Research Article

Journal of Public and Nonprofit Affairs
Vol. 11 , No. 1

Exploring Efficiency Metrics in Nonprofits: A Case Study of Habitat for Humanity

Jessica L. Berrett - University of Colorado Colorado Springs

This exploratory case study examines nonprofit efficiency by interviewing 36 leaders from Habitat for Humanity affiliates across diverse geographic locations in the United States, focusing on understanding efficiency from a practitioner's perspective. Habitat for Humanity, composed of numerous nonprofits dedicated to housing, provided a rich context for this investigation. The study finds that while nonprofit practitioners use a diverse array of metrics to assess efficiency, many of these metrics do not accurately measure it, indicating a need for greater education around efficiency measurement. Additionally, the metrics cover diverse organizational areas, highlighting the importance of a multidimensional approach to efficiency assessment. The study suggests that aligning scholarly methods with practitioner needs and promoting a broader understanding of efficiency across multiple organizational dimensions could improve both theoretical and practical applications in nonprofit management.

Keywords: nonprofit efficiency, normative measures, instrumental measures, Habitat for Humanity

Introduction

Nonprofit organizations are increasingly confronted with the challenge of optimizing their managerial efficiency—the ability to turn inputs into outputs (Coupet & Berrett, 2018). The pursuit of doing more with less has become a central theme in nonprofit scholarship and discourse (AbouAssi et al., 2016; Alexander, 2000; Bishop, 2007; Coupet & Berrett, 2018; Hackler & Saxton, 2007; Ridder et al., 2012; Ritchie et al., 2004). These organizations must navigate a complex landscape of diminishing government support, intensified competition for scarce resources, and heightened expectations from funders, who increasingly demand concrete, demonstratable outcomes while insisting on cost containment (Alexander, 2000). As a result, nonprofits are subject to heightened scrutiny and accountability (Bishop, 2007; Ritchie et al., 2004).

Efficiency metrics, which evaluate how effectively an organization converts resources into results, play a crucial role in this environment. These metrics are used both internally, for performance management and strategic planning, and externally, for public communication and benchmarking against other organizations (Poister, 2008). External benchmarking is often emphasized by watchdog organizations like Charity Navigator, Charity Watch, and BBB Wise Giving Alliance. For instance, Charity Navigator (2024) assesses metrics such as the program

Berrett, J. L.. (2025). Exploring Efficiency Metrics in Nonprofits: A Case Study of Habitat for Humanity. *Journal of Public and Nonprofit Affairs, 11*(1), 5 – 27, https://doi.org/10.20899/jpna.g0199p91

expense ratio and fundraising efficiency, while Charity Watch (2024) uses similar measures. BBB Wise Giving Alliance (2024) also evaluates program and fundraising expense ratios, whereas GuideStar by Candid (2024) is moving away from traditional metrics, offering new alternatives to reduce the emphasis on overhead ratios.

Nonprofits face significant challenges in assessing efficiency, due to a lack of clarity on what metrics to measure, insufficient data collection practices, and limited capacity to analyze and interpret data. Often, organizations struggle to define appropriate indicators of efficiency, unsure of whether to focus on financial metrics, program outcomes, or operational processes. This uncertainty is compounded by the fact that many nonprofits do not consistently collect the necessary data to evaluate their performance, either because they lack the resources or because data collection is not integrated into their regular operations. Additionally, even when data is available, nonprofits may not have the expertise or tools to analyze it effectively, making it difficult to draw meaningful insights or make informed decisions. These challenges create a significant barrier to understanding and improving efficiency, leaving many nonprofits unable to demonstrate their impact or optimize their use of resources.

Despite the importance of these metrics, there has been limited discussion between scholars and nonprofit practitioners on this topic. This paper aims to bridge that gap by providing clarification and insight into how efficiency is understood and measured by those working in the field. Guided by the research question "What efficiency metrics are employed by nonprofit practitioners?" this study conducts an exploratory case study on nonprofit efficiency, featuring interviews with executive directors and board members from various Habitat for Humanity affiliates across the United States. The perspective of practitioners is crucial, as highlighted by Mosley et al. (2019) in their critique of the "What Works" movement. They argue that evidence-based practice, while aimed at ensuring service quality through standardized models, often overlooks the contextual expertise of frontline workers and the unique needs of diverse communities. They advocate for an organizational learning approach that values adaptability and integrates multiple forms of knowledge, which can better support effective practice in complex social environments (Mosley et al., 2019). The goal of this study was to understand efficiency from the perspective of practitioners. Habitat for Humanity, as a prominent organization within the human service subsector—the largest nonprofit subsector in the U.S. (McKeever et al., 2016)—offers a useful sample.

The relevance of this study is highlighted by the current landscape in which nonprofits operate. The COVID-19 pandemic and subsequent economic disruptions have further strained resources and increased the demand for services (Kim & Mason, 2020; Newby & Branyon, 2021; Shi, 2022), making efficient use of resources more critical than ever. Nonprofits are under immense pressure to adapt and find innovative ways to achieve their missions with limited resources. Therefore, understanding and improving efficiency is not just an academic interest but a practical requirement for organizational survival and impact.

Moreover, this study offers practical insights for nonprofit leaders and managers. By highlighting the limitations of current efficiency measures and proposing alternative approaches, it aims to equip practitioners with the tools needed to navigate the complex landscape of nonprofit management. The findings suggest that a multidimensional approach can provide a more accurate understanding of efficiency, ultimately helping organizations to better achieve their missions in a resource-constrained environment. In sum, this study is timely and essential as it addresses the critical need for a better understanding of nonprofit efficiency in today's challenging environment. It connects practical application with academic theory, offering valuable contributions to both

fields and providing nonprofit organizations with the insights needed to enhance their operational effectiveness.

Literature Review

Upon examining the prior research that assesses efficiency measures within the nonprofit domain, the literature review has unveiled a multitude of efficiency metrics employed (see Table 1). These metrics can be effectively categorized into two overarching categories that align with Mitchell's (2018) dual perspectives on efficiency. One view, termed normative, accentuates the importance of overhead reduction, while the other perspective, deemed instrumental, underscores the imperative of cost minimization per unit of impact. However, scholarly literature has begun to expose the complexities and limitations inherent in some of these metrics.

Integrating institutional theory further enriches this discussion by exploring how nonprofit organizations navigate and reconcile these normative and instrumental logics within their institutional environments. Institutional theory proposes that organizations are shaped by external pressures from their institutional environment, including regulatory requirements, professional standards, and cultural expectations. These pressures can lead to isomorphism, where organizations in the same field become increasingly similar in their structures and practices (DiMaggio & Powell, 1983).

In practice, nonprofit managers often operate within a complex interplay of normative and instrumental logics. For example, a nonprofit may adhere to ethical standards (normative) while also employing performance metrics (instrumental) to demonstrate accountability and effectiveness to funders. Balancing these logics requires managerial acumen to ensure that the organization maintains its legitimacy and stakeholder trust while achieving its mission efficiently.

