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Is There a Dark Side to Government Support for Nonprofits?

The relationship between government social spending and private donations to the nonprofit sector is an issue that is relevant to both public administrators and nonprofit managers. Does government funding displace philanthropy, or encourage it? This article introduces the debate into the public administration literature. First, I survey and interpret the empirical work performed to date in this area by economists. Second, I retest this question across four nonprofit subsectors using data on both federal and state/local spending. My survey of the literature shows mixed results, although a broad pattern indicates that "crowding out" tends to dominate, particularly in the areas of social service provision and health. My empirical results are consistent with these findings, although they must be interpreted cautiously from a policy perspective: While results are statistically significant, the degree of crowding out is generally small. On the other hand, the claim that government funding stimulates giving seems to lack both statistical and policy significance.

A debate of increasing intensity in the public economics literature surrounds the relationship between government subsidies and private donations to the nonprofit sector. One hypothesis is that public spending displaces or "crowds out" private giving; competing hypotheses, however, say that subsidies leverage ("crowd in") philanthropy, or alternatively that the two sources of funds are independent. This question has practical implications for both nonprofit firms and public administrators.

If public support complements private giving to organizations, nonprofit managers should know this so that the relationship can be used strategically—to ignore it would represent a missed opportunity. And public administrators, armed with this information, could better target their funds toward specific outcomes, starting a "virtuous cycle" of funding in designated sectors of the nonprofit economy. On the other hand, if subsidies substitute for private giving, nonprofit managers might save considerable effort currently wasted on attempts to generate funds from both sources simultaneously. Public administrators and policymakers would benefit from the knowledge that their funds might not be creating the benefits they originally envisioned.

Another reason that both nonprofit and public managers can benefit from knowing the true relationship between the funding sources is to cut through the language surrounding an inevitably polemical political issue. Nobel laureate Milton Friedman (1980) argues that "one of the greatest costs of our present welfare system is [that it] ... poisons the springs of private charitable activity" (123). Specifically regarding the arts, critic Richard Kostelanetz (1990) says, "public funding of large arts institutions [has] taken private philanthropy off its increasingly expensive hook." In contrast, the National Endowment for the Arts (1998) has stated that "Each NEA dollar is ... a funding catalyst attracting many more dollars from local and state agencies, corporations, foundations, and individuals." Someone here must be mistaken.

The public administration literature has had plenty to say about the interface between the public and nonprofit sectors, of course. Focus on the "fourth face of federalism" (Kettl 1981) would be expected, since most nonprofit service providers now receive more than half their revenues from government (Lipsky and Smith 1989–90). Indeed, the devolution of services from government to the third sector has led to what Milward (1994) refers to as the "hollow state."[1] The perils of this interface that have been studied in the literature include the lack of control over

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contracted nonprofits (Gates and Hill 1995), perverse incentives on the part of nonprofit managers (Bernstein 1991), increasing reliance on public funds by formerly independent organizations (Smith and Lipsky 1993), and the bureaucratization of the nonprofit sector (Anheier et al. 1997). This article adds the crowding-out issue to this list in two ways. First, I summarize the work performed in this area to date by economists. Second, I present a new macro-level dataset across several nonprofit subsectors and empirically test the question. This analysis compares the effects of state/local versus federal expenditures and tests all subsectors the same way, on the same data. The results not only validate the general findings of the literature, but also provide a richer picture about how different levels of government affect philanthropy.

This article is organized in five parts. First, I present the arguments on both sides of the debate. Then, I summarize the public economics literature and its findings on this question. Next, I describe the data and measurement tools I will use, and present the results of the statistical analysis. Finally, I present implications and conclusions.

Crowding Out or Crowding In?

Intuition is mixed on the effect that government support should have on private giving to nonprofits, if any. Much government spending on the third sector is presumably based on the assumption that this spending is not affected by the behavior of private donors. This may not be the case, however.

