorities. While debate continues regarding the relationships between economic growth and well-being, for a variety of reasons, there is general agreement that economic growth is an incomplete measure of development or well-being. First, traditional measures of economic growth such as GDP are flawed measures of economic and human well-being because they include goods and services that pertain to negative impacts to individuals and society (e.g., pollution clean-up, crime enforcement, and cancer treatment can increase GDP), and they do not include goods and services of significant value that are not captured in the marketplace (e.g., ecosystem services, household domestic services, bartering, and sharing). Second, correlation does not equal causation; for example, some gains in well-being may be attributable to technological advances and policy agendas rather than economic growth. Third, economic growth can occur with little or no net benefit to workers or communities. For example, wages and benefits may not be sufficient to meet employees' basic needs, and projects that generate economic growth can impose negative costs to communities.

Distinctions between economic growth and economic development also emerged with increased awareness about threats to the natural resource base necessary to sustain economies. Referred to as ecosystem services, natural resources provide a number of functions that have significant economic value. These include provisioning (resources such as water or food are provided), regulation (resources provide safety or balance such as flood control or oxygen), supporting (resources provide assistance such as pollination), and cultural (resources provide aesthetic, historic, and other cultural benefits) (Alcamo et al., 2003). The full value of ecosystem services has not been, and likely cannot be, calculated; however, scientific inquiry is contributing to our understanding. For example, a pioneering study estimates total global value at $125 to $145 trillion (U.S. dollars) per year (Costanza et al., 2014). In another example, an analysis synthesizing data from more than 300 reports found that estimates of value per hectare per year standardized to international rates range from $490 per year for an "average" hectare of open oceans to nearly $350,000 per year for an "average" hectare of coral reefs (de Groot et al., 2012). In economic terms, better accounting of ecosystem value is important to achieve efficient allocation of resources.

Investigations into the process and efficacy of economic development have also brought attention to the interplay of social and environmental factors in economic development. This includes, for example, research on such topics as quality of life and placemaking (Fiori et al., 2015; Florida, 2014; Wlodarczak, 2012), equitable development (Bennett & Giloth 2007; Benner & Pastor, 2014; Krumholz, 1991), early childhood development (Bartik, 2011; Jenkins 2014), social capital (Casey, 2012, 2014; Oh, Lee, & Bush, 2014; Woolcock, 1998), incentive reform (Bartik, 2005; Osgood, Opp, & Bernotsky, 2012; Peters & Fisher, 2004; Reese, 2014; Zheng & Warner, 2010), and green, energy-based, and sustainable economic development (Carley, Lawrence, Brown, Nourafshan, & Benami, 2011; Greenwood & Holt, 2010; Harper-Anderson, 2012; Martin & Mayer, 2008; Opp & Osgood, 2013; Portney, 2003; Roberts & Cohen, 2002; Seidman, 2011).

The literature contributes to our understanding of the role of social and environmental factors in economic development (e.g., resource stewardship contributions to cost savings, place-making contributions to recruitment and retention) and has suggested a normative stance regarding impacts and beneficiaries of development both within and between generations. Despite increased attention to social and environmental dimensions of economic development, however, a definition of TBL or sustainable economic development is lacking. Addressing that gap, we define TBL or sustainable economic development as *programs, policies, or activities designed to create or retain jobs and wealth in ways that contribute to environmental, social, and economic well-being over time*.[2] It is distinct from economic growth or development, which may or may not contribute to overall well-being including quality of life, fiscal health, resource stewardship, and resilience. This line of thinking suggests that economic systems exist to serve human well-being, that human and economic well-being are inextricably linked to environmental well-being, and thus, that human, environmental, and economic well-being must be considered in the design and evaluation of economic development efforts.

What does this mean for practice? Just as there is not a single way to engage in conventional economic development, neither is there a single way to engage in TBL or sustainable economic development. Core objectives of economic vitality, resource stewardship, and community well-being will be held in common, though the means to achieve those objectives will vary with contextual factors such as type of project, community features, and scale. Most significantly, TBL economic development necessitates new forms of accounting for impact, and a more nuanced understanding of the interactions between economic, environmental, and social factors. For example, green building practices may contribute to the environmental bottom line by saving energy and reducing toxins, while also contributing to the social bottom line by reducing deleterious health impacts and to the economic bottom line by reducing operating costs, capturing market premiums, or improving employee health, retention, or productivity. By considering social, environmental, and economic factors, TBL, or sustainable economic development, provides a more meaningful, productive framework for achieving and measuring economic development.