Table 1. Selective Review on the Efficiency Measures from the Academic Literature

Instrumental Efficiency Measures	Studies
Administrative expenses + fundraising expenses + special event expenses / total revenue	Ecer et al. (2017); Hager et al. (2001)
Cost per dollar of receipts x technical efficiency index	Callen & Falk (1993)
Data envelopment analysis (DEA)	Ayayi & Wijesiri (2018); Ba et al. (2022); Berrett & Hung (2023); Burgess & Wilson (1995); Callen & Falk (1993); Coupet (2018); Coupet & Berrett (2018); Coupet et al. (2021); González-Torre et al. (2017); Luksetich & Hughes (1997); Min & Ahn (2017); Miragaia et al. (2016); Roh et al. (2010)
Fundraising + administrative costs / total revenue	Bowman (2006)
Fundraising expenses / contributions	Ashley & Faulk (2010); Frumkin & Keating (2011)

Fundraising expenses + special event expenses / total contributions + gross special event income	Ecer et al. (2017); Hager et al., (2001)
Program expenses / number of participants	Hung & Berrett (2023)
Project expenses / total revenue	Rocha Valencia et al. (2015)
Stochastic frontier analysis (SFA)	Bishop & Brand (2003); Coupet & Berrett (2018); Hung & Berrett (2022)
Normative Efficiency Measures	
Administrative expenses / total expenses	Ashley & Faulk (2010); Callen et al. (2003); Chikoto & Neely (2014); Coupet & Berrett (2018); Ecer et al. (2017); Frumkin & Keating (2011); Frumkin & Kim (2001); Tinkelman & Mankaney (2007); Trussel & Parsons (2007); Lu & Zhao (2019)
Administrative + fundraising expenses / total expenses	Lecy & Searing (2015); Kim (2017); Coupet & Berrett (2018)
Fundraising expenses / total expenses	Callen et al. (2003); Chikoto & Neely (2014); Frumkin & Keating (2011)
Program expense / total expense	Trussel & Parsons (2007)
Total expenses / program expenses	Callen et al. (2003)

Note. The list is meant to be representative but not exhaustive. Also, see Appendix A for a list of the input and output measures used in each study's DEA and SFA analysis.

Instrumental Measures

The instrumental logic, drawing inspiration from March and Olsen's (1998) theory of consequences, centers on the notion that individuals make choices by carefully evaluating the likely outcomes concerning their personal or collective objectives. Within the instrumental perspective, managerial decisions are not influenced by adherence to a predetermined set of normative rules; instead, they are driven by a deliberate assessment of the potential consequences associated with each decision.

The managerial viewpoint is marked by its inward focus, a clear orientation toward specific objectives, and a strong emphasis on achieving impact (Berrett & Sudweeks, 2023). Under the instrumental framework, efficiency is construed as a ratio juxtaposing costs against outputs or impact. In nonprofit organizations, this instrumental orientation toward efficiency entails pursuing organizational goals by amplifying social impact while concurrently curbing or maintaining costs (Berrett & Sudweeks, 2023). Within the nonprofit literature, instrumental measures manifest through three distinct avenues.

Data Envelopment Analysis: Data envelopment analysis (DEA) is a method used to evaluate how efficiently different organizations use their resources (like money, time, or staff) to produce results (like how effectively shelters use their budgets to provide housing for the homeless or how

effectively counseling centers use their staff to improve client well-being). It is a way to compare the performance of different organizations doing similar work to see who is getting the best results with the resources they have. It helps identify who is most efficient and where others might improve. Essentially, the application of DEA is instrumental in determining an organization's efficiency relative to its peers, yielding a scoring metric ranging from 0 to 1. This score is derived by maximizing the summation of input-to-output ratios for each organization, thereby generating an efficiency score (Charnes et al., 1978, 1981). An organization achieving a score of 1 is deemed the most efficient, effectively establishing an efficiency frontier. Subsequently, peer organizations are assessed and assigned efficiency scores, reflecting their proximity to the most efficient entity or entities.

For instance, in a study conducted by Coupet (2018) investigating the impact of government funding on efficiency in nonprofit and public colleges, DEA is employed as the initial step. Each college's efficiency is calculated, considering inputs such as instruction, academic support, and student services, compared with the output metric of graduation rates. Subsequently, a regression analysis employs the efficiency score as the dependent variable of interest, with public funding as the independent variable. The findings of this study reveal that public funding experts have no discernable influence on the efficiency of nonprofit colleges, but conversely have a negative effect on the efficiency of public colleges (Coupet, 2018).

In another study, DEA is harnessed to gauge the efficiency of food banks across 13 European countries, as undertaken by González-Torre et al. (2017). This analytical framework leverages inputs including the foundation year, number of volunteer staff, and number of permanent staff. Outputs encompass metrics such as amount of food distributed and number of recipients of food. The outcomes of this analysis facilitate identifying the most and least efficient food banks, thereby affording the means to establish benchmarks for enhancement.

Stochastic Frontier Analysis: Akin to the application of DEA, certain scholars within the nonprofit domain employ stochastic frontier analysis (SFA) as a method to measure efficiency, as exemplified by the works of Bishop and Brand (2003), Coupet and Berrett (2018), and Hung and Berrett (2022). As explained by Kumbhakar et al. (2015), SFA entails utilizing econometric models to estimate production, cost, or profit frontiers, then assessing efficiency relative to these established frontiers. For instance, in a study by Bishop and Brand (2003), the researchers probe into the nexus of public funding, volunteer engagement, and efficiency. Efficiency is achieved by evaluating total running and maintenance costs incurred by museums during the study year, with the number of full-time equivalent workers within each museum constituting the inputs. Outputs are captured by the number of physical visits and subscribers garnered by each museum. Through a regression analysis incorporating public funding and volunteer activity as independent variables, the study discerns a negative impact on efficiency.

In another study, Hung and Berrett (2022) examine the relationship between commercialization and nonprofit efficiency with the moderating roles of government funding and organizational size in nonprofit arts organizations. They measure efficiency using stochastic frontier analysis with the number of participants as the output, and total program expenses, total administrative expenses, and the number of full-time equivalent employees as the inputs. Regressing commercialization on nonprofit efficiency, they find a positive correlation. Moreover, they find the relationship is more positive when less government funding is received.

Simple Input-to-Output Ratios: Efficiency measures can also include simple input-to-out ratios. For instance, some scholars focus on fundraising efficiency by calculating the ratio of fundraising expenses to contributions (Ashley & Faulk, 2010; Frumkin & Keating, 2011; Hager et al., 2001).

Ashley and Faulk (2010) found that organizations with higher fundraising expense ratios tend to receive lower grant amounts. On the other hand, in a large sample of nonprofits across the U.S., Frumkin and Keating (2011) discovered that revenue concentration enhances efficiency. Other researchers have examined revenue efficiency by analyzing different expense-to-revenue ratios (Bowman, 2006; Ecer et al., 2017; Hager et al., 2001; Rocha Valencia et al., 2015). For example, Hager et al. (2001) used the ratio of overhead expenses to total organizational revenues. They found that the efficiency levels vary based on factors like organizational size, age, and subsector. Ecer et al. (2017) also used this ratio and observed that organizations relying primarily on commercial revenues more efficiently manage overhead costs. Additionally, some scholars have focused on program efficiency. For example, Hung and Berrett (2023) used a ratio of program expenses to the number of participants in a sample of arts nonprofits, finding that efficiency does not mediate the relationship between commercialization and free access in nonprofits.

Normative Measures

The normative managerial framework draws upon March and Olsen's (1996, 1998) concept of appropriateness logic. In this paradigm, managerial actions are guided by established norms and rules that stem from the organization's institutionalized identity or role. This institutionalization process gives rise to a set of norms and regulations that dictate what constitutes appropriate behavior within the organization, or in other words, socially acceptable standards. These decisions and actions are largely influenced by the need to uphold these institutionally defined standards of conduct rather than being solely grounded in rational expectations (Berrett & Sudweeks, 2023). This perspective posits that a socially or normatively accepted mode of behavior exists for nonprofit organizations, and managers are tasked with making choices that align with and perpetuate this accepted conduct.

