

# **Crowding-out or crowding-in: The dynamics of different revenue streams**

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## **Summary**

An important question in public economics is to what extent changes in government funding lead to changes in private donations. In this chapter we identify and summarize four theoretical perspectives answering this question: the micro-economic, institutional-political, institutional signaling, and organizational perspective. Reviewing the empirical support for each perspective, we find that none of the perspectives sufficiently explains the dispersed empirical evidence for the relationship between government financial support and individual philanthropic donations. We argue that the context in which nonprofit organizations operate is a relevant but often overlooked factor that influences how government support affects philanthropic giving. Research in this area should adopt a dynamic perspective, taking into account the dynamics of different nonprofit revenue streams (from governments, businesses, foundations, households) as well as contextual level factors like the subsector of the nonprofit sector and country characteristics.

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## Introduction

In public economics, a large body of literature has examined the question whether government funding “crowds out” private donations. There has been a vast number of empirical studies on this question, with dispersed and even contrasting findings. In this chapter we (1) give an overview of the most important theoretical perspectives on the relationship between government support and philanthropic giving; (2) evaluate the available evidence on these perspectives, and (3) identify the most promising directions for future research, taking into account the importance of the dynamics of funding portfolios and the contextual differences that influence these dynamics. We argue that it is not very useful to estimate “the” crowding-out effect, because the association between government support and private giving varies strongly between contexts.

A better understanding of the dynamics of different nonprofit revenue sources is crucial for the future of nonprofit organizations, given the importance of resources for organizational performance (Pfeffer & Salancik, 1978). The size and composition of the revenue portfolio has important consequences for the financial health and governance of nonprofit organizations. Resources are necessary for nonprofit organizations to deliver goods and services that cannot be provided by the state or the market, to form a space where citizens express themselves, and to defend minority and animal rights in public debates. As such, the nonprofit sector plays a crucial role in today’s diverse societies. To increase organizational effectiveness of nonprofit organizations it is important to know, for both funders and recipients, how different revenue streams interact within different local contexts.

In the next section, we first discuss the theoretical foundations of the literature studying the association between government support and private donations and the possible explanations for the mixed empirical support for the theoretical claims.

## Theoretical perspectives

Four perspectives dominate the literature.

### *1. Micro-economic perspective*

*Theory:* A vast literature in economics examines how changes in government funding affect private individual donations. Economic theory predicts that altruistic donors reduce donations by one dollar for each dollar contributed through tax-funded government subsidies (Roberts, 1984; Steinberg, 1991; Warr, 1982). Because the crowd-out was found to be less than dollar-for-dollar, this theory was later refined by the addition of a “warm glow” component to the donors’ utility function, representing all motives that are not responsive to changing mandatory contributions (Andreoni, 1989, 1990).

*Key actors:* Individual private donors.

*Empirical evidence:* Experimental designs testing predictions of micro-economic theory typically provide participants with a small endowment that they can divide between themselves and the public good. When there is a larger mandatory contribution (“tax”) to the public good, participants generally give lower amounts as a voluntary donation. Such designs on average find that a \$1 increase in mandatory contributions corresponds with a \$0.64 decrease in voluntary contributions – this is fairly robust, with a 95% confidence interval around this average between -0.70 and -0.58 (De Wit & Bekkers, 2017). These results show that even in tightly controlled laboratory circumstances philanthropic donations cannot completely be substituted by a government tax or vice versa.

Two limitations of the micro-economic theory are the following.

First, the theory and laboratory experiments testing it imply a number of assumptions, including full information on the actions of “the government”. These assumptions are not likely to be true in real life because donors know very little about the level of government funding nonprofit organizations receive (Eckel, Grossman, & Johnston, 2005; Horne, Johnson, & Van Slyke, 2005; De Wit, Bekkers, & Broese van Groenou, 2017).

Second, the theory uses the term “warm glow” as a catch-all phrase to refer to all impure altruistic motives, but it is unsure what motivations or mechanisms are included here. Giving for reasons of reputation or psychological benefits are just a few of the possible mechanisms that make donations unresponsive to government support. Donors may be insensitive to changes in government funding because of a habit, because giving sends a costly signal to potential partners, because giving is a social norm that implies a duty, or because not giving would create guilt (Vesterlund, 2006).