Triple Bottom Line and Sustainable Economic Development in Practice

Having defined TBL and sustainable economic development, we consider whether and how the concept has been addressed in practice. Our research includes a review of the literature, a national survey of economic development practitioners, and a review of 18 cases of TBL economic development in practice. A summary of each is presented below, followed by a synthesis of findings.

Literature Regarding Triple Bottom Line and Sustainable Economic Development Practice

Research regarding how economic development practitioners understand and prioritize TBL or sustainable development is sparse, though consistently identifies the population as having limited engagement with sustainability themes. Jepson (2003) surveyed 500 certified city planners and found that those who self-identify as economic developers offered slightly lower support for ecologically focused sustainable development activities than planners with other specializations. Zeemering (2009) utilized Q methodology with 28 economic development officials in the nine-county San Francisco Bay Area and found that participants do not hold a unified conceptualization of sustainability (e.g., varying levels of emphasis on economic, environmental, and social factors) and that prioritization of potential actions is influenced somewhat by context (e.g., whether a factor is constrained in their jurisdiction or viewed as within the organization's scope of responsibility). Grodach (2011) explored barriers to sustainable economic development in 15 Texas cities through document analysis and interviews with economic development officials. He found that economic development officials rarely mentioned TBL themes when asked to define the purpose of economic development, but did mention TBL themes when asked to identify important assets for economic development (e.g., human capital, educated workforce, quality of life, accessibility, and regional collaboration). Sustainability themes were viewed primarily in relation to how they may negatively impact future growth and as outside the economic developer's control. A competitive and reactive approach to development was identified as a barrier, along with a conventional economic development mindset that emphasizes attention to economic growth over social equity and environmental protection.

Economic Development Practitioner Survey

Our national survey of economic development professionals contributes to understanding about practitioners' views and practice regarding TBL economic development. The survey recruitment strategy was designed to ensure adequate representation of diverse regions of the United States as well as diverse types of jurisdictions (city, county, region, state), community size (rural/suburban/urban populations), and organization type (public, private, nongovernment organization). The research team worked with U.S. Economic Development Administration (EDA) and national economic development membership organizations to reach the target population (economic development professionals in the United States), as there is no list of names or contact information for this group of people. An invitation to participate in the online survey was sent by EDA to members and subscribers of the International Economic Development Council

(IEDC), National Association of Development Organizations (NADO), and Rural Policy Research Institute (RUPRI). The survey was conducted in 2011. Anonymity was provided and human subjects' approvals were secured.

The research team employed a number of best practices to encourage survey response. These included high-level sponsorship or endorsement of the survey (distributed through respected economic development organizations), ease of survey administration (users tested the online survey), follow-up (reminder sent), and salience or motivation (explain how the survey will be useful; Miller & Salkind, 2002; Selltiz, Wrightsman, & Cook, 1976). Four-hundred and thirteen surveys were completed, with most questions receiving 381 responses. Randomization of choice options was used to reduce answer choice presentation bias (e.g., automatic rotation of answer choices to avoid those near the top of a list being selected more frequently than choices near the bottom of a list).

Our analysis considered two types of volunteer bias. First, volunteer bias may occur if respondents who care strongly about the survey subject are more likely to respond, and their views differ from those who respond later and whose views may be more in line with the silent majority. We compared responses of early and late responders on several key survey questions and found no differences in their responses, suggesting that this form of volunteer or nonresponse bias was not a problem in our survey. Second, volunteer bias can occur when respondents' answers differ according to certain respondent characteristics (e.g., whether they are from urban or rural places) and the volunteer sample is not representative of the target population (e.g., overrepresents urban or rural). There is no data set that makes it possible to identify whether the sample is representative of the target population to test for potential differences; we explored whether respondents' answers varied depending on characteristics about themselves, their agencies, or the area they serve (e.g., gender, age, rural/urban/suburban). Where we found no such relationships, we can say that any differences that might exist between the sample and the target population do not affect our ability to make generalizations about the target population from the sample data. However, our ability to accurately estimate the views of the target population from the volunteer sample is affected where we find that responses varied with population characteristics. As reported below, we identified a few of these cases in our analysis (t test, $p \leq .05$). In those cases, we present how the results differ among the relevant subgroups rather than draw conclusions from the sample about the target population. In this way, we are careful to avoid making biased conclusions about the overall target population.

