In Kind or in Cash? The Effectiveness of Public and Private Support of Nonprofit Food Provision

Bethany Slater, Doctoral Fellows Program 2014

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Research Question
How do cash and in-kind donations from private and public sources impact nonprofits’ mission effectiveness?

Brief Abstract
In looking at 272 food pantries, soup kitchens, and shelters, the paper finds that the most beneficial donations to increase the number of meals served are a combination of in-kind donations from the public sector, and monetary donations from the private sector. As many nonprofit organizations receive funds and resources from outside sources, they lose some degree of control over how funds can be spent. This paper provides empirical evidence that could enable practitioners to make wiser decisions when evaluating potential funding sources.

Key Findings
- In the public sector, donations of food, clothes, and other non-monetary products are more beneficial in increasing the number of meals served. In contrast, in the private sector, monetary donations are more beneficial in increasing the number of meals served.
- Although this finding cannot be extended to other nonprofit sectors, the study finds that in-kind donations may pose an unaccounted variable for nonprofits. Non-monetary donations require additional storage space and volunteer commitment that financial donations do not need.

Opportunities for Action
- Nonprofit practitioners can evaluate how the type of donation affects their mission and approach to obtaining future fundraising solicitations and government investments.
- Practitioners can consider educating donors on the advantages and disadvantages regarding cash versus in-kind donations.

Find This Paper
The paper was completed during the 2014 UPenn summer doctoral fellowship and can be found on the Center for Social Impact Strategy’s website.
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The Effectiveness of Public and Private Support of Nonprofit Food Provision

Penn Social Impact Doctoral Fellows Program
Working Paper

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Abstract

Support for nonprofit organizations can come in the form of cash or in-kind donations and often originate from both private and public sources. A remarkably widespread and deeply rooted component of American charitable behavior is collecting canned foods through food drives to be redistributed to those in need. This study uses a unique dataset to determine the effects of different funding sources and kinds of support on a fully operationalized concept of mission effectiveness. Using fixed effects regression analysis, in-kind food donations and cash support over five years are examined in relation to the number of quality meals distributed among 272 food pantries, soup kitchens and shelters. The results show that cash donations from the private sector and in-kind support from the public sector are most beneficial in increasing meals served. The findings also raise difficult questions by empirically examining the efficacy of an embedded trait of traditional charitable giving.

Keywords in-kind donations, public support, fundraising, emergency food programs

Introduction

Nonprofit organizations serve various constituencies and rely on multiple forms of support to achieve its mission, be it financial or in-kind. Financial support may be in the form of donations, grants, contracts, fees for service, or commercial ventures. In-kind giving are noncash donations of tangible products given at no cost related to the nonprofit’s needs; they may come in the form of clothing, cars, medications, household products, computer equipment, building materials, or food donations. There has been much research on the various tradeoffs depending on the types of funders a nonprofit utilizes (Kearns, Bell, Deem, & McShane, 2014; Garrow, 2011; Jang & Feiock, 2007; Vanderwoerd, 2004; Gronbjerg, 2001; Alexander, 1999; Froelich 1999; Tyminshi,
1998; Weisbrod, 1998; Lipsky & Smith, 1989), however much of these analyses only feature financial inputs and practitioners’ perceptions of their respective tradeoffs. This article seeks to evaluate fundraising types and funders through their relationship to organizational outputs. In other words, are there particular funding sources from the private or public sector that will help nonprofits better achieve their mission?

Human service nonprofits are often constrained within their program services; by choosing to serve clients with an inability to pay, they are dependent upon external funders to finance their programming. Existing research has shown that a need to generate resources from external sources may coincide with relinquishing some levels of control over how to use those funds, though how much input the nonprofit concedes may vary depending on the source (Frumkin & Galaskiewicz, 2004; Weisbrod, 1998). Thus nonprofit managers are often sensitive to the need for resources while also weary of balancing the loss of autonomy, leading them to inherently weigh the costs and benefits of many donation opportunities (Hughes & Luksetich, 2004; Froelich, 1999. Weisbrod, 1998). This research contributes to the literature in evaluating fundraising sources by empirically tying them to an organization’s output, which can assist practitioners to evaluate tradeoffs and benefits on a proxy of mission effectiveness. The resulting objectivity will enhance existing efforts that rely on nonprofit managers’ own preferences (Fischer, Wilsker & Young, 2011).

