

Discussion

Sustainability of Rural Nonprofit Organizations: Czech Republic and Beyond

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Abstract: Sustainability of nonprofit organizations is a key concern for today's nonprofit scholars and practitioners. Building upon the nonprofit economics literature, the present paper introduces the distinction between the demand-side and supply-side determinants of nonprofit sustainability and makes the case for the discrepancy between them. This discrepancy presents not only a generic conceptual explanation of the nonprofit sustainability problems but is also applicable to the context of the European rural nonprofit sector. Three arguments are advanced. First, the notorious implementation problems of LEADER partnerships can be explained as a manifestation of the above discrepancy. Second, and related, the rural context implies the tendency of the supply-side determinants of nonprofit sustainability to undermine the demand-side ones. Third, recent empirical findings from the Czech Republic show that this tendency does not necessarily imply the possibility of a clear classification of the demand-side and supply-side sustainability determinants. Rather, those features of rural areas and communities that significantly affect the size of the local nonprofit sector exhibit a controversial entanglement of demand-side and supply-side identities.

Keywords: nonprofit organizations; nonprofit economics; rural development; rural partnerships; Czech Republic

1. Introduction

Sustainability of nonprofit organizations is an increasingly prominent theme in today's booming multidisciplinary field of nonprofit sector studies. Especially in the Western world, the nonprofit sector fulfills a broad range of socio-economic functions that are intended to strengthen the social and ecological dimensions of sustainable development (*cf.* [1–4]). Yet, many individual nonprofit organizations operate in a complex and turbulent environment that poses a significant challenge to their own economic sustainability (*cf.* [5–7]). It is primarily the economic sustainability of individual nonprofit organizations that today's nonprofit scholars have in mind when referring to “nonprofit sustainability” (*cf.* [8,9]). Among these scholars, a consensus seems to be emerging to the effect that the economic sustainability challenge is shaping both strategies and structures of nonprofit organizations. For example, many nonprofit organizations are under growing pressure to rely on commercial sources of income (e.g., [10–13]) as well as to seek partnerships with public agencies [14] and private for-profit corporations. In the scholarly literature, these organizational transformations in the nonprofit sector are analyzed through the lenses of sociological institutionalism (e.g., [15]), organizational ecology (e.g., [16]), resource dependence (e.g., [17]) and social systems theory (e.g., [18]). All these analyses yield the disconcerting implication that the precarious sustainability of nonprofit organizations potentially undermines the useful functions that are ascribed to nonprofit organizations by theoretical models. This implication poses the novel research question of enriching the theoretical understanding of nonprofit functions with an account of nonprofit sustainability problems in such a way as to arrive at a more balanced assessment of the actual impact of the nonprofit sector.

The present paper addresses this research question in two respects. First, it traces the challenge of nonprofit sustainability back to the roots of nonprofit economics, a burgeoning economic subdiscipline. Since its beginnings in the early 1980s, nonprofit economics included two distinct types of theories, usually designated as demand-side and supply-side. The demand-side theories examine the societal problems addressed by nonprofit organizations and characteristically locate these problems in specific types of market failure. The supply-side theories study the behavior of nonprofit managers and entrepreneurs with a view to understanding the structures and functions of nonprofit organizations. An interesting and provocative idea of the modern nonprofit economics is the persisting lack of connection between the demand-side and supply-side theories, suggesting that the behavior of nonprofit managers and entrepreneurs may be only distantly related to the societal problems that nonprofit organizations are supposed to solve [19–24]. The present paper will conceptualize the split between the demand-side and supply-side theories as a discrepancy between the demand-side and supply-side determinants of nonprofit sustainability. In doing so, it will advance the thesis that the deficits of nonprofit sustainability are systematically predicted by the nonprofit economics literature.

The second contribution of this paper to understanding nonprofit sustainability is in applying the above thesis to the European rural development context. In the last decade, European rural areas have been witnessing the shift “from government to governance”, *i.e.*, the increasing transfer of responsibilities from state to non-state actors (*cf.* [25,26]). The shift from “from government to governance” meant the growing role of nonprofit organizations, such as LEADER partnerships, in revitalizing depressed rural areas through community-based endogenous initiatives. The extensive scholarly literature spawned by the LEADER program emphasizes the problems of sustainability of

European rural partnerships. An authoritative literature review points out that the social inclusion potential of these partnerships has often been limited, especially with regard to the most vulnerable groups; the power relations between partners have often been contested; all too often, partnerships have been instrumentalized for the purpose of attracting funding without a genuine concern for long-term community development; fundraising efforts have been often excessive; and local state agencies have tended to dominate community self-organization processes [27]. The present paper will interpret these problems in terms of the discrepancy between the demand-side and supply-side sustainability determinants of rural partnerships. This discrepancy will be shown to be not only exacerbated by characteristic features of rural areas but also further complexified by the fact that the distinction between the demand-side and supply-side determinants is much easier to draw in theory than in practice.

