Recent Research on Nonprofit Balance Sheets and Capital Investment

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Abstract: The static trade-off and pecking order capital structure theories are analyzed and applied to nonprofit organizations. In addition, this paper also considers how nonprofits adjust their leverage over time. The analyses consider the unique role of donor-restricted endowments in the decision to borrow, as well as different types of borrowing by nonprofits. The results indicate that nonprofit capital structure choices are best explained using the pecking order theory, in which internal funds are preferred over external borrowing. Further, nonprofit endowment is not found to increase leverage. Despite the unambiguous findings across varying definitions of leverage, the results also suggest that a “modified pecking order” is a more apt descriptor of nonprofit behavior.


Abstract: Notwithstanding its importance as an internal source of financing, no analysis has examined why nonprofits choose to retain unrestricted net assets. As restricted net assets might not be used as desired by the nonprofit manager, unrestricted net assets are a more accurate definition of available internal resources than total net assets. This article tests several theories that might motivate nonprofit accumulation of unrestricted net assets. Furthermore, the empirical strategy employed allows an analysis of unrestricted net asset accumulation over time and overcomes several significant statistical estimation issues. The results suggest that nonprofits target profits and seek their accumulation over time, although targets may be set at very low levels. Furthermore, the results suggest that the low levels of profits accumulated annually are for the purpose of reducing organizational financial vulnerability. The results also suggest that many nonprofits behave as if leverage and unrestricted net assets are substitutes.

Abstract: Despite the enormous size of the nonprofit sector, there has been very little empirical research done on the capital structure of nonprofit organizations, and no one has examined the potential effects of borrowing on individual contributions. Using a representative sample of nonprofits, the empirical analysis first determines whether secured or unsecured borrowing by nonprofits influence future contributions. The results for the full sample support a "crowding-out" effect. When the analysis is repeated on a subsample of nonprofits that are older, larger, and more dependent upon donations, the results are more ambiguous: secured debt has little or no effect, while unsecured debt has a "crowd-in" effect. The empirical analysis is then expanded to test whether nonprofits with higher than average debt levels have different results than nonprofits with below average debt levels. The results suggest that donors do remove future donations when a nonprofit is more highly leveraged compared to similar organizations.


Abstract: Nonprofits receive funding from multiple revenue sources, including private contributions and earned program revenues. In this article, we hypothesize that the composition of revenues is a result of the nature of services provided—specifically whether services are public, private, or mixed in the nature of their benefits. Using subfields from three major fields in the National Taxonomy of Exempt Entities (NTEE), this study divides nonprofits according to service type and estimates the impact of service character on particular revenue streams and overall revenue diversification. Generally, we find that the proportion of revenues generated by earned program revenues is lowest for the category deemed public, highest for those with mostly private benefits, and midway for those classified as mixed. Similarly, the more public a nonprofit’s services, the greater its reliance on donations. We also identify some puzzling results that suggest the need for continued investigation.


Abstract: In the search for sustainability and stability, a central tenet of social entrepreneurship holds that revenue diversification is desirable. Business and nonprofit researchers have long argued that by establishing and maintaining multiple streams of funding, including some combination of earned income, government contracts, foundation and corporate grants, and individual contributions, organizations are able to avoid excessive dependence on any single revenue source, stabilize their financial positions, and thereby reduce the risk of financial crises or interruptions in funding. By studying a large sample of nonprofit organizations in the US, this paper investigates whether this basic claim about the
desirability of revenue diversification is both correct and complete. Against the dominant trend in the literature that focuses on the risks of revenue concentration, we find that nonprofit organizations that have highly concentrated and specialized forms of revenue actually experience some significant benefits, in the form of lower administrative and fund-raising expenses. However, these savings are associated with greater exposure to swings in an organization's financial position. Based on our study of the broader world of nonprofit organizations, we conclude that social entrepreneurs likely face a more complex set of choices about the composition of their revenue than previous research has suggested.


Abstract: Nonprofit charities and foundations hold endowments and many other kinds of investments. How do these investments perform? Some high-profile nonprofit endowments, including those of colleges and universities, have been studied previously. This study is the first, to our knowledge, that looks at a large number of the diverse types of nonprofits. We investigate the determinants of investment performance using a large panel data set culled from the 990 forms that nonprofits must file annually with the IRS. In this first part of our article, we discuss our approach and the challenges of using these data to infer investment returns. The IRS data, though less than perfect, yield valuable measures of the investment returns of nonprofits. They reveal that some charities consistently do better in their investment returns than do others.