In this study, a unique panel dataset of financial and in-kind donations for 272 emergency food programs are used to develop an empirical model to test their relationship in increasing the number of meals served to individuals seeking assistance. First the literature on public and private funding and financial and in-kind donations are reviewed to provide the background for the empirical analysis. The next section describes the hypotheses, the variables and data utilized.
in this study. Following the analysis of the study results, a discussion of the findings and their policy implications are included to enhance recommendations for future research.

**Literature Review**

*Public Sector versus Private Sector Funding Support*

The sources of an organization’s funding predetermines much of its behavior, including the goods and services it produces and how it distributes its products (Weisbrod, 1998). Human service nonprofits are formed to primarily serve the poor. The vast majority of these organizations are small and typically rely extensively on government funding, since the nature of their services matches the availability of public grants and contracts after the periods of devolution and privatization (Garrow, 2011; Gronbjerg, 2001; Alexander, 1999; Smith & Lipsky, 1989). As government funding for nonprofit organizations increased, the pressures to maintain accountability over those funds grew as well and government began to exert influence in exchange for dollars (Smith & Lipsky, 1989). Therefore the receipt of public dollars contains its own benefits and constraints.

Government funding often comes in large amounts and can cover significant portions of organizations’ budgets. An organization that receives public dollars generally enjoys low revenue volatility as government funding is relatively stable, continuous and predictable (Froelich, 1999; Tyminshi, 1998, Gronbjerg, 1993). Many nonprofits that receive public funding view its receipt as key to their sustainability or long-term survival (Besel, Williams & Klak, 2011; Tyminshi, 1998). It is a valued funding source for many organizations, essential for day to day operations.

While the expansion of contracting enhanced the role of nonprofit organizations in the delivery of social welfare services, it also resulted in a heightened role in public agencies in
shaping the character of the nonprofit services and dominating the development of policy guidelines (Lipsky & Smith, 1989). The most common effects of receiving public dollars involves changes to internal processes or structures within the organization as there has been evidence of government-driven professionalization, bureaucratization and loss of autonomy among nonprofit organizations (Frumkin & Galaskiewicz, 2004; Alexander, 1999; Froelich, 1999; Lipsky & Smith, 1989). On a daily basis, concerns often arise of the time and resources needed to comply with various requirements (Besel, Williams & Klak, 2011) and the regulations that restrict specialization or flexibility in programming that make nonprofits distinct (Jang & Feiock, 2007).

Nonprofits that choose not to compete for government dollars will invest in increasing private sources of funding. Organizations may seek a large private donor base since these donors often do not carry the same influences or restrictions as public grants. Since the average individual donation size is relatively smaller and the overall population of donors is likely to be quite large, the size of the stakes are relatively small (Frumkin & Galaskiewicz, 2004). These private dollars often also come heralded as signs of legitimacy from the local community (Froelich, 1999). Being able to demonstrate widespread community support can be a marketing strategy to leverage additional dollars. Further contributions from the private sector often come in the form of unrestricted dollars to be used at the organization’s discretion and allow nonprofits the freedom to provide services independently (Jang & Feiock, 2007).

Yet, donations from the private sector have their own drawbacks, as they are often unpredictable and unstable from year to year, with little control over the amount of funds raised under the organization’s control (Froelich, 1999; Gronjberg, 1993). Acquiring private donor dollars thus requires significant staff time and resources with no guarantee return on the
investment.

A popular alternate form of support involves developing sources of revenue generating activities as this frees the organizations from external influences (Hughes & Luksetich, 2004; Froelich, 1999; Weisbrod, 1998). Revenue generating activities are when a nonprofit operates programming within its services that generates income through fees or sales that can be reinvested into the organization’s budget. Since its income comes from within the organization’s activities, it carries virtually none of the ‘strings’ that external donations carry. Human service organizations are somewhat constrained from this tactic due to their client population, however they may undertake some alternative programming activities that are unrelated to their income based programming to balance their budgets. The risk in these endeavors, however, is that there is no guarantee return on the investment as well as the risk of mission drift when utilizing organization resources to operate these activities. Nonprofits must take care when undertaking such endeavors to continue to prioritize their mission and not become subject to goal displacement or too closely mimic a for-profit organization (Weisbrod, 1998).