Expense Ratios: The normative measures of efficiency are epitomized by the array of expense ratios, a category encompassing the overhead, administrative, fundraising, and program ratios, as substantiated by a corpus of scholarly works (Ashley & Faulk, 2010; Bowman, 2006; Callen et al., 2003; Chikoto & Neely, 2014; Coupet & Berrett, 2018; Ecer et al., 2017; Frumkin & Keating, 2011; Frumkin & Kim, 2001; Kim, 2017; Lecy & Searing, 2015; Lu & Zhao, 2019; Tinkelman & Mankaney, 2007; Trussel & Parsons, 2007). Expense ratios are considered normative because they are grounded in the concept of appropriateness logic, which dictates that managerial actions should align with established norms and rules within an organization (March & Olsen, 1996, 1998). These norms, derived from the organization's institutional identity, define what is considered acceptable behavior, such as reducing overhead costs. Expense ratios, like overhead, administrative, and fundraising ratios, are commonly used as proxies for efficiency because they are easily accessible, simple to compute, and allow for comparisons across organizations. However, they focus on input-to-input ratios rather than measuring outputs, which limits their ability to fully capture organizational efficiency (Coupet & Berrett, 2018). Despite these limitations, expense ratios are widely used because they reflect socially accepted standards within the nonprofit sector.

For those who employ expense ratios as their metric of choice, the reduction of overhead is construed as a critical marker of efficiency. For example, an investigation conducted by Ashley & Faulk (2010) hinged upon the administrative and fundraising cost ratios, seeking to unravel the impact of efficiency on grant acquisition. Their findings unveiled an inverse relationship, wherein organizations exhibiting higher fundraising ratios tended to secure less grant revenue. Furthermore, a study by Frumkin and Keating (2011) delved into revenue concentration, establishing a linkage with heightened efficiency. This investigation employed the administrative and fundraising expense ratios as proxies for efficiency, effectively demonstrating that revenue

concentration was positively correlated with enhanced efficiency. However, caution must be applied to these findings for the reasons explained below.

Challenges With the Normative Measures: The evaluation of nonprofit efficiency is fraught with challenges, but the increasing pressure on these organizations to demonstrate efficiency emphasizes its importance for scholars and practitioners alike. A key concern in the discourse is the concept of construct validity, which refers to the extent to which a metric accurately represents the phenomenon it is intended to measure while also aligning with the established theoretical frameworks (Garson, 2016).

Several scholars have cautioned against overreliance on expense ratios as a means of comparing nonprofit organizations. Steinberg and Morris (2010) argue that an excessive focus on these ratios can lead to unintended and harmful consequences, such as increased compliance costs, the spread of misleading solicitations, donor misguidance, inefficient fundraising efforts, and the suboptimal delivery of charitable outputs. They point out that high fundraising expenses do not necessarily indicate fraud or misallocation of resources (Steinberg & Morris, 2010).

Bowman (2006) further critiques the utility of overhead ratios, noting their limitations in the comparative analysis of organizations. Research by Coupet and Berrett (2018), using the same Habitat for Humanity data as this study, supports the conclusion that the expense ratios do not validly measure efficiency. The crux of the issue lies in the distinction between input-to-output ratios, which genuinely assess efficiency, and input-to-input ratios, like expense ratios, which do not account for outputs. For example, the administrative expense ratio measures administrative costs as a percentage of total expenses, without considering the outcomes produced by these expenditures. This lack of output consideration undermines the construct validity of expense ratios as a measure of efficiency.

To substantiate their argument, Coupet and Berrett (2018) conducted an analysis comparing expense ratios with direct efficiency measures, using stochastic frontier analysis (SFA) and data envelopment analysis (DEA), both of which are well-regarded methods in the management sciences for evaluating efficiency (Lampe & Hilgers, 2015; Ruggiero, 1996). Their findings showed a statistically significant relationship between SFA and DEA efficiency scores, while showing a negative correlation between these scores and expense ratios (Coupet & Berrett, 2018). Based on these results, Coupet and Berrett (2018) advocate for the use of metrics more closely aligned with true efficiency, such as DEA and SFA, highlighting the construct validity issues inherent to using overhead ratios as proxies for efficiency.

Prentice (2016) also emphasizes the importance of construct validity in nonprofit financial assessments, particularly when complex constructs are oversimplified into single metrics or when different metrics are used interchangeably. Mitchell and Calabrese (2019) further critique the use of overhead as a proxy for efficiency, arguing that it fails to serve as a credible measure of organizational effectiveness and efficiency due to its lack of construct validity.

Takeaways From the Academic Literature

The review of academic literature on nonprofit efficiency reveals several key trends and insights. Scholars have predominately focused on financial efficiency, with a particular emphasis on overhead ratios as a proxy for efficiency. However, it is noteworthy that the most recent study using overhead ratios dates back to 2019, indicating a potential shift away from this metric. This shift is likely driven by increasing caution among scholars regarding the limitations and potential misuse of overhead ratios.

In place of these traditional metrics, there is a growing trend toward the application of more sophisticated analytics methods such as data envelopment analysis and stochastic frontier analysis. Although these methods are not entirely new, their increased usage reflects a broader move toward more accurate assessments of nonprofit efficiency. These approaches allow for a more comprehensive understanding by evaluating the relationship between inputs and outputs, rather than relying solely on financial metrics.

Despite these advancements, the literature consistently highlights that there is no single, definitive way to measure nonprofit efficiency. The complexity and diversity of the sector necessitates a multidimensional approach that takes into account various factors beyond financial performance alone. This academic perspective sets the stage for exploring how nonprofit practitioners themselves approach the measurement of efficiency. The following methods section dives into the research design, data collection, and analysis processes.

Method

Research Design Overview

This research employs an exploratory case study methodology, a method developed by Stake (1995), to gain deeper insight into the measures used by nonprofit practitioners in assessing efficiency. While applying this research question beyond a single case would be valuable, a case study approach was chosen to ensure the study's manageability, particularly given its exploratory nature and the use of interviews. The exploratory design facilitates the identification of emerging patterns, themes, and unanticipated insights, making it well suited to address the research question. Focusing on Habitat for Humanity affiliates allows for an exploration of the practical applications and theoretical constructs of nonprofit efficiency, ensuring that the findings are both relevant and applicable to academic and practitioner audiences. In the context of this research, the study focuses on 36 in-depth, semi-structured interviews conducted with executive directors and board members from various Habitat for Humanity affiliates across the U.S.

Habitat for Humanity International is dedicated to bringing people together "to build homes, communities, and hope" (Habitat for Humanity, 2023). Its mission focuses on building homes and providing affordable homeownership. The organization is hierarchical and decentralized, encompassing several levels of governance and operational units, including global headquarters, regional offices, national organizations, and local affiliates. This study focuses on local affiliates based in the U.S. The selection of this particular sample is supported by the shared operational characteristics and output parameters exhibited by these Habitat for Humanity affiliates, thereby facilitating an evaluation of efficiency within each affiliate.

Study Participants

Thirty-one executive directors and five board chairs from Habitat for Humanity affiliates, representing 19 states,[i] participated in the interviews. Regarding racial background, two individuals (5.56%) identified as Black, while the majority, comprising 34 individuals (94.44%), identified as white. Gender distribution among the interviewees consisted of 16 females (44.44%) and 20 males (55.56%). The nonprofit leaders' backgrounds, prior to assuming leadership roles within Habitat for Humanity, were diverse. Specifically, five leaders (13.89%) had prior experience in the public sector, nine (25%) hailed from the nonprofit sector, eight (22.22%)

possessed a for-profit sector background, and 14 (38.89%) brought a blend of experience spanning multiple sectors.

Regarding the organizations represented by these nonprofit leaders, 15 organizations (41.67%) were classified as highly efficient, nine (25%) as moderately efficient, and 12 (33.33%) as having low efficiency. Additionally, when examining organizational size, six entities (16.67%) were categorized as small, 11 (30.56%) as medium-sized, and 19 (52.78%) as large organizations. Please see Table 2 for a summary of the descriptive statistics.