The next section will provide a brief background on the disconnection between the demand-side and supply-side economic theories of nonprofit organizations and on this basis introduce the distinction between the demand-side and supply-side determinants of nonprofit sustainability. The subsequent section will apply this argument in the rural development context and present the empirical evidence on the rural nonprofit sector to the Czech Republic. Finally, the disconnection between demand-side and supply-side determinants of nonprofit sustainability, both in the rural development context and in the more generic nonprofit context, will be given a systems-theoretic interpretation inspired by Niklas Luhmann's theory of functional differentiation.

2. From Nonprofit Economics to Nonprofit Sustainability

2.1. The Split between the Demand-Side and Supply-Side Theories

The distinction between the demand-side and supply-side theories of nonprofit organizations goes back to the seminal chapter of Henry Hansmann [24] who sought to produce a comprehensive mapping of the field of nonprofit economics as it existed at the time. Hansmann's authoritative overview brought the disconcerting conclusion that the (supply-side) theories of nonprofit organizational behavior demonstrated a lack of contact with the (demand-side) theories locating the societal role of nonprofits in the correction of market failures. Since then, the demand-side theories have been criticized on a number of grounds. Being framed by neoclassical economics, they had little to say on the institutional embeddedness of the nonprofit sector (*cf.* [28–35]) and indeed committed the Polanyian “economistic fallacy” [36]. As a counterpoise to the demand-side theories, Chaves and Monzón [37] see nonprofit organizations as a part of the broader social economy that contributes to sustainable development while laying bare the monistic nature of the mainstream neoclassical economics that has been mainly focused on the capitalist for-profit enterprise. Furthermore, according to Lohmann [38], the main thrust of the demand-side theories is negative, for they tell more about what the nonprofit sector is not than they do about what it is. Most important to the present context, however, is the charge that the demand-side market failure theories “explain why consumers would want to buy from and donors donate to nonprofits, but do not explain why nonprofits are there for them to use. What is needed is a theory of the supply of this organizational form to complement the theories of demand” [23] (p. 128). According to Rose-Ackerman [39], the supply-side theories must address the

important motivational and behavioral aspects of ideology, altruism, social values, and mission-drivenness, each of which gets short shrift in the demand-side market failure theories.

A related strand of the nonprofit literature highlights the geographical implications of the split between the demand-side and supply-side theories. According to an authoritative literature review, the studies of the locational dynamics of nonprofit organizations “take a common approach in that needs and resources (such as poverty or income) in a particular region (usually a city) are held to determine the number of nonprofit organizations in that region” [40] (p. 222). By emphasizing the “needs and resources”, these studies endorse the theory-driven distinction between the demand-side and supply-side determinants. For example, Corbin’s [41] study of factors influencing the growth of nonprofits in social services in the United States identified both the demand-side factors, such as demand heterogeneity and market failure, and the supply-side factors including social cohesion, resource dependence, and philanthropic culture. In a similar vein, Grønbjerg and Paarlberg [42] use county-level data for the state of Indiana in order to inquire into the community variations in the size and scope of the nonprofit sector. They found out that the demand-side factors of these variations are largely overridden by the supply-side factors as well as by the effects of community social structures.

2.2. *Implications for Nonprofit Sustainability*

The split between the demand-side and supply-side theories indicates that the behavior of nonprofit organizations is more complex than assumed by the demand-side theories many of which present stylized models of market failure [22–24]. A moment’s reflection suggests that this split is likely caused by the difference in the levels of analysis of the two types of theories. While the demand-side theories refer to the problems of society as a whole, the supply-side ones are geared to the level of organizations which face a range of organizational-level challenges that are invisible from the societal perspective. It is these challenges that make nonprofit sustainability insecure and erode trust into the ability of these organizations to address societal problems. Therefore taking a due account of nonprofit sustainability requires adopting an organization theory perspective that could interrelate organizational goals (*i.e.*, missions) with actual organizational behavior.

