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## Transparency and Resource Allocation of Grassroots Nonprofits in China

### Abstract

Organizational transparency has become a prominent concern for the nonprofit sector as it expands globally. Transparency is important to organizational accountability, which may be indicated by how nonprofits allocate their resources. In this study, we examine the relationship between nonprofits' transparency and their resource allocation to programs, administration, and fundraising. Our study focuses on China, where a nascent nonprofit sector is playing increasingly significant roles in social development while facing public trust challenges. Based on Agency Theory and Resource Dependence Theory, we propose two hypothesized frameworks that link transparency to resource allocation, and use the 2013–2015 China Grassroots Organizations' Transparency Survey data ( $n=370$ ) to test this relationship. Our results suggest that nonprofits with higher transparency allocate more resources to programs rather than administration, a possible result of the current public scrutiny of nonprofit accountability in China. Our findings provide implications for nonprofit practitioners and future research about the significance of organizational transparency, particularly in emerging nonprofit sectors.

**Keywords:** resource allocation, transparency, agency theory, resource dependence theory, China

## Transparency and Resource Allocation of Grassroots Nonprofits in China

As the global nonprofit sector broadened in scope and size over the past few decades, nonprofits' stakeholders, including donors and the public, have increasingly focused on nonprofits' accountable performance (Bies, 2010; Gugerty & Prakash, 2010). One of the widely recognized factors linked to nonprofit accountability is *transparency* (Cabedo et al., 2018; Saxton & Guo, 2011), which means "a continuous flow of information from an organization to the public about the organization's mission, financial situation, and governance practices" (BoardSource, 2010, p. 366).

Transparency, through either mandatory monitoring, reporting, or voluntary information disclosure, demonstrates nonprofits' effectiveness to donors (Saxton, Neely, & Guo, 2014). It may increase nonprofits' credibility (Murtaza, 2012; Zhuang, Saxton, & Wu, 2014) and helps organizations secure tangible and intangible resources (e.g. funding and reputation; Bies, 2010; Sidel, 2010). Nonprofit transparency may be influenced by organizational age, organizational legitimacy, and the area in which the organization provides services. For example, education nonprofits in the U.S. tend to disclose more information than religion-related nonprofits and health organizations (Tremblay-Boire & Prakash, 2015), and organizations with a longer history, which are more attentive to reputation cultivation, may have higher transparency (Rodríguez, Pérez, & Godoy, 2012). Unregistered organizations, which have fewer resources, may be less transparent than those already registered (Deng, Lu, & Huang, 2015).

Another factor related to accountability, nonprofits' resource allocation (i.e., expenditure), has also raised concerns. A nonprofit typically allocates its resource to three areas: program, administration, and fundraising (Pollak, Rooney, & Hager, 2001). *Program expenses*

directly relate to organizational mission execution and result in services or goods being provided; they involve any spending on program goal achievement and program activity implementation.

*Administrative expenses* cover the organization's overall function and management, which may include salaries and benefits of board members and administrative staff, as well as outlays for equipment and supplies. *Fundraising expenses* support efforts related to raising money for the organization, such as printing and material costs for fundraising events (NGO Administrative Bureau of China, 2004).

Nonprofit expenditure denotes how much resource the organization allocates to each area. Program expense ratio, calculated by the amount of program expense divided by total expense, has been widely recognized as an indicator of nonprofits' efforts in achieving their charitable missions. Many consider a high program expense ratio to be an indicator of effectiveness and accountability (Krishnan, Yetman, & Yetman, 2006; Xie et al., 2016). In contrast, a high administrative expense ratio, calculated by the amount of administrative expense divided by total expense, indicates nonprofit inefficiency and potential misuse of revenues (Jacobs & Marudas, 2009; Marudas, Hahn, & Jacobs, 2014). A high fundraising expense ratio, calculated by the amount of fundraising expense divided by total expense, is also considered an indicator of financial inefficiency (Burkart et al., 2018; Krishnan et al., 2006).

Countries with long-established nonprofit sectors have adopted various accountability practices. Nonprofits in the United States, for example, are mandated to disclose their tax return information and are voluntarily sharing other organizational information to the public (Bothwell, 2000; Internal Revenue Service, 2014). In developing regions, however, nonprofit accountability is a relatively new concept as nonprofit sectors are still emerging (Gugerty, 2010; Sidel, 2010).

For instance, the practice of nonprofit accountability in Asia began in the late 1990s and is still in the experimental phase (Sidel, 2010).

China, with its rapidly growing number of philanthropists, increasing corporate investment in corporate social responsibility, and surging online giving through social media platforms (UNDP, 2015), has one of the fastest growing nonprofit sectors in Asia. In the past ten years, China's charitable donation has substantially grown from CNY 6.2 billion (approximately USD 930 million) to 104.2 billion (USD 15.7 billion) (Lu, Rios, & Huang, 2016). Nonprofits in China are expecting enormous opportunities in a rapidly expanding nonprofit economy.

According to a recent cross-regional survey of 15 economies in Asia, China has one of the most supportive ecosystems for social sector development, such as philanthropy-related awards, corporate social responsibility, volunteer programs, and related education and trainings. For instance, in 2018, Tencent's WeChat social media platform catalyzed 6.8 million users to donate a total of USD \$44 million during a national charitable giving day event (Center for Asian Philanthropy and Society, 2018).

The rapidly growing nonprofit sector in China also raises concerns about nonprofit accountability, for which access to information is the first step (Meijer, 2003). Despite its rapid development, China's nonprofit sector is significantly challenged by inadequate transparency. A recent study of 821 Chinese grassroots nonprofits shows that on a 0–100 scale, the average transparency level is 29.1 points. Among all measures, financial information is the least disclosed (Deng et al., 2015).

Laws and regulations around grassroots nonprofits' transparency are also lagging in China. Not until March 2016 did the central government begin to require that all charitable organizations disclose information to the public. Moreover, recent news of several nonprofits'

financial misconduct show that some nonprofit managers have exploited charitable donations for their own use, instead of investing in programs and services (Deng et al., 2015; Xie et al., 2016).

