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CALCULATING DAF PAYOUT AND WHAT WE LEARN WHEN WE DO IT CORRECTLY

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ABSTRACT

The tremendous increase in the use of donor-advised funds for charitable donations has led policy-makers to ask if there is sufficient regulation and oversight of DAFs. In the absence of account level reporting, the debate has focused on the average payout rates of DAF sponsoring organizations, which have been reported by the DAF industry to exceed 20%. We show that the industry-preferred method for calculating payout rate overstates the correct payout by more than 50%. We then argue that the flow rate is uninformative unless grounded in the stock of assets held by the DAF sponsor. We suggest a different measure of flow we call the stockpiling rate. Finally, we show that transfers between DAFSs cause DAF grants to be overstated. Reporting transfers separately would allow a more precise estimate of flow.

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1. Introduction

Donor-advised funds (DAFs) have enjoyed explosive growth in recent years, causing legislators and policy analysts to become increasingly interested in whether DAFs should be subject to more regulation and/or disclosure requirements.[1] DAFs are a form of charitable giving in which donors transfer their cash or property to a DAF sponsor, giving up legal ownership but retaining "advisory privileges" which allow the donor (or other designated advisor) to make decisions about the investment and disbursement of DAF assets. Donors get an upfront charitable deduction because the DAF sponsor is itself a 501(c)(3) organization and the donor technically gives up dominion and control over their donation. But, because of the advisory privileges, DAFs operate in practice like a combination of a charitable investment, savings, and checking account. The donor decides whether or where to invest DAF funds and when, if ever, to disburse them to charities.

The growth of donor-advised funds is a product of the benefits that they provide donors, DAF sponsors and financial advisors. DAFs are advantageous for donors because they allow donors to obtain maximum tax benefits for their charitable contributions by: (1) facilitating contributions of appreciated property, allowing donors to more easily save both capital gains taxes and income taxes on their charitable donations; and (2) allowing donors to front-load (or "bunch") their charitable deductions in earlier years, even if the ultimate contribution to charity does not occur until many years later. [2] In addition, DAFs afford donors anonymity that other forms of charitable giving may not permit. Donor-advised funds are advantageous to DAF sponsors because sponsors receive management fees for the management of DAF assets. These fees can provide financial benefits for the financial institutions associated with commercial DAF sponsors and can play a significant role in supporting the work of community foundations and other mission driven DAF sponsors. Finally, financial advisors are able to earn their own management fees for managing the investments of their clients' DAF accounts. These financial benefits for DAF sponsors and financial managers have resulted in significant marketing efforts designed to attract more contributions to DAFs.

The extraordinary growth of DAFs in recent years is particularly striking in comparison to the growth of outright donations to charities (even accounting for contributions from DAFs). Looking at years 2016-2017, the most recent years for which full data is available, we see contributions to DAFs grew 23.4%, while outright contributions to charities (including contributions from DAFs) grew only 6.6%. While some of growth of DAFs that year might have

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[1] In recent years there have been several proposals to regulate DAFs on both the state and federal levels. California is currently considering legislation which would require greater disclosure by DAF sponsors. In 2013 Congressman Camp proposed a requirement that all DAF funds be subject to a five-year payout requirement. More recently, a group of philanthropic donors and leaders have urged Congress to adopt rules that would require individual DAF accounts (a well as private foundations) to distribute at least 10% of their assets each year for the next 3 years. See http://charitystimulus.org/ .

[2] For a full discussion of these and other tax advantages for DAFs, see Andreoni, (2018): and Colinvaux and Madoff, (2019)

been attributable to the enactment of the Tax Cuts and Jobs Act of 2017 on December 22, 2017, we see similar discrepancies in prior years. From 2015 to 2016 contributions to DAFs grew 18.3%, whereas outright contributions to charities (including contributions from DAFs), only grew 3.3%.

While the benefits to donors and DAF sponsors are clear, the benefit of DAFs to the public is less certain as there are currently no regulations or time limits on when or how fast DAF funds must be disbursed to charities. In addition, there is only minimal information available to the public and regulators about the practices of DAF holders because there are no account level reporting requirements; the only reporting that is required is aggregate reporting by DAF sponsors. This has raised questions about the extent to which DAFs may be serving as resting places for charitable dollars.

In response to these concerns, DAF sponsors have argued that there is no need for regulation because average DAF payout rates regularly exceed 20%. More recently, the concept of "flow rate" has been used to argue that DAFs efficiently deliver their funds to charities because the amount of distributions in a given year is close to the amount of contributions, producing a *flow rate* of close to 100%.