A highly suitable platform for such an organization theory synthesis is provided by Scott’s seminal textbook [43] that differentiates between the three basic approaches to organizations. Scott [43] designates these approaches as the rational, natural, and open system perspectives. From the rational system perspective, “organizations are collectivities oriented to the pursuit of relatively specific goals and exhibiting relatively highly formalized social structures” [43] (p. 27). From the natural system perspective, “organizations are collectivities whose participants are pursuing multiple interests, both disparate and common, but who recognize the value of perpetuating the organization as an important resource. The informal structure of relations that develops among participants is more influential in guiding the behavior of participants than is the formal structure” [43] (p. 28). Finally, from the open system perspective, “organizations are congeries of interdependent flows and activities linking shifting coalitions of participants embedded in wider material-resource and institutional environments” [43] (p. 29).

In the nonprofit context, the rational system perspective makes clear that the demand-side theories, such as those of Weisbrod [44] and Hansmann [24], while offering the theoretical and normative justifications of nonprofit goals, fail to refer to the actual capacity of nonprofit organizations to attain

them. In fact, Salamon's [45] "voluntary failure" theory has explained long ago why these organizations may lack expertise and resources to deliver on their missions (see also [46–48]). In emphasizing the role of informal relations as well as organizational survival considerations, the natural system perspective not only provides a valuable means to capture the importance of "mission-drivenness" [38,39], but also allows to think of opportunistic tendencies and "discretionary excesses" of nonprofit managers and entrepreneurs [21]. The open system perspective appears to have the most critical implications. It suggests not only that nonprofit organizations must effectively reach their external stakeholders but also that they may fail to manage their resource dependencies [5–8,18].

The open system perspective is especially interesting because it apparently underpins Bell *et al.*'s [9] distinction between programmatic and financial types of nonprofit sustainability. To Bell *et al.* [9] (p. 16), programmatic sustainability means that "nonprofit's programs are relevant to its constituents and are having an impact", whereas financial sustainability means that "the organization has sufficient working capital for its needs and activities". While each of the three organization theory perspectives presented above are suited to capture nonprofit sustainability problems, this paper will draw upon Bell *et al.*'s [9] approach and generalize the distinction between the programmatic and financial types of sustainability. Framing the nonprofit economic theories in terms of Bell *et al.*'s [9] terminology, it makes sense to differentiate between the demand-side and supply-side determinants of nonprofit sustainability. While the former determinants refer to the societal relevance of nonprofit missions, the latter are related to the ability and willingness of nonprofit decision-makers to secure the resource base required for the realization of these missions overtime. Obviously, the sustainability of nonprofit organizations requires the concurrence of its demand-side and supply-side determinants.

If the demand-side and supply-side theories are conceptualized as the respective sustainability determinants at the organizational level, then the split between these theories translates into the tendency of the supply-side sustainability determinants to cut the ground from under the demand-side sustainability determinants. Regardless of the empirical support for the demand-side theories proper, the sheer empirical validity of the supply-side theories indicates that the societal roles of nonprofit organizations deviate from the demand-side theories' predictions, suggesting that the realities of institutional life are considerably more complex than the latter theories seem to assume. A good recent example of the way the demand-side determinants of nonprofit sustainability are undermined by the supply-side ones is Lenette and Ingamells's [49] study of human services for refugee immigrants to Australia. The authors identify the growing chasm between funding-driven agencies, on the one hand, and social and community needs, on the other. Their conclusion is that "the field of human services ... needs to reclaim a broader paradigm of human service practice allowing for joined up, locality-based, capacity building work that is responsive to people, contexts, and specific issues emerging over time". As the next section shows, the relationship between the demand-side and supply-side determinants of nonprofit sustainability is notoriously precarious in the rural development context.

3. Implications for Rural Development

3.1. Rurality and the Nonprofit Sector

Iliopoulos and Valentinov [50] argue that the socio-economic characteristics of rural areas, such as low population density, low per-capita incomes, geographic dispersion, and relatively poor infrastructure generally tend to lower the attractiveness of rural areas as a location for profit-driven business (*cf.* also [51–53]). “The lower return on investment weakens the incentives of for-profit firms to operate in rural areas. This means, in turn, that rural dwellers may be dissatisfied with the levels of consumption goods and services delivered to them by for-profit firms” [50] (p. 441). According to the authors, the emerging gaps in the provisioning of rural dwellers could be filled by various types of nonprofit organizations which are not concerned with the profitability of their activities in the same way that the for-profit firms are [50]. It is common knowledge today that “people living and working in rural Europe usually experience higher rates of risk of poverty and lower levels of employment, income, educational attainment, health care, and access to infrastructure and public services” [54] (p. 6). Nonprofit organizations hold considerable potential for “break[ing] the vicious cycles of exclusion and marginalization in rural areas” [54] (p. 12). These arguments suggest that the endemic developmental problems of rural areas constitute a distinct demand-side rationale for nonprofit organizations, a rationale that constitutes the ultimate, if implicit, core of the theoretical justification of rural partnerships as a rural development policy instrument (*cf.* [55–57]).