On one hand, there are several plausible reasons why there may be "crowding out."[2] First, public will to support a social cause might be diminished if the government takes responsibility for its funding. A nonprofit may begin to look like a quasi-public agency as a greater portion of its revenues come from government sources (Friedman and Friedman 1980), and few people contribute (voluntarily) to government social programs. Second, subsidies to nonprofit firms may make them appear to private donors "nonmainstream" and, hence, in need of nonmarket support. And since many donors—particularly corporate donors—are attracted to nonprofits that appear strong and independent, such a perception may discourage them from giving (Laurie 1994). Third, some private donors may continue a financial relationship with a nonprofit only as long as they can maintain control over the organization (Odendahl 1990), and government intervention may compromise this control. Finally, since government support is tax-based, higher public support might lead to lower individual disposable income, discouraging private giving (Lingle 1992). This last mechanism is not automatic, however, because the tax deductibility of donations could actually lead to *higher* donations as tax levels rise.

On the other hand, there may be "crowding in," especially when government provides seed money to nonprofits. First, some government support takes place in the context of matching funds campaigns and consequently is unavailable in the absence of matching private dollars. Additionally, the government match to a private gift should generate greater benefits to both giver and receiver. Second, subsidies might be viewed as proof of quality or reputability, especially for organizations that are not especially well known. Being worthy of government backing could stimulate the attention of private donors, who would otherwise have ignored the organization. Third, government involvement might be seen as a guarantee of due diligence on the part of the nonprofit—public funding is generally granted in return for a promise of a certain level of fiduciary responsibility, thus reassuring donors.[3]

The Evidence to Date

The evidence assembled has usually been subsector- and region-specific. Studies have focused primarily on social welfare provision, education, health-related organizations, and the arts and culture. While this excludes many subsectors, it encompasses by far the greater part of the nonprofit sector: These four subsectors represent about 80 percent of all nonprofit expenditure (James and Rose-Ackerman 1986, 6,14). Practically all of the studies have focused on the United States, although some work has been done on Canada and the United Kingdom.[4]

A few studies pool data across the nonprofit sector, generally finding crowding out, although (as is the case in subsector-specific studies) it is fractional in that one dollar of public funding crowds out less than one dollar in private giving. Abrams and Schiff (1978) find that a 10 percent increase in state and local nonprofit funding led to a 1.8 percent decrease in private giving, while a 10 percent increase in federal funding led to a 2.7 percent decrease in giving. Lindsey and Steinberg (1990) found that one dollar in federal money crowded out 6 cents in private donations. On the other hand, Schiff (1985) finds that while one dollar in local funding crowded out 66 cents in giving, one dollar in state funding crowded *in* 34 cents.

Social–Human Welfare

The studies focusing specifically on social–human service nonprofits are broadly consistent with the results just cited. In general, with the exception of an occasional finding of crowding in at the state and local levels, studies find no significant relationship between funding sources or crowding out.

At the federal level, Amos (1982) finds 46 cents of private donations were crowded out by one dollar in government support. Similarly, Payne (1998) discovers crowd-

ing out of 53 cents, while Schiff (1990) finds crowding out of 40 cents. Steinberg (1985) finds a much smaller effect, with only 5 cents displaced. Day and Devlin (1996) find that volunteer time is crowded out by federal subsidies in Canada, in both amount and in the decision to volunteer in the first place. In contrast, Reece (1979) and Lindsey and Steinberg (1990) find that the relationship between federal money and donations was not statistically significant.[5] Khanna et al. (1995) also find insignificance for U.K. charities.

In another U.K. study, Jones (1983) combines federal and local funding and finds crowding out of 2 cents per dollar of subsidies. Other studies looking at state and local government subsidies have had mixed results. While Schiff (1985) finds crowding out at the state level of 6 cents per dollar of subsidy, he also finds that one dollar in local subsidies crowded in 3 cents in donations, and one dollar in state noncash transfers crowded in 5 cents. In addition, in a later study he (Schiff 1990) finds 13 cents of crowding in at this level. Mixing state and local government support, Abrams and Schmitz (1984) find that one dollar of subsidy crowded out 30 cents for each $1,000 of personal income.