Respondents. The majority of respondents are senior-level staff (53%) or midlevel professionals (42%), which is in line with our research focus on economic development practitioners who are responsible for and familiar with economic development decision making. More than half (53%) of the respondents have at least 15 years of experience, consistent with the responses regarding organizational position. The majority are 50 years or older (61%), again in keeping with the respondents' seniority of position. Although the population distribution of economic development practitioners by age, professional experience, and positional seniority is unknown, the respondents' profile on these characteristics is consistent with the level of professional leadership targeted for the survey. There were more male respondents than female (60% and 40%, respectively), which may or may not reflect the actual distribution of the target population. Some differences in response by gender were identified and are discussed in the results (see Table 1).

Table 1. Respondents.

	n	%
Seniority of position		
Elected official	4	1%
Senior level	198	53%
Mid-level	157	42%
Junior level	14	4%
Entry level	4	1%
Professional experience		
Less than 5 years	44	11%
5 to 9 years	69	18%
10 to 14 years	62	16%
15 to 19 years	54	14%
20 to 30 years	98	26%
More than 30 years	50	13%
Not applicable	6	2%
Gender		
Male	221	60%
Female	145	40%
Age		
29 years or younger	14	4%
30 to 39 years	41	11%
40 to 49 years	88	24%
50 to 59 years	130	35%
60 years or older	94	26%

Respondents represent diverse areas of the United States, with representation from each of the six EDA regions (Atlanta 12%, Austin 11%, Chicago 17%, Denver 17%, Philadelphia 20%, Seattle 23%). No information exists regarding the distribution of economic developers by state. Thus, although we cannot say whether this sample is representative of the target population, we can say that each EDA region is represented and that the higher representation of the east and west coasts is logical, given the concentration of population in those regions.

The organizational service area ranges from individual cities to multistate regions, and the population served ranges from very small (less than 10,000) to very large (more than 5

Table 2. Organization.

Type of organization	*n*	%
Public	165	43%
Nonprofit, nongovernmental	121	32%
Quasi-public	34	9%
Tribe	3	1%
For profit	26	7%
Other	31	8%
Service area character		
Urban	41	11%
Urban/suburban	39	10%
Suburban	5	1%
Suburban/rural	40	11%
Rural	139	37%
Urban/suburban/rural	93	25%
Other	21	6%
Service area geography		
City/township/local	81	22%
County	58	15%
Multicounty region	120	32%
State	51	14%
Multistate region	35	9%
Other	30	8%
Population served		
Less than 10,000	45	12%
10,000 to 24,999	24	6%
25,000 to 49,999	27	7%
50,000 to 99,999	30	8%
100,000 to 199,999	50	13%
200,000 to 500,000	60	16%
500,000 to 999,999	37	10%
1,000,000 to 4,999,999	47	13%
5,000,000 or greater	52	14%

million). Most respondents work for public or nonprofit agencies. Only a few respondents work for tribes, so we cannot tell from this study how tribal economic development practitioners view these issues (see Table 2).

Familiarity With Triple Bottom Line Term. When asked, "How familiar are you with the term 'triple bottom line?'" three of every four respondents reported that they are at least "somewhat familiar" with the term (39% identified as "somewhat familiar" and 36% as "very familiar"). However, a significant difference between respondents serving urban and rural areas was identified. Generally, respondents who work for agencies that serve rural communities, including those that serve suburban/rural and urban/suburban/rural communities, are less familiar with the term than those who serve urban and suburban/urban communities; 28% and 17%, respectively, responded "unfamiliar" (see Tables 3 and 4).

The differences in response by location should be considered when using the sample to estimate the views of the target

Table 3. Familiarity.