Identifying the demand-side justification for rural partnerships and other nonprofits suggests that their supply-side sustainability determinants may be disconnected from the demand-side ones. Similar to the more generic nonprofit case, there seem to be no grounds for assuming that the former determinants will automatically translate into the latter ones. Thus, there are no grounds for optimism with regard to the overall sustainability of the concerned nonprofit organizations. Therefore, it is small wonder that the split between the two types of sustainability determinants manifests itself in the widely acknowledged and discussed implementation problems with which these organizations have been grappling. The implementation problems have indeed taken center stage in the scholarly literature on the LEADER program. Noble as it is, the theoretical justification for the LEADER program could not and did not translate into direct action. Rather, participation has to be enabled by the right organizational structures; funding modalities have to be adjusted (*cf.* [27]); social capital, networks, and accountability mechanisms have to be put into effect (*cf.* [58]); and collective action problems need to be addressed (*cf.* [1]). Nor is this all. As Munoz *et al.* [59] aptly discern, the very challenges of rural areas that delineate the demand-side sustainability of nonprofit organizations simultaneously deprive these areas of the resources and capabilities required for community-based service providers to operate effectively. Dispersed settlement patterns, low population densities, ageing populations and other characteristics of rurality are highly ambivalent in that they give a boost to the demand-side sustainability of rural nonprofits while suppressing their supply-side sustainability [59].

The argument of Munoz *et al.* [59] illuminates the rurality-specific mechanism of how the demand-side and supply-side determinants of nonprofit sustainability undermine and defeat each other. The precarious relationship between these has already attracted much scholarly attention. For example, in the case of Poland, Furmankiewicz *et al.* [27] describe how the supply-side determinants, such as

funding arrangements and influence of local authorities, “undermine the ability of Polish partnerships to operate in ways which harness the endogenous capacities of local communities”. More radically yet, Shucksmith [60] notes the self-undermining tendencies of endogenous development initiatives that “favor those who are already powerful and articulate, and who already enjoy a greater capacity to act and to engage with the initiative. This may even lead to a capturing of the initiative by elites or sectional interests, in extreme cases. More marginalized groups are less able to participate or engage with the program, and are less likely to be empowered unless explicit attention is given to their inclusion”. These studies underscore that in the rural context, the validity of the supply-side sustainability determinants is likely not merely to complement, but rather to undermine the demand-side ones.

3.2. The Rural Nonprofit Sector in the Czech Republic

This section presents recent econometric evidence on the effects of the socio-economic characteristics of rural areas and communities in the Czech Republic on the size of the local nonprofit sector. The contribution of this evidence to the proposed theoretical understanding of nonprofit sustainability is twofold. First, we document the rurality-specific relationship between the demand-side and supply-side sustainability determinants that was outlined in the preceding subsection. This relationship adds a valuable qualification to Iliopoulos and Valentinov’s [50] argument that the attributes of rurality enhance the demand-side sustainability of the rural nonprofit sector. The empirical findings make it more plausible to argue that these attributes act on both the demand and supply side, with their supply-side identity undermining or counteracting their demand-side identity. Second, somewhat unexpectedly, empirical work has shown that the distinction between the demand-side and supply-side sustainability determinants may be hard to draw. The suggested “double nature” of the attributes of rurality indicates that their demand-side and supply-side identities cannot be clearly disentangled. This presents a sharp contrast to the unambiguous differentiation between the demand-side and supply-side sustainability determinants in the above cited studies of the locational dynamics of nonprofit organizations [40–42]. Thus, our key hypothesis is that the size of the local rural nonprofit sector is affected by both the demand-side and supply-side sustainability determinants. The verification of this hypothesis is supplemented by the analysis of the ambiguity of the distinction between the demand side and supply side.