In this study, our research question is: What is the relationship between nonprofits' transparency and their resource allocation? While the literature has extensively discussed the importance of nonprofit transparency (Cabedo et al., 2018; Murtaza, 2012; Rodríguez et al., 2012; Saxton & Guo, 2011; Zhuang et al., 2014) and resource allocation (Burkart et al., 2018; Jacobs & Marudas, 2009; Krishnan et al., 2006; Marudas et al., 2014) separately, little is known about the connection between these two organizational accountability factors. Furthermore, research on nonprofit accountability primarily examines regions where nonprofit sectors have been long established, such as the U.S. (Callen, Klein, & Tinkelman, 2010), Europe (Bies, 2010), and Canada (Bradshaw, Murray, & Wolpin, 1992). Few studies look at regions where nonprofit sectors are emerging, such as Asia (Sidel, 2010) and Africa (Gugerty, 2010). This study adds to the literature by examining the relationship between organizational transparency and resource allocation in China, where the nonprofit sector is playing an increasingly important role in social development while facing public trust challenges.

China has two types of nonprofits—GONGOs (Government Organized Non-Governmental Organizations) and grassroots nonprofits. *GONGOs* are defined as government-operated, top-down organizations that provide services and programs for the collective good; they receive government funding or fundraise through government connections. *Grassroots nonprofits*, on the contrary, are privately-operated, bottom-up nonprofits that emerged since 1995; these organizations are established and managed by individuals, rather than government agencies (Deng, 2013; Zhu, 2013). Given that the GONGO is a special organizational structure specific to China's social context, and is uncommon in other countries, our study focuses on

grassroots nonprofits only. In addition, the definition of “grassroots” in the Chinese context is not equivalent to “grassroots” in Western countries. While a grassroots organization in the West is defined as locally based, autonomous, volunteer-run, nonprofit group with an official membership of volunteers (Smith, 1997), a grassroots organization in China is a type of nonprofit opposite to the GONGO; it may involve both membership-based and non-membership-based, registered and unregistered organizations that have no government background.

### **Theoretical Framework and Literature Review**

Our hypothesis is driven by two theories—Agency Theory and Resource Dependence Theory, which provide two possible mechanisms that theoretically explain how transparency is linked to resource allocation.

#### **Agency Theory**

Originally developed in economics, the Agency Theory states that all exchange activities between two parties involve an agent, who chooses actions from various possibilities based on available information, and a principal, who pays the agent to take actions. The principal observes the results of the agent’s actions and uses this information to make future payment decisions. When the principal and the agent have unequal access to information, the principal–agent information asymmetry problem arises (Arrow, 1984).

For the nonprofit sector, organizations are the agents while their donors are the principals. To them, information asymmetry has two possible causes: first, the agent’s actions are sometimes unobservable by the principal (Arrow, 1984), particularly for nonprofit donors, who usually are not nonprofits’ service users and can hardly observe nonprofits’ operations or evaluate their outcomes (Rodríguez et al., 2012); second, the agent may choose to hide certain information from the principal (Fama & Jensen, 1983a). Agency Theory assumes that agents

have more information than principals, and agents may take advantage of this for their own interests, which do not always align with the principals' (Gugerty & Prakash, 2010; Miller-Millesen, 2003; Van Slyke, 2007). In other words, there is a goal divergence between the agent and the principal, and the agent's resource allocation tendencies and the principal's budget concerns sometimes conflict (Van Slyke, 2007). For example, nonprofits with high overhead cost may choose not to disclose this information in order to avoid public criticism.

Transparency reduces the principal-agent information asymmetry (Rodríguez et al., 2012), and thus influences resource allocation. First, reducing information asymmetry prevents the problem of adverse selection, which means the principal (i.e., donors of nonprofits) pays for low-quality services with an unfair price because of insufficient information (Van Slyke, 2007). Reducing information asymmetry allows nonprofits to signal to their principals that they are ethically allocating resources (Prakash & Gugerty, 2010) and prevents excessive administrative expense (Callen et al., 2010). Second, reducing information asymmetry minimizes moral risk, as more information exchange aligns agents' goals with their principals'; in other words, transparency builds more common goals between nonprofits and their donors (Miller-Millesen, 2003; Van Slyke, 2007).

### **Resource Dependence Theory**

The connection between nonprofit transparency and resource allocation may also be explained by Resource Dependence Theory, which stresses that organizations' activities are determined by their external context. Organizations rely on external support to survive. As an exchange, external supporters may demand certain actions from an organization (Pfeffer & Salancik, 1978). Among all types of organizations, nonprofits are particularly interdependent with their donors. They rely on donors to provide resources, while donors rely on them to deliver programs to

achieve their philanthropic missions (AbouAssi, 2015). This interdependence motivates nonprofits to respond to donors' demands, which may include more financial transparency (Harrow, 2006; Sidel, 2010) and accountable resource allocation (Szper, 2013). A study of U.S. nonprofits who receive substantial public donations, for instance, showed that nonprofits reported larger program expense ratios and smaller fundraising expense ratios in order to increase their third-party ratings and maintain their legitimacy (Szper, 2013).

Resource Dependence Theory also states that the more organizations rely on external resources, the more likely they will respond to external demands (Pfeffer & Salancik, 1978). This is a particularly common phenomenon in developing countries, where donors' support is especially crucial (AbouAssi, 2015).

In China's social context, grassroots nonprofits overall rely heavily on donors' support. For instance, a previous study showed that the average donation income of grassroots nonprofits was six times of their income from government grants in 2011 (Deng et al., 2015). Chinese donors' demands are essentially about disclosing information and cutting overhead spending. In the recent years, certain nonprofits' financial misconduct evoked distrust in the entire nonprofit sector and devastated its reputation. This is especially detrimental to grassroots nonprofits, who rely heavily on public donations (Deng, 2015; Liu, 2012).

In this context, increasing nonprofit organizations begin to voluntarily disclose information to regain public trust. For instance, in 2013, the China Union of Self-Disciplinary Organizations (USDO) and several other organizations co-initiated the *Grassroots Organizations' Transparency Index (GTI)* survey that assesses transparency of grassroots nonprofits in China (Union of Self-Disciplinary Organizations, n.d.). During the past three years, more and more grassroots nonprofits have volunteered to join this initiative. By 2015, the index



had been used to evaluate 1,738 grassroots nonprofits' transparency. Many organizations also begin to restrict their overhead costs to demonstrate their administrative efficiency (Xie et al., 2016).