Overall the number of funders and their related volume of donations will impact an organization’s responsiveness to funders’ attempts to influence operations. If organizations only rely on a few funders for support, they are then beholden to them for their survival (Froelich, 1999). As resource dependencies become more diverse, this requires greater managerial expertise and fundraising efforts at the expense of program services (Hughes & Luksetich, 2004). In addition, each form of support comes with its own constraints and obligations to satisfy the donor (Moulton & Eckerd, 2012). Program coordinators should recognize the constraints of each of their sources and evaluate them to ensure the resource opportunities exceed the internal costs, be it regulations regarding program features, choice of clientele or goal
displacement (Froelich, 1999). An organization can remain in control by staying true to its mission and continuously adapting its strategies.

Financial Support versus In-Kind Support

A second aspect in soliciting support for certain nonprofits is in accepting noncash donations in the form of in-kind gifts. Little research exists on how effectively in-kind gifts are utilized once they leave the donor (Gazley & Abner, 2014), however in-kind gifts remain a valued aspect of donations. In-kind giving encompasses an ever growing portion of giving behavior in corporations, as companies reported that 28% of their charitable contributions were in forms other than cash donations (The Conference Board quoted in Jackson, 2006). Recent regulatory attempts to enhance or restrict in-kind donations to make them more useful to the intended beneficiaries had mixed impacts (Bero, Carson, Moller & Hill, 2010; Brostek, 2008; Jackson, 2006; D’Agostino & Williams, 2006). This suggests that donors are well intentioned in their giving, they just may be uninformed of the needs of the organization where they seek to donate (Gazley & Abner, 2014). Expanding the research to understand the impact of in-kind giving in relation to program outputs will assist both donors and nonprofit organizations.

Existing literature that evaluates the receipt of in-kind and cash support have been mixed. Valuations of the National School Lunch Program found cash benefits to be more efficient than in-kind resources (Peterson & Le Grand, 2011; Peterson, 2011), while examinations of welfare programs favor in-kind support as more effective than cash transfers (Slesnick, 1996; Currie, 1994). Factoring in-kind benefits substantially influences the cross-national differences in studies that compare the net value of social welfare transfers and inequality in standards of living, documenting their substantial worth to clients in the United States (Garfinkel, Rainwater, & Smeeding, 2006). Existing comparisons of food aid versus cash support focus on international
contexts and rely on economic models as opposed to empirical data. One study advocates for food for the short-term followed by cash investments (Faminow, 1995) and the other encouraged food investments as opposed to cash (Basu, 1996). These mixed findings are most likely attributed to study design and the lack of standards on valuation of in-kind gifts. More empirical examples are needed that are replicable within the multiple contexts of in-kind donations. This will allow for objective evaluations to better inform policy.

A major reason attributed to the lack of research on this topic is a lack of data that account for or value in-kind donations at the organization, state, or national level (Stritt, 2008). At the organizational level, a lack of capacity may account for an organization’s inability to create an accurate and systematic accounting system to assess value to in-kind goods as they arrive onsite (Trigg & Nabangi, 1995). Research has been restricted in its comparability as a result of the diversity upon how the data was collected (Faminow, 1995).

Emergency Food Assistance and Types of Support

[Insert Table 1 Here]

Hunger in the United States is a growing social problem. In 2012, 49 million Americans (14.5 percent) lived in food insecure households (Coleman-Jensen, Nord, and Singh, 2012). A household is defined as “food insecure” if an individual reported having “difficulty at some time during the year providing enough food for all their members due to a lack of resources” (Coleman-Jensen, et al., 2012, v). In the United States there is a safety net in place. If an individual is experiencing food insecurity, she can utilize government resources by applying for federal nutrition programs, she can also seek emergency food assistance provided by charitable nonprofits or she can utilize both the nonprofit and public sectors for support.

Emergency food programs provide food at no cost to individuals who use them, serving
approximately 37 million Americans (Cohen, et al., 2010) and distributing over 3 billion pounds of food annually (Feeding America, 2012). Usage of emergency food programs, originally thought as temporary, has become a chronic coping strategy of the food insecure as opposed to a short-term solution (Feeding America, 2012; Daponte & Bade, 2000). Even individuals which receive government benefits may not be impervious to also seeking emergency food assistance (Cohen, Mabli, Potter, & Zhao, 2010; Berner, Ozer & Paynter, 2008; Berner & O’Brien, 2004).