The hypothesis is verified using primary and secondary data (Table 1). The primary data originate from interviews that were conducted with mayors in 190 randomly selected municipalities of the Czech Republic (Vysočina and Jihomoravský kraj) in 2013. To make sure that the municipalities are rural, we limited our attention to municipalities with less than 2000 residents. The interviews were based on the structured questionnaire containing questions on the municipality residents, infrastructure, economic activity, the number of local nonprofit organizations, their size (in terms of membership), the nature of their activities, social capital, local action groups, the main challenges of local development, and the quality of local life. As each municipality was represented by the respective mayor, 190 mayors have been approached. Of these, 11 mayors could not provide the requested information. Accordingly, our sample consists of 179 rural municipalities that contain 699 nonprofit organizations (*cf.* [61,62]).

The secondary data that we have utilized comes from the 2011 census of the Czech Statistical Office and contains information on the demographic, social and economic characteristics of residents in these municipalities. Beside the census data, we relied on the Linked Open Data from the surveyed regions, including the data provided by the free databases ÚFIS, ARIS and MONITOR (*cf.* [63]). MONITOR is the information portal of the Czech Ministry of Finance and allows free access to the budget and accounting information related to all levels of public administration. ARIS contains publicly available information about municipal incomes and expenditures in the Czech Republic in the period of 2001–2009; the respective information for the subsequent years is provided by ÚFIS, the successor database. Furthermore, the information provided by the mayors was cross-checked using the publicly available annual reports of formally registered nonprofit organizations.

Table 1. Qualitative and quantitative methods used for primary and secondary data collection and analysis.

Methods and Tools Used	interviewing; descriptive statistics; cluster analysis; correlation analysis; exploratory data analysis; pattern recognition; regression analysis
	<i>Primary data:</i> Questionnaire survey
Available Data	<i>Secondary data:</i> Census Data; Linked Open Data from regions; Linked Open Data from the free databases of the Czech Ministry of Finance (ÚFIS, ARIS, MONITOR); NPO Annual Reports

Our sample of 179 rural municipalities is satisfactory if compared with the minimum sample size required to maintain the relative error standard deviation $\delta(s)$ as a prescribed value [64]. The minimum sample size is determined by the formula:

$$n_{\min} = \frac{g_2(u) - 1}{4\delta(s)^2} + 1 \quad (1)$$

Given a relative standard deviation $\delta(s) = 0.1$ (*i.e.*, 10%), and a normal distribution with kurtosis $g_2 = 3$, the recommended minimum sample size is 51. Our sample meets this condition.

Respondents indicated that of the 699 nonprofit organizations, 550 were formally registered and 101 were informal groups (while unable to classify 48 organizations). In 30 municipalities, some nonprofits are members of the local action group (supported by the LEADER+ program of the EU Common Agricultural Policy). In 25 municipalities, there were nonprofits that terminated their activity and do not exist anymore. Twenty-one percent of nonprofits in our database are sports clubs, 20% provide public services (mainly fire protection), 16% present interest and hobby clubs, 12% are engaged in cultural activities, 9% pursue environmental concerns (*e.g.*, local hunters associations). 60% of the nonprofits in the database operated during the socialist period, the rest was established or re-established after the collapse of the socialist regime.

These and other results of the descriptive statistical analysis enabled us to quantitatively summarize the sample and revealed the main features of the undertaken observations. Based on the subsequent exploratory data analysis we specified the essential characteristics of the dataset in order to select analytical tools and recognize patterns. The main use of this database for the present study was in enabling us to run a regression exploring the effects of the socio-economic characteristics of rural areas and communities in the Czech Republic on the size of the local nonprofit sector (Table 1). We

regressed the number of nonprofits in a rural municipality on independent variables describing local population, local infrastructure, education and employment of rural residents, local religious activity, and residents' satisfaction with the quality of life (Tables 2 and 3). The model is highly statistically significant and delivers high coefficients of determination (R^2 close to 0.58; adjusted R^2 above 0.54), *i.e.*, it explains a high proportion of the total variation of outcomes. The overall significance of the F-statistics confirms that the model is not misinterpreted. A correlation analysis revealed the need to prevent the adverse effects of multicollinearity on the significance of the independent variables. Thus, we applied a stepwise regression that allowed us to group independent variables in appropriate sets by a cluster analysis (Table 1).

Table 2. Explanatory variables.

