1 Income diversity and nonprofit financial health

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INTRODUCTION

Nonprofit organizations (nonprofits) and associations have a long history in America, going back to the founding of the nation. A decade prior to Alexis de Tocqueville's famous visit, James Walker, who would later become the President of Harvard University reportedly observed: 'We have societies for everything. The consequence is, that scarcely a month passes in which we are not called upon to join, or aid, some benevolent association' (Walker 1825, p. 241). Nonprofits and associations in America also have a long history of reliance on a variety of funding sources, including substantial support from local, state and federal governments, commercial revenue or fees for the use of services, charitable donations, voluntary service and membership dues (Hammack 1998). As Walker added, 'each [association] member was required to contribute, as he was able, to a common fund for charitable uses' after all, a 'consideration in favor of associations for charitable and other benevolent purposes, is, that there are obviously many important objects, which cannot be accomplished in any other way' (Walker 1825, p. 242).

In his impressive historical summary of traditions of philanthropy in the West, Robbins (2006) traces the roots of this philanthropic tradition back to ancient Jewish life and Greek philanthropy as cultural phenomena that shaped sociology and politics of 'fractious communities, Roman philanthropy as an obligation of civilized people, and the development of Christianity'. These roots 'profoundly influenced the motives of philanthropists, the formation of voluntary associations and the ethos of self-sacrifice' (Robbins 2006, p. 19). Robbins's provocative analysis concludes that 'many nonprofits survive . . . because of the compulsions toward external or communal service experienced by private donors and . . . that donor motives are usually . . . plural in nature' (2006, p. 28).

Interestingly, diversification of 'revenue' sources took many forms, even in ancient Israel. Ancient gifts involved alms to the poor, shared meals, gleanings from landowners, special tithes for the poor, leavings from untended fields, and donors putting charitable contributions in secret chambers in the Temple, including money and other assets of value. Similar forms of diverse charitable gifts can be found in other early cultures as well. Monetary funds were important, but so too was diversification, which insured that the need for charitable funds would not fall on a single revenue source (Robbins 2006), suggesting concerns about organizational financial health.

Monetary support is, and has always been, vital to the mission and objective of any enterprise, whether for-profit, nonprofit or a governmental agency. In the nonprofit world, contributions of various types can be important sources of support; many nonprofits depend on in-kind contributions, earnings on assets, sales of contributed items, and donated labor to deliver services and carry out their missions. The involvement of

volunteers and use of donated non-monetary resources are a time-honored tradition and common practice among nonprofits. However, most seek consistent, predictable and unearmarked financial support. Not surprisingly, scholars and practitioners continue to pay close attention to how nonprofit activities are financed, and why their revenues change through time (James 1983; Tuckman 1993; Weisbrod 1998).

Recent attention has focused on understanding how each funding source behaves (Young 2007, 2017), and the extent to which each source allows nonprofits to accomplish their missions. In the past 30 years, an impressive body of nonprofit research has emerged on issues of revenue choice and how to attain an efficient mix of revenues. Some researchers identify and develop theories on nonprofit decision makers' choices of primary revenue sources (Grønbjerg 1993; Young 2007, 2017) while others explore why some nonprofits rely on a single revenue source versus a variety of sources (Chang and Tuckman 1994; Fischer et al. 2007). Scholars have also analyzed the risks and rewards of nonprofits' revenue choices (Frumkin and Keating 2002, 2011), as well as whether diversification of revenue sources is associated with financial stability of nonprofits (Tuckman and Chang 1991; Chang and Tuckman 1994; Greenlee and Trussel 2000; Hager 2001; Hager and Greenlee 2004; Carroll and Stater 2009), or with financial capacity and growth (Foster and Fine 2007; Chikoto and Neely 2014).

This chapter reviews the progress in the line of research that focuses on sources of nonprofit revenues and revenue diversification. The chapter also addresses how these elements affect the financial health of nonprofit organizations, an overall concern that lies at the heart of discussions around revenue streams and their diversity. Our goal is to summarize what we think we know, where scholars still disagree and existing gaps in the current state of knowledge. We also highlight new directions for future research on the subject.

WHAT WE KNOW ABOUT THE SOURCES OF NONPROFIT REVENUE

'Americans conduct almost all of their formally organized religious activity, and many cultural and arts, human service, educational and research activities, through private nonprofit organizations' (Hammack 1998, p. xv). The nonprofit sector therefore comprises a large and diverse collection of organizations that pursue equally diverse missions and rely on diverse sources for financial support in widely different proportions (Boris and Steuerle 2006; Young 2007). Revenue-related research questions that have dominated the nonprofit literature have centered on discerning what the major sources of nonprofit income are, why some nonprofits prefer or at least systematically rely on certain sources of revenues, and whether diversified or concentrated revenues are best for optimal financial performance. Such studies have provided a rich source of information and insights on wide-ranging topics related to nonprofit finance. Frequently, new lines of research grow out of the availability of new data that allow researchers to reliably identify the sources of nonprofit revenue. For US nonprofits, the federal income tax return, Form 990, filed by tax-exempt charitable organizations with annual receipt of \$50 000 or more with the Internal Revenue Services (IRS) is that source. This section summarizes selected literature on the sources of nonprofit revenues while the next section focuses on theories of nonprofit revenue portfolios and related research emerging from the literature.

Source: Adapted from McKeever (2015).

Figure 1.1 Sources of income for US reporting public charities (2013)

Tuckman (1993) distinguished two categories of capital funds: internal sources such as interest and dividends from self-owned investments, and earned incomes from program services; and external sources such as donations received from capital campaigns and designated grants and subsidies from philanthropic foundations or government. The comprehensive review of major financial sources of nonprofit organizations in the volume edited by Young (2007) identifies six major sources of income from which most nonprofit organizations draw financial support: charitable giving, government support, fee and commercial income, membership dues, returns on investment, and in-kind gifts and (volunteer) services.

Figure 1.1, shows the key sources of income from the 237,632 reporting public charities, based on their combined \$1.73 trillion in total revenue for 2013. Note, these sources of income also vary by subsector. For example, the distribution depicted in Figure 1.1 changes substantially if we exclude hospitals and higher education, which make up a huge proportion of total public charities' revenue and rely more heavily on fees for services.

Charitable Giving

Rooney (2007) and other researchers have noted that charitable giving is a major component of nonprofit finance in many cases such as the American Red Cross and United Way, for which charitable contributions are the dominant mode of financial support.