Education

Considerably fewer studies have been conducted specifically on education than on social welfare nonprofits. The two studies that have addressed this area present mixed results. First, Day and Devlin (1996) find that volunteer time to educational institutions is crowded out by government funding in Canada. Second, in a study that is more difficult to interpret, Connolly (1997) finds a complementary relationship between internal and external research funding to universities. To the extent that external funding is governmental while internal funding comes from privately donated university funds (as is often the case), this might be evidence of crowding in.

Health

There are also relatively few studies specifically on health-related nonprofits. Day and Devlin's (1996) Canadian study on volunteer time finds the relationship between government money and volunteer hours was not statistically significant. On the other hand, Khanna et al. (1995) find about 18 cents crowded out for each dollar of government subsidy to British health organizations.

Arts and Culture

Studies of nonprofits devoted to arts and culture have yielded diverse results, with a slight tendency toward crowding out. Hughes and Luksetich (1997) find that although the link between federal dollars and donations to art museums was not significant, one dollar in state funding crowded out about 40 cents. In contrast, they find 48 cents crowded in at the federal level for history museums. Brooks (1999) finds no significant relationship for symphony orchestras. In the case of public radio, Kingma (1989) finds 14 cents crowded out from one dollar at all levels of government.

The results across all subsectors are summarized in Table 1.

These findings are varied enough that broad generalization is difficult. Findings of crowding out tend to dominate and, in general, they are larger in magnitude than findings of crowding in. It seems safe to say that the relationship between government subsidies and private philanthropy is highly dependent on the subsector, the level of government involved, and the specific dataset used in the analysis.

New Data and Measures

To add some clarity to this debate, I have assembled a new dataset that looks at both state/local and federal spending on social and human welfare, health, and education for the 40-year period from 1955 through 1995. I also study federal spending on arts and culture using data from 1966

Table 1
Results of Studies on the Effects of Government Subsidies on Private Donations to Nonprofit Organizations

Subsector studied	Crowding in	No statistically significant relationship	Crowding out
General	Schiff (1985)		Abrams and Schiff (1978) Schiff (1985) Lindsey and Steinberg (1990)
Social–human welfare	Schiff (1985) Schiff (1990)	Reece (1979) Lindsey and Steinberg (1990) Khanna et al. (1995)	Amos (1982) Jones (1983) Abrams and Schmitz (1984) Schiff (1985) Steinberg (1985) Schiff (1990) Day and Devlin (1996) Payne (1998)
Education	Connolly (1997)		Day and Devlin (1996)
Health		Day and Devlin (1996)	Khanna et al. (1995)
Arts and culture	Hughes and Luksetich (1997)	Brooks (1999)	Kingma (1989) Hughes and Luksetich (1997)

through 1997. These are compared with data from the same period on private philanthropic giving to nonprofit organizations in these subsectors. Combining this with data on external macroeconomic forces, I will model and estimate the effects in question across all four subsectors uniformly. My intention is to lend greater consistency of method to any speculation about the true nature of the relationship.

Figures on the government's involvement in each subsector were taken from the *Statistical Abstract of the United States* (1998). The data on giving to nonprofits in social and human welfare, health, arts and culture, and education were acquired from the American Association of Fund-Raising Counsel Trust for Philanthropy (1991, 1993, 1998). Data on aggregate gross domestic product (GDP) were taken from the *Economic Report of the President* (1998).

The regression analysis estimates the effects on this year's private giving to a particular subsector from last year's federal expenditures in that area; last year's state and local expenditures; last year's private giving; the year itself (trend); and this year's GDP. Using the lagged values of government spending figures follows Kingma (1990), and solves the problem of simultaneity in the model: Last year's government funding can affect this year's private giving, but not vice versa.[6] The intuition for this specification is that if donors react to government involvement in a certain sector, the subsidies most observable are those occurring in the previous period. Lagged values of the dependent variable in each regression are included to capture important momentum effects seen in other studies (for example, Brooks 1999): Donors are much more likely to give this year if they gave last year, all else equal. GDP is included to capture the effects of macroeconomic changes on giving patterns.[7]