Familiarity with TBL term	All respondents (*N* = 501)
Unfamiliar	25%
Somewhat familiar	39%
Very familiar	36%

Note. TBL = triple bottom line.

population (all U.S. economic development practitioners). Nearly half (48%) of the survey respondents work for agencies that serve rural or suburban/rural places. If this is less, or more, than the case for the target population, then the level of familiarity is probably lower, or higher, than that identified by the survey. Without knowing the urban/rural mix of economic development practitioners across the nation, it is probably safest to say that 25% to 48% of economic development practitioners are very familiar with the term, 25% to 47% are somewhat familiar, and 17% to 28% are unfamiliar with the term. Analyses of familiarity by agency characteristics and respondent characteristics did not identify any other significant differences between subgroups.

Perceived Importance of Considering Triple Bottom Line. When asked how important it is to consider the TBL of economic development investments, nearly all the respondents (91%) reported that in their opinion it is "moderately important" or "very important" to consider the TBL of economic development investments, including nearly two thirds who view it as "very important." While this does not reveal respondents' views regarding how the TBL should be considered, it does reveal strong agreement regarding the importance of considering the economic, environmental, and social dimensions (see Table 5).

Consistent with other research, our survey findings identified gender differences, with females more likely to express support for consideration of the TBL of economic development (Vanderleeuw, Sandovici, & Jarmon, 2011). Fifty-seven percent of male respondents and 77% of females think it is "very important" to consider the TBL of economic development investments. Eighty-nine percent of males and 97% of females see it as either "moderately important" or "very important." We do not know if the gender mix in our sample (60% male and 40% female) differs from the mix in the target population. If there is a higher or lower proportion of men in the target population, then the overall view on the importance of TBL would likely shift. Nonetheless, it is safe to say that the majority of economic development practitioners think it is "very important" to consider the TBL of economic development investments (see Table 6).

Perceived Value of Tools to Consider Triple Bottom Line. The majority of respondents (57%) report that it would be "very helpful" to have tools or processes that could help their organization consider TBL impacts of investments and 81% think it would

Table 4. Familiarity by Urban/Rural.

Familiarity with TBL by urban/rural	Urban, urban/suburban, suburban (n = 84)	Suburban/rural, rural (n = 176)	Urban/suburban/rural (n = 92)
Unfamiliar	17%	28%	28%
Somewhat familiar	36%	47%	25%
Very familiar	48%	25%	47%

Note. TBL = triple bottom line.

Table 5. Importance.

TBL importance	All respondents (n = 380)
Not at all	1%
A little	6%
Moderately	27%
Very	64%
Don't know	2%

Note. TBL = triple bottom line.

Table 6. Importance by Gender.

TBL importance by gender	Male (n = 219)	Female (n = 145)
Not at all	1%	0%
A little	8%	1%
Moderately	32%	20%
Very	57%	77%
Don't know	2%	1%

Note. TBL = triple bottom line.

be either "moderately helpful" or "very helpful." Views on this question did not significantly differ across any of the respondent or agency characteristics; however, interest in TBL tools is greater among respondents who report familiarity with the term (see Table 7).

Current Use of Triple Bottom Line Approaches. While the majority of respondents indicate that TBL impacts of economic development should be considered, nearly three-quarters of survey respondents report that they are unaware of any jurisdictions, including their own, that have systematically applied a TBL approach to economic development decision making. This indicates a significant gap, particularly given long-standing calls to better account for impact of both economic development organizations and investments (Ammons & Morgan, 2011; Arena, Adams, Noyes, Rhody, & Noonan, 2008; Bartik, 2005; Felsenstein, 2001; Felsenstein, Persky, & Wiewel, 1997; Gosh et al., 2014; Musil, 2001; Reese & Fasenfest, 1999).

Triple Bottom Line Economic Development Cases

To better understand what TBL economic development looks like in practice and identify lessons learned, our research

Table 7. Need for Tools.

Usefulness of tools	All respondents (n = 379)
Not helpful—already have tools	2%
Not helpful—have no interest or need	3%
A little helpful	12%
Moderately helpful	24%
Very helpful	57%
No opinion/don't know	2%

Note. TBL = triple bottom line.

included an exploration of 18 cases where a TBL approach to economic development was implemented. Cases were selected to represent diverse settings (e.g., rural, urban, and suburban communities), as well as diverse types of economic development activity (e.g., industry and manufacturing, institutions and services, mixed-use development, and culture, recreation, and tourism). Selection was not meant to imply endorsement or that TBL results were achieved; rather, our purpose was to learn from a range of examples where such an approach was tried.