Charitable giving tends to be local, with donors providing money and other financial gifts disproportionately to local charities that benefit people who live in the same community. Individual giving is also strongly associated with personal income. While individuals at all income levels donate, high-income donors give a disproportionate share of the total gifts. Rooney (2007) observes that many fundraisers now subscribe to the 90–10 rule (that is, the top 10 percent of the donors give 90 percent of the total gifts in a campaign).

According to *Giving USA 2016*, a publication of the Giving USA Foundation, Americans gave \$373.25 billion in 2015 or 2.1 percent of gross domestic product (GDP), compared with \$307.65 billion or 2.2 percent of GDP in 2008 (Center on Philanthropy at Indiana University 2009, 2016). While total giving in 2008 set a new record in absolute and relative terms (Center on Philanthropy at Indiana University 2009), ‘total estimated giving reached its highest levels ever in 2015’, registering increases from 2014, across all sources, namely, from individuals (+3.8 percent), corporations (+3.9 percent), private foundations (+6.5 percent), and bequests (+2.1 percent) (Indiana University Lilly Family School of Philanthropy 2016, p. 2). Individuals give more than institutions; in 2015, for instance, 71 percent of total charitable giving came from living individuals, followed by foundations (16 percent), bequests (9 percent) and corporations (5 percent). The largest share of charitable dollars go to religious organizations (32 percent), followed by education (15 percent) and human service organizations (12 percent) (IUPUI Lilly Family School of Philanthropy 2016).

Government Support

Nonprofit organizations receive support from the government in a variety of ways. Many nonprofits receive financial support directly from the government through grants and subsidies. Those organized as charitable nonprofits under section 501(c)(3) of the Internal Revenue Code also receive support from the federal, state and local governments indirectly through tax exemption from corporate taxes and the privilege of issuing tax-exempt bonds. Governments also support nonprofits directly by allowing individuals and corporations to deduct gifts to qualified nonprofits from income tax liabilities. Government also contracts with qualified nonprofit organizations that have expertise and experience in the delivery of particular goods and services.

Although exactly how much support comes from government is unknown, we know that of an estimated \$905.9 billion in total revenues reported by public charities in 2013, 32.5 percent came in the form of fees for services and goods from government sources (24.5 percent) and grants (8 percent) (McKeever 2015). In recent years, with the increased popularity of outsourcing as a form of service delivery, many nonprofits, especially those in health care and social service sectors of the nonprofit world, have increasingly relied on governments for funding support (Rushton and Brooks 2007). Even faith-based organizations, with the encouragement of the George W. Bush Administration, have increased their involvement with government by becoming suppliers of social services, increasing their reliance on government as a source of income.

However, government revenues usually come with specific objectives in mind, and nonprofit decision makers must therefore determine whether these fit their mission while, at the same time, keeping a watchful eye on trends in government funding. Failure to do so can lead to destabilizing and unanticipated falls in revenue. Grønbjerg (1993) conducted a

comprehensive analysis of the relationship between community organizations and funding providers in the US using national Form 990 data. She noted that while government grants may be a source of reasonably predictable funding, the costs of obtaining and maintaining such grants can be high, and many organizations, particularly smaller ones, may prefer not to apply for funds from this source.

In the present political environment government funding of nonprofits in the US is characterized by considerable uncertainty. The fate of pro-choice groups such as Planned Parenthood, seems to have already been sealed; on 13 April 2017, President Trump signed legislation cutting off federal funding to Planned Parenthood and other groups (Davis 2017). The future of nonprofits that rely on funding from independent federal agencies directed towards the arts, also hangs in the balance. On grounds of fiscal responsibility, the proposed federal budget for discretionary spending for the 2018 fiscal year requests the dissolution of the National Endowment for the Arts' (NEA) \$148 million budget, the National Endowment for Humanities' (NEH) \$148 million budget, the Institute of Museum and Library Services (IMLS) \$230 million budget and the Corporation for Public Broadcasting's (CPB) \$445 million budget – altogether amounting to 0.02 percent of the total federal budget (Tipping 2017). (For more on government funding policies, see Chapter 21.)

Fee and Commercial Incomes

Operating income from fee for service activities has historically been an important source of financial support for nonprofits in the US (James and Young 2007). Fees for services remain the dominant funding source, generating 47.5 percent of total revenues, based on the revenues from 293 103 reporting public charities that filed Form 990 with the IRS in 2013 (McKeever, 2015). This number increases significantly (to 72 percent), when we include fees for services and goods from government sources, as shown in Figure 1.1. Museums, local airport and sports authorities, and other nonprofits offer specific services to residents for a fee. Other nonprofits, such as hospitals, nursing homes and daycare centers that coexist and sometimes compete with for-profit businesses in the same market, also offer services on a quid pro quo basis. Still others, such as the American Association of Retired Persons and the Farm Bureau, rely primarily on membership dues and/or donations for revenue but they also engage in commercial activities and pay unrelated business income tax (UBIT) (Tuckman and Chang 2006). Unlike those nonprofits that produce 'pure public goods' used by many at the same time (for example, public service radio and television), these nonprofits earn commercial income and fees from marketable goods and services. That is, they offer private goods 'rival' in consumption and excludable from nonpaying individuals (Chang and Tuckman 1996). (For nonprofit pricing strategies, see Chapter 10.)

Membership Dues

Individual members of a nonprofit can provide income in three ways: dues, purchases, and donations (Steinberg 2007). Members of a professional organization such as the American Economic Association (AEA) or the American Medical Association (AMA) all pay membership dues. Many of them also buy additional services such as educational

seminars or vacation trips offered by their associations; and they may also donate political action committee (PAC) money for political lobbying activities to advance the collective interests of their profession. According to Steinberg (2007), information on the amounts of membership dues earned by nonprofits is sketchy and the structure of membership dues is complicated. While much remains to be explored in this fertile area of research, further complicating the matter is that, as of 2007–08, core 990 data no longer list membership dues as a separate line item. Instead, membership dues are now clustered together with contributions and grants; to separate dues we must now parse Part VIII of the Form 990 for each nonprofit.