A perennial problem in this type of estimation (indeed, in almost all empirical work on the nonprofit sector) is the collection of sufficiently detailed data. Because of data limitations, three variables are not included in the following models that might have been advantageous. First, it could be helpful to include the scale of operations of each subsector among the explanatory variables to control for subsector size, since we might imagine that donations are relatively more or less forthcoming depending on this characteristic. Unfortunately, these data have not been systematically collected across the years in the sample. Second, a clearly pertinent explanatory variable would be the level of fundraising expenditures in each subsector; these data are not included because aggregates across all firms in these subsectors do not exist. I have included the trend variable (TIME) to capture some of the effect of these omitted variables, on the assumption that they have a tendency to change systematically over time. A third omitted variable is the level of state and local spending on arts and culture. These data have not been collected over most of the years in this sample; the effects of this omission will be discussed below.

As would be expected, the data in this sample exhibit clear indications of positive first-order autocorrelation, which is adequately corrected using the Cochrane–Orcutt estimation method.[8] The results presented in the next

Table 2
Measures for Dependent and Independent Variables

Dependent variables	
$WEL\_PRIVATE_t$	Private contributions to nonprofit social and human welfare providers in year t.
$EDU\_PRIVATE_t$	Private contributions to nonprofit educational organizations in year t.
$HEA\_PRIVATE_t$	Private contributions to nonprofit healthcare organizations in year t.
$ART\_PRIVATE_t$	Private contributions to nonprofit arts and cultural organizations in year t.
Independent variables	
$WEL\_PRIVATE_{t-1}$	Private contributions to nonprofit social and human welfare providers in year t–1.
$EDU\_PRIVATE_{t-1}$	Private contributions to nonprofit educational organizations in year t–1.
$HEA\_PRIVATE_{t-1}$	Private contributions to nonprofit healthcare organizations in year t–1.
$ART\_PRIVATE_{t-1}$	Private contributions to nonprofit arts and cultural organizations in year t–1.
WEL_FED_{t-1}	Federal expenditures on social and human welfare in year t–1.
EDU_FED_{t-1}	Federal expenditures on education in year t–1.
HEA_FED_{t-1}	Federal expenditures on health in year t–1.
ART_FED_{t-1}	Federal expenditures on arts and culture in year t–1.
WEL_STATE_{t-1}	State and local expenditures on social and human welfare in year t–1.
EDU_STATE_{t-1}	State and local expenditures on education in year t-1.
HEA_STATE_{t-1}	State and local expenditures on health in year t–1.
PERIOD	Trend variable, increasing as years pass in sample.
GDP_t	Gross domestic product in year t.

Note: Variables are measured in millions of 1995 dollars.

Table 3
Descriptive Statistics of the Regression Data

	Mean	Standard error	Median	Range	Minimum	Maximum
GDP	4,244,771	240,954	4,082,900	5,365,260	1,826,140	7,191,400
EDU_PRIVATE	10,638	506	10,220	13,377	4,611	17,989
EDU_FED	15,496	1,270	19,129	27,504	3,178	30,683
EDU_STATE	229,897	14,815	254,305	311,300	71,309	382,608
HEA_PRIVATE	9,709	386	10,484	8,116	4,911	13,026
HEA_FED	8,152	638	9,101	13,620	1,342	14,963
HEA_STATE	13,926	1,649	12,203	35,440	2,821	38,261
WEL_PRIVATE	13,986	485	12,657	10,016	10,541	20,557
WEL_FED	23,325	3,168	28,410	60,617	252	60,869
WEL_STATE	78,435	7,552	83,167	176,232	18,522	194,754
ART_PRIVATE	6,840	517	6,623	8,515	2,655	11,171
ART_FED	185	16	209	316	14	331

Note: Figures are in millions of 1995 dollars.

section are from the resulting generalized least squares (GLS) regressions.

Results and Analysis

Turning first to the results for human and social welfare, we see that while federal spending does not have a significant impact on private giving, one dollar in state spending crowds out about 2 cents in donations (significant at the 10 percent level). The practical implications of this finding are summarized in Table 5. If state spending moves down from its median level by one quartile to the 25th percentile level, private donations are predicted to increase by about $1.2 billion. If they move up to the 75th percentile level, private donations are predicted to decrease by about $400 million.