Theoretically, Chinese grassroots nonprofits' dependence on public donations would motivate them to respond to increasing public requests for information transparency. Higher transparency would reduce information asymmetry, build more common goals between nonprofits and donors, and prevent adverse selection and moral risks. These factors would likely influence nonprofits to invest more resources in programs rather than administration or fundraising.

In this study, we explore the relationship between organizational transparency and resource allocation in China's nonprofit sector. Based on the two theoretical frameworks and China's social context, we propose that higher organizational transparency is associated with more resource allocation to programs and less resource allocation to administration and fundraising.

## **Method**

### **Data and Sample**

Our cohort data came from the 2013–2015 China Grassroots Organizations' Transparency Survey, which was initiated by China Union of Self-Disciplinary Organizations (USDO) and collaboratively conducted by Shenzhen One Foundation, Narada Foundation, and China Foundation Center. The survey team compiled a list of grassroots nonprofits and collected their organizational information that was disclosed through Internet, social media, and other public sources. It is the first national survey that specifically evaluates levels of transparency of grassroots organizations in mainland China. Due to the time lag on nonprofits' information

disclosure, the 2013–2015 data evaluate grassroots nonprofits' transparency in 2011–2013, respectively. The number of organizations included in the 2013, 2014, and 2015 survey was 1,004, 1,301, and 1,738.

In this study, we only included organizations that fully disclosed their expenditure information (e.g., *Beijing Stars and Rain Education Institute for Autism*, *Green Camel Bell-Gansu Environmental NGO*, etc.). After excluding organizations with incomplete information in key variables (which on average were younger organizations with smaller total assets across various program areas), our final sample size was 370. Thus, our findings represent a subset of grassroots organizations that are relatively transparent in the nonprofit sector. Also, since the sampling frame was a nonprofit list compiled by the Grassroots Organizations' Transparency Survey team, the sample consisted of nonprofits that were known to the public to a certain extent, which means nonprofits without any publicly available information were excluded.

### **Measures**

Our dependent variable was Chinese grassroots nonprofits' expense structure, which included total expense and its subcategories. *Total expense* refers to the outflow of economic benefits or service potentials that occurred in carrying out programs and services, which causes the reduction of current net asset (NGO Administrative Bureau of China, 2004). According to its function, we divided nonprofits' total expense into *program*, *administrative*, and *fundraising expense*. In addition, the data also included *other expense*, which refers to costs that do not belong to the previous three categories; these expenses may include net loss occurred during fixed assets disposal and intangible assets disposal (NGO Administrative Bureau of China, 2004). In this study, we converted the expense amount into *expense ratios*, which was defined as

the percentage of each expense category (i.e. program expense, administrative expense, fundraising expense, and other expense) in total expense.

Our main independent variable was *level of transparency*. It was measured by the *Grassroots Organizations' Transparency Index (GTI)*, an index that indicates Chinese grassroots nonprofits' levels of transparency. The index consists of four dimensions: basic information transparency, governance transparency, financial transparency, and activity transparency. A total of 58 items measured these dimensions. For example, *basic information transparency* was measured by items such as organizational mission, vision, date of establishment, and founder. *Governance transparency* was measured by number of board members, board meeting minutes, executive director's compensation package, etc. *Financial transparency* included items such as total assets, total expenditure, project costs, fundraising costs, and management costs. Last, *activity transparency* was measured by items including name of major projects, project aims, project location, and project progress. A complete list of all items is presented in the appendix. In addition to whether this information is available to public, the GTI also gives weight on the timeliness and completeness of information. The total GTI score sums the scores for all dimensions and ranges 0–100. Higher scores indicate higher levels of transparency (more details about the GTI index can be found in Deng et al., 2015).

We also controlled for four organizational characteristics that might influence transparency: program area, type of registration, organizational age, and geographical location.

*Program area* consisted of six categories: people with disabilities, poverty and disaster relief, environmental protection, education, community service, and other. *Other* areas included animal rights, child welfare, elderly welfare, health, support and research, labor protection, culture/art/sport, gender equality, social innovation, and volunteer support.

*Type of registration* included four categories in which these organizations were registered: business entity, private non-enterprise unit, social organization, and unregistered organizations. *Business entity* is defined as a nonprofit registered under the China State Administration for Industry and Commerce. *Private non-enterprise unit* means a non-membership-based organization. *Social organization* refers to a membership-based organization. *Unregistered organizations* were those that were operating programs but not yet officially acknowledged by the governments (Huang, Deng, Wang, & Edwards, 2013). Notably, these types are specific to China's nonprofit registration system and not commonly seen in other countries.

*Organizational age* refers to the time since establishment until the time of the survey. We divided organizational age into three groups: less than 5 years, 5–10 years, and over 10 years.

In addition, since regional economies and nonprofit sectors are most developed in major Chinese metropolises, followed by the east provinces, central China, and least developed in the west provinces, we also controlled for organization location. *Location* has four categories—the major metropolises (i.e. Beijing, Shanghai, Guangzhou, and Shenzhen), the east, the central, and the west. Given that the sample included additional organizations every year, we also controlled for the *survey year* (i.e. 2013, 2014, and 2015).

### **Analytic Strategy**

Our analysis included descriptive analysis and bivariate analysis of expense ratios by main independent variables, followed by ordinary least squares regressions to examine the association between transparency and resource allocation, controlling for organizational characteristics. The model specification was:

$$ER = X_1 \beta_1 + X_2 \beta_2 + \varepsilon,$$

In this equation,  $ER$  denotes the expense ratio,  $X_1$  represents the GTI transparency score, and  $X_2$  represents organizational characteristics (i.e. program area, type of registration, location, organizational age) and survey year.  $\beta_1$  and  $\beta_2$  represent the estimated coefficients;  $\varepsilon$  is the error term. In addition, we performed robust test of our results. First, we tested a nonlinear specification of transparency, where GTI transparency score was divided into three categories (i.e. low, medium, and high). Second, we examined the unique contribution of each dimension of transparency. Given that some organizations were surveyed for more than one year and therefore were accounted in the sample for more than once, we used robust standard errors in all regression analyses to adjust for estimation bias.