Cases were identified through the literature, web searches, the survey of practitioners (described above), and professional networks. A minimum of one interview with a lead staff person familiar with the project was conducted per case. A semistructured interview protocol was used, with questions addressing the basic facts of the project, accomplishments, assessment methods, and lessons learned. Archival documents (e.g., reports, articles) were analyzed as a complement to the interviews. The case research was conducted between 2011 and 2012. Human subjects' approval was obtained and interviewees were provided an opportunity to review the draft report for accuracy.[3]

Our search for cases and our interviews indicate that the concept of TBL economic development is not at all common in practice, and that TBL language may not be used when the concepts are employed. As one interviewee noted, "It never occurred to us to connect to the double or TBL. It was very real and authentic to our priorities—it wasn't done with an external audience or framework in mind." This is consistent with other research indicating that TBL or sustainability practices may be adopted without the terminology being applied (Conroy, 2006; Saha & Paterson, 2008; Zeemering, 2009).

As noted above, TBL strategies were employed across diverse settings and types of economic development activity. Strategies ranged from green industry job creation that targeted traditionally underserved populations to the inclusion of TBL performance measures in incentive programs. An example of how the three dimensions were addressed can be found in the case of a maritime center in rural Washington. The new center promoted *economic well-being* by diversifying revenue streams for maritime and tourism industries; *community well-being* by providing facilities and programming that contributed to historic preservation, placemaking, education, and cultural enrichment; and *natural resource stewardship* by remediating a contaminated site, protecting sensitive habitat, achieving green building certification, and purchasing green power.

Despite the diversity of settings and strategies, where TBL concepts were employed, key themes emerged. Interviewees attributed success to integrated and inclusive planning and partnership, coupled with continuous learning. From business incubators to infrastructure, participants identified the importance of a clearly articulated vision and plan, realistic assumptions and due diligence, playing from strengths, a patient and long-term view, an ability to navigate changing conditions and respond to emerging opportunities, and a willingness to bridge innovation with proven paths. Furthermore, working with diverse disciplines, departments, and stakeholders enhanced project design, buy-in, and resources. Through collaboration, projects were able to link and leverage ideas and resources, thus enabling greater impact, cost sharing, and innovation for better results. One interviewee observed, "Collaboration will write your success or failure—particularly as resources become scarcer."

Another key theme identified is the need for enhanced capacity to successfully incorporate a TBL perspective into economic development. This includes developing staff expertise to ensure understanding of core TBL concepts as well as skills for productive engagement and partnership. Strategies vary with context, though best practice is defined by an attitude of mutual respect and learning, a valuing of diverse talents and resources, and a commitment of time and resources that align with the needs of the project.

Although these "lessons" may seem like common sense good practice, there is a sense that the identified behaviors are not necessarily standard practice though were essential for project success. This is consistent with the literature, suggesting that collaborative systems approaches are important though underutilized in economic development (Gordon, 2009; Innes & Booher, 1999; Roberts & Cohen, 2002; Shaffer et al., 2006). In our exploration of the ways that communities are applying a TBL perspective to economic development investment, we found that, although many concepts and strategies are familiar, new territory is being covered. For example, while partnership and collaboration are not new to economic development, there is a sense that the approach is changing with new skills and attitudes regarding network development, stakeholder engagement, and multidisciplinary whole-system approaches.

Discussion and Implications

Triple bottom line and sustainable economic development understand the purpose of economic development to be improved well-being and quality of life through the creation of jobs and wealth, and the process of economic development to include creation, expansion, retention, and recruitment, of jobs and businesses through a mix of techniques. These techniques include, for example, business assistance, workforce development, and the cultivation of networks, infrastructure, and amenities that support business development and influence business location decisions. It adds to this conventional view a recognition that economic development is inextricably connected to environmental and social factors, and that all three must be addressed for economic development to succeed.