The only other significant variable in this regression is the lagged value of private donations. This "momentum" effect of giving indicates that one dollar given last year leads to about 80 cents in giving this year.

In the case of education, neither state nor federal spending has a statistically significant impact on private giving. What *does* predict philanthropy is last year's giving and increases in GDP: one dollar given last year explains 88 cents of giving this year, while a $10 increase in GDP explains a 2-cent increase in donations to this sector.

As in the case of social services, giving to health nonprofits is crowded out by state spending, but is not affected (statistically significant) by federal spending. Specifically, one dollar in spending displaces about 16 cents in private giving. Table 6 puts this into policy perspective. If state spending moves down from its median level in the sample a quartile to the 25th percentile level, private donations are predicted to increase by about $1.3 billion. If they move up to the 75th percentile level, private donations are predicted to decrease by about $1.1 billion. Health nonprofits also see significant momentum and growth effects. A dollar in giving last year explains 50 cents in giving this year, while a $10 increase in GDP explains a 2-cent increase in donations.

For the arts and culture, the regression yielded no statistically significant results. While this is broadly consistent with Brooks (1999), the findings of Hughes and Luksetich (1997)—that state funding had a significant negative impact on giving to art museums—suggest that the lack of data on state arts spending in this sample may be injecting an omitted-variable bias into the results. In other words, the omission of the state variable may be

Table 4
GLS Regression Results

Independent variable	Dependent variable							
	$WEL\_PRIVATE_t$		$EDU\_PRIVATE_t$		$HEA\_PRIVATE_t$		$ART\_PRIVATE_t$	
	Standard Coef.	Standard error	Standard Coef.	Standard error	Coef.	error	Coef.	error
$WEL\_PRIVATE_{t-1}$	0.793***	0.153						
WEL_FED_{t-1}	0.001	0.030						
WEL_STATE_{t-1}	-0.024*	0.013						
$EDU\_PRIVATE_{t-1}$			0.880***	0.104				
EDU_FED_{t-1}			-0.028	0.054				
EDU_STATE_{t-1}			-0.007	0.009				
$HEA\_PRIVATE_{t-1}$					0.500***	0.143		
HEA_FED_{t-1}					0.110	0.100		
HEA_STATE_{t-1}					-0.159***	0.054		
$ART\_PRIVATE_{t-1}$							0.279	0.200
ART_FED_{t-1}							0.732	1.732
TIME	-125.43	159.4	-111.67	116.3	-48.28	95.48	192.88	151.0
GDP_t	0.002	0.001	0.002*	0.0009	0.002**	0.0009	0.0002	0.001
CONSTANT	-1585.0	1818.0	-1390.4	1431.0	-483.6	1350.0	895.48	3067.0
	R^2 = .95 F=117 N=39		R^2 = .97 F=235 N=39		R^2 = .97 F=186 N=39		R^2 = .96 F=165 N=31	

Note: Standard errors in parentheses.
* Coefficient is significant at a=.10.
** Coefficient is significant at a=.05.
*** Coefficient is significant at a=.01.
ρ in the GLS model was estimated using the Cochrane–Orcutt iterative procedure.

distorting some of the measured coefficients or their standard errors.

Conclusions and Implications

My survey of the empirical literature on the crowding-out debate shows thoroughly mixed results, making sweeping proclamations on the subject suspect. If a broad pattern is visible, it would not be in the direction of crowding in, as Table 1 illustrates. Rather, we can say that crowding out seems to be a dominant effect especially in social/human service provisions and health services. In education and arts and culture, the literature is simply inconclusive. The tests I have undertaken here are consistent with these findings. In the cases of education and arts and culture, I found no statistically significant relationship between government support and private philanthropy. In social–human services and health, on the other hand, I found a small but significant level of crowding out. In no case was there any significant evidence of crowding in.

Table 5
Policy Significance of State Social Welfare Subsidies

	State social welfare spending at the 25th percentile value ($31.6)	State social welfare spending at the median value ($83.2)	State social welfare spending at the 75th percentile value ($100.9)
Predicted donations to social welfare nonprofits	$11.7	$10.5	$10.1

Note: Figures are in billions of constant 1995 dollars.