## Results

### Descriptive Statistics

As shown in Table 1, during 2011–2013, the 370 Chinese grassroots nonprofits' annual total expense was averagely CNY 2.7 million (equivalent to USD 0.4 million), with a standard deviation of CNY 6.4 million (USD 1 million). On average, these organizations allocated most resource to program expense (70.1%), followed by administrative expense (25.8%), other expenses (2.4%), and fundraising expense (1.7%). The mean of their transparency score was 66.9 out of 100 points, with a standard deviation of 13.8. In terms of subdimensions, these organizations were most transparent about basic information (16.7 out of 19 points), followed by financial information (22 out of 30), governance information (15.9 out of 28), and activity information (12.4 out of 23).

In terms of program area, 34% of these organizations worked with people with disabilities, followed by those worked in community service (18.1%), other areas (16.8%), education (14.6%), environmental protection (11.4%), and poverty and disaster relief (5.1%).

With respect to type of registration, 69.2% were private non-enterprise units, 20% were social organizations, 6.2% were business entities, and 4.6% were not yet registered. Almost one third (32.4%) of these organizations were located in the four major metropolises; fewer were in the east (27.6%), the west (24.9%), and central China (15.1%). Nearly half of the organizations (49.7%) had established for 5–10 years, 40.8% had established for over 10 years, and a few were less than 5 years (9.5%).

[Table 1 Here]

### **Expense Ratios by Level of Transparency and Organizational Characteristics**

Table 2 show the bivariate analysis of organizational resource allocation and transparency, which is also illustrated in Figure 1. Organizations with high transparency allocated the most resources to program expense (75.7%), followed by those with medium transparency (69.2%), and then those with low transparency (65.5%). On the contrary, organizations with high transparency spent the least on administrative expense (19.8%), followed by those with medium transparency (27.9%), and those with low transparency (29.7%). Fundraising expense ratios and other expense ratios were low in general and do not differ significantly across organizations.

[Figure 1 Here]

Organizational resource allocation also differed by organizational characteristics. In terms of program area, those working for people with disabilities and poverty and disaster relief spent lower-than-average proportion on program expense but higher-than-average on administrative expense. Organizations in community service allocated the most resources to program expense (76.6%) and the least on administrative expense (22%). In terms of type of registration, social organizations had the highest program expense ratio (77%) and the lowest administrative expense ratio (18.7%). Unregistered organizations had the highest fundraising

expense ratio (9.9%), probably due to their pressure of securing external funding to survive and obtain recognition. With respect to geographic location, organizations in the west spent the most on program (76.8%), whereas Organization in central China spent the least on program (65%). Lastly, in terms of organizational age, older organizations spent less on administration.

[Table 2 Here]

### **Regression Estimates of Expense Ratios**

Table 3 presents the regression estimates of expense ratios. Transparency, our key independent variable, was significantly and positively associated with program expense ratio and negatively associated with administrative expense ratio. Every 10 points increase in transparency score was linked to 3 percentage points increase in program expense ratio and 2 percentage points decrease in administrative expense ratio, while holding all other variables constant.

In addition, expense ratio was associated with type of registration. Unregistered organizations' program expense ratios were marginally significantly lower than social organizations. As discussed in the last section, this may indicate that unregistered organizations struggle with survival and social recognition, and therefore, may allocate more resources toward fundraising instead of programs. Expense ratio was also associated with organizational age. The older an organization was, the more it spent on programs and the less it spent on administration. We did not find transparency significantly relates to fundraising and other expense ratios, which were not included in the table given space limit.

[Table 3 Here]

Table 4 shows the robust test of transparency score on expense ratios through two specifications: linear (Specification I) and nonlinear (Specification II). Four models are presented. Model 1 shows the linear specification that treated transparency score as a continuous

variable, which was exactly the same as the model in Table 3. Model 2 presents linear results of the four transparency subdimensions (i.e. basic information, governance, finance, and activity). The total transparency and subdimension scores were divided into three categories (i.e. low, medium, and high) in order to test their nonlinear effects on expense ratios in models 3 and 4. Respectively, model 3 and 4 show the effects of the total transparency score and the subdimension scores.

In the linear specification (model 1), higher transparency score was associated with higher program expense ratio and lower administrative expense ratio. When we looked at the specific transparency dimensions (model 2), governance transparency particularly showed significant positive association with program expense ratio and negative association with administrative expense ratio. Every 10 points increase in governance transparency was related to 6 percentage points higher program expense ratio and 6 percentage points lower administrative expense ratio. Higher basic information transparency also linked to higher program expense ratio; but this effect was marginally significant only.

The nonlinear specification compared resource allocation among organizations with low, medium, and high transparency. Compared with organizations with low transparency (model 3), those with high transparency had 7.6 percentage points higher program expense ratio and 7 percentage points lower administrative expense ratio. The resource allocation of organizations with medium transparency, however, did not differ from those with low transparency.

Governance transparency, again, showed strongly significant associations (model 4).

[Table 4 Here]

## **Discussion**

### **Transparency and Resource Allocation**



Our results show that Chinese nonprofit organizations with higher transparency allocate more resources to programs and fewer resources to administration. One theoretical explanation based on Agency Theory is that grassroots nonprofits' transparency practices reduce information asymmetry, which may allow the organizations to build common goals with their donors, avoid adverse selection, and reduce moral risks. Another theoretical explanation based on Resource Dependence Theory is that these nonprofits' practices are mainly driven by external environment, which includes an increasingly competitive fundraising market and donors' distrust of the nonprofit sector. In this challenging environment, improving transparency effectively demonstrates self-regulation efforts and address donors' concern over overhead costs. From both theoretical perspectives, higher transparency is related to nonprofits' tendency to allocate more resources to programs and fewer to administration.

Our results also show that among all transparency dimensions, governance transparency (i.e., information about the board, trustees, and executive director) has the strongest association with resource allocation. A possible explanation of this association from the Agency Theory perspective is that effective nonprofit governance monitors organizational management to avoid conflicts of interest between nonprofits and donors (Fama & Jensen, 1983b). Effective governance also reduces the risk of managerial opportunism, where the managers misuse donations for their personal gain (Miller-Millesen, 2003). Thus, transparent governance would build more common goals between nonprofits and their donors and prevent moral hazard (Van Slyke, 2007). From the Resource Dependence Theory perspective, transparent nonprofit governance would motivate more resource allocation toward mission achievement while disincentivizing unreasonable administrative expense (Callen et al., 2010).