This short paper examines the following arguments around DAF payout:[3]

First, and most importantly, this paper addresses the claim that DAF sponsors regularly payout in excess of 20%. Over the years, the DAF industry has used a variety of different formulae to calculate payout. We examine the effect of these different methods and show how these methods, including the one that generated the 20% figure, significantly overstate payout. We then show that there is only one formula that accurately answers that question: "what portion of DAF dollars that could go to charity are in fact going to charity?"[4]

Second, we apply this formula to the 2017 tax returns for all DAF sponsoring organizations, the most recent year for which a complete set of returns are available. We show that the formula used by DAF sponsors increased payout rates by 53% for all DAF sponsors (and by 56% for commercial DAF sponsors) over the payout rate that would have been derived using the proper

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[3] One issue that we are not discussing in this paper, but have discussed elsewhere, is the limited utility of using information about overall payout from sponsoring organizations for purposes of determining policy. Here we agree with the following statement from the report from the Congressional Research Service: "Because DAF accounts have heterogeneous objectives, in some cases to manage giving with high payout rates and in others to establish an asset base, a DAF sponsor can have a high average payout rate although many accounts have little or no payout…. This suggests that a minimum payout rate for sponsors would not be effective." See "An Analysis of Charitable Giving and Donor Advised Funds" Congressional Research Service (https://fas.org/sgp/crs/misc/R42595.pdf).

[4] We believe it is no coincidence that this is the same method that has been used by both the US Treasury and the Congressional Research Service in their evaluations of the effectiveness of DAFs. See the discussion in Section 2 and footnote 6 below.

method for calculating payout. We also show the heterogeneity of DAF payout rates amongst DAF sponsors. This data provides some interesting insights about DAF payout rates. First, despite the frequent arguments that DAFs have payout rates far in excess of 5% (the minimum payout requirement imposed on private foundations), the data shows that in 2017 nearly one in four (24%) of all DAF sponsors distributed less than 5% of their assets. Second, despite claims by community foundations that they have higher payout rates than commercial DAF sponsors, the data shows that community foundations had the highest percentage of DAF sponsors distributing less than 5% of their assets (28%) and that commercial DAFs had the lowest number of DAF sponsors distributing less than 5% of their assets (4%).

Third, we explore the relatively new concept of flow rate. The flow rate places all of its focus on comparing the annual flow of dollars into and out of DAFs. If the flow rate is high (close to 1), it is argued, the DAF is acting as a simple ``pass-through'' agent connecting donors to charities. We argue here, however, that the flow rate, on its own, is a largely uninformative measure of DAF performance as it fails to distinguish between DAFs that warehouse donations from those that efficiently pass money from donors to charities. However, we show how using flow rate, along with asset values can help provide information about how fast the pile of future charitable donations are stacking up or being drawn down (we call this the *stockpiling* rate).

Finally, we explore how the existing measurements of DAF payout and flow rates overstate their benefits to charity because of the failure to account for DAF-to-DAF transfers. We examined DAF-to-DAF transfers from Fidelity Charitable to just 24 of the more than 1,100 DAF sponsors. These transfers, which represent no charitable donations whatsoever but are "booked" as grants to charities, allowed Fidelity Charitable to overstate grants by 3.8%. Even this calculation likely significantly understates the prevalence of DAF to DAF transfers because it is limited to transfers from Fidelity to commercial DAFs and does not include transfers between commercial DAFs and DAFs sponsored by community foundations and mission driven organizations. Were such transfers between DAF sponsors separated from ordinary contributions and grants and reported, we could not only more accurately measure DAF payout rates, but also avoid double counting of charitable grants, thus getting a more precise measure of the impact of DAFs.

2. Calculating DAF Payout Rates

2.1 Available Information from Which to Calculate Payout

The tax returns filed by DAF sponsors give four numbers from which to learn about the overall performance of DAFs (see IRS 990 form, Part I, Schedule D):

Beginning of Year Assets (BOY): Assets on hand at the DAF sponsors on the first day of the fiscal year of the DAF Sponsor.

Contributions (CONTRIBS): Money or non-cash Assets (e.g. stocks) given to DAF accounts over the course of the year.

Grants (GRANTS): Money withdrawn from DAFs and directed to other 501(c)(3) charities (including both outright distributions and distributions to DAFs) over the course of the year.

End of Year Assets (EOY): Assets on hand at the end of the fiscal year.