Returns on Investment

Many section 501(c)(3) organizations own endowment funds and use investment income to help support their missions and charitable activities. Investment incomes consist of interest, dividends and capital gains (Bowman et al. 2007), and in 2013, investment income comprised 4.8 percent of total revenues (McKeever 2015). Although it is not easy to accumulate a large endowment, once accrued, this financial base offers many distinct advantages unavailable to other nonprofits relying on fee for service income or donations, even to the point of being considered a ‘rainy day’ fund by some (Weisbrod and Asch 2010). One such benefit is indeed the ability to weather economic hard times and the resulting financial uncertainty. A steady flow of investment income from endowed assets translates into a steady flow of unrestricted income, helping to offset fixed costs as well as pursue missions without inhibiting constraints. However, bear in mind here that not all endowments are unrestricted; many are temporarily or permanently restricted to particular uses. And a steady flow of investment income can also reduce staff needs in fundraising and service delivery.

The accumulation of extraordinarily large endowments by nonprofit elite universities and colleges like Harvard, Yale and Princeton, yielding to rainy-day funds or endowment funds that could finance 96 years, 92 years and 141 years of nonprofit activity, respectively (compared with the American Red Cross’s two-year rainy-day fund, according to Weisbrod and Asch 2010), have led researchers and the general public to question the appropriateness of such a practice and whether endowment-owning entities are spending enough of the proceeds from investment on charitable activities. For example, Hansmann (1990) questioned whether the accumulation of endowment in universities and colleges is a better use of resources than spending the money on today’s students, and Chang and Tuckman (1990) theorized that such nonprofit decision makers are motivated by a desire to accumulate surplus funds and assets without necessarily planning to use them in direct support of mission. Bowman et al. (2007) have urged decision makers in nonprofits with large endowments to manage their investment portfolios carefully; they also advocate a more active public debate on whether the lure of a large endowment is short-changing the current needs of many nonprofits. It seems clear that more research is needed on how effectively the investment committees of nonprofits manage their investments, particularly those of small and medium-sized nonprofits that rely on the advice of volunteers.

Volunteer Services

A challenge with tracking volunteer trends is that, data on volunteer labor is collected by different groups (for example, Independent Sector, the Center for Philanthropy, the Census Bureau, the Bureau of Labor Statistics, and the Corporation for National and Community Service) (Preston 2007). Nonetheless, according to the Bureau of Labor Statistics, 29 percent of Americans 16 years of age or older, or 64 million individuals, volunteered for a formal organization in 2003–04 (Preston 2007). Using the Current Population Survey and the American Time Use Survey, an estimated 62.8 million adults reported having volunteered at least once in 2014. This constituted 25.3 percent of the population (McKeever 2015).

The Independent Sector (IS) has estimated that volunteers outnumber paid employees by a factor of 6:1 and the hours of work that they provide are equivalent to the total hours of 1.68 million full-time employees. The total market value of volunteer services exceeded \$58.9 billion in 2004 (Preston 2007, p. 183), and rose from an estimated \$144.7 billion in 2008 and \$164.8 billion in 2011, to \$179.2 billion in 2014 (McKeever 2015). Based on the 2012 National Center for Charitable Statistics (NCCS) calculations, McKeever (2015) estimated that over two-fifths of public charities rely on volunteers. Volunteer workers, while providing important benefits to organizations that use them, are usually not professionally trained for the work they perform for free. Their use therefore can involve ‘hidden costs’ associated with lower productivity compared with professionally trained staff. Organizations that use this ‘free’ resource, must understand the factors behind the supply and demand for volunteer labor and develop strategies to effectively employ this resource in its highest valued uses (Preston 2007).

Unlike the five income sources mentioned previously, volunteer services do not necessarily constitute a direct source of income per se; instead, they provide services that allow nonprofits to save money that they would otherwise have spent had they employed people to perform the services volunteers perform. Volunteers can also free up paid staff to give more attention to core functions. Finally, research also shows that volunteers are more likely to donate or give significantly more than non-volunteers (Fidelity Charitable Gift Fund 2009). (See Chapter 16 for more on the valuation of volunteer labor.)

WHAT WE KNOW ABOUT REVENUE DIVERSIFICATION AND ITS RELATED ELEMENTS

We know that nonprofits’ dependence on the above funding sources varies by the subsector or field of work they operate in.

Figure 1.2 shows the degree of resource reliance by subsector, with the health and education sectors being heavily dependent on fees, compared with international and foreign affairs, arts, culture and humanities, and environment and animals nonprofits that rely more on private contributions. Note here that the ‘Other public charities’ category includes religion-related and public and societal benefit (for example, civil rights and advocacy, and veterans’ affairs, cemeteries) public charities.

The development of a theoretical understanding of the complex issues surrounding the mix of nonprofit revenue and the factors that influence this mix is relatively recent. Early

Source: Adapted from McKeever et al. (2016).

Figure 1.2 Revenue diversification by subsector (2013)

research on nonprofit revenue diversification focused on nonprofits as voluntary entities that served the general public and relied on donations and volunteered labor for support. Weisbrod (1977) regarded nonprofits as providers of 'public goods' that government and the for-profit sector failed to provide, while Hansmann (1990) viewed nonprofits as a remedy for 'contract failure' that, if not corrected, results in an insufficient amount of certain goods and services valued by consumers but handicapped by asymmetric information between consumers and producers. Other researchers such as Becker (1976), Andreoni (1989, 1990) and Kingma (1997) offered an alternative view of individual support for nonprofits, introducing the concepts of 'impure altruism' and the 'warm glow' factor. In their view, individuals derive satisfaction and a 'warm glow' feeling when they help others through funding the work of nonprofits. Here the focus is on giving and volunteering by individuals and the underlying motivations for these altruistic actions and behaviors.

Researchers have broadened their conception of nonprofit revenues and made major contributions to explaining the complex reasons that motivate the quest for revenue and the resulting mix. Weisbrod (1998) hypothesized that nonprofit decision makers choose to produce a combination of public and private goods and services, subject to a non-distribution of profit constraint to satisfy their own 'utility' or to promote their organization's mission. Alternatively, Galaskiewicz (1990), Bielefeld (1992) and Galaskiewicz and Bielefeld (1998) suggested that nonprofits broadened their income sources for the specific purpose of increasing community 'buy-in' and organizational legitimacy.

Drawing on the utility maximization model of traditional microeconomic theory, Chang and Tuckman (1990) hypothesized that nonprofit managers are motivated by a desire to increase surplus funds specifically to accumulate wealth and equity. They further suggested that many nonprofit decision makers consciously pursue a diverse revenue mix to manage financial risk and reduce vulnerability to financial hard times and uncertainty, over which they have little control (Chang and Tuckman 1991). Similar views on why nonprofits prefer a diverse mix of income sources have also been expressed by other researchers such as, Hager (2001), Greenlee and Trussel (2000) and Trussel and Greenlee (2004). (For more on modeling nonprofit behavior, see Chapter 9.)