Our research indicates that economic development professionals generally favor the consideration of economic, environmental, and social dimensions when making economic development investments, yet few do so. A number of interrelated factors may contribute to this gap. First, economic development is situated in a broader context in which understanding of and support for TBL concepts may be limited. Research in related areas of planning, administration, and sustainability suggests that organizational and community characteristics impeding uptake and implementation of TBL concepts may include insufficient capacity, a weak understanding of and support by key organizational and political leaders, and low socioeconomic status (Conroy, 2006; Grodach, 2011; Hammer, 2010; Hammer, Allen, & Meier, 2010; Johnson & White, 2010; Saha, 2009; Saha & Paterson, 2008; Svara, Watt, & Jang, 2013; Wang, Hawkins, Lebredo, & Berman, 2012). Second, economic development occurs in a highly competitive environment where much of what affects outcomes is outside the jurisdiction's control and success is narrowly defined. Furthermore, TBL economic development may be impeded by a lack of integration and coordination among various policies and programs, with existing programs often at odds with TBL principles, and trade-offs between economic, environmental, and social goals assumed to be required. Finally, TBL or sustainability principles are not core to academic and professional accreditation for economic developers, which likely translates into a lack of knowledge and skills to infuse TBL concepts into practice. For example, accreditation as a Certified Economic Developer or Accredited Economic Development Organization does not require any coverage or proficiency with respect to TBL or sustainability theory or practice. Furthermore, at the university level, there is no national accreditation for economic development

programs and thus no requirements regarding competence in TBL theory or practice.

If the purpose of economic development is to improve well-being through the generation of jobs and wealth, then conventional approaches must be questioned for their contribution to deleterious trends such as increasing income disparity and costly development-related environmental impacts. We suggest that the TBL approach is core to successful economic development and can serve as an organizing framework for economic development programming and research. Reflecting on our research findings and experience in the field, we suggest the following as important for helping to advance theory and practice of TBL economic development.

Training and Certification

The industry's leading professional organization, IEDC, has brought sustainability-related content to its publications and programming; however, there is ample room to expand on these efforts. In particular, we recommend that TBL concepts be added to the core competencies required to achieve designation as a Certified Economic Developer and Accredited Economic Development Organization. In addition, universities offering economic development degrees, certificates, and concentrations should include fundamental sustainability knowledge and skills as part of the core requirements, a requirement in keeping with accreditation standards for planning and business programs (Planning Accreditation Board and Association of MBAs, respectively).

Assessment

Triple bottom line assessment is an important though challenging endeavor. Literature about assessment indicates that ex ante assessment of impacts can be limited by a focus on avoidance of negatives rather than alignment with preferred results, extensive resources required for analysis, and poor integration into planning and decision-making context (Cashmore, William, Morgan, Cobb, & Bond, 2004; Hertin et al., 2009; Jay, Jones, Slinn, & Wood, 2007). A number of challenges to ex post assessment of impact have also been identified, including long-time horizons required for analysis, resources required for data collection and analysis, and limited ability to make causal attribution (Jackson, 2013; Schutte, 2010; Searcy, 2012). Furthermore, assessment frameworks often see a lack of uptake, particularly in the absence of incentives for use (Bentivegna et al., 2002; Bond, Morrison-Saunders, & Pope, 2012; Fazili, 2010; Frame & Vale, 2006; Freireich & Fulton, 2009; Hammer 2010; Harji & Jackson, 2012; Hopwood, Unerman, & Fries, 2010; Jenson & Elle, 2007). The U.S. EDA's TBL Tool sought to help meet the need for a research-based, industry-vetted, and user-friendly assessment tool. The TBL Tool was an online platform that could be used to design for, assess, and communicate alignment of economic development investment with goals for economic vitality, natural resource stewardship, and community well-being.[4] The tool drew on national data sets and user-defined information to determine the degree of investment alignment with these goals. For example, scores pertaining to location accessibility, relative wages, and proximity to natural resources were generated based on the project address, while scores pertaining to green building certification, community engagement, or job creation were generated based on user-supplied information. Version 1 of the tool was designed for location-based investments; future versions were planned for nonlocation-based investments (e.g., a citywide conservation project or a mobile slaughterhouse) as well as non-U.S.-based investments. The tool received favorable reviews; however, uptake was inhibited by a number of factors, including a lack of incentives for use and the need for better training in TBL concepts—two items addressed in our list of recommendations. We suggest that the framework developed for the TBL Tool provides a productive point of departure for further efforts to assess TBL economic development.