Table 6
Policy Significance of Health Subsidies

	State health spending at the 25th percentile value ($4.2)	State health spending at the median value ($12.2)	State health spending at the 75th percentile value ($19.3)
Predicted donations to health nonprofits	$10.9	$9.6	$8.5

Note: Figures are in billions of constant 1995 dollars.

What accounts for these intersectoral differences? This question is a topic of research in and of itself, which one might begin to address by asking whether government money tends to displace private giving more for necessities than "luxuries." If this is the case—if funding for services such as the arts and higher education (which are generally demand-inelastic and hence termed "luxuries" by economists) is relatively insensitive to changes in government funding due to specific donor characteristics—we might expect the patterns witnessed. One such characteristic might be that some of those who give to these subsectors do so more for social motives than for reasons of need (and hence the main argument for crowding out is effectively neutralized). In the case of the arts, this explanation is consistent with research on donor behavior (for example, Brooks 1997, Ostrower 1995).

My findings of crowding out must be interpreted cautiously from a practical perspective. A common weakness in much of the empirical policy literature is confusion of *statistical* significance and *policy* significance, and the results in both the general crowding-out literature and in my findings demonstrate the important differences between these concepts. For example, while state spending on social services is indeed significant (at the 10 percent level) in crowding out donations, the magnitude of that effect is probably not considerable enough to affect policy. Table 5 shows that using these regression results, an increase in state spending of $50 billion (moving from the 25th percentile in the sample to the median, a plausible change) would displace just $1.2 billion in philanthropy. The policy significance of crowding out in health is greater, but still potentially judged to be small: an $8 billion increase (again, the 25th percentile to the median in the sample) in state spending crowds out $1.3 billion private giving.

While the crowding-out hypothesis is the more compelling of the two from an econometric perspective, then, public administration decisions will likely need to enrich this result by answering the following questions:

- Is the witnessed level of crowding out great enough to sacrifice government funding for the subsector in question?
- Are there noneconomic reasons for continued public-sector involvement in the subsector?
- On the other hand, are there nonpecuniary social costs to crowding out even small amounts of voluntary participation?

While the crowding-out results may have limited policy significance, the "dual" result in this study might not. Specifically, a fairly convincing picture emerges that crowding-in arguments have no strong empirical basis: the claim that government funding stimulates giving is generally devoid of *both* statistical and policy significance. This result should discourage claims to the contrary from administrators and improve the accuracy of views on the subject in the public sector.

Acknowledgments

For their helpful suggestions, I am grateful to John Thomas and Greg Lewis. Jaime McMahon provided excellent research assistance. The usual caveat applies.

Notes

1. Some writers dispute whether the nonprofit sector is capable of actually hollowing out the state to any meaningful degree (Hall and Reed 1998).
2. This is a variant on arguments about the crowding out of private expenditures by government provision of goods and services in general. See, for example, Friedman (1962), Feldstein (1974), and West (1975).
3. All three of these arguments are evident in the literature of the National Endowment for the Arts (1998), which states that "the National Endowment for the Arts provides a stamp of excellence that leverages private support. NEA grants confer national prestige that cannot be duplicated on a state or local level. Each NEA dollar is matched by at least 1:1 and is a funding catalyst attracting many more dollars from local and state agencies, corporations, foundations, and individuals."
4. This is due largely to the relatively undeveloped third sector in most of Western Europe.
5. For all of the results reported in this section, significance is at the 5 percent level.
6. Models containing the current year's government spending generally show an insignificant relationship between the variables, indicating that the model specification used here is sufficient to capture all potential crowding out or crowding in effects.
7. An implicit assumption made here is that federal spending is independent of state and local spending. This is necessary to avoid bias in the individual coefficients. A fuller explanation of this and other technical issues in this estimation is provided in Steinberg (1993).
8. Autocorrelation was ascertained using Durbin's *h*-statistic, due to the presence of the lagged value of the dependent variable.

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