An abundance of excess food facilitated by the private sector combined with thousands of energetic volunteers wanting to make a difference enabled nonprofits to provide a service to hungry individuals through emergency food programs. This network expanded with a lack of oversight or concrete standards for service delivery. The leeway that existed at the grassroots level resulted in individual programs that varied widely in their daily operation and resources. Emergency food programs are smaller nonprofits with often lower capacity operations. The food provided by emergency food programs comes from purchases and donations of food from individuals, businesses, grocers, and government. Forms of support may be received either financially or in-kind through food donations, through the receipt of food that is not paid for.

Originally, operations of emergency food programs were small and operated solely on donations from the private sector (Daponte & Bade, 2006). Once demand grew exponentially during the 1980s amid federal government policy changes and budget cuts, the public sector implemented several funding initiatives to support emergency food programs. At the federal level, the distribution of government commodities through The Emergency Food Assistance Program (TEFAP) was instrumental in providing a second stable source of food in addition to food donations from the private sector (Lipsky & Thibodeau, 1988). Commodities are federal
government purchases utilized to regulate the market, so particular items are purchased to sustain prices (such as dairy or chicken), repackaged and distributed to schools and emergency food programs. Over $260 million was allocated to purchase TEFAP commodity foods for emergency food programs in 2012 (USDA, 2012). A portion of the $120 million for the Emergency Food and Shelter Program (EFSP) also provides financial assistance to purchase food (EFSP, 2012). Within New York State, the Hunger Prevention and Nutrition Assistance Program (HPNAP) through the Department of Health provides $29.7 million in financial support to emergency food programs to assist in acquiring food, capital equipment, and alleviate operating costs (NYS Department of Health, 2012). Lastly, local governments may establish contracts for services with emergency food programs and can serve as another source of public sector revenue.

Forms of support from the private sector may arise from solicitations for unsaleable or excess foods from individuals or businesses through food drives. Tax breaks exist to incentivize businesses to donate and charitable tax donations encourage philanthropy at the individual level (Jackson, 2006; Molnar et al., 2001). Community Events such as CROP walks or admission fees to sporting events, fairs or concerts may be substituted in exchange for a food or financial donation to a local feeding program. Emergency food programs themselves may engage in commercial generating activities to increase revenue, such as thrift stores, can and bottle redemption or sales of cookbooks. As Table 2 demonstrates, emergency food programs benefit from several avenues of support from both the public and private sectors that provide forms of financial and in-kind support, however it has not been empirically evaluated to determine if one form is more valuable than another in its relationship to distributing more meals to families in need.
Hypotheses:

1. Higher levels of nonprofit food output are more strongly associated with public in-kind support than public financial support

Since the origination of TEFAP was a program to support farmers, the traditional “strings” of a government contract were a minor concern as the commodities were a secondary policy output (Lipsky & Thibodeau, 1988) rather than a primary policy goal. With the exception of the HPNAP program, the few observations of the other financial public support variables questions their ability to better increase the number of meals served. Thus with the predictability and sheer volume of the TEFAP commodities, it is hypothesized that in-kind public sector support better increases the number of meals served.

2. Higher levels of nonprofit food output are more strongly associated with private financial support than private in-kind support

Financial donations from the private sector will often come in small amounts with little to no strings attached, unlike the large contracts from the public sector. This allows emergency food coordinators the managerial discretion to utilize these dollars to purchase food products to fill inventory gaps with vendors that have the best transactions, be it in quality or volume, dependent on the product.

Further food drives, while large in volume, are often an outlet of convenience for the donor that offer little to no control to the emergency food program over what they receive. Food donations are encouraged through tax incentives for businesses to donate products that are unsaleable; this encourages products that are outdated, damaged or otherwise deemed undesirable for the willing-to-pay consumer. For the individual, food donations are often
selected to give based on excess, and may also be outdated, damaged, or unusable due to food safety regulations. Since any in-kind donation must be inspected for numerous food safety regulations, receipt in volume is no guarantee that an in-kind donation is usable to be redistributed to a client in need. Further, given the strict definitions of what constitutes a meal, managerial control of purchasing products will allow for more outputs. Thus it is predicted that financial donations from the private sector better increase the number of meals served.

**Methods**

**Sample:** The sample population is food pantries, soup kitchens, and shelters that were active member programs of the Food Bank of Central New York from July 2008 – June 2013. The data was collected through grant applications that are submitted to the Food Bank in June of each year; programs that did not apply were asked similar questions in monitor visits by Food Bank staff. To become a member program, an emergency food program must reside within the Food Bank’s eleven county service area, be active for at least six months, have an IRS 501(c)3 classification and pass an application process (Food bank documents, 2013). Focusing a sample into a single geographic area for the same regional food bank will allow an analysis among programs that have comparable access to funding streams and donors.