Table 2. Descriptive Statistics

Category	Subcategory	Details	Percentage
Participants	Role	31 Executive Directors	86.11%
		5 Board Members	13.89%
	Racial Background	2 Black	5.56%
		34 White	94.44%
	Gender Distribution	16 Females	44.44%
		20 Males	55.56%
	Prior Experience	5 Public Sector	13.89%
		9 Nonprofit Sector	25.00%
		9 For-Profit Sector	22.22%
		14 Multiple Sectors	38.89%
Organizations Represented	Efficiency Classification	15 Highly Efficient	41.67%
		9 Moderately Efficient	25.00%
		12 Low Efficiency	33.33%
	Organizational Size	6 Small	16.67%
		11 Medium	30.56%
		19 Large	52.78%

Data Collection

Semi-structured interview protocols were crafted and tested among Habitat executive directors and board members, and the necessary approval was received from the Institutional Review Board. These interviews were conducted from November 2019 to January 2020 via Zoom. While the interviewees responded to a comprehensive set of 15 questions as part of a larger project, the interview questions specific to this study included the following: Do you measure efficiency in your organization? If so, what metrics or measures do you use? Although the interviews ranged from 30 to 60 minutes on average, the questions pertinent to this study typically occupied approximately 2 to 4 minutes of the interviewees' time.

Analysis

The qualitative data analysis was conducted utilizing NVivo12, employing a qualitative content analysis approach. The analytical process for the qualitative data involved the following steps: (1) initial transcript preparation for coding, followed by a thorough review of each transcript to gain familiarity with the data; (2) a second reading of the transcripts, during which text segments were systematically coded; (3) aggregation of similar codes to eliminate redundancy and refine the coding structure; (4) utilization of codes to identify underlying themes and the formulation of theme passage; (5) development of a conceptual map to organize and connect these themes; and (6) crafting a coherent narrative that weaves together all of the identified themes to address the primary research question, in line with the approach outlined by Creswell and Creswell Báez (2021).

The initial coding process involved collaboration between the primary interviewer and a graduate student, jointly creating the codebook and delineating the preliminary themes. To enhance interrater reliability, a third round of coding was conducted with the involvement of an additional graduate student, achieving an interrater reliability score of 0.81. In cases of coding discrepancies, discussion was held until a consensus was reached. Subsequently, the emergent themes underwent extensive analysis and discussion among the research team.

In qualitative research, the assessment of the findings' validity or accuracy is conducted through a multifaceted lens, considering the perspectives of the researcher, participants, readers, and reviewers (Creswell & Creswell Báez, 2021). The researcher, in particular, undertakes a process of reflexivity, contemplating their experiences and backgrounds, and what potential impact these elements could exert on interpreting the data. A search for disconfirming evidence is also employed, which requires establishing themes followed by searching for evidence for exceptions to these themes. Subsequently, the integration of participants' viewpoints is essential. This is realized through collaborative efforts, exemplified by the engagement of seven Habitat leaders in pilot interviews. This participatory aspect enriches the research process by incorporating the unique perspectives of those Habitat leaders directly involved. Furthermore, a commitment to presenting thick, rich descriptions is important in catering to the discernment of readers and reviewers. This commitment involves crafting and articulating detailed contextual information, facilitating a nuanced and comprehensive understanding of the research outcomes.

Results

The results are organized into two sections. The first focuses on thematic analysis based on types of measures, and the second section focuses on thematic analysis based on organizational areas.

Thematic Analysis Based on Types of Measures

In response to the inquiry regarding the evaluation of efficiency, a majority of participants, comprising 69.44% (25 out of 36 respondents), affirmed that they engaged in efficiency measurement practices. Conversely, 30.56% (11 out of 36 respondents) indicated that they do not incorporate efficiency metrics into their assessments.

Among those respondents who acknowledged measuring efficiency, an examination of the metrics they employ was conducted, as detailed in Table 3. The findings revealed various metrics, totaling 34 distinct measures collectively. Noteworthy is the observation that only seven of these metrics constituted direct efficiency measures, explicitly denoting ratios of inputs to outputs. The remaining metrics encompassed expense ratios and input or output measures, reflective of the data requisites and collection practices intrinsic to Habitat International.

Input-to-Output Ratios: The input-to-output ratios provided are instrumental measures of efficiency and are key indicators of efficiency in construction and project management. Several of these ratios are particularly important in the pursuit of efficiency and productivity. First, there is a strong emphasis on completing tasks as quickly as possible. This focus on speed is closely linked to the time required to build a house, with minimizing the construction duration being a top priority. As one respondent noted, "In construction, my director of construction, in particular, has a goal around the speed at which a house gets built. We aim to complete all our houses within 16 weeks or less from the time the roof is raised" (Interview #18). However, the need for speed must

be balanced with cost considerations. Another respondent highlighted the importance of cost efficiency:

> We tend to focus heavily on the cost of the unit produced. There's a question of how many units you can produce in a certain amount of time using mostly volunteer labor. It is going to specifically limit exactly how much construction you can get done in any given timeframe. But it also tends to help lower the price of the unit, and what you get is any time you make a decision that increases the price of the unit, you have to increase the amount of income that the end user is going to need in order to afford the unit. (Interview #31)

Table 3. Thematic analysis based on types of measures.

Themes	Codes
Input-to-output ratios	• # of staff per house built • Cost of goods sold • Cost per house • Getting things done as fast as possible • Staffing ratios • Time per project • Time to build a house
Input-to-input ratios	• Expense ratios
Inputs	• # of applications approved • # of applications received • # of families applying • # of families inquiring • # of people who attend orientation meetings • # of volunteer hours • # of volunteers • Amount of land • Amount of cash accumulated • Bills paid • Board giving • Board member engagement • Cost of operations • Cost savings • Donations • Employees paid • Time • Value of a dollar donated
Outputs	• # of families served

- # of houses built
- # of houses sold
- # of mortgages
- # of mortgages overdue vs. current
- # of people connected with
- Accessibility
- How much is saved from the landfill

This approach also involves a careful analysis of the costs of goods sold, ensuring that each unit produced is financially viable. As one respondent explained:

> We measure efficiency by closely monitoring our budgets, but cash flow is even more critical. When evaluating the budget, we compare the cost of goods sold to the home costs and the sales price. We calculate the cost of goods sold divided by the number of homes built. (Interview #27)

Understanding staffing ratios is also essential for achieving efficiency in production. Determining the optimal number of staff members needed to build a single house is crucial for effective resource management. Staffing ratios, which consider the total time spent on projects and the corresponding financial allocation, provide a comprehensive view of workforce optimization. As one respondent shared, "We measure efficiency primarily through financial metrics. We assess staffing ratios and the cost of building a home, including how specific positions are allocated across divisions. These financial metrics are key to defining and evaluating efficiency" (Interview #22).

Input-to-Input Ratios: The input-to-input ratios provided reflect the normative measures of efficiency. Effectively managing financial resources is paramount in any organization, and for some organizations, input-to-input ratios play a crucial role in understanding and optimizing expenditures. A key consideration is how much is spent on homes versus operations, as striking a balance between these two categories is essential for financial sustainability. One respondent highlighted this balance:

> We measure efficiency in two different ways. We have the Department of Agriculture, which has a charity checker. They look at the 990s and financials, and they also assess how much we spend on homes versus operations. We also use Charity Navigator, which does the same thing. People rely on both of these, and it helps increase donations. (Interview #5)

Functional expenses, which encompass various operational costs, contribute to the overall financial landscape. For many organizations, analyzing and optimizing these functional expenses is key to efficient resource allocation. As one respondent emphasized,

> We measure efficiency in terms of financial management and administration. We look at functional expenses mainly because they're easily identifiable and come out in the audit, such as overhead ratios. We look at where our funder's donations are spent, and in every decision, we ask if it's a good use of funds—whether it increases our capacity to do more and if we can serve more families as a result. (Interview #6)

Expense ratios provide valuable insights into the proportion of resources dedicated to overhead costs. Overhead, including indirect costs such as administrative expenses, must be carefully managed to prevent unnecessary financial strain. Balancing the ratios ensures that a reasonable portion of the budget is allocated to essential operational elements without excessively burdening the organization with overhead costs. As one respondent pointed out, "We like to look at how

much of our budget is allocated to administrative overhead versus program expenditures" (Interview #23).