Diversify or Concentrate? Their Influence on Nonprofit Financial Health

Chang and Tuckman (1994) applied a 'revenue concentration index' based on the Herfindahl–Hirschman Index (HHI) used by economists for measuring the degree of market concentration to a large national sample of Form 990 tax returns. They found that the degree to which a nonprofit diversifies its revenue mix is closely associated with its mission. They further argued that 'commercial nonprofits' (those who engage in fee for service activities and compete with for-profit suppliers of similar goods and services) are more likely to display a concentrated income mix than 'donative nonprofits' (those that rely mostly on donations and gifts as financial support), and that a diversified revenue portfolio is associated with a healthier financial position as measured by such indicators as asset size, operating margin and growth of net equity (total assets minus total liabilities).

The view that nonprofits prefer a mix of income sources is by no means universally accepted. A number of researchers point out that not all nonprofits pursue diversification and that revenue concentration, as opposed to revenue diversification, may be better for

some nonprofits. For example, Grønbjerg (1992) argued that high-performing nonprofits tend to develop a limited number of stable and reliable revenue sources to achieve continuity and efficiency. In her view, continuity of objectives is highly valued and can be achieved by working closely with a few large and reliable funding entities. A positive side effect of this strategy is that, over time, a symbiotic relationship is likely to evolve between grantor and grantee, with each serving the other's interests.

Frumkin and Keating (2002) argued that concentration of revenue and not a diversified revenue mix may be more beneficial to nonprofits. They supported this argument by identifying a number of benefits from a more concentrated revenue base such as lower administrative and fundraising costs, and faster revenue growth that can be accomplished when nonprofit staffers concentrate their focus on just a few major revenue sources. However, Frumkin and Keating later observed (2011) that these cost-saving benefits come at the price of increased exposure to fluctuations in nonprofits' financial position.

Recent work reports further empirical investigations of the diversification–concentration question particularly, as it relates to financial stability and financial growth, arriving at similarly mixed results. For instance, investigating whether diversification reduces revenue volatility (the extent to which actual revenue deviates from expected revenue), Carroll and Stater (2009, p. 947) concluded that nonprofits need to diversify their revenue streams by 'equalizing their reliance on earned income, investments, and contributions, in order to reduce revenue volatility'. Using different measures, Wicker and Breuer (2014) also found a positive relationship between revenue diversification and the financial condition (measured in terms of total revenues, breaking even, profit, and investments) of sport governing bodies in Germany.

Employing 'a new empirical measure of volatility that addresses estimation issues of expected revenue, including heteroskedasticity and the omission of the effect of diversification on expected revenue', Mayer et al. (2014, p. 374) concluded that the effects of revenue diversification on volatility and expected revenue are dependent on the changes in the overall composition of a nonprofit's income portfolio. For instance, the authors found that both revenue volatility and expected revenue dropped when nonprofits attempted to diversify their portfolios by replacing earned income with donations. However, they observed an absence of a risk-return tradeoff when nonprofits replaced investment income with donations; resulting in volatility reductions while increasing expected revenue. This led Mayer et al. to speculate that nonprofit organizations may hold investment income for other motives, including maintaining holdings for long-range plans and capital financing (Chang and Tuckman 1990; Tuckman and Chang 1992), as rainy-day funds (Fisman and Hubbard 2005; Weisbrod and Asch 2010) and for reducing resource dependency (Froelich 1999).

Consistent with Frumkin and Keating (2002, 2011), Chikoto and Neely (2014) found evidence to support Foster and Fine's (2007) claim that to build financial capacity (measured in terms of growth in total revenue), nonprofits need to concentrate their revenue streams. Consistent with Frumkin and Keating (2011), Chikoto and Neely also found negative financial growth tradeoffs (in terms of total revenues, total net assets and unrestricted net assets) when nonprofits' revenue streams increasingly became more concentrated over time. This led them to conclude that, as a financial capacity-building strategy, 'revenue concentration is more effective when deployed as a one-time strategy' (Chikoto and Neely 2014, p. 579).

The above discussion clearly suggests that a mix of income offers many benefits but also involves certain risks. Evidence suggests a positive association between employing a revenue diversification strategy and an organization's financial stability; however, this may vary by changes being made to the overall composition of a nonprofit's income portfolio. In particular, following Mayer et al.'s (2014) findings, nonprofits still need to pay close attention to the behavior and impact of the individual funding streams that compose their income portfolios. Additionally, a revenue concentration strategy may contribute to financial growth, while persistent concentration may put the financial position of an organization at risk. Finally, it is important to recognize that most studies on the subject have been conducted on the nonprofit sector as a whole, albeit with some subsector controls. As such, we should not overgeneralize these findings given the wide scope, dimension and diversity of nonprofit organizations.

Nonprofit Revenue Mix: Normative Theories

Kearns (2007) offered yet another theory on nonprofit revenue mix. Viewing nonprofits as multi-stakeholder/multi-decision-maker organizations with diverse constituents and complex organizational structure, Kearns argues that revenue mix reflects closely the views and preferences of its diverse constituents, on the one hand, and the internal organizational concerns, on the other. These concerns include whether an income source is appropriate and consistent with the mission of the organization, whether the source can generate sufficient revenue in the short term, as well as in the long term, the risk of not meeting revenue expectations, the likelihood that one income 'crowds out' another and the extent to which use of an income source restricts independence or autonomy. Much can be learned about the revenue choices of these organizations by a deeper understanding of the strategic thinking of nonprofit decision makers and their perceptions of the preferences and wishes of the external funders and supporters.

Extending the works of Kearns (2007), Chang and Tuckman (1994), and others who contributed to the understanding of nonprofit income portfolios and related issues in Young's (2007) edited volume, Young (2017) further articulates the various rationales and factors that help explain why nonprofits pursue or are able to attract particular funding streams. The expounded 'benefits' theory of nonprofit finance reinforces the notion that nonprofits' activities, goods and services should be derived and connected to the mission. Depending on their nature, those activities, goods and services in turn may confer certain public, group, private or trade benefits for which beneficiary groups should be willing to pay in some manner. While public and group benefits are received respectively by broader groups (for example, benefits of crime reduction activities to the general public) or by identifiable segments of society (for example, benefits of environmental cleanup activities on local outdoor groups), private and trade benefits can be exchanged in the market (as in clients paying user fees for a service or businesses funding sponsorships in cause marketing collaborations). By this logic, it makes sense for nonprofits offering private and trade benefits to rely on fees or commercial revenue, while those offering group and public benefits rely more heavily on philanthropy and government support.