Abstract: We continue our examination of the investment performance of nonprofit charities and foundations. This analysis tests hypotheses about what types of organizations do better. Our motivating intuition is that nonprofits with greater focus on investment performance will secure higher returns. Our hypotheses are tested by regressing the rate of return for each organization on various characteristics. As expected, nonprofits whose primary business is predominantly financial, such as insurance providers and pension or retirement funds, consistently earn higher returns. The data also support our hypotheses that larger nonprofits, older nonprofits, and private foundations will tend to outperform. The evidence is mixed as to whether nonprofits that pay higher executive salaries or spend more on management earn higher returns.


Abstract: For the first time a stylised model, in the tradition of corporate finance models described by Tirole (2006), is developed in order to understand the existence of financial constraints in nonprofit organisations and their
relationship with the presence of agency problems. Financial constraints can be expected to arise when there are no substantial opportunities to increase revenues from fundraising and when nonprofit managers might not be willing to exert high fundraising efforts. Furthermore, under these circumstances more agency problems lead to lower debt levels. In situations without expected financial constraints, more agency problems are shown to go together with higher debt levels. Extending watchdog agencies' assessment methods to include default payments can limit or even eliminate financial constraints. The model also allows to understand why larger and chain affiliated organisations should suffer less from financing constraints. The very scant empirical literature's findings on the matter are shown to be reconcilable with the model's predictions.


Abstract: The empirical tests of non-profit organisations’ capital structure theories by Jegers and Verschueren (2006) on a sample of Californian non-profit organisations (data on 1999) are replicated and extended for a more recent Belgian sample (844 observations pertaining to 2007). Three complementary theories to explain the presence and levels of overall debt and financial debt are examined: equity constraints, agency, and borrowing constraints. The decision to borrow and the amount to be borrowed are analysed separately. The estimations obtained reveal that both are driven by different mechanisms. After having removed outliers, the results show effective equity constraints when explaining debt levels, as observed in the Californian sample with respect to the overall amount of debt. The results also indicate an agency explanation of debt: both the decision to borrow from financial institutions, and the overall amount of (financial) debt are positively affected by the presence of a potential agency gap between board and management. In the Californian sample, the results on this were mixed. Borrowing constraints were almost never discovered, similar to the conclusions reached by Jegers and Verschueren. However, slightly reducing the sample by removing outliers makes borrowing constraints apparent. As to the control variables, size positively affects the probability of borrowing, but, for the organisations taking on debt, negatively affects the level of borrowing. As could be expected, the amount of tangible fixed assets in place is positively related to the amount of financial debt.


Abstract: We investigate the relationship between revenue diversification and volatility for nonprofits. Modern portfolio theory suggests that more diversification reduces volatility at the expense of reduced expected revenue. We find that this relationship should not be taken for granted. We use a new empirical measure of volatility that addresses estimation issues of expected revenue, including hetero-skedasticity and the omission of the effect of diversification on expected revenue. We also examine
the impact on nonprofits of different types of diversification. We find that the effects of diversification on volatility and expected revenue depend on the compositional change in the portfolio. For example, a more diversified portfolio achieved by replacing earned income with donations reduces both volatility and expected revenue, while replacing investment income with donations to achieve an increase in diversification of the same magnitude reduces volatility and increases expected revenue. This suggests other motives for nonprofit organizations to hold investments.


Abstract: Depending on the kind of realized mission, sensitivity to risk, which is a result of the decision about liquid assets investment level, NPOs should choose that level and resulting from it, the liquid assets financing. The kind of organization influences the best strategy choice. The organization choosing between various solutions in liquid assets needs to decide what level of risk is acceptable for its owners and capital suppliers. That choice results with financing consequences, especially at cost level. It is a basis for considerations about relations between risk and expected benefits from the liquid assets decision and its results on financing costs for both nonprofit or profit organizations. The paper shows how, in author’s opinion, decisions about liquid assets management strategy and choice between the kind of taxed or non-taxed form, inflow the risk of the organizations and its economical results during the realization of its main mission. Comparing the theoretical model with empirical data for 1000+ Polish nonprofit organization results, we suggest that nonprofit organization managing teams choose higher risky aggressive liquid assets solutions than for-profit organizations.


Abstract: Independently of the kind of a realized mission, sensitivity on risk, which is a result of decision about liquidity financing policy, is on another level. The kind of non-profit organization influences the best strategy choice. If an exposition on liquidity strategy risk is greater, the more conservative will be the strategy. If the exposition on that risk is smaller, the more aggressive will be the net working capital strategy. The paper shows how decisions about liquidity strategy inflow the risk of the non-profit organizations and its economical results during realization of main mission.