Inputs: Many nonprofits rely on various input measures as indicators of their efficiency. These inputs represent the resources required to execute their programs. For example, some organizations focus on their volunteers. As one respondent shared,

> Well, when I started here, we had nothing. We had no way of measuring anything. So, the reports that we have to turn in to Habitat International, the statistical reports, and that sort of thing, have really forced us and encouraged us to start tracking things like volunteer hours. And we've just recently signed on with a company called Network for Good to track our donors and our online donations. So, we're just starting to learn how to use that. (Interview #29)

Other organizations emphasized board participation. As one respondent noted, "We have metrics that measure board participation; for instance, we strive for 100% board giving and require board members to attend at least three home dedications each year" (Interview #7). This active engagement demonstrates board members' personal investment in the organization's mission.

Some organizations take a more comprehensive approach, tracking not only the number of volunteers but also donations and homeownership inquiries. One respondent explained, "We're constantly evaluating our number of volunteers, our donations, and how many families are applying" (Interview #17). Another added,

> We track our family services by monitoring the number of inquiries for homeownership, the number of people who attend our orientation meetings, how many applications are received, how many are approved, and we also track our land inventory throughout this process. (Interview #30)

Outputs: Nonprofits also utilize a variety of output measures as indicators of their efficiency. Central to these measures is the number of houses built, which lies at the heart of the organization's mission. This metric represents the tangible result of the organization's efforts to provide housing solutions to those in need. As one respondent noted, "An obvious one is the number of houses—we primarily build new houses and do some full rehabs" (Interview #11). This metric, combined with the number of families served, expands the narrative beyond just structures. As another respondent stated, "We have a number of measures—how many houses we're building, how many families we serve" (Interview #13). Closely related is the number of homes sold. For example, one respondent mentioned, "This year, our metric happens to be to sell 70 homes in [city] and 10 in [another city]" (Interview #7).

Another important measure is reflected in the number of mortgages facilitated. As one respondent explained,

> There's the official and unofficial method. Officially, what is required of Habitat International in the quarterly production reports, such as how many houses, how many mortgages, and how many mortgages are overdue vs. current? Unofficially, are we meeting the needs of the families and community? (Interview #2)

Beyond housing and financial metrics, nonprofits also measure their environmental impact. One respondent highlighted the organization's commitment to sustainability, saying, "How much do we save from the landfill?" (Interview #19).

Thematic Analysis Based on Organizational Areas

In addition to categorizing the measures based on their types, an alternative approach involves organizing them according to specific organizational areas, as illustrated in Table 4. Notably, it was observed that the efficiency measures provided did not encompass an overarching evaluation of overall efficiency; instead, they were more granular and specific to distinct organizational areas. The three areas that emerge as themes include finances and resources, management and human resources, and programs.

Finances and Resources: The financial health and resource management of a nonprofit organization are reflected in several key metrics. The amount of cash accumulated and cash flow provide insight into the organization's liquidity and its ability to sustain operations over time. Board giving demonstrates the commitment of leadership to financially support the mission, which can inspire confidence in other donors. The timely payments of bills and employees indicate effective financial management and operational stability. Cost of operations and cost savings are critical in evaluating how efficiently the organization utilizes its resources, while expense ratios help assess the balance between spending on programs versus overhead. Additionally, tracking donations and understanding the value of each dollar donated highlight the organization's fundraising effectiveness and its ability to maximize donor contributions toward achieving its mission.

Management and Human Resources: A nonprofit organization's management and human resources are reflected in several key metrics. The number of staff per house built and volunteer hours highlight the organization's ability to effectively utilize both paid staff and volunteers to achieve its goals. The total number of volunteers and the engagement of board members indicate the level of community involvement and leadership commitment, which are vital for sustaining the nonprofit's mission. Prioritizing efficiency, as seen in the focus on getting things done as quickly as possible, and monitoring staffing ratios, are essential for optimizing workforce productivity. Metrics like time per project and overall project duration provide insights into the organization's ability to manage its time effectively, ensuring that projects are completed on schedule and resources are used efficiently.

Programs: A nonprofit's programs can be reflected in a variety of metrics. The number of applications received and approved, and the number of families applying, inquiring, and served are key indicators of the program's reach and ability to meet community needs. The number of houses built and sold, along with the number of mortgages facilitated and their status (overdue vs. current), illustrate the tangible outcomes of the organization's housing efforts, while the number of people attending orientation meetings speaks to the program's ability to engage and educate potential beneficiaries. Accessibility is important in ensuring that these programs reach those in need, and the amount of land available directly impacts the organization's capacity to expand its services. Financial metrics, such as the cost of goods sold and cost per house, highlight the program's efficiency in resource utilization. Additionally, tracking how much is saved from the landfill highlights the environmental impact of the program, while the time it takes to build a house reflects operational efficiency. Finally, tracking the number of people connected with through these programs ensures ongoing engagement and support, reinforcing the organization's commitment to its mission and community.

Table 4. Thematic analysis based on organizational areas

Themes	Codes
Finances and resources	• Amount of cash accumulated • Bills paid • Board giving • Cash flow

	• Cost of operations • Cost savings • Employees paid • Expense ratios • Donations • Value of a dollar donated
Management and human resources	• # of staff/house built • # of volunteer hours • # of volunteers • Board member engagement • Getting things done as fast as possible • Staffing ratios • Time per project • Time
Programs	• # of applications approved • # of applications received • # of families applying • # of families served • # of families inquiring • # of houses built • # of houses sold • # of mortgages • # of mortgages overdue vs. current • # of people connected with • # of people who attend orientation meetings • Accessibility • Amount of land • Cost of goods sold • Cost per house • How much is saved from the landfill • Time to build a house

Discussion

This study found that nonprofit practitioners utilize a wide variety of metrics to measure efficiency. While some practitioners focus on instrumental measures, such as input-to-output ratios, others continue to rely on normative measures like expense ratios or even individual input or output measures. The efficiency measures were also categorized according to organizational areas: finances and resources, management and human resources, and programs. This categorization highlights that practitioners consider efficiency across multiple dimensions of their operations, demonstrating the need for a multidimensional approach to fully assess an organization's efficiency.

The findings show both similarities and differences when compared to scholarly approaches. In terms of similarities, both nonprofit practitioners and scholars recognize that no single metric can fully capture nonprofit efficiency. Both groups use a diverse array of measures, with scholars and practitioners both employing normative and instrumental measures.

There are also notable differences, however. Scholars have increasingly moved away from traditional metrics like expense ratios, moving toward sophisticated methods such as DEA and SFA (for example, see Ayayi & Wijesiri, 2018; Ba et al., 2022; Coupet & Berrett, 2018; Coupet et al., 2021). By contrast, the study results indicate that nonprofit practitioners are less likely to use these advanced methods, instead relying on simpler metrics and ratios. This gap highlights a divergence in the tools and methodologies used by academics and practitioners to assess efficiency.