### **Future Research Directions**

While Agency Theory and Resource Dependence Theory provide two theoretical explanations for our findings, our data cannot suggest which theory is better supported. These theoretical frameworks warrant future research to test measures of relevant constructs, such as nonprofit-donor goal alignment, changes in public donation trends, and organizations' motivations for self-regulation. For instance, AbouAssi and Bies's study (2018) of environmental nonprofits in Lebanon suggests that nonprofits' self-regulation and accountability practice are not simply driven by resource dependence or external parties' mandatory requirement; instead, it may be driven by nonprofits' self-motivated responsiveness to donors, beneficiaries, and nonprofit peers (AbouAssi & Bies, 2018; Prakash & Gugerty, 2010; Tremblay-Boire, Prakash, & Gugerty, 2016).

Additionally, nonprofit partnership with private businesses was also found to facilitate nonprofits' accountability and financial transparency (Sanzo-Pérez, Rey-Garcia, & Álvarez-González, 2017). Therefore, possible inquiry in further studies may include organizations' reason for information disclosure and process of budgeting decision-making. These data can be collected through surveys and interviews with donors, nonprofit leaders, nonprofit network members, and cross-sector partners.

While our study adopts Agency Theory and Resource Dependence Theory, theories developed in western social contexts, future studies may frame this discussion within perspectives specific to China. For instance, Teets (2013) argued that Chinese nonprofits operate within a "consultative authoritarianism" model, where the state encourages nonprofits to have some autonomy while it maintains social control. Thus, the power dynamic between the state and nonprofits may also play an important role in resource allocation decisions.

As shown in Table 1, our sampled organizations have large standard deviations in their expenses, which suggests great variances across these organizations that warrant further investigation (e.g., staff background, Farooq et al., 2019). Also, as shown in Table 3, the R-squared values indicated our independent variables only explained 14% and 12% of program and administrative expense ratio, respectively; future studies may therefore explore other factors that influence resource allocation. Additionally, although our cross-sectional analyses suggest an association between transparency and resource allocation, the relationship could be bi-directional as organizations with higher program expenses may be more likely to be transparent. The causal relationship needs to be tested through future studies with longitudinal designs.

Finally, although our results show that Chinese grassroots nonprofits' transparency is not associated with their fundraising expenses, which merely account for 1.7% of their total expenses, this could be a result of grassroots nonprofits' fundraising eligibility. Before the recent Chinese Charity Law of 2016, Chinese grassroots nonprofits were not allowed to fundraise publicly. Consequently, most grassroots nonprofits' revenues rely on overseas donations and government contracts. Some also collaborate with GONGOs, who are authorized by the central government to fundraise publicly. As the Chinese government opens up fundraising rights to grassroots nonprofits, these organizations' fundraising expenses may grow substantially in the next few years, warranting further monitoring and study.

In this study, we consider higher program expense ratio and lower administrative expense ratio an indicator of greater nonprofit accountability. However, nonprofit accountability is a complicated concept that involves many dimensions (Bradshaw et al., 1992; Cabedo et al., 2018). Expense ratios also do not necessarily signify nonprofits' service quality or program outcomes (Szper, 2013). Nonprofit practitioners and policymakers should also note that

excessive cuts to administrative expenses may threaten nonprofits' survival. As more donors are concerned about nonprofits' administrative efficiency and favor a lower overhead cost ratio (Burkart et al., 2018), increasing program ratio becomes a tempting choice for grassroots nonprofits to boost reputation. Many nonprofits are competitively suppressing their administrative and fundraising expense. They are then faced with a dilemma; they need more resources for organizational operation during today's challenging economy, but they are afraid of the negative public attitude toward high administrative and fundraising ratios.

In these cases, funders', and sometimes governments', excessive regulations burden nonprofits' operations (Sidel, 2010). For instance, China's *Regulations on Foundation Governance* (enacted in 2004) specifies that the total amount of foundation staff salaries, fringe benefits, and organizational administrative expenses cannot exceed 10% of the foundation's total expense that year. The *Notice on Nonprofits' Tax-Exempt Status Accreditation* (enacted in 2009) states that in order for a nonprofit to be tax-exempt, the average salary of its staff cannot exceed twice that of the local average salary (Deng, 2015).

To balance nonprofit organizations' resource allocation and their sustainable development, we propose that donors and policymakers should recognize the necessity of nonprofits' reasonable administrative and fundraising expenses to meet their actual operational needs. Nonprofits, donors, and governments will need to find common ground through more complete, transparent information exchange. To find this common ground, we speculate that transparency and administrative expense may present a curvilinear relationship—administrative expense declines as transparency gets higher, but remains stable once it reaches the minimum point, which accounts for the necessary operational costs. Future study with larger samples could further test this relationship.

Notably, our sample represented a group of relatively transparent grassroots organizations with expenditure information available for analyses, and the majority of the sampled organizations were 5 years of age or older. Our results therefore may only apply to more mature organizations and may not be generalized to young ones, or to the entire sector.

### **Conclusion**

Using China as an example, this study examines the relationship between nonprofit organizations' transparency and their resource allocation, measured by expenses on programs, administration, and fundraising. Our results suggest that higher nonprofit transparency is associated with more resources allocated to programs and fewer to administration. Our results also highlight the connection between governance transparency and organizational resource allocation decisions. Our findings call for nonprofits' awareness of transparency, which could help organizational leaders make more informed resource allocation decisions that are vital to nonprofits' survival in an emerging nonprofit sector. Timely, open information exchange will effectively engage key stakeholders—including boards and staff—in this decision-making process (Bothwell, 2000) and inform organizational leaders to make wiser operational decisions for their organization. In addition, we propose two hypothesized pathways between organizational transparency and resource allocation that future studies may test with larger samples and more comprehensive measurement.