The sample includes 272 programs, including 229 food pantries, 33 soup kitchens and 10 shelters whose budgetary data have at least one observation in the analysis. Overall there are 1,224 observations within the data, including 1,025 food pantry observations (83.74%), 150 soup kitchens (12.25%), and 49 shelters (4.01%) within the five year funding period. The data asked the program coordinators to answer three questions for the previous 12 month period: the total budget used to purchase food, their funding sources broken down by percentages, and the sources of their food broken down by percentages (Food bank documents, 2013). Using the total
budget and internal poundage distribution reports from the Food Bank, hard numbers were able
to be extrapolated from these percentages into dollars for financial variables and pounds for in-
kind variables.

Dependent Variable: The annual number of meals served to clients as reported by the
emergency food program will act as the dependent variable. Within the context of a logic model,
the chief output of an emergency food program is the food that is distributed and is the best
measure to examine how the different resource inputs impact the volume. A meal is defined by
the NYS Department of Health as acceptable serving sizes of items from at least three of the five
food groups (vegetables, fruit, grains, dairy, meat and beans) and at least one of which must be a
fruit or a vegetable (NYS Department of Health, 2013). This is the best measure because it is
directly comparable across emergency food program types and is an unduplicated number, unlike
the number of individuals served. The number of individuals served will not be directly
comparable as the volume of food provided to individuals differs among the program types at
each visit. For example, a soup kitchen will typically serve one meal that is consumed onsite
whereas a food pantry will provide a package of meals for home consumption that is intended to
last several days, the average meal package being 9 meals per person, per visit, for each
individual residing in the household. Utilizing a program output to ascertain the relationship to
their many inputs also allows one to assume the variables fall within managerial discretion at the
program level. Within the sample, the number of meals served annually varies widely, from a
minimum of 721 to a maximum of over 765,000 during a 12 month period.

Financial Support Independent Variables: The financial variables were derived from the
program’s total food budget and are divided between public and private sources of funding. The
data demonstrates the low capacity of emergency food programs, as the average annual budget to
purchase food was approximately $15,000 and the median budget was a little over $9,600.

From the federal government, the Emergency Food & Shelter Program provides funding to support emergency services that are allocated by county boards. A portion of these funds may be provided to local food pantries, shelters or soup kitchens, dependent upon the applicants and the county’s allocation process. With a mean grant of $3,100, 470 observations in the sample received this form of financial support. In New York State, the Hunger Prevention & Nutrition Assistance Program provides financial support to emergency food programs through contracts with regional food banks. This is the most frequent source of financial support, as 1,176 observations received HPNAP funding, with an average $4,300 grant or $2,900 median grant. Other government grants could include grants established at the local level such as county per diems, with 72 observations showing an average other public financial support grant of over $14,000.

Within the private sector, donations from individuals are reported in 988 observations with a mean of $5,500 and a median of $1,700. This may include fundraising appeals or other solicitations, specialty events or dollars raised where support was given by members of the community without a formal organizational structure. Organizational support is measured as groups supporting the emergency food program, such as local rotary clubs, foundations, United Ways, businesses or corporations, or sponsoring churches if they are a faith based organization. Formalized or informal, organizational support was reported in 605 observations with a mean donation of $3,500.00 and a median donation of $54.00. The last financial variable is agency fundraising, which measures internal activities within the nonprofit operating the emergency food program to support its operations. This could be as sophisticated as utilizing endowments, shifting existing programming operating funds, or utilizing profits from revenue generating
activities through the sales of cookbooks or can and bottle returns. Within the sample, 678 observations had this form of financial support with a mean of $4,100 and a median of $385.00.