Furthermore, while academic research has traditionally focused heavily on financial metrics—likely due to the availability of financial data—the study results suggest that nonprofit practitioners place significant emphasis on other areas, such as human resources and programs. This indicates that practitioners may adopt a broader perspective on efficiency, considering various aspects of their operations beyond just financial performance.

Implications

First, nonprofit practitioners need to learn what efficiency is and how it is best measured. Scholarly work has highlighted the problems with using the expense ratios as a measure of efficiency (Bowman, 2006; Coupet & Berrett, 2018; Steinberg & Morris, 2010) and this is something that needs to continue to be communicated to nonprofit practitioners. Furthermore, the study highlights the importance of evaluating efficiency across multiple dimensions. Practitioners should consider developing and using a comprehensive set of efficiency metrics that capture the full scope of their organization's operations rather than relying on a single measure or focusing solely on financial metrics. Additionally, while more advanced methods such as DEA and SFA may not be realistic for a nonprofit practitioner to use, nonprofits are capturing individual input and output measures and can learn to combine these into ratios to measure efficiency (refer to Appendix A). Lastly, the divergence between scholarly methods and practitioner approaches highlights the need for better alignment and knowledge sharing. As the field evolves, nonprofit practitioners should remain open to refining their efficiency metrics and approaches. By periodically reviewing and updating their methods in line with both practical experiences and academic advancements, they can ensure that their organizations are effectively measuring and improving efficiency across all areas of operation.

Scholars should consider broadening their research to include metrics that reflect human resources and program outcomes, as practitioners emphasize these areas alongside financial efficiency. This shift could lead to a more comprehensive understanding of nonprofit efficiency. Additionally, the divergence in the tools and methodologies used by scholars and practitioners suggests a need for greater alignment. Scholars should explore ways to make advanced methods like DEA and SFA more accessible and applicable to practitioners, potentially developing practical guidelines or tools that translate complex methods into usable strategies for nonprofits. Scholars should promote the use of multidimensional efficiency assessments in their research, recognizing that no single metric can fully capture nonprofit efficiency. By advocating for a more holistic approach, scholars can help shape a better understanding of efficiency in the nonprofit sector. Lastly, scholars might benefit from increased collaboration with nonprofit practitioners to ensure that academic research addresses real-world challenges and that theoretical advancements are

informed by practice experience. This engagement could foster a two-way exchange of knowledge, enhancing both research and practice in the field.

Furthermore, a balanced, integrated multidimensional metric and related approach may also be useful to multi- or cross-sector collaborations involving foundations, other nonprofit organizations, and sectors. Such an approach can facilitate a more comprehensive evaluation and improve coordination and resource allocation among different entities working toward common goals. Exploring how shared beliefs or values relate to preferred outcomes can provide deeper insights into the alignment of organizational goals and the effectiveness of these multidimensional metrics.

Lastly, a multidimensional approach to measuring nonprofit efficiency should incorporate diverse perspectives, including those of people with lived experience and cross-disciplinary experts. Engaging people with lived experience can provide valuable insights into the practical implications of efficiency measures. Cross-disciplinary expertise can help develop, implement, and monitor more holistic and contextually relevant metrics. The paper suggests that while this inclusive approach is broadly beneficial across various nonprofit domains, its importance may vary based on the organization's context and mission. For example, housing nonprofits like Habitat for Humanity can significantly benefit from the insights of community members who directly experience housing challenges. In domains where direct service delivery and community impact are central, such as human services and healthcare, involving people with lived experience can lead to more relevant and impactful efficiency measures. Conversely, for more administrative or advocacy-focused nonprofits, cross-disciplinary expertise might play a more prominent role.

Limitations and Future Research

This study has several limitations that should be considered when interpreting the findings. First, the focus on Habitat for Humanity, an organization with specific characteristics—such as a significant reliance on volunteers and a mission centered on housing as a fundamental human right—limits the generalizability of the results to the broader nonprofit sector. Second, the study employed a case study methodology and relied solely on interviews for data collection, which may also limit the generalizability. Third, the potential for response bias exists, as participants may have provided socially desirable answers, affecting the integrity of the data. Fourth, selection bias is a concern, as the sample of 36 affiliates was drawn from a larger population, which may not fully represent the diversity within Habitat for Humanity. Lastly, the exploratory nature of the study offers preliminary insights without engaging in confirmatory analysis, necessitating further research to substantiate and refine the findings.

To address the limitations identified in this study, future research should consider several avenues to enhance the generalizability and robustness of findings. Expanding the scope beyond Habitat for Humanity to include a more diverse range of nonprofit organizations will help determine whether the identified efficiency metrics apply broadly across the sector. Additionally, integrating quantitative data and data from surveys with qualitative interviews could provide a more comprehensive understanding of nonprofit efficiency. Addressing potential response and selection biases will require larger, more representative samples and the use of mixed-method approaches. Finally, future studies should move beyond exploratory analysis to include confirmatory research that tests and validates the proposed efficiency measures, thereby solidifying their applicability and reliability across different nonprofit contexts.

Conclusion

This study offers insights into the complex landscape of nonprofit efficiency metrics, highlighting the divergence between academic approaches and practitioner practices. While academics are increasingly adopting sophisticated methods like DEA and SFA, practitioners often rely on more straightforward metrics. This research highlights the need for a multidimensional approach to efficiency that incorporates financial, human resource, and programmatic dimensions. Future efforts should aim to bridge the gap between theory and practice, ensuring that nonprofit organizations have access to both robust metrics and practical tools for assessing and enhancing efficiency.

Notes

[i] Those states are Alabama, Arkansas, California, Colorado, Florida, Georgia, Idaho, Indiana, Kentucky, Montana, Michigan, Nebraska, New York, North Carolina, Ohio, Oregon, Pennsylvania, Tennessee, and Texas.

Disclosure Statement

The author(s) declare that there are no conflicts of interest that relate to the research, authorship, or publication of this article.

References

AbouAssi, K., Makhlouf, N., & Whalen, P. (2016). NGOs' Resource Capacity Antecedents for Partnerships: Capacity as Antecedent for Partnerships. *Nonprofit Management and Leadership*, *26*(4), 435–451. https://doi.org/10.1002/nml.21200

Alexander, J. (2000). Adaptive Strategies of Nonprofit Human Service Organizations in an Era of Devolution and New Public Management. *Nonprofit Management and Leadership*, *10*(3), 287–303. https://doi.org/10.1002/nml.10305

Ashley, S., & Faulk, L. (2010). Nonprofit competition in the grants marketplace: Exploring the relationship between nonprofit financial ratios and grant amount. *Nonprofit Management and Leadership*, *21*(1), 43–57. https://doi.org/10.1002/nml.20011

Ayayi, A. G., & Wijesiri, M. (2018). Better with age? The relationship between longevity and efficiency dynamics of nonprofit microfinance institutions. *Quality & Quantity*, *52*(5), 2331–2343. https://doi.org/10.1007/s11135-017-0668-3

Ba, Y., Berrett, J. B., & Coupet, J. (2022). *Government attention and nonprofit efficiency: A link across boundaries*. Public Administration Review Virtual Symposium.

BBB Giving Wise Alliance. (2024). *BBB Standards for Charity Accountability*. Retrieved from: https://give.org/charity-landing-page/bbb-standards-for-charity-accountability

Berrett, J. B., & Hung, C. (2023). Does Revenue Concentration Really Bring Organizational Efficiency? Evidence From Habitat for Humanity. *Nonprofit and Voluntary Sector Quarterly*.