Variables	Explanation
Nr. of residents (ln_nr_residents)	Community size (census data) Note: the relationship between the number of residents and the number of nonprofits is non-linear. The logarithmic form of this explanatory variable delivers statistically more significant results
Share of elderly people (share_elderly_people)	Residents over 65 (census data)
Nr. of public areas (nr_public_areas)	The state of development of public infrastructure. Note: these determinants are represented as one explanatory variable (sum) because of their high cross-correlations
Nr. of football pitches (nr_football_pitches)	
Nr. of playgrounds (nr_playgrounds)	
Nr. of kindergartens (nr_kindergartens)	
Nr. of primary schools (nr_primary_schools)	
Sewage plant (sewage_plant)	Existence of a sewage plant in a municipality
Public water supply system (public_water_supply_system)	Existence of public water supply system in a municipality
Active church (nr_church)	Nr. of churches in the municipality
Share of religious population (share_religious)	Residents claiming a religious faith (census data)
Education degree (share_basic_education)	Human capital (share of population with only a basic education—highest achieved—census data)
Unemployed residents (share_unemployed)	Unemployment rate in the municipality (census data)
Freelancers (share_freelancers)	Share of freelancers/all employed residents (census data)
Share of residents satisfied with social and cultural conditions in the municipality (satisfaction_social_conditions)	Life quality in the community based on mayors' estimation of residents' satisfaction with social and cultural conditions in the municipality (% of satisfied residents)
Share of residents satisfied with the level of provided public services (satisfaction_public_services)	Life quality in the community based on mayors' estimation of residents satisfaction with the level of provided public services (% of satisfied residents)

A number of the independent variables in the model turned out to be significant. Somewhat unsurprisingly, the data show that the number of local nonprofits is positively affected by local population size. Also positively related to the number of local nonprofits is the set of variables including the number of local public areas, football pitches, playgrounds, kindergartens, and primary schools; the same can be said about residents' satisfaction with the social and cultural conditions of the

local quality of life. The surprising findings are the negative relationship between the number of local nonprofits and the local availability of a sewage plant and a church.

Iliopoulos and Valentinov's [50] argument about the demand-side sustainability of the rural nonprofit sector provides a useful lens into the meaning of these findings. To these authors, the poor state of rural infrastructure generates the demand for rural services that can be potentially provided by nonprofit organizations [50]. The positive relationship between residents' satisfaction and the number of local nonprofits lines up well with the main thrust of this argument, as the services provided by nonprofits plausibly make the residents more satisfied. The straightforward support for this argument is forthcoming from the revealed tendency of local sewage plants to suppress the number of local nonprofits. If the availability of local sewage plants is taken to indicate a better state of rural infrastructure than their non-availability, then their availability likely dampens the demand for nonprofit services, thereby suppressing the number of local rural nonprofits.

Table 3. Determinants of the Czech rural nonprofit sector ⁽¹⁾.

Dependent Variable: nr_NPOs	b * (Standardized partial regression coefficient)	Std. b * (Standard error of b *)	b (Partial regression coefficient)	Std. b (Standard error of b)	p-Value ⁽²⁾
ln_nr_residents	0.661087 ***	0.076636	2.22511	0.257946	0.000000
nr_public_areas.					
nr_football_pitches.					
nr_playgrounds.	0.290752 ***	0.066268	0.30948	0.070537	0.000019
nr_kindergartens.					
nr_primary_schools					
sewage_plant	−0.155593 **	0.054006	−0.89375	0.310220	0.004427
public_water_supply_system	−0.065497	0.051983	−0.78817	0.625540	0.209246
nr_church	−0.111434 *	0.056539	−0.60756	0.308261	0.050209
share_elderly_people	0.092872	0.055568	0.06243	0.037352	0.096329
satisfaction_social_conditions	0.121776 *	0.059863	0.01714	0.008428	0.043340
satisfaction_public_services	−0.116369	0.061678	−0.01674	0.008872	0.060749
share_basic_education	−0.080971	0.054517	−0.05597	0.037693	0.139165
share_unemployed	0.060839	0.051123	0.08722	0.073289	0.235536
share_freelancers	−0.062381	0.049598	−3.45174	2.744452	0.210063
share_religious	0.056134	0.051904	0.01225	0.011331	0.280873

⁽¹⁾ $R = 0.7579$; $R^2 = 0.57439$; adjusted $R^2 = 0.5471$; $F(12,187) = 21,031$; ⁽²⁾ Note: * $p < 0.05$. ** $p < 0.01$.