In-Kind Independent Variables: In-kind donations are a critical form of support for emergency food programs, as it is unlikely the mean 40,000 meals distributed to clients can be maintained on an average $15,000 budget. From the federal government, TEFAP’s food commodities report an average of 11,000 pounds in 1,202 observations and a median of 6,154 pounds. Food donated in-kind is reported in 1,144 observations with a mean of 24,628 pounds and a median of 5,993 pounds. This variable is limited to measure only products that were donated to the emergency food programs at no cost, be it by companies, individuals, farmers, or community gardens. It is important to note that the main food provider for the majority of emergency food programs are their regional food bank, however, since their food is accessed with a shared maintenance fee, this food is not accounted for in this variable because there is a cost associated to access these products. Further, if food is purchased from other vendors at cost or at a discounted rate, it is also not accounted for since it was not donated in-kind. In order to access these products, the emergency food providers would need to utilize their fundraising dollars and these inputs would not be able to be accounted for within the same model and is beyond the scope of the research question in this article. The descriptive statistics of each of the variables can be found in Table 3; the large standard deviations illustrate the wide variety in fundraising activities within the sample.

[Insert Table 3 Here]
Results

Correlations of all variables were reviewed and tested for multicollinearity; the mean VIF was calculated to be 1.28. A fixed effects regression model was used to evaluate the financial and in-kind inputs and their relationship to meals served in the emergency food programs over a five year funding period. The fixed effects model enables the estimation to capture the time-invariant heterogeneity within organizations as well as macro-level time-varying shocks that similarly affected all nonprofit organizations. All independent variables and the dependent variable were logged to make comparative assessments of variations among a large number of entities. To avoid taking the log of zero, each independent observation was increased by 1 \((X' = \log (X+1))\) (Mark and Shotland, 1983). Hausman’s specifications test for random effects indicated that the fixed effects model would be more appropriate for the data instead of the random effects estimator and robust standard errors are reported to control for the heteroskedasticity (Tinkelman and Neely, 2010).

[Insert Table 4 Here]

*Sector and Types of Support:* Table 4 shows that four variables are statistically significant in their relationship to meals distributed to clients.

In examining the public sector, the Emergency Food & Shelter Program is statistically significant at the 5% level, and a 1% increase in funding is associated with a .0096% increase in meals served. Other government grants and the Hunger Prevention & Nutrition Assistance Program are not found statistically significant; though the high coefficient for HPNAP suggests it is likely influential but the large standard error likely impacts its lack of significance. In comparison to the in-kind public sector support, TEFAP is significant at the 1% level and a 1%
increase in TEFAP poundage is associated with .02995% increase in meals served. Thus we can assume that hypothesis 1 is upheld.

In looking at the private sector, food donations are not found statistically significant. Within the financial variables, the agency fundraising variable is also not statistically significant. Individual donations are marginally significant at the 10% level and a 1% increase in donations is associated with a 0.0095% increase in meals served. Organizational support is also marginally significant at the 10% level and a 1% increase in donations is associated with a 0.0088% increase with meals served. Thus even though the coefficients and the level of significance are smaller than the finding for the Emergency Food & Shelter Program, the lack of significance finding for food drives, even with the volume of donations within the sample, provides support that hypothesis 2 is at least partially upheld.

**Limitations:** There are several limitations to this study. First, data on emergency food programs that are not members of the food bank would have been useful to increase the sample size and determine how independent operations influence their number of meals. Secondly, the vast differences in funding sources among the different emergency food program types impede their comparability to one another. Lastly, is the discussion in the literature on the comparability of in-kind and cash values, here measured in poundage and dollars. While this is an improvement to existing research due to its empirical nature, future research could seek to track the types of food donations to incorporate its dollar value for a more comparable evaluation.

This also assumes that the value of support is solely measured in dollars and poundage. Many coordinators prefer working with particular stakeholders or solicitation strategies and they may value them beyond the volume it returns. Certain policy goals for the HPNAP program are specifically related to nutrition and health. These dollars are only utilized for foods that meet a
minimum nutrition standard, introducing a policy discussion on quality that a measure such as volume does not take into account. Since food insecurity is ultimately an indicator of health, the quality of food being distributed is a proxy that should be taken into consideration in future research.

**Conclusions and Implications for Practice**

These findings provide a template to compare in-kind donations and cash funding and their relationship to outputs as a proxy for mission effectiveness. It also seeks to enhance the literature on comparing in-kind benefits, though it does not resolve the research challenge of providing a comparable value outside of using logged variables. This paper finds that the best investments for the delivery of nonprofit food differs by sector. For the public sector, in-kind investments better increase the number of meals served while financial donations better increase outputs when coming from the private sector.