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Table 1. Descriptive statistics

| <i>N</i> = 370                        | <i>Mean or Percentage (S.D.)</i> |
|---------------------------------------|----------------------------------|
| Total Expense [CNY in thousand]       | 2,692 (6,383)                    |
| Program expense                       | 1,854 (3,371)                    |
| Administrative expense                | 641 (4,650)                      |
| Fundraising expense                   | 149 (2,240)                      |
| Other expense                         | 48 (390)                         |
| Expense Ratio [% in Total Expense]    |                                  |
| Program expense                       | 70.1 (29.8)                      |
| Administrative expense                | 25.8 (27.5)                      |
| Fundraising expense                   | 1.7 (9.2)                        |
| Other expense                         | 2.4 (9.7)                        |
| Total Transparency [0–100]            | 66.9 (13.8)                      |
| Basic information transparency [0–19] | 16.7 (1.8)                       |
| Governance transparency [0–28]        | 15.9 (6.5)                       |
| Financial transparency [0–30]         | 22.0 (5.8)                       |
| Activity transparency [0–23]          | 12.4 (5.5)                       |
| Program Area [%]                      |                                  |
| Poverty and disaster relief           | 5.1                              |
| People with disabilities              | 34.0                             |
| Environmental protection              | 11.4                             |
| Education                             | 14.6                             |
| Community service                     | 18.1                             |
| Other                                 | 16.8                             |
| Type of Registration [%]              |                                  |
| Business entity                       | 6.2                              |
| Private non-enterprise unit           | 69.2                             |
| Social organization                   | 20.0                             |
| Unregistered                          | 4.6                              |
| Location [%]                          |                                  |
| Major metropolises                    | 32.4                             |
| East                                  | 27.6                             |
| Central                               | 15.1                             |
| West                                  | 24.9                             |
| Organizational Age [%]                |                                  |
| Less than 5 years                     | 9.5                              |
| 5–10 years                            | 49.7                             |
| More than 10 years                    | 40.8                             |
| Survey Year [%]                       |                                  |
| 2013                                  | 24.0                             |
| 2014                                  | 36.0                             |
| 2015                                  | 40.0                             |

Note: Numbers in the table are means (with standard deviations in parentheses) or percentages.

Table 2. Expense ratios by transparency and organizational characteristics

| <i>N</i> = 370              | Expense Ratio [% in Total Expense] |                |             |            |
|-----------------------------|------------------------------------|----------------|-------------|------------|
|                             | Program                            | Administrative | Fundraising | Other      |
| <b>Transparency</b>         |                                    |                |             |            |
| Low                         | 65.5 (33.2)                        | 29.7 (31.1)    | 1.9 (10.8)  | 2.9 (11.6) |
| Medium                      | 69.2 (30.1)                        | 27.9 (28.9)    | 0.5 (3.8)   | 2.5 (9.1)  |
| High                        | 75.7 (24.8)                        | 19.8 (20.4)    | 2.7 (11.1)  | 1.9 (7.9)  |
| <i>F</i> -test              | 3.7*                               | 4.7**          | 1.9         | 0.3        |
| <b>Program Area</b>         |                                    |                |             |            |
| Poverty and disaster relief | 61.5 (39.9)                        | 29.1 (32.4)    | 3.9 (9.7)   | 5.5 (14.0) |
| People with disabilities    | 62.8 (29.9)                        | 31.6 (28.6)    | 1.6 (8.8)   | 3.9 (11.9) |
| Environmental protection    | 76.1 (25.3)                        | 22.1 (24.4)    | 0.4 (1.5)   | 1.4 (4.0)  |
| Education                   | 74.4 (26.2)                        | 22.2 (23.6)    | 1.2 (4.0)   | 2.1 (13.0) |
| Community service           | 76.6 (28.7)                        | 22.0 (28.0)    | 0.1 (0.6)   | 1.3 (6.2)  |
| Other                       | 72.8 (30.5)                        | 22.8 (27.0)    | 4.0 (17.3)  | 0.5 (2.0)  |
| <i>F</i> -test              | 3.2**                              | 2.0+           | 1.6         | 1.8        |
| <b>Type of Registration</b> |                                    |                |             |            |
| Business entity             | 57.3 (30.1)                        | 37.1 (27.5)    | 4.4 (15.5)  | 1.2 (3.5)  |
| Private non-enterprise unit | 70.1 (29.5)                        | 26.5 (28.2)    | 1.0 (7.0)   | 2.4 (9.1)  |
| Social organization         | 77.0 (27.3)                        | 18.7 (21.6)    | 1.3 (5.2)   | 2.9 (13.1) |
| Unregistered                | 57.4 (37.1)                        | 31.8 (33.4)    | 9.9 (25.1)  | 0.9 (3.4)  |
| <i>F</i> -test              | 3.9**                              | 3.3*           | 5.9***      | 0.3        |
| <b>Location</b>             |                                    |                |             |            |
| Major metropolises          | 68.0 (31.0)                        | 26.1 (27.6)    | 3.1 (14.2)  | 2.7 (10.4) |
| East                        | 69.5 (28.9)                        | 27.2 (28.1)    | 0.6 (4.3)   | 2.7 (11.5) |
| Central                     | 65.0 (29.7)                        | 30.8 (28.1)    | 1.9 (7.7)   | 2.3 (8.0)  |
| West                        | 76.8 (28.6)                        | 20.8 (25.8)    | 0.8 (4.2)   | 1.6 (7.0)  |
| <i>F</i> -test              | 2.3+                               | 1.7            | 1.8         | 0.3        |
| <b>Organizational Age</b>   |                                    |                |             |            |
| Less than 5 years           | 59.8 (31.8)                        | 39.2 (31.4)    | 0.2 (0.5)   | 0.8 (2.2)  |
| 5–10 years                  | 71.3 (30.4)                        | 25.2 (27.9)    | 1.6 (10.4)  | 1.8 (8.2)  |
| More than 10 years          | 71.0 (28.3)                        | 23.4 (25.1)    | 2.1 (8.6)   | 3.5 (12.0) |
| <i>F</i> -test              | 2.3+                               | 4.9**          | 0.6         | 1.8        |
| <b>Survey Year</b>          |                                    |                |             |            |
| 2013                        | 62.9 (34.2)                        | 28.9 (29.1)    | 4.1 (15.0)  | 4.1 (12.0) |
| 2014                        | 74.7 (24.6)                        | 23.5 (24.6)    | 0.7 (4.1)   | 1.1 (5.2)  |
| 2015                        | 70.4 (30.6)                        | 26.0 (28.8)    | 1.0 (7.6)   | 2.6 (11.0) |
| <i>F</i> -test              | 4.26*                              | 1.0            | 4.2*        | 2.7+       |

Note: Numbers in the table are means with standard deviations in parentheses.