*Evaluation:* In laboratory experiments there is strong evidence for impure altruism, but the external validity of such experiments is uncertain. This theoretical perspective does little to explain why donations would *not* be responsive to changes in government funding.

## *2. Institutional-political perspective*

*Theory:* Weisbrod’s (1977) government failure theory posits that the government, while aiming to provide public goods that the market is not able to produce, is not equipped to fulfill all needs in society. Democratic governments are bound to the desires of the median voter, which leaves demands from different minorities unfulfilled. This is where nonprofit organizations step in, with their ability to provide a wide variety of public goods. Thus, where societies are more heterogeneous, government failure theory would predict a larger nonprofit sector and a smaller government.

Salamon & Anheier (1998) argue that the government failure theory is not sufficient to explain the mechanisms that are at work in different national contexts. Their social origins theory posits that social and political developments in the history of specific countries define current civil society sector dimensions: traditional, liberal, welfare-partnership, social-democratic and statist. These dimensions reflect different power relationships between state, market and nonprofit sector in each country (Salamon, Sokolowski, & Haddock, 2017).

*Key actors:* Nonprofit organizations, political parties, trade unions, and lobby groups.

*Empirical evidence:* Analyses with data aggregated on the country, state or county level show mixed evidence for government failure theory. Some studies find a negative correlation

between government expenditures and the size of the nonprofit sector, as predicted by government failure theory (Matsunaga & Yamauchi, 2004; Matsunaga, Yamauchi, & Okuyama, 2010); other studies find positive correlations (Paarlberg & Zuhlke, 2019); and some studies find zero correlation (Gronbjerg & Paarlberg, 2001).

The social origins theory as put forward by Salamon and Anheier has been widely cited but not often empirically scrutinized. Correlational analyses with aggregated data show to some extent support for the theoretical predictions based on the social origins theory (Einolf, 2015; Salamon, Sokolowski, & Haddock, 2017), but the longitudinal comparative data needed to test this theory does not exist.

Two limitations of the institutional-political perspective are the following.

First, the theoretical arguments are not universally applicable. Government failure theory requires a government that responds to the median voter and is thus most likely to occur in majority democracies (Sokolowski, 2013). Likewise, many countries do not fit in the five ideal types proposed in social origins theory. Einolf (2015: 518) concludes that “[e]ven for wealthy, democratic countries with a European culture and history, Salamon and Anheier’s social origins theory is of limited use”.

Second, there is a lack of reliable quantitative data to test the hypotheses of these theories. Government failure theory is typically tested with proxy measures of heterogeneity, like ethnic or socio-economic diversity, which do not measure voter demands directly. Heterogeneity is not only a demand-side variable, but also related with social cohesion and other factors on the supply side (Corbin, 1999). Measures of philanthropy are problematic, too. Despite very useful attempts to collect all information that is currently available (Salamon & Anheier, 1998; Wiepking & Handy, 2015), there is a lack of reliable cross-national data on philanthropic giving, which makes comparative research problematic.

*Evaluation:* Inconclusive. Historical political processes certainly contribute to the development of the nonprofit sector vis-à-vis the state, but the current data does not allow for strong conclusions about specific theoretical predictions. The strongest contribution of this perspective lies in the extensive analysis of country-specific political processes, rather than in quantitative testing of the theoretical expectations.

### *3. Institutional signaling perspective*

*Theory:* Institutional theories assume that attitudes and behaviors of citizens are shaped by formal (rules, legislation, organization) and informal (norms, habits) institutions (North, 1991; Rothstein, 1998). When in search for cues to guide their choices, people are guided by social rules (Ingram & Clay, 2000). Government support may serve as a signal that nonprofit organizations are trustworthy, which could explain a positive association between government funding and philanthropic donations (Handy, 2000; Heutel, 2014; Schiff, 1990).

*Key actors:* Individual private donors.

*Empirical evidence:* Theories on institutional signaling are typically tested with cross-national data, often finding positive correlations between government expenditure and civic engagement (Van Oorschot & Arts, 2005). For monetary giving, there is evidence that extensive social welfare spending does not reduce the total size of philanthropy, but rather shifts the causes they support, such that donors give more to “expressive” organizations (De Wit et al., 2018; Sokolowski, 2013; Pennerstorfer & Neumayr, 2017). Studies may also use more fine-grained datasets on specific charities. Heutel (2014) finds more strongly positive correlations between government funding and philanthropic donations among younger charities, for which the signaling effect would be stronger because they are less well-known among the public.