Berrett, J. L., & Sudweeks, J. (2023). Understanding nonprofit leaders' perceptions of organizational efficiency. *Nonprofit Management & Leadership*, *33*(3), 491–510. https://doi.org/10.1002/nml.21538

Bishop, P., & Brand, S. (2003). The efficiency of museums: A stochastic frontier production function approach. *Applied Economics*, *35*(17), 1853–1858. https://doi.org/10.1080/0003684032000158064

Bishop, S. W. (2007). Linking Nonprofit Capacity to Effectiveness in the New Public Management Era: The Case of Community Action Agencies. *State & Local Government Review*, *39*(3), 144–152. https://doi.org/10.1177/0160323X0703900303

Bowman, W. (2006). Should Donors Care About Overhead Costs? Do They Care? *Nonprofit and Voluntary Sector Quarterly*, *35*(2), 288–310. https://doi.org/10.1177/0899764006287219

Burgess, J. F., & Wilson, P. W. (1995). Decomposing Hospital Productivity Changes, 1985-1988: A Nonparametric Malmquist Approach. *Journal of Productivity Analysis*, *6*(4), 343–363. https://doi.org/10.1007/BF01073525

Callen, J. L., & Falk, H. (1993). Agency and Efficiency in Nonprofit Organizations: The Case of "Specific Health Focus" Charities. *The Accounting Review*, *68*(1), 48–65.

Callen, J. L., Klein, A., & Tinkelman, D. (2003). Board Composition, Committees, and Organizational Efficiency: The Case of Nonprofits. *Nonprofit and Voluntary Sector Quarterly*, *32*(4), 493–520. https://doi.org/10.1177/0899764003257462

Candid. (2024). *GuideStar Launches Tool for Nonprofits to Emphasize Their Progress and Results*. Retrieved from: https://candid.org/about/press-room/releases/guidestar-launches-tool-for-nonprofits-to-emphasize-their-progress-and-results

Charity Navigator. (2024). *How We Assess Charities' Transparency and Financial Responsibility*. Retrieved from: https://www.charitynavigator.org/about-us/our-methodology/ratings/accountability-finance/#accordion-33b1f4ab90-item-efea199a1c

Charity Watch. (2024). *Our Charity Rating Process*. Retrieved from: https://www.charitywatch.org/our-charity-rating-process#:~:text=NR%20%3D%20Not%20Ratable*-,CharityWatch%20considers%20a%20charity%20to%20be%20highly%20efficient%20when%20our,benchmarks%20for%20governance%20and%20transparency.

Charnes, A., Cooper, W. W., & Rhodes, E. (1978). Measuring the efficiency of decision making units. *European Journal of Operational Research*, *2*(6), 429–444. https://doi.org/10.1016/0377-2217(78)90138-8

Charnes, A., Cooper, W. W., & Rhodes, E. (1981). Evaluating Program and Managerial Efficiency: An Application of Data Envelopment Analysis to Program Follow Through. *Management Science*, *27*(6), 668–697. https://doi.org/10.1287/mnsc.27.6.668

Chikoto, G. L., & Neely, D. G. (2014). Building Nonprofit Financial Capacity: The Impact of Revenue Concentration and Overhead Costs. *Nonprofit and Voluntary Sector Quarterly*, *43*(3), 570–588. https://doi.org/10.1177/0899764012474120

Coupet, J. (2018). Exploring the link between government funding and efficiency in nonprofit colleges. *Nonprofit Management and Leadership*, *29*(1), 65–81. https://doi.org/10.1002/nml.21309

Coupet, J., Berrett, J., Broussard, P., & Johnson, B. (2021). Nonprofit Benchmarking With Data Envelopment Analysis. *Nonprofit and Voluntary Sector Quarterly*, *50*(3), 647–661. https://doi.org/10.1177/0899764020977670

Coupet, J., & Berrett, J. L. (2018). Toward a valid approach to nonprofit efficiency measurement. *Nonprofit Management & Leadership*, *29*(3), 299–320. https://doi.org/10.1002/nml.21336

Creswell, J. W., & Creswell Báez, J. (2021). *30 essential skills for the qualitative researcher* (Second Edition). SAGE Publications, Inc. https://go.exlibris.link/vzwvY3gN

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review, 45*(2), 147-160. https://doi.org/10.2307/2095101

Ecer, S., Magro, M., & Sarpça, S. (2017). The Relationship Between Nonprofits' Revenue Composition and Their Economic-Financial Efficiency. *Nonprofit and Voluntary Sector Quarterly*, *46*(1), 141–155. https://doi.org/10.1177/0899764016649693

Frumkin, P., & Keating, E. K. (2011). Diversification Reconsidered: The Risks and Rewards of Revenue Concentration. *Journal of Social Entrepreneurship*, *2*(2), 151–164. https://doi.org/10.1080/19420676.2011.614630

Frumkin, P., & Kim, M. T. (2001). Strategic Positioning and the Financing of Nonprofit Organizations: Is Efficiency Rewarded in the Contributions Marketplace? *Public Administration Review*, *61*(3), 266–275. https://doi.org/10.1111/0033-3352.00029

Garson, G. D. (2016). *Validity and Reliability*. Statistical Associates Publishing.

González-Torre, P., Lozano, S., & Adenso-Díaz, B. (2017). Efficiency Analysis of the European Food Banks: Some Managerial Results. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, *28*(2), 822–838. https://doi.org/10.1007/s11266-016-9814-0

Habitat for Humanity. (2023). https://www.habitat.org/about/mission-and-vision

Hackler, D., & Saxton, G. D. (2007). The Strategic Use of Information Technology by Nonprofit Organizations: Increasing Capacity and Untapped Potential. *Public Administration Review*, *67*(3), 474–487. https://doi.org/10.1111/j.1540-6210.2007.00730.x

Hager, M. A., Pollak, T., & Rooney, P. (2001). *Variations in Overhead and Fundraising Efficiency Measures: The Influence of Size, Age, and Subsector*. Annual Conference for Research on Nonprofit Organizations and Voluntary Action, Miami.

Hung, C., & Berrett, J. (2022). The effects of commercialization on nonprofit efficiency and the moderating roles of government funding and organizational size. *Nonprofit Management & Leadership*, *33*(4), 735–753. https://doi.org/10.1002/nml.21546

Hung, C., & Berrett, J. (2023). When Are Commercialized Nonprofits Less Likely to Offer Free Access? Evidence from the Performing Arts Subsector. *Public Performance & Management Review*, *46*(3), 644–665. https://doi.org/10.1080/15309576.2023.2168283

Kim, M. (2017). The Relationship of Nonprofits' Financial Health to Program Outcomes: Empirical Evidence From Nonprofit Arts Organizations. *Nonprofit and Voluntary Sector Quarterly*, *46*(3), 525–548. https://doi.org/10.1177/0899764016662914

Kim, M., & Mason, D. P. (2020). Are you ready: Financial management, operating reserves, and the immediate impact of COVID-19 on nonprofits. *Nonprofit and Voluntary Sector Quarterly*, *49*(6), 1191-1209.

Kumbhakar, S. C., Wang, H.-J., & Horncastle, A. P. (2015). *A Practitioner's Guide to Stochastic Frontier Analysis Using Stata*. Cambridge University Press.