Testing Young's benefits theory, Fischer et al. (2007) found the following: first, nonprofits providing services that confer private benefits relied more on earned income or fees for services, and this result was also consistent across nonprofits in the arts and

health subsectors. Second, nonprofits providing public benefit types of services relied on significantly smaller shares of earned income, and this result was consistent across health and human services nonprofits. Third, nonprofits with services conferring public benefits relied more on charitable contributions, with health and human service nonprofits exhibiting similar dependency. Overall, the authors found that health nonprofits relied the most on earned income and less on contributions, and that human services nonprofits relied more on donations than the arts. Fourth, the authors found support for the hypothesis that revenue diversification is associated with the field of service in which a nonprofit operates, with the arts being significantly more diversified, and health nonprofits being more concentrated, relative to human services nonprofits (consistent with Frumkin and Keating 2011).

Finally, the authors also found that nonprofits that: produce mixed public- and private-type services are likely to have a more diversified revenue mix; nonprofits that are affiliated with an umbrella organization are more protected from risk and less likely to diversify their revenues; older nonprofits are more likely to diversify than younger ones; and larger organizations (measured by assets) are more likely to have diversified revenue streams.

The foregoing research sheds light not only on whether certain types of organizations are more likely to diversify than others, but also on the rationale behind why certain types of nonprofits are more likely to rely on particular funding streams than others.

Estimation Models for Predicting Survival

A key applied research question is how to advise at-risk nonprofits trying to survive. Some of the studies reviewed (Greenlee and Trussel 2000; Hager 2001; Trussel 2003; Tuckman and Chang 2006) construct models that enable nonprofit policy makers to plan based on current financial and other information. This is an area where academic research can contribute by creating predictors of success and failure, and it is important that this work continue. The studies conducted thus far are useful in identifying measures of how well a nonprofit is performing, but they require both refinement and further development, which we are starting to see. Using factor analysis, Prentice (2016b) attempted to organize and reduce nonprofits' 'financial measures [for example, solvency, margin and profitability], into [a] theoretically intuitive and defensible construct'. Prentice's findings led him to caution researchers against employing financial measures in an interchangeable fashion, particularly without acknowledging the multidimensional nature of nonprofit financial performance.

Recently, some scholars have developed new measures of financial health to improve estimation of financial stability or growth (for example, Chikoto-Schultz and Neely 2016; Prentice 2016a). For instance, Prentice (2016a) employs a financial health continuum ranging from poor to strong, and also controls both organizational and environmental factors (measured in terms of GDP, state product, median household income, density, regional, state and national revenue share) in predicting human service and higher education nonprofits' financial health. Prentice finds that increases in several of the foregoing environmental factors (except for density, state and national revenue share) improved human services nonprofits' financial health. (National revenue share was positively associated only with the financial health of higher education nonprofits.)

In similar vein, Chikoto-Schultz and Neely (2016) generated a taxonomy classifying nonprofits based on how financially stable they are and whether their revenues grew over a five-year period. Using differences of means tests, the authors then compared 'high financially performing' (HFPs) nonprofits, that is, those that exhibited both high financial stability (volatility percentage <1.26 percent) and growth (five-year revenue growth >22.7 percent), to those performing low on both axes (LFPs). These tests revealed statistically significant differences between the two groups, across many organizational factors. For instance, compared to LFPs, HFPs were older and larger in terms of total revenues (mean of \$11.5 million compared to \$1.18 million; HFPs had more capital assets, received more in government grants (mean of \$965 021 compared with just \$97 393), and reported more officer compensation, although this constituted a smaller part of their budgets compared to LFPs.

Finally, using logistic regression, the authors identified organizational factors that best predicted high financial performance. Their results suggest that HFPs tend to be larger (in terms of total revenues and capital assets holdings, but not unrestricted net assets), had government grants as part of their income portfolios and they paid their officers higher compensation levels. However, HFPs also contained their overhead spending by limiting the shares of their budgets dedicated to officer compensation, administrative and fundraising expenses. Revenue concentration was positively associated with high financial performance; however, the result was not statistically significant. Note, this research was based on the nonprofit sector as a whole, albeit with subsector controls, limiting its generalizability to specific subsectors.

Research remains scant on the number of nonprofits that exit the sector, what happens to the assets of these entities, the exit strategies of nonprofits, and on predictive models that explain exit. With respect to the latter, some researchers have recently put to the test the predictive value of models developed in the late 1990s and early 2000s (for example, Tuckman and Chang 1991; Greenlee and Trussel 2000; Trussel 2003), in connection with their adaptability in predicting nonprofit financial vulnerability in the international realm. Silva and Burger's (2015) paper, for instance, expands the set of measures predominantly used to assess nonprofit financial vulnerability to incorporate the unique attributes of the non-governmental organization (NGO) sector in Uganda. In addition to finding revenue diversification a significant predictor of financial vulnerability, the authors found that owning physical assets, as a proxy for equity, reduced the probability of facing sharp declines in NGOs' total revenues. Additional unique attributes (for example, rigid institutional financial arrangements and access to financial services) were not significantly associated with financial vulnerability.

In their analysis of 228 British non-governmental development organizations (NGDOs) during 2008 and 2012, Andres-Alonso et al. (2015, p. 371) found Trussel's (2003) financial vulnerability index (FVI) to be 'a very poor adaptation . . . to the reality' of the NGDO sector, in terms of its predictive prowess. Generally, the FVI and its components (debt, surplus margin and administrative expenses) proved inconsistent, producing inconclusive results, with the exception of size and revenue concentration.

Performing similar tests, Tevel et al. (2015) found that compared to other models (for example Ohlson's 1980 model used to predict financial stability in the corporate world and a practitioner model based on nonprofits' rankings and ratings guidelines), Tuckman and Chang's (1991) model and its reduced version (using revenue concentration and

administrative expenses) provided the best predictions of financial vulnerability among Israeli performing arts organizations.