*** $p < 0.001$.

What about the relationship between the demand-side and supply-side sustainability determinants? It does not seem too far-fetched to suppose that the lack of local sewage plants is generally indicative of the deficient state of local capacity to create (*i.e.*, supply) rural nonprofits. One possible scenario is that the most able and entrepreneurial individuals, repelled by the prospect of living in a locality without a sewage plant, emigrate and thus deprive the concerned rural areas of the valuable human capital. It is possible, however, that the supply-side determinants are particularly effective in the case of the infrastructure described by another significant variable, or, more exactly, the set of variables including the number of local public areas, football pitches, playgrounds, kindergartens, and primary

schools. The positive relationship of the number of these infrastructural objects to the number of local nonprofits apparently contradicts Iliopoulos and Valentinov's [50] demand-side argument. However, these infrastructural objects very likely differ from the local sewage plants by their superior ability to mobilize and improve the local capacity to create or get involved with the local nonprofits. It is indeed much more likely for local residents to get together and discuss their collective strategies in local public areas and schools rather than in sewage plants. It is this supply-side identity of the former infrastructural objects that likely explains why they give a boost to the number of local nonprofits instead of suppressing it, in contrast to sewage plants.

The complexity of the supply-side sustainability determinants of the Czech rural nonprofit sector is further enhanced by the role of local churches. On the one hand, these churches present a premier platform for local residents to come together and improve the local capacity to create or get involved with the local nonprofits. On the other hand, the churches may act as local nonprofits in their own right, thus preventing local residents from getting involved in other nonprofits which are considered in our dependent variable. The negative relation between the availability of local churches and the number of local nonprofits gives support to the latter scenario.

In conclusion, it must be noted that each of the statistically significant determinants of the size of the local nonprofit sector in the considered rural areas of the Czech Republic plausibly combines demand-side and supply-side identities in such a way that they can only be disentangled by in-depth case studies. It is furthermore plausible that the sign of the relation of these determinants to the size of the local nonprofit sector is conditioned by the relative roles of these identities. In the proposed interpretation of the empirical findings, there are several examples of this ambiguity: (a) local sewage plants could act as the supply-side sustainability determinants, but we prefer to interpret them as the demand-side ones; (b) local public areas could be the demand-side sustainability determinants, but we prefer to interpret them as the supply-side ones; (c) we prefer to interpret local churches as nonprofits in their own right rather than as the supply-side sustainability determinants. Accordingly, as the next section explains, it is not the sustainability determinants as such but rather the complexity and ambiguity of their demand-side and supply-side identities that emerge as a guidepost for the further development of the field of nonprofit economics.

4. Discussion

The evidence presented in the preceding section casts a new light on the problem of the disconnection between the demand-side and supply-side determinants of nonprofit sustainability. Until now, nonprofit economists have tended to see this problem as a theory-building deficit that could be addressed by finding ingenious ways to integrate these determinants in ever more encompassing conceptual frameworks [20,23,24]. The significance of the reported data on the Czech nonprofit sector, as well as of the numerous empirical studies of the LEADER program, is in showing this disconnection to be an empirically valid phenomenon. In light of this evidence, the relevant research problem is no longer in conceptually overcoming or explaining away this disconnection, but rather in reorienting the field of nonprofit economics toward the search for systematic reasons making this disconnection necessary and pervasive.

This reorientation delineates an uncharted territory in the field of nonprofit economics and is certainly open toward multiple and diverse interpretations. One possible point of departure for initiating the suggested inquiry can be found in Niklas Luhmann's sociological systems theory [65–68]. Luhmann saw the distinctive attribute of modern society in its functional differentiation, *i.e.*, its composition of a large number of equally ranked functional systems, such as economy, politics, law, science, and others. These systems, according to Luhmann, are “operationally closed”. This means that they react to their societal and natural environment only to the extent that the environmental happenings fall in line with the respective systemic dichotomous codes, such as “payment/no payment” for the economy, “legal/illegal” for the legal system, “power/opposition” to the political system, *etc.* The codes allow the systems to disregard most of the environmental complexity and thus to concentrate on developing substantial internal complexity which presents to Luhmann an indisputable civilizational attainment. At the same time, this disregards results in the failure of (functional and other) social systems to consider the full extent of their dependence on the societal environment. As a result, “the more we rely on systems for improbable performances, the more we shall produce new and surprising problems, which will stimulate the growth of new systems, which will again interrupt interdependencies, create new problems, and require new systems” [67] (p. 182). The paradoxical implication is that “a functionally differentiated world system seems to undermine its own prerequisites” [67] (p. 183).