Lampe, H. W., & Hilgers, D. (2015). Trajectories of efficiency measurement: A bibliometric analysis of DEA and SFA. *European Journal of Operational Research*, *240*(1), 1–21. https://doi.org/10.1016/j.ejor.2014.04.041

Lecy, J. D., & Searing, E. A. M. (2015). Anatomy of the Nonprofit Starvation Cycle: An Analysis of Falling Overhead Ratios in the Nonprofit Sector. *Nonprofit and Voluntary Sector Quarterly*, *44*(3), 539–563. https://doi.org/10.1177/0899764014527175

Lu, J., & Zhao, J. (2019). Does Government Funding Make Nonprofits Administratively Inefficient? Revisiting the Link. *Nonprofit and Voluntary Sector Quarterly*, *48*(6), 1143–1161. https://doi.org/10.1177/0899764019859435

Luksetich, W., & Hughes, P. N. (1997). Efficiency of Fund-Raising Activities: An Application of Data Envelopment Analysis. *Nonprofit and Voluntary Sector Quarterly*, *26*(1), 73–84. https://doi.org/10.1177/0899764097261007

March, J. G., & Olsen, J. P. (1996). Institutional Perspectives on Political Institutions. *Governance*, *9*(3), 247–264. https://doi.org/10.1111/j.1468-0491.1996.tb00242.x

March, J. G., & Olsen, J. P. (1998). The Institutional Dynamics of International Political Orders. *International Organization*, *52*(4), 943–969. https://doi.org/10.1162/002081898550699

McKeever, B. S., Dietz, N. E., & Fyffe, S. D. (2016). *The nonprofit almanac: The essential facts and figures for managers, researchers, and volunteers*. Rowman & Littlefield.

Min, H., & Ahn, Y. (2017). Dynamic Benchmarking of Mass Transit Systems in the United States Using Data Envelopment Analysis and the Malmquist Productivity Index. *Journal of Business Logistics*, *38*(1), 55–73. https://doi.org/10.1111/jbl.12148

Miragaia, D., Brito, M., & Ferreira, J. (2016). The Role of Stakeholders in the Efficiency of Nonprofit Sports Clubs. *Nonprofit Management & Leadership*, *27*(1), 113–134. https://doi.org/10.1002/nml.21210

Mitchell, G. E. (2018). Modalities of Managerialism: The "Double Bind" of Normative and Instrumental Nonprofit Management Imperatives. *Administration & Society*, *50*(7), 1037–1068. https://doi.org/10.1177/0095399716664832

Mitchell, G. E., & Calabrese, T. D. (2019). Proverbs of Nonprofit Financial Management. *The American Review of Public Administration*, *49*(6), 649–661. https://doi.org/10.1177/0275074018770458

Mosley, J. E., Marwell, N. P., & Ybarra, M. (2019). How the "What Works" Movement is Failing Human Service Organizations, What Social Work Can Do to Fit It, 43(4), 326-335.

Newby, K., & Branyon, B.(2021). Pivoting services: Resilience in the face of disruptions in nonprofit organizations caused by COVID-19. *Journal of Public and Nonprofit Affairs, 7*(3), 443–460. https://doi.org/10.20899/jpna.7.3.443–460

Poister, T. H. (2008). *Measuring performance in public and nonprofit organizations*. John Wiley & Sons.

Prentice, C. R. (2016). Understanding Nonprofit Financial Health: Exploring the Effects of Organizational and Environmental Variables. *Nonprofit and Voluntary Sector Quarterly*, *45*(5), 888–909. https://doi.org/10.1177/0899764015601243

Ridder, H.-G., Piening, E. P., & Baluch, A. M. (2012). The Third Way Reconfigured: How and Why Nonprofit Organizations are Shifting Their Human Resource Management. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, *23*(3), 605–635. https://doi.org/10.1007/s11266-011-9219-z

Ritchie, W. J., Anthony, W. P., & Rubens, A. J. (2004). Individual Executive Characteristics: Explaining the Divergence between Perceptual and Financial Measures in Nonprofit Organizations. *Journal of Business Ethics*, *53*(3), 267–281. https://doi.org/10.1023/B:BUSI.0000039417.15488.17

Rocha Valencia, L. A., Queiruga, D., & González-Benito, J. (2015). Relationship Between Transparency and Efficiency in the Allocation of Funds in Nongovernmental Development Organizations. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, *26*(6), 2517–2535. https://doi.org/10.1007/s11266-014-9527-1

Roh, C. Y., Jae Moon, M., & Jung, C. (2010). Measuring Performance of U.S. Nonprofit Hospitals. *Public Performance & Management Review*, *34*(1), 22–37. https://doi.org/10.2753/PMR1530-9576340102

Ruggiero, J. (1996). On the measurement of technical efficiency in the public sector. *European Journal of Operational Research*, *90*(3), 553–565. https://doi.org/10.1016/0377-2217(94)00346-7

Shi, W. (2022). COVID-19 impacts on border community organizations. *Journal of Public and Nonprofit Affairs, 8*(3), 399–422.https://doi.org/10.20899/jpna.8.3.399–422

Stake, R. E. (1995). *The art of case study research*. Sage Publications. https://go.exlibris.link/fRTcLCB1

Steinberg, R., & Morris, D. (2010). Ratio discrimination in charity fundraising: The inappropriate use of cost ratios has harmful side-effects. *Voluntary Sector Review*, *1*(1), 77–95. https://doi.org/10.1332/204080510X497028

Tinkelman, D., & Mankaney, K. (2007). When is Administrative Efficiency Associated With Charitable Donations? *Nonprofit and Voluntary Sector Quarterly*, *36*(1), 41–64. https://doi.org/10.1177/0899764006293176

Trussel, J. M., & Parsons, L. M. (2007). Financial Reporting Factors Affecting Donations to Charitable Organizations. *Advances in Accounting*, *23*, 263–285.

Author Biography

Jessica L. Berrett is an assistant professor in the College of Public Service at the University of Colorado Colorado Springs. Her specialty is nonprofit management, with a research focus on financial and performance managmenet.

Appendix A. DEA and SFA Input and Output Selection

Context	Input	Output	Example studies
Colleges (nonprofit and public)	Instruction, academic support, and student services	Graduation rate	Coupet (2018)
Food banks	Foundation year, number of volunteer staff, number of permanent staff	Amount of food distributed and number of recipients of food	González-Torre et al. (2017)
Hospitals (nonprofit)	# of full-time physicians and other health professionals, current assets of each hospital, # of hospital beds in each hospital	Total # of patient days, # of ER visits, # of outpatient visits, # of outpatient surgery visits, total amount of charity care	Roh et al. (2010)
Hospitals (nonprofit, for-profit, and public)	# of long-term hospital beds, registered nurses, licensed practical nurses, other clinical labor, nonclinical labor, and long-term care labor	Acute care inpatient days, case-mix weighted acute care inpatient discharges, long-term care inpatient days, number of outpatient visits, ambulatory surgical procedures, inpatient surgical procedures	Burgess & Wilson (1995)
Housing nonprofits	Program expenditures; management and general expenditures	Number of new houses, rehabilitated houses, recycled houses, and repaired houses	Ba et al. (2022); Berrett & Hung (2023); Coupet & Berrett (2018)
Mass transit systems (private, public, and nonprofit	Service area population density, total operating	Fare revenue earned, total miles	Min & Ahn (2017)

	expenses, total labor hours	accumulated on active vehicles	
Microfinance institutions	Total assets, operating expenses, # of employees	Gross loan portfolio, inverse of average loan balance per borrower, # of active borrowers	Ayayi & Wijesiri (2018)
Museums	Total running and maintenance costs of the museum in the year; number of full-time equivalent workers in each museum	Number of physical visits and subscribers achieved by each museum	Bishop & Brand (2003)
Performing arts nonprofits	Total program expenses, total administrative expenses, full-time equivalent (FTE) employees	Number of participants	Hung & Berrett (2022)
Rural transit nonprofits	Vehicles in annual maximum service, number of volunteer drivers, operational expenses	Car miles; unique passenger trips	Coupet et al. (2021)
Sports clubs	Human resource costs, general expenditure resulting from the aggregation of operating costs, transports, facilities, and expense with activities	Revenues from activities, subsidies, membership fees, and sponsorship	Miragaia et al. (2016)
Symphony orchestras	Spending on staff, including printing and postage, phone, and other development expenses	Government funding, individual funding, business funding, and foundation funding	Luksetich & Hughes (1997)