+  $p < .10$ , \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

Table 3. Regression estimates of expense ratios (% in total expense)

| <i>N</i> = 370              | Program<br>Expense Ratio |             |          | Administrative<br>Expense Ratio |             |          |
|-----------------------------|--------------------------|-------------|----------|---------------------------------|-------------|----------|
|                             | <i>B</i>                 | <i>S.E.</i> | <i>P</i> | <i>B</i>                        | <i>S.E.</i> | <i>P</i> |
| Transparency                | 0.3                      | 0.1         | 0.029*   | -0.2                            | 0.1         | 0.075+   |
| Program Area                |                          |             |          |                                 |             |          |
| Poverty and disaster relief | ---                      | ---         | ---      | ---                             | ---         | ---      |
| People with disabilities    | 5.7                      | 11.4        | 0.619    | -3.0                            | 9.6         | 0.751    |
| Environmental protection    | 18.9                     | 11.7        | 0.107    | -12.2                           | 9.9         | 0.219    |
| Education                   | 15.0                     | 11.5        | 0.194    | -10.9                           | 9.6         | 0.257    |
| Community service           | 17.7                     | 11.7        | 0.131    | -11.7                           | 9.9         | 0.239    |
| Other                       | 15.9                     | 11.5        | 0.169    | -11.7                           | 9.6         | 0.224    |
| Type of Registration        |                          |             |          |                                 |             |          |
| Business entity             | -4.2                     | 10.9        | 0.700    | 10.2                            | 9.7         | 0.292    |
| Private non-enterprise unit | 12.0                     | 8.6         | 0.165    | -5.5                            | 8.1         | 0.499    |
| Social organization         | 15.9                     | 9.2         | 0.084+   | -10.3                           | 8.1         | 0.206    |
| Unregistered                | ---                      | ---         | ---      | ---                             | ---         | ---      |
| Location                    |                          |             |          |                                 |             |          |
| Major metropolises          | ---                      | ---         | ---      | ---                             | ---         | ---      |
| East                        | -1.1                     | 5.1         | 0.824    | 2.7                             | 4.8         | 0.582    |
| Central                     | -4.8                     | 5.5         | 0.388    | 7.1                             | 5.5         | 0.194    |
| West                        | 5.2                      | 4.8         | 0.277    | -1.7                            | 4.4         | 0.693    |
| Organizational Age          |                          |             |          |                                 |             |          |
| Less than 5 years           | ---                      | ---         | ---      | ---                             | ---         | ---      |
| 5–10 years                  | 14.5                     | 6.0         | 0.016*   | -16.1                           | 5.9         | 0.007**  |
| More than 10 years          | 14.7                     | 6.1         | 0.018*   | -18.0                           | 6.1         | 0.004**  |
| Survey Year                 |                          |             |          |                                 |             |          |
| 2013                        | ---                      | ---         | ---      | ---                             | ---         | ---      |
| 2014                        | 12.6                     | 3.8         | 0.001**  | -7.1                            | 3.4         | 0.041*   |
| 2015                        | 6.2                      | 3.7         | 0.098+   | -2.9                            | 3.2         | 0.371    |
| Constant                    | 7.6                      | 16.9        | 0.655    | 71.2                            | 14.9        | 0.000*** |
| <i>R</i> <sup>2</sup>       |                          | 0.14        |          |                                 | 0.12        |          |

Note: Numbers in the table are ordinary squares regression coefficients and standard errors.

---: reference group, +  $p < .10$ , \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

Table 4. Robust tests of GTI on expense ratios

| <i>N</i> = 370                     | Program Expense Ratio |             |          |          |             |          | Administrative Expense Ratio |             |          |          |             |          |
|------------------------------------|-----------------------|-------------|----------|----------|-------------|----------|------------------------------|-------------|----------|----------|-------------|----------|
|                                    | <i>B</i>              | <i>S.E.</i> | <i>P</i> | <i>B</i> | <i>S.E.</i> | <i>P</i> | <i>B</i>                     | <i>S.E.</i> | <i>P</i> | <i>B</i> | <i>S.E.</i> | <i>P</i> |
| <b>Specification I: Linear</b>     |                       |             |          |          |             |          |                              |             |          |          |             |          |
|                                    | Model 1               |             |          | Model 2  |             |          | Model 1                      |             |          | Model 2  |             |          |
| Total Transparency                 | 0.3                   | 0.1         | 0.029*   |          |             |          | -0.2                         | 0.1         | 0.075+   |          |             |          |
| Basic Information                  |                       |             |          | 1.9      | 0.9         | 0.052+   |                              |             |          | -0.6     | 0.9         | 0.498    |
| Governance                         |                       |             |          | 0.6      | 0.3         | 0.024*   |                              |             |          | -0.6     | 0.3         | 0.014*   |
| Finance                            |                       |             |          | 0.5      | 0.3         | 0.141    |                              |             |          | -0.3     | 0.3         | 0.415    |
| Activity                           |                       |             |          | 0.1      | 0.3         | 0.644    |                              |             |          | -0.1     | 0.3         | 0.700    |
| <b>Specification II: Nonlinear</b> |                       |             |          |          |             |          |                              |             |          |          |             |          |
|                                    | Model 3               |             |          | Model 4  |             |          | Model 3                      |             |          | Model 4  |             |          |
| Total Transparency                 |                       |             |          |          |             |          |                              |             |          |          |             |          |
| Low (ref. group)                   | ---                   | ---         | ---      |          |             |          | ---                          | ---         | ---      |          |             | ---      |
| Medium                             | 0.8                   | 4.2         | 0.846    |          |             |          | 0.6                          | 4.3         | 0.896    |          |             |          |
| High                               | 7.6                   | 4.4         | 0.087+   |          |             |          | -7.0                         | 4.1         | 0.093+   |          |             |          |
| Basic Information                  |                       |             |          |          |             |          |                              |             |          |          |             |          |
| Low (ref. group)                   |                       |             |          | ---      | ---         | ---      |                              |             |          | ---      | ---         | ---      |
| Medium                             |                       |             |          | 5.0      | 4.4         | 0.258    |                              |             |          | -0.2     | 4.3         | 0.954    |
| High                               |                       |             |          | 7.9      | 4.0         | 0.051+   |                              |             |          | -3.5     | 3.8         | 0.353    |
| Governance                         |                       |             |          |          |             |          |                              |             |          |          |             |          |
| Low (ref. group)                   |                       |             |          | ---      | ---         | ---      |                              |             |          | ---      | ---         | ---      |
| Medium                             |                       |             |          | 4.3      | 4.3         | 0.318    |                              |             |          | -2.9     | 3.9         | 0.452    |
| High                               |                       |             |          | 9.0      | 4.3         | 0.037*   |                              |             |          | -8.5     | 3.8         | 0.027*   |
| Finance                            |                       |             |          |          |             |          |                              |             |          |          |             |          |
| Low (ref. group)                   |                       |             |          | ---      | ---         | ---      |                              |             |          | ---      | ---         | ---      |
| Medium                             |                       |             |          | -0.6     | 3.9         | 0.873    |                              |             |          | 1.7      | 3.7         | 0.645    |
| High                               |                       |             |          | 2.9      | 4.5         | 0.526    |                              |             |          | -0.7     | 4.2         | 0.874    |
| Activity                           |                       |             |          |          |             |          |                              |             |          |          |             |          |
| Low (ref. group)                   |                       |             |          | ---      | ---         | ---      |                              |             |          | ---      | ---         | ---      |
| Medium                             |                       |             |          | 0.1      | 4.0         | 0.982    |                              |             |          | -0.1     | 3.8         | 0.988    |
| High                               |                       |             |          | 1.1      | 3.7         | 0.767    |                              |             |          | -0.5     | 3.5         | 0.878    |