A first limitation is the availability of data. Similar to the institutional-political perspective, research in the signaling literature mainly examines cross-national variety, because the largest differences between institutional arrangements are between countries. Yet, these studies are limited by the available cross-country datasets, which primarily cover WEIRD (Western, Educated, Industrialized, Rich and Democratic) countries.

A second limitation in this perspective is the issue of causality. Welfare state institutions not only guide behavior through norms and signals, but also redistribute resources that encourage philanthropic giving (Stadelmann-Steffen, 2011; Van Ingen & Van der Meer, 2011). Furthermore, individual values, government expenditures and civic engagement can all be driven by the same underlying variables, and it is problematic to treat government spending as an exogenous variable (Payne, 2009). Insights from the institutional-political perspective can

be helpful in this sense, which pays more attention to the political processes that lead to the establishment of institutional arrangements in the public and non-profit spheres.

*Evaluation:* Inconclusive. There are large differences between countries in terms of institutional arrangements and levels of philanthropy, but the causal mechanisms are difficult to disentangle.

#### *4. Organizational perspective*

*Theory:* Resource dependency theory (Pfeffer & Salancik, 1978) assumes that funders exercise control over nonprofit organizations. Nonprofit organizations can reduce their dependence by attracting resources from additional funders. Because efforts to do so require investment of resources, a self-sustaining feedback loop emerges that reduces chances of survival for organizations in a downward spiral, and makes winners even more successful. Such a “Matthew Effect” was described by Merton (1968) for careers of scientists – one grant leads to another.

Other scholars argued for an opposite effect, in which organizational behavior would explain a negative association between government support and private donations. As described in the “nonprofit starvation cycle” (Gregory & Howard, 2009), funders require low overhead costs, which gives pressure on nonprofit organizations to present themselves in that way, while performing with mediocre infrastructure. This leads again to unrealistic expectations at funders, and the cycle starts over again. In this argument, receiving government support could be detrimental for fundraising and administration expenditures that are necessary to obtain private income, because organizations are pressured to cut on their indirect costs.

Andreoni & Payne (2003) argue that nonprofit organizations that receive lower government funding will invest more in fundraising behavior. Fundraising becomes less efficient, however, when individual giving is indeed crowded out by government support: if individual giving is lower, it is more costly to acquire funds. The result is incomplete crowding-out. This process has been labeled “indirect crowding-out”.

*Key actors:* fundraising organizations.

*Empirical evidence:* Andreoni & Payne (2003, 2011a, 2011b) find that charities in the United States and Canada increase fundraising efforts when confronted with lower government support. In Germany, however, Schubert & Boenigk (2019) show that declines of government funding start a “starvation cycle” in which organizations have increasing difficulties to acquire income.

In terms of limitations, there is relatively little reliable data on organizational revenues in many countries, and more analyses can reveal how these mechanisms work in different national contexts and among different types of organizations. Another limitation might be that financial indicators are not always proper indicators of the proposed theoretical constructs, and there is ample room for discussion about the best way to measure constructs like liquidity, financial health and revenue diversification (e.g. Chikoto, Ling, & Neely, 2016; Prentice, 2016). Also, analyses on financial statistics usually do not provide insights in decision-making processes within organizations. Research has examined the relationships between different types of revenue streams and nonprofits’ mission, autonomy, and degree of formalization (Froelich, 1999; O'Regan & Oster, 2002; Seo, 2016; Verschuere & De Corte, 2014). Because revenue portfolios are also driven by organizational characteristics and choices made by the receiving organizations, however, these relationships do not necessarily imply causal influences (Fischer, Wilsker, & Young, 2011).

*Evaluation:* Organizational behavior is important for the association between government support and philanthropic giving. It is uncertain to what extent the proposed mechanisms work differently in different contexts and for different types of organizations.