In evaluating the funding sources in relation to the private and public sector, this paper utilizes an objective example beyond researchers’ frameworks or managers’ perceptions. Each perspective offers another opportunity to assist practitioners in the various constraints and tradeoffs to find the best combination of options to fit their organization. These findings are helpful to design new fundraising solicitations or government investments. The discretion allowed with dollars raised from the private sector can better increase the number of meals served than the structured public funding opportunities in place. Public funders can learn by structuring grants and contracts to allow for more discretion with nonprofit managers and fewer administrative commitments to encourage additional nonprofits to apply and compete for funding. Further, public funders can learn that if their controls in place or influence over service delivery are not enhancing mission effectiveness, then they can reevaluate or restructure their
programming to make it more effective. For example, the purchasing policies utilized by the TEFAP administrators may provide additional insight in how to spend limited dollars to maximize the volume of products received. Lastly since the variable measuring agency fundraising tactics was not found statistically significant, this may help organizations by demonstrating that these investments may not yield the impact sought and prevent them from undertaking future endeavors that can be costly in both dollars and staff commitment.

In regards to in-kind support, this empirically calls into question an inherent tradition of charitable giving in the United States in the form of food drives and provides evidence that in-kind giving from the private sector may benefit the donor more than the nonprofit receiver. In-kind giving requires significant space for storage, volunteer commitment for sorting, evaluation of product suitability and organizing the items. The lack of evidence of private in-kind donations associated with increasing meals served, considering their required administrative commitments needed for the nonprofit, provides an additional ‘string’ that nonprofit managers may not factor in when evaluating their external funding options. While this finding is not generalizable to all in-kind giving, it does provide additional support for why some nonprofit organizations decide to opt out of participating in the collection of in-kind donation due to the administrative challenges and headaches (Gazley & Abner, 2014; Brostek, 2008). Existing food drives and financial supports are currently being utilized to feed individuals who request assistance and will likely continue; however, it would benefit practitioners to adjust future solicitation requests to educate donors on the benefits of receiving cash as opposed to in-kind donations. As legislative and regulatory initiatives encourage in-kind giving alongside financial donations to prospective individual and corporate donors, education and communication on how to make these donations beneficial will be critical for long-term success.
Nonprofit organizations are dependent upon external sources to achieve their mission and it is critical to prioritize these funding sources. As external expectations pressure nonprofits to foster continuous improvement in their service delivery, programming, and efficiency, this paper demonstrates that funders and donors can also evaluate their own practices to ensure that their giving assists, not detracts, from achieving the intended maximum impact.
References

Leadership, 10(1), 57-70.

Basu, K. (1996). Relief programs: When it may be better to give food instead of cash. World
Development, 24(1), 91-96. doi: http://dx.doi.org/10.1016/0305-750X(95)00110-X

and Food Bank Usage in North Carolina. Nonprofit and Voluntary Sector Quarterly,
33(4), 655-672. doi: 10.1177/0899764004269145

0072.2008.00274.x

Bero, L., Carson, B., Moller, H., & Hill, S. (2010). To give is better than to receive: compliance

Besel, K., Williams, C. L., & Klak, J. (2011). Nonprofit sustainability during times of


Feeding America.

Coleman-Jensen, Alisha, Mark Nord, and Anita Singh. Household Food Security in the
Service, September 2013.


procedures are needed to ensure appropriate use of and accountability for international

Interactions between Public and Private Responses to Hunger. Nonprofit and Voluntary

Assistance Network”. Institute for Research on Poverty Discussion Paper no. 1211-00,
(2013, April 22). Retrieved from

Emergency Food and Shelter Program: Latest News (2012, October 20). Retrieved from
http://www.efsp.unitedway.org/efsp/website/websiteContents/latestNews.cfm


Table 1: Definitions of Key Terms

| Emergency food assistance: Charitable feeding programs whose services are provided to clients who are typically in short-term need of emergency assistance. Emergency food programs include food pantries, soup kitchens and shelters |
| Food Pantry: A charitable distribution agency that provides clients food and grocery products for home preparation and consumption |
| Soup Kitchen: A charitable program whose primary purpose is to provide prepared meals, served in the kitchen, to clients in need |
| Shelter: A charitable program with a primary purpose to provide shelter or housing on a short-term or temporary basis to clients and typically serves one or more meals a day |

(Cohen et al., 2010, p. 1)