Note: Numbers in the table are ordinary least squares regression coefficients and standard errors.

All independent variables in Table 3, except for GTI, were controlled in the regressions.

---: reference group, +  $p < .10$ , \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

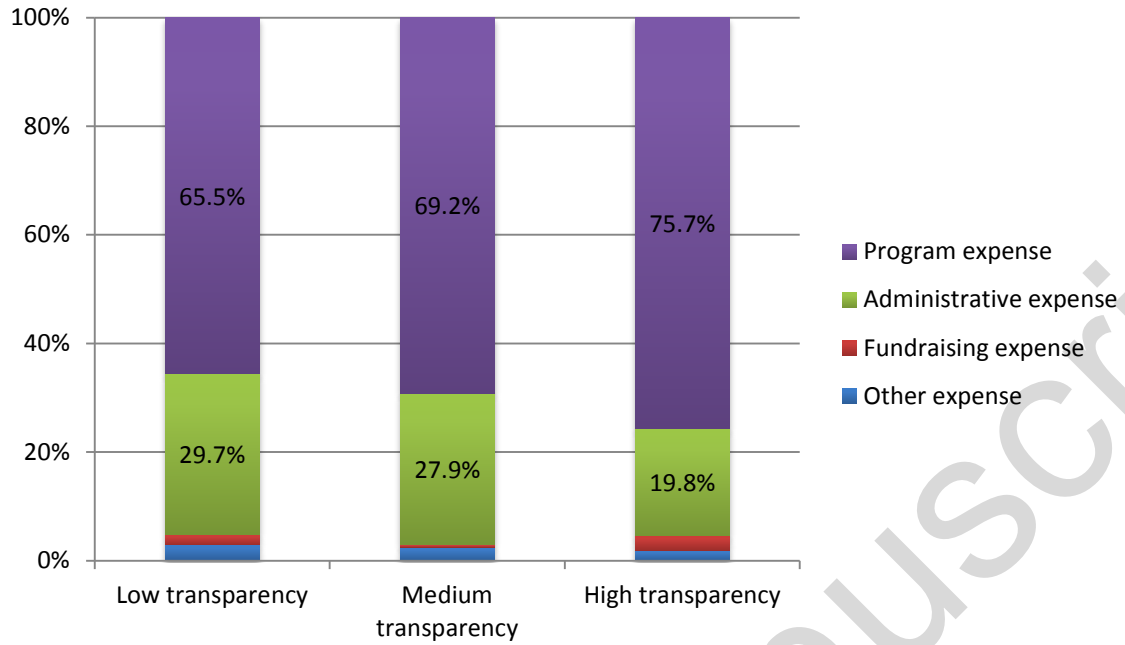


Figure 1. Expense ratios by level of transparency



## Appendix: Composition of the Grassroots Organizations' Transparency Index (GTI)

| <b>Dimension</b>  | <b>Item</b>                           |
|---|---------------------------------------|
| Basic Information<br>transparency                                   | Purpose, mission, and vision          |
|   | Scope of activities                   |
|   | Date of establishment                 |
|   | Registration type                     |
|   | Legal representative and manager      |
|   | Place of registration and headquarter |
|   | Founder                               |
|   | Phone number                          |
|   | Email address                         |
|   | Mail address                          |
|   | Employee information                  |
|   | Independent information platforms     |
|   | Governance<br>transparency            |
| Names of board members  |                                       |
| Number of trustees, or number of other administrative board members |                                       |
| Name of the president of the trustees                               |                                       |
| Board meeting minutes   |                                       |
| Board of trustee's procedural rules                                 |                                       |
| Department and position of the trustee members                      |                                       |
| Wages of trustee members  |                                       |
| Related party transactions of the trustee members                   |                                       |
| Names of organizational supervisors                                 |                                       |
| Names of executive managers   |                                       |
| Background of the executive director                                |                                       |
| Executive Director's compensation package                           |                                       |
| Departments   |                                       |
| Family relations among trustee members and managers                 |                                       |
| Related party transactions  |                                       |
| Strategic plan  |                                       |
| Annual work report  |                                       |
| Annual financial statement  |                                       |
| Financial management system   |                                       |

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|---------------------------|--|
| Financial<br>transparency | Total assets<br>Net assets<br>Total income<br>Value of donations<br>Value of government subsidies<br>Value of operational income<br>Value of other income<br>Total expenditure<br>Project costs<br>Fundraising costs<br>Management costs<br>Other costs<br>Balance sheet<br>Activity list<br>Cash-flow statement<br>Details of donations |
| Activity<br>transparency  | Name of major projects or activities<br>Aim of activities<br>Activity-related fields<br>Project location<br>Project duration<br>Activity-related income<br>Activity-related expenditure<br>Project implementation<br>Immediate beneficiaries<br>Activity progress  |

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