In what way are these admittedly highly abstract ideas helpful for disentangling the precarious relationship between the demand-side and supply-side determinants of nonprofit sustainability? It seems plausible to conjecture that the supply-side determinants register those dimensions of nonprofit organizations that can be captured by the operational codes of the concerned functional systems, whereas the demand-side determinants reflect the sector's overall meaning inherent in the societal environment as a whole. Thus, the nonprofit activities appear on the radar of the economic system only to the extent that they are mediated by managerial decisions on the allocation of resources and on the effecting of payments. The political system likewise is only able to perceive those elements of nonprofit activities that are amenable to interpretation in terms of upholding or criticizing the extant structure of political power. Both managerial behavior and political support present widely acknowledged supply-side determinants of nonprofit sustainability. At the same time, as Luhmann noted, the operational closure and coding of functional systems prevent them from being responsive to the full range of environmental happenings. In the nonprofit sector context, this lack of sensitivity indicates that the full meaning of the nonprofit sector in the societal environment as a whole, *i.e.*, the sector's demand-side sustainability, fails to be adequately matched by its supply-side sustainability.

Luhmann [68] devoted a remarkable book to an analysis of how the weak sensitivity of operationally closed functional systems to their societal and natural environment undermines their sustainability. Indeed, according to Luhmann, the global challenge of socio-economic sustainability comes down to little else [68]. To the extent that the operational closure makes the functional systems ignore their critical environmental dependencies, systemic operations become self-defeating. In the nonprofit sector context, this self-defeating character translates into the split between the demand-side and supply-side determinants of nonprofit sustainability. A rurality-specific illustration of the split, as found in the reported Czech data, is the intertwining of the demand-side and supply-side identities of the individual socio-economic determinants of the size of the local nonprofit sector. The findings

suggest that the validity of the demand-side identities of these determinants is likely circumscribed by the effects of the supply-side identities.

5. Conclusions

The conceptual innovation of the present paper is in reconstructing the distinction between the demand-side and supply-side explanations of the nonprofit sector as the divergence between the demand-side and supply-side determinants of nonprofit sustainability. This reconstruction informs the nonprofit sustainability literature in three respects that are especially relevant to the European rural development context. First, the well-documented and puzzling implementation problems of the LEADER partnerships present a logical consequence of the divergence between the demand-side and supply-side determinants of nonprofit sustainability. Second, this divergence informs the scholarly inquiries into the rurality-specific explanations of rural nonprofit organizations. Iliopoulos and Valentinov [50] may be right in pointing out that the socio-economic attributes of rural communities reinforce the demand-side sustainability of rural nonprofits; yet the divergence between demand-side and supply-side sustainability drives home the point that rural nonprofits are highly vulnerable to an unfavorable institutional environment which is often characteristic of rural areas (*cf.* [1]). Third, in contrast to the literature endorsing a clean distinction between the demand-side and supply-side sustainability determinants, the reported evidence from the Czech Republic documents the complexity of these determinants' intertwining and entanglement.

The broader implication of the presented arguments is that the split between the demand-side and supply-side determinants of nonprofit sustainability could indicate the precarious relationship among the economic, social, and environmental pillars of sustainability in general. While many nonprofit organizations pursue lofty and noble missions aiming at addressing the social and environmental sustainability problems [69], these problems stubbornly persist. It appears, then, that the organizational pursuit of the social and environmental sustainability exacts a price in the form of the insecure economic sustainability of the concerned organizations. This is precisely what is happening when the demand-side determinants of nonprofit sustainability are undermined by the supply-side ones. Despite the fact that nonprofit organizations may be quite successful in ameliorating human life and thus be sustainable on the demand side, their activity can be hindered by the supply-side sustainability determinants that are out of the scope of their control. The further research on nonprofit organizations is accordingly called upon to create the awareness of the complex dialectics of the demand-side and supply-side determinants of nonprofit sustainability. Toward this end, it is essential to see nonprofit organizations as arenas for the dynamic interaction between the demand-side and supply-side stakeholders, interaction occurring in specific places and communities, whose features are particularly salient in the rural context. Furthermore, these places and communities are themselves embedded in the civilizational regime of functional differentiation which, as this paper conjectured, exercises a major formative influence on nonprofit activities, especially in rural areas.

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Author Contributions

The authors contributed equally to this paper. All authors read and approved the final manuscript.

Conflicts of Interest

The authors declare no conflict of interest.

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