### **Towards a dynamic perspective**

To some extent, the divergence of findings in the empirical literature can be attributed to differences in the data and methods used. While it is clear that different research designs lead to different findings (Lu, 2016; De Wit & Bekkers, 2017), there is no consensus about the internal and external validity of such choices. In addition, there are substantial reasons why studies have reached such different conclusions. It has been argued that crowding-out effects vary with the level of government support (Borgonovi, 2006; Brooks, 2000, 2003), the salience of the tax (Eckel, Grossman, & Johnston, 2005), the number of other donors (Ribar & Wilhelm,



2002), differences between types and costs of public goods (Tinkelman, 2010), the number of people that do or do not contribute to a public good (Chan et al., 2002; Ribar & Wilhelm, 2002; Tinkelman, 2010), and the availability of information (De Wit, Bekkers, & Broese van Groenou, 2017). Some of these contextual differences may explain differences in the findings from between research designs as well. Laboratory experiments typically have a small number of other donors (Ribar & Wilhelm, 2002) and a salient message about the government contribution that is “taxed” from the participants (Eckel, Grossman, & Johnston, 2005). These conditions create a stronger crowding-out effect. In a large economy of donors, imperfect information about government support is likely to reduce the effect of changes in government funding on private giving.

Different choices in data and methods, however, do not fully explain why crowding-out effects look very different from the four perspectives. The four perspectives we have discussed also identify different actors as pivotal in the relationship between government funding and private giving. The four perspectives are not mutually exclusive. In reality, all actors involved probably all have their influences. These influence vary considerably between contexts – i.e., between “types”, cultures, countries, regions, and over time. Therefore, we argue it is not very useful to try to estimate “the” crowding-out effect. Different funding sources do not operate in a vacuum but are in constant interaction with other actors within and around the beneficiary organization. Therefore, theory and research on nonprofit revenues will benefit from adopting a dynamic perspective. Below we discuss two broad factors to consider in future research: interactions between different revenue streams, and the context in which these funding streams interact.

#### *The influence of other revenue streams*

A first reason why the effects of changes in government funding vary so strongly is that they interact with changes in other revenue streams. Compared to the sizeable literature on the effects of government funding on private donations, research on the interaction between funding from other sources, including households, foundations, businesses and governments, is rare. It is uncertain how these funding sources are related, and how these interactions affect outcomes such as organizational effectiveness. This is surprising, because different actors all contribute to the same goals and it is likely that they influence each other.

On the one hand, revenues can *substitute* each other. From the institutional-political perspective we learn that country-specific political processes lead to a certain division of labor

between the state and the nonprofit sector. Non-governmental actors may step in where governments are not able to fulfill all demands, and this argument may be applicable to all types of private actors that contribute to those needs. Households, foundations and businesses may fill the gaps of the government and give money to organizations with lower levels of public funding. Philanthropic foundations are a special case because they are tax-exempt in many countries. While households and businesses may perceive government subsidies as something that they pay for with their taxes, foundations provide grants that are often completely independent from government subsidies. If there is substitution, it would be because other funding sources reduce the social needs in society.

The government in its turn may decide to decrease subsidies to organizations that receive high levels of private funding. Previous studies showed that private giving crowds out government subsidies in US higher education (Becker & Lindsay, 1994; Sav, 2012), because increasing private donations affords politicians and bureaucrats “opportunities for reallocating tax supplied dollars away from education to other self-promoting and vote gathering pursuits” (Sav, 2012: 1133).

Individual philanthropic donors may not only respond to levels of government support, but also to other types of funding. The theoretical rationale is largely similar to economic theories on government support and donations, with altruistic donors expected to reduce their contributions in the presence of other funding sources. Experimental evidence suggest that business funding crowds out individual donations (Bennett, Kim, & Loken, 2013). There is some literature on the idea that charitable lottery players donate less to philanthropic organizations, although evidence suggests that charitable gambling and donations are complements rather than substitutes (Apinunmahakul & Devlin, 2004; Lin, & Wu, 2007). It is likely that individual responses depend on how donors perceive the other funder. Business funding may be perceived as a signal of undesired corporate influences on nonprofit strategies, crowding-out private donations, while income from foundations or governments may be evaluated more positively, crowding-in donations (Khovrenkov, 2017).

Organizational behavior may partly explain substitution effects between revenue streams. Insights from the organizational perspective are useful not only for the association between government support and private donations, but also for interactions between other types of funding.

On the other hand, revenues may *complement* each other. Governments often work together with nonprofits, businesses and foundations in public-private partnerships (Ansell & Gash, 2008). In such collaborations, it is common that all partners contribute knowledge and/or

resources. With different types of contracts, including Social Impact Bonds, the initiators ensure the (conditional or unconditional) engagement of multiple public and private funders. For receiving organizations, this automatically leads to a diverse portfolio. This can be helpful to nonprofits in achieving its mission, although there are also some cautions for working with complex partnerships and having strong revenue diversification, largely dependent on the type of nonprofit organization (Hung and Hanger, 2019).