Incentives

Economic developers are mostly incentivized to *not* consider the TBL. Consistent with Grodach (2011) and Roberts and Cohen (2002), our interactions with economic development professionals revealed concerns that such an approach could hinder a project and thus work counter to the mandate and reward system to which they are held accountable. With respect to the provision of economic development incentives, progress is being made in the area of accountability for development incentives;[5] however, it is not clear to what extent incentives are being conditioned on performance with respect to TBL goals. We suggest that professional norms regarding incentives, both the standards to which economic developers are held and the design and accountability of economic development incentives, provide clear expectations and rewards for TBL approaches.

Research

The concept of TBL or sustainable economic development provides abundant opportunities for productive research. First, we suggest extension and integration of the practitioner surveys regularly administered by IEDC and the International City County Management Association.[6] Currently, each of these organizations surveys members on a range of TBL-related issues; however, the lack of uniformity for similar questions precludes analysis between groups, and an absence of questions on key topics precludes understanding regarding important issues. Coordination of survey efforts would improve understanding of differences between groups (e.g., mayors, managers, economic development professional) and afford the opportunity to track changes in attitudes, priorities,

and actions over time. Doing so would be particularly useful for developing responses that meet practitioner needs with respect to TBL economic development (e.g., policies, programs, trainings, research). Second, there is a rich research agenda associated with TBL approaches to development and measurement. This includes, for example, documenting impact and lessons learned, and building on and contributing to literature in such areas as collaborative governance, adaptive management, social capital, equitable development, pathways to opportunity, and sustainability assessment.

The research presented here contributes to understanding about TBL economic development, providing a standard definition along with insight into how the concept is viewed and operationalized by economic development professionals. The TBL concept is identified as important by practitioners; however, it is not commonly integrated into practice. A number of factors help explain this gap, including an absence of TBL themes from education, training, and accreditation programs as well as the presence of disincentives. Simply put, practitioners are generally not trained or rewarded to consider the TBL. We suggest that a TBL approach is central to economic development success and recommend specific actions with regard to training, incentives, assessment, and research that can advance theory and practice in this regard.

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Notes

1. A small number of examples includes *Sustainability Accounting Journal*, *Management and Policy Journal*, *Journal of Sustainable Real Estate*, *Journal of Sustainable Finance and Investment*, *Corporate Social Responsibility and Environmental Management Journal*, *Stanford Social Innovation Review*, *The UN Principles for Responsible Investment Initiative*, *The Global Impact Investing Network (GIIN)*, and the *Forum for Sustainable and Responsible Investment (US-SIF)*. A sample of reports documenting penetration of the concept into business and investment include Haanaes et al. (2012), Harji and Jackson (2012), and KPMG International (2013).
2. Technically, TBL development refers to strong environmental, social, and economic performance, and sustainable development refers to environmental, social, and economic performance that can endure over time. The two terms are often used interchangeably and are presented so here.
3. Space does not permit an overview of the 18 cases; the casebook is available at http://tbltool.org/files/CUPA_Casebook.pdf.
4. The TBL Tool website includes a user's guide with detailed information on method and measures (tbltool.org/files/tbl_tool_users_guide.pdf), as well as a practitioner's guide with a framework for considering TBL impacts (tbltool.net/files/tbl_framework_practitioners_guide.pdf).
5. For example, The Pew Charitable Trust is leading an initiative to improve evaluation of state economic development tax incentives (http://www.pewtrusts.org/en/projects/economic-development-tax-incentives). IEDC has also published a report aimed at improving return on incentives (Hurwitz, 2015).
6. Collaboration with other key economic development related organizations is advised as well, when appropriate. Examples include the American Planning Association, National League of Cities, and National Association of Development Organizations. IEDC and the International City County Management Association are highlighted here because they regularly survey their members on related topics.

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Author Biographies

Janet Hammer served as director of the Initiative on Triple Bottom Line Development at Portland State University and led the development of the Triple Bottom Line Tool for the U.S. Economic Development Administration. She is currently adjunct faculty at Portland State University and a consultant. Her research bridges sustainable development theory and practice, focusing on sustainability metrics,, multi-stakeholder processes, and sustainable economic development.

Gary Pivo is a faculty member at the University of Arizona and codirects the Responsible Property Investment Center. He works in the areas of responsible property investing, land use planning, and sustainable cities.