Based on the above, we are left to wonder whether different subsectors or contexts require the use of different predictive models. Certainly, more can be done to ascertain factors contributing to failure in different nonprofit subsectors, and to identify safe strategies for poorly funded or financially struggling nonprofits.

STRENGTHS AND WEAKNESS OF CURRENT RESEARCH

An extremely important area that needs to be addressed by both researchers and policy makers is improvement of the national data for nonprofit organizations both for understanding revenue diversification and financial health. This includes, but is not limited to, the quality of the data currently collected, better access to these data, the current lack of data specificity, needed improvement in data definition and improved scope of the data. In addition, we consider the need for better restructuring of the database, and the need for better estimation models to predict the survivability of a nonprofit. Each of these items is discussed in turn.

The Quality of the Current Data

Chang and Tuckman were among the first users of Form 990 data to provide econometric results (Chang and Tuckman 1990, 1991, 1994; Tuckman and Chang 1991, 1992). They quickly learned the data's limitations and ways to overcome them. These data were initially collected for an entirely different legal purpose and, therefore, did not include information on many of the uses to which they are now being put, such as evaluating how well nonprofits are managed, measuring efficiency and providing accountability. The 990 forms tended to be filled out quickly, often without instruction and frequently with errors. The forms were difficult to trace and hard to track from year to year, and many were unaudited. They also lacked many basic items of information necessary to incorporate economic, environmental, political and social factors for research.

Fortunately, beginning in 1999, the nonprofit organization and program classifications (National Taxonomy of Exempt Entities, NTEE) coding system was constructed and merged with the core codes to provide a system that classifies nonprofit entities. It is used by several providers of nonprofit data, such as GuideStar and the Urban Institute's NCCS. This major innovation made it feasible to disaggregate the data by fields of service, giving rise to interesting insights into how mission affects income and expenditure decisions. Together with more careful auditing of individual nonprofits by the NCCS, as well as other compilers of nonprofit data, data reliability has improved, aided by the demand and scrutiny by over 100 academic centers, many nonprofit institutions and think-tanks, and the interest of many foundations.

Substantial improvements in computing power have vastly increased the research community's ability to use the Form 990 data to analyze the nonprofit population and to utilize sophisticated analytic tools. Nonetheless, substantial research is needed to identify general weaknesses in the revenue categories, to recognize specific shortfalls in the types of income over- or under-reported, to characterize income from multiple complex sources

(such as hospitals and universities) and to be aware of limitations in the existing reporting form. To date, the digitized 990 data from 1998–2003 remains the most nuanced or comprehensive dataset available. This alone speaks volumes in that using core data only allows researchers to account for some funding streams, and not for government grants and contracts, and membership dues as separate components.

Access to the Data

A key source of data for research remains the Form 990 database, which is not easy for researchers without funding to access if one is interested in digitized data similar to the 1998–2003 version. Technically, the providers of these data have the option to offer digitized data at no cost but the preference is that they at least be reimbursed for processing costs. This restricts use of the data to those researchers with funds and it also limits the number of people who might otherwise offer constructive commentary on how best to improve the information. Moreover, it limits how the national databases are used. For example, providers of national data such as GuideStar target their services primarily to comparative studies within nonprofit mission categories, size groups or geographic entities, limiting their analysis largely to one or two variable comparisons. While this is undoubtedly useful for individual nonprofits that wish to benchmark against other nonprofits, it limits the ability of researchers to conduct large-scale studies of nonprofit data. Questions involving the historical performance of a sector, impacts of changes in policy, accountability and system optimization are difficult to answer given the limited access to the data. The restrictions also limit the ability to construct longitudinal databases and make it harder to work in a multivariate context. They may also encourage individual data collection efforts that result in a proliferation of databases and a limited set of comparative studies on a national basis. To be fair, core 990 data is now publicly available.

Greater Data Specificity

Serious development is needed on the output and outcomes side to make the data on nonprofits more useful to users. Specifically, estimates are needed on the number of clients served, the types of services provided, consumer and donor satisfaction, and other measures of effectiveness. On the income side, work is needed on defining the existing income categories with more careful reporting of actual program revenues (for example, separating government and private fees) and of non-conventional incomes, such as gains from barter, trades, and income from auctions and from commercial sales. The need for this specificity will grow as more nonprofits become hybrid nonprofits – that is, organizations that have both nonprofit and for-profit components (Tuckman 2009). An advantage to specificity is that nonprofits would be able to report their income sources and their categories in more precise and consistent ways.

Data Reclassification

Over time, there is a need for periodic review of the data systems used to measure nonprofit performance and accountability. Within the nonprofit sector, this means rethinking existing measurements such as appropriate means for valuation of non-cash contributions

and in-kind gifts. It also means identification of new sources of revenue such as payments from social entrepreneurs, new forms of earned income, and funds earned from auctions, outsourcing and relationship marketing. It is important both to conceptualize these new sources of concern and to provide better guidelines as to how payments should be classified in national studies.

Data Scope

The increase in the number of nonprofits with earned income is considerable, as is the amount of such income that these entities are earning. Form 990 is an instrument of tax policy and its purpose is to monitor nonprofits in that capacity, therefore it is not a good research tool for capturing linkages between for-profit and nonprofit business. This is because the commercial revenues of nonprofits are reported separately under business tax laws and, consequently, it is very difficult to identify all of the for-profit activities or enterprises of commercial nonprofits, difficult to identify complementary and substitute activities, hard to reconstruct revenue streams from the two sources of revenue, and very difficult to identify multiple sources of compensation (Tuckman 2009).

Because hybrid nonprofits exist at the border between the for-profit and nonprofit sectors, society has a strong interest in their activities, particularly since over time the two sets of activities are likely to blur. The Fourth Sector Mapping Initiative (FMSI) currently underway at the Urban Institute, in partnership with The B Team, and a 180-plus member council of experts, gives us something to look forward to. The FMSI, launched in April 2014, is designed to enlarge our understanding of what has been labeled the ‘fourth sector’, or ‘for-benefit enterprises’, thus distinguishing them from the traditional private, public and social or nonprofit sectors. The initiative is designed to develop a consensus definition of this new sector’s boundaries, generate a classification of for-benefit organizations, in addition to ‘conducting a global mapping of for-benefits and their supportive ecosystem, identifying the barriers these organizations face, and understanding their potential for generating economic, social and environmental impacts’ (FMSI 2017).