Besides such organizational collaborations, it could be that funding streams complement each other in a less visible way. From the literature on institutional signaling we learn that funding from other sources can serve as a norm to direct individual behavior. This may not only hold for individual donors but also for businesses and foundations, who are looking for cues to guide their own financial decisions. Even policy makers, who are supposed to make robust decisions based on voter preferences, may have a bias towards organizations that are already successful in attracting funds.

The behaviors of the recipient organizations themselves may also produce positive correlations between revenue streams. Large and successful organizations may be better able to hire professional fundraisers, and establish and maintain connections with funders.

#### *The context in which nonprofit organizations operate*

Besides interactions between different revenue streams, the context in which nonprofits operate defines how government funding may affect philanthropic donations. Three factors are briefly mentioned here, which are more extensively discussed in De Wit (2018).

First, institutional arrangements on the macro level may affect the the dynamics between different revenue streams. An important hypothesis which is not sufficiently tested is that crowding-out is most likely in the United States and other Anglo-Saxon countries. These countries are characterized by a highly professionalized fundraising regime (Wiepking & Handy, 2015) and a more critical attitude towards government interventions (Andress & Heien, 2001; Svallfors, 1997). More cross-national research in the realm of the institutional-political and institutional signaling perspective could examine how dynamics between nonprofit revenues vary across macro contexts.

Second, dynamics between nonprofit revenues may depend on the subsectors of the nonprofit sector. A meta-analysis finds stronger negative correlations between government funding and charitable giving among human service nonprofits, while it finds stronger positive correlations for the arts and health care sectors (Lu, 2016). Theoretical arguments about *why*

such effects would vary across the nonprofit sector are scarce. Each subsector is unique in the types of public goods that are produced, the actors that are most prominent, and the type of nonprofit organizations that are active in that area. Furthermore, those subsectors are not isolated: it has been argued that changing social needs do not decrease total donations, but rather leads donors to shift their donations towards other subsectors (De Wit et al., 2018; Pennerstorfer & Neumayr, 2017; Sokolowski, 2013). Research on the organizational level should consider such contextual dynamics when making generalizable statements about the association between government funding, philanthropic donations and other revenue streams.

The third contextual factor is the availability and framing of information. While behavioral experiments often aim to make predictions about macro effects, they generally fail to take the availability of information into account. Citizens adapt their giving behavior only when they are aware of external changes like changing government support. Although this sounds like “stating the obvious”, there has been surprisingly little academic attention for the availability of information among prospective donors (notable exceptions are De Wit, Bekkers, & Broese van Groenou, 2017; Horne, Johnson, & Van Slyke, 2005; Li & McDougale, 2017; McDougale & Handy, 2014). More experimental and non-experimental data on citizen perceptions and nonprofit communication could shed light on the role of information in donor decisions.

## **Concluding remarks**

In this chapter, we discussed the arguments, key actors and empirical evidence of four prominent theoretical perspectives on the relationship between government financial support and private individual giving. The micro-economic perspective convincingly revealed that individual donors are impure altruists in laboratory experiments, but it is uncertain to what extent this behavior occurs in daily situations. The institutional-political perspective contributed important insights in how interest groups contribute to constellations of public and non-profit institutions, and the institutional signaling perspective makes strong arguments about how institutions guide individual donor behavior. However, both institutional perspectives are not backed up with strong causal evidence. The organizational perspective, finally, delivers strong theoretical and empirical arguments on organizational behavior as a

cause and a consequence of changing revenues, although the proposed mechanisms will likely work differently in different contexts.

The theoretical discussion leads us to propose a dynamic approach towards nonprofit revenues. Supposed effects of government support on private donations do not occur in a vacuum but are shaped by contextual factors like the institutional environment, the organizational structure, the political context and the media landscape. Philanthropic foundations, individual donors, government bodies and corporate enterprises may all contribute to public goods, and they all interact with each other. Future research should go beyond estimations of “the” crowding-out effect, and pay more attention to the ecosystem in which such interactions take place. Such insights will help funders to better evaluate the value and consequences of their contributions, thus helping the nonprofit sector to continue contributing to essential public goods.

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