Table 2: Common Forms of Support by Sector

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<th>Financial</th>
<th>In-Kind</th>
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<td><strong>Public Support</strong></td>
<td></td>
</tr>
<tr>
<td>- Emergency Food &amp; Shelter Program (EFSP)</td>
<td>- The Emergency Food Assistance Program (TEFAP)</td>
</tr>
<tr>
<td>- Hunger Prevention &amp; Nutrition Assistance Program (HPNAP)</td>
<td></td>
</tr>
<tr>
<td>- Local Government Contracts</td>
<td></td>
</tr>
<tr>
<td><strong>Private Support</strong></td>
<td></td>
</tr>
<tr>
<td>- Individual Donations</td>
<td>- Food Donations</td>
</tr>
<tr>
<td>- Organizational Support</td>
<td></td>
</tr>
<tr>
<td>- Agency Fundraising Activities</td>
<td></td>
</tr>
</tbody>
</table>
Table 3: Descriptive Statistics for Financial and In-Kind Support Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Median</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>D.V.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meals Served to Clients</td>
<td>1,224</td>
<td>25,569</td>
<td>40,689</td>
<td>48,219</td>
</tr>
<tr>
<td>Total Food Budget</td>
<td>1,204</td>
<td>$9,666.34</td>
<td>$15,084.61</td>
<td>$16,714.36</td>
</tr>
<tr>
<td><strong>FINANCIAL SUPPORT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hunger Prevention &amp; Nutrition Assistance Program</td>
<td>1176</td>
<td>$2,942.60</td>
<td>$4,329.82</td>
<td>$4,409.23</td>
</tr>
<tr>
<td>Emergency Food &amp; Shelter Program</td>
<td>470</td>
<td>$0.00</td>
<td>$3,140.60</td>
<td>$5,246.41</td>
</tr>
<tr>
<td>Other Government Grants</td>
<td>72</td>
<td>$0.00</td>
<td>$14,827.90</td>
<td>$26,096.20</td>
</tr>
<tr>
<td>Private</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual donations</td>
<td>988</td>
<td>$1,753.85</td>
<td>$5,529.44</td>
<td>$7,960.87</td>
</tr>
<tr>
<td>Organizational Support</td>
<td>605</td>
<td>$54.32</td>
<td>$3,531.24</td>
<td>$5,556.74</td>
</tr>
<tr>
<td>Agency Fundraising</td>
<td>678</td>
<td>$385.75</td>
<td>$4,139.16</td>
<td>$7,177.52</td>
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<tr>
<td><strong>IN-KIND SUPPORT</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TEFAP</td>
<td>1,202</td>
<td>6,154</td>
<td>11,241</td>
<td>12,829</td>
</tr>
<tr>
<td>Private</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Drives</td>
<td>1,144</td>
<td>5,993</td>
<td>24,628</td>
<td>162,083</td>
</tr>
</tbody>
</table>
Table 4: Predictors of Financial and In-Kind Support to Meals Distributed from July 2008 – June 2013

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient (SD)</th>
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</thead>
<tbody>
<tr>
<td><strong>Financial</strong></td>
<td></td>
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<tr>
<td>Public</td>
<td></td>
</tr>
<tr>
<td>Hunger Prevention &amp; Nutrition Assistance Program</td>
<td>0.0140 (0.0118)</td>
</tr>
<tr>
<td>Emergency Food &amp; Shelter Program</td>
<td>0.0096** (0.0047)</td>
</tr>
<tr>
<td>Other Government Grants</td>
<td>0.0074 (0.0057)</td>
</tr>
<tr>
<td>Private</td>
<td></td>
</tr>
<tr>
<td>Individual donations</td>
<td>0.0095* (0.0051)</td>
</tr>
<tr>
<td>Organizational Support</td>
<td>0.0088* (0.0048)</td>
</tr>
<tr>
<td>Agency Fundraising</td>
<td>0.0040 (0.0050)</td>
</tr>
<tr>
<td><strong>In-Kind</strong></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td></td>
</tr>
<tr>
<td>TEFAP</td>
<td>0.02995*** (0.0115)</td>
</tr>
<tr>
<td>Private</td>
<td></td>
</tr>
<tr>
<td>Food Donations</td>
<td>0.0083 (0.0055)</td>
</tr>
<tr>
<td><strong>Year FE</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Organization FE</strong></td>
<td>Yes</td>
</tr>
</tbody>
</table>

N = 1,203; Adj. R-Squared: 0.9412

(***) = P value significant at .01; (**) = P value significant at .05; (*) = P value significant at .10