Better Structuring of the Database

Modern research studies involve both cross-sectional and longitudinal techniques, which can each answer important questions. An important service of researchers at the academic centers is their ability to combine datasets from different years and to utilize modern econometric techniques that can provide answers not attainable a few years ago. This is especially true of mixed time-series, cross-section analyses that provide a dynamic perspective on the questions raised previously. If this capability is to be exploited, at least two things need to be improved. First, the IRS must more carefully track entry and exit from the sector and enter Form 990s in their database in a systematic and traceable fashion. It must also spend more time with users of the information to determine what new data are needed to make feasible multi-year studies of the sector. Unfortunately, the Trump administration’s proposed cut of the IRS’s \$239 million budget is likely to further weaken an already hard-pressed IRS’s ability to make such improvements (Puzzanghera 2017).

AGENDA FOR FUTURE RESEARCH

Much still can be gained from additional research on the volatility of revenues, how diversification of revenue streams changes through time and on understanding the financial stability of the sector. In this section, we suggest research on several broad themes that might give rise to interesting findings. We begin with studies of income and income diversification.

Additional Research on New Sources and Kinds of Income and Income Diversification

It would be useful to examine the impact that social entrepreneurs have on the choices of revenue streams by nonprofits. At present, the research is fragmentary and it is unclear whether emphasis on social entrepreneurship has stabilized or destabilized the income flows of the nonprofits affected. A need also exists to identify measures of risk for the sector and to use these to evaluate the growth of nonprofit revenue streams, along with their volatility. Such studies would be both cross-sectional and longitudinal, and designed to increase our knowledge of the most stable revenue sources for nonprofits with different types of mission.

Second, it would also be useful to conduct meta-analyses of prior nonprofit financial health studies to understand revenue diversification and the different measures of financial health currently in use in the nonprofit literature. As Prentice (2016b) rightly noticed, there are too many measures leading different authors to using different measures to study the same phenomena. It would be best for the sector to develop some consensus on measures of financial health. It would also be useful if such a meta-analysis were to be conducted in consultation with nonprofit practitioners to bridge the gap between how researchers and practitioners conceptualize financial health. Not only will this allow for a common language and hence, discourse, but it would also allow for more informed prescriptions to the nonprofit sector that are grounded in the reality of nonprofits' financial management praxes.

Third, we note the importance of studies that focus on identifying successful revenue acquisition strategies. While the statistical models discussed previously play an important role, it would also be useful to conduct a meta-study of prior research to create alternative models for predicting when mergers and acquisitions are most likely to succeed. Substantial work has been done on this question in the for-profit sector but data availability has slowed studies of nonprofit activity of this type. We acknowledge recent advances in research surrounding mergers and their nature and whether they reduce costs among hospitals (see Harrison and Thornton 2006; Harrison 2007, 2011). Further such research could also explore how mergers and acquisitions alter organizational resource dependence and financial health.

Additional Research on the Effects of the Internet

The Internet created dramatic changes in our cultural and social institutions, but the nonprofit sector moved slowly in response (Tuckman et al. 2004). The growth of third parties who accept outsourced dues collection, as well as the direct use of technology to allow nonprofits to collect their own dues, change the dynamics between

fundraiser and donor, and the techniques by which membership and voluntary dues are collected.

While historically, nonprofits were limited in their abilities to utilize websites, for example, as strategic tools for interactive stakeholder engagement (Kent et al. 2003; Saxton et al. 2007), the arrival of social networking through social media outlets, such as Facebook, Twitter, GoFundMe and Crowdrise, has since removed this deficiency. Social media is boosting organizations' ability to engage larger audiences, while at the same time attracting new and younger audiences (Flannery et al. 2009). Furthermore, social network platforms are offering nonprofits novel ways to engage communities in their fundraising efforts (Saxton and Wang 2014). For instance, in a study of the largest 100 nonprofits, Lovejoy and Saxton (2012) found that these nonprofits tended to utilize Twitter, a type of microblogging, for three primary public relations functions: providing information; community-building, such as giving recognition and thanks; and calling people to action.

The use of social media for calling people to action includes event promotion, donation appeals, selling products, a call for volunteers, lobbying and advocacy, and what the authors referred to as 'Learn how to help', as a strategy for cultivating donors and other supporters. The latter entails indirectly asking for donations by setting up a two-step process of articulating how people can help (information) and the action they need to take to help. Saxton and Wand (2014, p. 851) also found that 'social media-based charitable giving' through Facebook, is largely influenced by what they coin a 'social network effect', which is the size of a nonprofit's network following or 'web capacity' and much less by organizational efficiency measures charity watchdogs are fixated on. Moreover, Saxton and Wand also found online donors more responsive to certain categories of causes than others, such as those related to health. Finally, social media-related donations tend to be small.

Another recent phenomenon is crowdfunding, a new Internet-based fundraising tool that allows organizations to raise funds 'from an extensive online community of individuals, called a crowd' (Manzoor 2017, p. 152). Owing to its ability to raise large sums of money in a short space of time, crowdfunding is being touted as 'powerful' and 'valuable' for charitable nonprofit organizations (Manzoor 2017, p. 152). As a tool, crowdfunding has the potential to boost charitable giving for specific nonprofit initiatives or projects. However, several challenges and questions remain: for instance, given that individuals, as well as for-profit and nonprofit organizations can utilize this tool, might this not only increase competition for donations and, in turn, increase donor fatigue? As Tuckman and Chang (2006) noted, the Internet has certain advantages and disadvantages. It is cheaper and faster to use than a strategy that employs individual fundraisers, but the low barriers to entry mean that a nonprofit might find its appeal lost among many other fund seekers.

Also, given the predominant use of crowdfunding as a strategy for raising funds for specific initiatives, it is safe to conclude that crowdfunding does not necessarily replace, nor should it replace, traditional fundraising techniques. The degree to which nonprofits are utilizing crowdfunding, whether crowdfunding crowds out other funding sources, as well as its impact, remain areas for future inquiry. Similarly, given that social media-based donations appear to be small and cause-driven, they are likely not to replace traditional 'offline' fundraising strategies.

Internet use, including its associated elements of social media, also require both the donor and recipient to have the knowledge and confidence to use technology and, when

either fails, this can lead to errors and lost donations. The Internet and its social media components eliminate neither the need for personal contact nor the need to persuade, but may require a nonprofit to understand the legal requirements of the different countries in which its donors reside. Nonetheless, for some nonprofits, the powerful reach unleashed by Internet use, and its social media components, helps open up and broaden nonprofits' donor base, as well as new revenue streams; for others, it may involve growing global competition. It allows a nonprofit to reach many people quickly and inexpensively, opening communications with new groups, some of whom have previously unrealized common interests. Moreover, a presence on the Internet can bring worldwide awareness of an organization and its mission.