Conclusion: Accounts receivable management decisions are very complex. On the one hand, too much money is tied up in accounts receivables, because of an extreme liberal policy of giving trade credit. This burdens the organization with higher costs of accounts receivable service with additional high alternative costs. Additional costs are
further generated by bad debts from risky customers. On the other hand, the more liberal accounts receivable policy could help increase inflows from cash revenues. Data used for our calculations comes from 337 Polish NPOs. The considered raw population of NPO statements was larger, but few of the NPOs use accounts receivables management in connection to a real operational cycle with inventories.


Abstract: The kind of realized mission inflows the sensitivity to risk. Among other factors, the risk results from decision about liquid assets investment level and liquid assets financing. The higher the risk exposure, the higher the level of liquid assets. If the specific risk exposure is smaller, the more aggressive could be the net liquid assets strategy. The organization choosing between various solutions in liquid assets needs to decide what level of risk is acceptable for her owners (or donors) and / or capital suppliers. The paper shows how, in authors opinion, decisions, about liquid assets management strategy inflow the risk of the organizations and its economical results during realization of main mission. Comparison of theoretical model with empirical data for over 450 Silesian nonprofit organization results suggests that nonprofit organization managing teams choose more risky aggressive liquid assets solutions than for-profit firms.


Abstract: I study the determinants of capital structure in the absence of tax incentives. I find that debt use is positively related to asset tangibility, growth, and size, and negatively related to age, liquidity, and profitability. Tax-exempt sector-specific findings indicate that debt is also positively related to the efficacy of state laws against the misuse of assets and to the percentage of decision makers that are paid and negatively related to decision-maker compensation and to charitable contributions. Religious organizations most commonly borrow from internal sources, those in education use tax-exempt bonds, while human services organizations use mortgages and notes payable.


Abstract: This study looks into the determinants of capital structure in the absence of tax incentives. I find that attributes normally associated with debt use for taxable corporations are likewise correlated with debt use in the tax-exempt sector. These include the organisation’s age, asset tangibility, governance structure, industry grouping, liquidity, profitability, and size. Tax-exempt sector-specific findings indicate that debt use is also related to the size of the organisation’s endowment and the amount of voluntary income. This study also demonstrates the portability
of the theory of capital structure by extending the findings in Smith (2010) beyond the United States.


**Abstract:**

Purpose: This paper examines the 2008 collapse of the US tax-exempt auction rate securities (ARS) market, from the perspective of not-for-profit auction rate debt issuers.

Design/methodology/approach: The authors use a multiple case study methodology to examine the financial and operating impact of ARS auction failures on three US nonprofit hospitals and health systems. The analysis is based solely on information drawn from publicly-available documents.

Findings: The three case study subjects issued more than $411 million in ARS. These securities were issued with bond insurance and fixed payer interest rate derivatives. The 2008 global financial crisis resulted in millions of dollars in drastically increased interest costs, costly debt refunding, and derivative-related collateral postings. It was also found that the ability of an individual ARS issuer to respond effectively to these capital market-related shocks is related to three key factors – profitability, liquidity and perceived credit quality.

Research limitations/implications: The reliance on a case study methodology may limit the authors’ ability to generalize the findings to the hundreds of other US non-profit ARS issuers.

Practical implications: Nonprofit financial executives must learn to adequately assess their organization’s risk exposures if innovative long-term capital financing instruments are to be used in the future. These potential costs, as well as any ineffectively hedged interest cost exposure, must be considered and weighed against any potential interest cost saving associated with any future debt financing arrangements.

Originality/value: The paper measures the financial and operating impact of the highly publicized 2008 ARS market collapse on non-profit ARS issuers.


**Abstract:**

This paper explores whether nonprofits are increasingly adopting mixed revenue strategies, and the sustainability of these strategies over time. We constructed a panel using NCCS data from 1998 and 2007, and divided nonprofits into three groups: Commercial, Donative, and Mixed Revenue. We found no evidence that nonprofits are increasingly adopting mixed revenue strategies. Mixed revenue
strategies appeared less sustainable over time than predominately commercial or predominately donative strategies. Our results suggest that for most nonprofits, relying predominately on either commercial or donative revenue (DR) is a more stable equilibrium than attempting to achieve a balanced revenue mix. Exceptions may be those nonprofits, such as arts organizations, where there is a natural alliance between donors and customers.


Abstract: The relative amount of debt used by an organization is an important determination of the organization’s likelihood of financial problems and its cost of capital. This study addresses whether or not there are any differences between proprietary and nonprofit health care organizations in terms of capital structure. Controlling for profitability, risk, growth, and size, analysis of covariance is used to determine whether or not proprietary and nonprofit health care organizations use the same amount of leverage in their capital structures. The results indicate that there is no difference in the amount of leverage between the two institutional types. Although nonprofit and proprietary organizations have unique financing mechanisms, these differences do not impact the relative amount of debt and equity in their capital structures.