Similarly, the Internet creates unique opportunities for income diversification and outsourcing not previously contemplated. Additional studies of how the Internet and its social media components are being used for these purposes by nonprofits, beyond the largest organizations in the sector, would be exceedingly useful.

Solicitation over the Internet raises issues of trust, transparency and accountability, as to how dollars are spent. Bhagwati's two caveats remain relevant today: without adequate transparency, nonprofits might 'produce their own counterparts of the occasional corruptions of some multinationals' (Bhagwati 2004, p. 44) and 'NGOs, no matter what universalism they profess, are grounded in national political and cultural contexts' (Bhagwati 2004, p. 46). More research on these issues and their influence on charitable contributions would be helpful. In summary, it remains useful to monitor how changes in technology continue to affect access to new donors and new revenues, their impact on the stability of existing relationships with major income providers, competition from other nonprofits, and strategies for income diversification.

The Effect of Third-Party Dispensers of Gifts

In a clever attempt to retain investment assets, a number of financial asset management firms (FAMF) have created programs to provide advice to potential donors. Some have large staff available to help donors decide how to spend their charitable dollars, and most offer financial advice as to how best to invest them. Designed primarily for wealthy investors, these FAMF manage charitable dollars that might otherwise be put in individual or community foundations, usually at a higher cost. Typically, they enable donors to put a fixed sum into the fund and to allocate it across multiple missions or purposes, making it unnecessary to transfer stocks or other assets each time a donation is made.

An example of this are donor-advised funds, which constitute a contractual donor–public charity relationship wherein the donor makes a contribution of money or property to a public charity, which then holds the gift in a separate bookkeeping account (Hussey 2010). Although the 'donor does not retain any legal control over the contributions' with 'the final decision-making authority' resting with the public charity, the 'donor retains the right to advise the public charity as to when, to whom, and in what amount distributions should be made from the account' (Hussey 2010, p. 60).

Several concerns exist with this arrangement, some of which are not new. First, although public charities have final decision-making authority, there is every incentive for public charities to yield to donors' advisory privileges. Donors expect to have continuing control over their contributions (Cullman and Madoff 2016). Second, similar to restricted

endowment funds, donor-advised funds essentially allow usually wealthy taxpayers to take advantage of favorable tax treatments for charitable donations without any obligation or deadline that any of the donation be put to active charitable use (Hussey 2010; Cullman and Madoff 2016). The main issue with donor-advised funds is that, similar to large endowment holdings, a significant proportion of the funds may remain unutilized. This is the same concern that led Hansmann (1990) to question whether such accumulations are a better use of resources. In addition, Cullman and Madoff (2016) noted that, ‘billions of dollars [are being] drawn into the orbit of charitable middlemen, and there is no end to their growth in sight’ with annual contributions to donor advised funds hitting ‘an all-time high of \$19.66 billion in 2014’. In all, Cullman and Madoff regard donor-advised funds as having ‘too many private benefits for the financial services industry . . . and individual taxpaying donors’ especially in commercial donor-advised funds.

The effect of these funds is difficult to study because of the absence of publicly available data, but it is likely that they change the dynamics of giving since they introduce into the relationship another advisor usually well versed in the alternative uses of the funds. As a start, qualitative research could be done to explore the nature of the donor–charity nexus in such arrangements, including investigating the degree and frequency with which donor-advised funds are disseminated, in what manner and with what effects.

Implications of External Shocks on Revenue Diversification

Both the 9/11 terrorist attacks and the fight against terrorism had many impacts on nonprofit revenues, liabilities and obligations. The financial impact on non-9/11 charities is well documented – donors shifted their dollars toward charities that met 9/11 needs and away from those that had other missions. The impact was severe. In the period since 2001, some nonprofits have developed specifically to meet security needs, others proposed and funded projects designed to fill homeland security needs, and still others altered existing programs to fit them within a framework that made them attractive to donors with this interest. In a sense, anti-terrorism became a new source of funds.

An unanticipated impact of 9/11 was the pressures from the government to carefully screen donors. Early information indicated that nonprofit funding may have been used to fund terrorism-related activities and this led to stringent government monitoring of nonprofit funding sources. At the same time, the nonprofits were also told that they were responsible for the actions of employees who engage in terrorist activity, even if they are doing so in activities unrelated to their normal job.

However, for nonprofits, it is important to remember that unprecedented events such as the 9/11 attacks are but one of many external shocks that can affect nonprofits’ financing. Financial crashes or recession (see Never 2012) and natural disasters also constitute systematic risks that stand to shift the environment in a way that is beyond nonprofits’ control. The potential of such systematic risks occurring, has been used as justification for diversified financial portfolios in the corporate world (Kearns 2007). In some respects, as with natural disasters, nonprofits in disaster-prone areas can opt to invest in disaster mitigation and preparedness measures (Chikoto et al. 2013). Having a cushion in the form of unrestricted revenue to help weather the unexpected can also be helpful. At present, few studies have been conducted on the financial implications of these and related risks, but it is clear that the costs of raising revenues have increased and the sector remains

vulnerable to financial disruptions owing to terrorism and other external shocks. More research along these lines is needed to help nonprofits consider their revenue streams in the context of risk. (See also Chapter 11 in this volume.)

CONCLUDING REMARKS

Nonprofit organizations have grown in importance globally, both in absolute number and in terms of their influence. They affect decision making on a variety of vital issues, ranging from the pace of globalization to environmental warming, and from care of migrants to monitoring world trends in slavery, healing the sick and providing quality education. While the missions of nonprofit entities differ widely, they share certain needs. These include stable and predictable sources of revenue that provide income sufficient to enable them to carry out their missions. Critical roles of academic research include providing timely critiques of available data, new frameworks for analysis, and analyzing the economic requirements that enable nonprofits to reach their goals. This calls for continued investments in producing richer, timely and more refined data, as well as increased collaborations and consultations between academics and nonprofit practitioners.

NOTES

- * Co-author of the first edition chapter who provided permission for the second edition revision.
- ** Co-author of the first edition chapter who was deceased prior to initiation of the second edition.

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