A fifth number not provided but nonetheless important is Investment returns:

Investment Returns (RETURNS): Investment income or losses that have accumulated while the assets are invested while in DAFs**.**

These five numbers are key because they give us an *accounting identity*, that is, an equation that tells us how we define different classifications of funds in relation to each other. This identity is

$$EOY = BOY + CONTRIBS - GRANTS + RETURNS$$

The is called an identity because it must always hold. It will be convenient at times to use $REVENUES = CONTRIBS + RETURNS$, and write the accounting identity this way

$$EOY = BOY + REVENUES - GRANTS$$

2.2. Industry reported Payout Rates and How They are Constructed.

Over the years, the DAF industry has generally used one of two methods for measuring payout rates. The first is

$$P_1 = \frac{GRANTS}{EOY}$$

This equation was used widely until the National Philanthropic Trust (NPT), also a sponsor of DAFs, switched to a new formula that has since become widely adopted by DAF industry:

$$P_2 = \frac{GRANTS}{BOY}$$

With the rapid growth in the DAF balances each year, BOY is virtually always less than EOY, meaning the second measure is likely to produce higher payout rates than the first since the smaller the divisor, the larger the payout rate.[5]

[5] NPT says that it chose its payout methodology in order to match the methodology used by Candid/Foundation Center to evaluate payout rates from private foundations which, in turn, is based on payout rate calculations as laid out in the Tax Code. The problem with using this methodology is that it does not answer the evaluative question that it purports to answer: "how effective has this entity been in distributing its available funds for charitable use" The purpose of the private foundation payout provisions in the Tax Code is not evaluative, but prescriptive. Its purpose is to establish prospective payout obligations for organizations that are often formed to exist in perpetuity. As a determination of a prospective obligation, it makes sense that it is based on prior end of year values and does not include grants paid in its denominator (because we can't know what those grants are.) In addition, private foundations are more typically funded up-front rather than receiving additional funds each year (as opposed to DAFs, where DAF sponsors are commonly the largest recipients of charitable donations, far

Unfortunately, whether intended or not, these formulae greatly overstate payout rates because both methods fail to include "grants made" as part of the denominator. Shrinking the divisor this way has the overall effect of increasing the payout rate and producing absurd results. For instance, imagine a DAF sponsor with just 2 customers. Customer Anne has $10,000 in her DAF, makes no contributions, no grants, but earns $1000 in investment returns over the year. She ends the year with $11,000 in her DAF. Customer Anne's payout rate is obviously zero. Customer Bob, by contrast, opens a new DAF one day during the fiscal year, contributes $100,000 to the fund and immediately designates a $100,000 grant, leaving balance of $0 in his DAF. Customer Bob's payout rate is, obviously, 1 or 100%. Yet, when this DAF sponsor fills out its 990 tax returns it will report grants are $100,000, BOY is $10,000 and EOY is $11,000. Then using P_1 and P_2 will result in a payout rate of 9 and 10, respectively, that is, 900% and 1000%. But how can a fund give out 9 or 10 times the assets available? How did our definitions of the payout rate lead us to such illogical conclusions?

Let us ask, what we are hoping to learn from a payout rate? To most people, we expect the term suggests that it reveals the amount of money granted out in a year as a fraction of the money available for the DAF sponsor to give away in that same year (and indeed, If we are measuring the efficiency of the DAF vehicle in converting donations to grants, that is the only ratio that makes sense.) Following our example above, the total dollars that could have been paid out are BOY assets ($10,000), plus contributions ($100,000), plus asset returns ($1000), or $111,000. What was actually paid out was $100,000. What fraction of available funds was paid to charities? The answer is P^*:

$$P^* = \frac{GRANTS}{BOY + CONTRIBS + RETURNS} = \frac{100{,}000}{10{,}000 + 100{,}000 + 1{,}000} = \frac{100{,}000}{111{,}000} = 0.90$$

or 90%. Notice, we do not always observe *RETURNS* in our data. To get around this, we can note from the accounting identity that *BOY+CONTRIBS+RETURNS = EOY + GRANTS.* This means we can rewrite this expression as

$$P^* = \frac{GRANTS}{EOY + GRANTS} = \frac{100{,}000}{11{,}000 + 100.000} = 0.90$$

Does this expression have the qualities we want? When no assets are given to charity, $GRANTS = 0$, the payout rate will be 0. When *GRANTS* are so large that they drive *EOY* to zero, then the payout rate is 1 or 100%. If *GRANTS* only large enough to drive *EOY* to half of what it would have been if there were no grants, then then *GRANTS* equals *EOY*, and so P^* will equal 0.5, which correctly states that half of all money available was granted to charity.

We then define

$$P^* = \frac{GRANTS}{EOY + GRANTS}$$

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out-performing other charities.) Finally, the comparison between DAFs and private foundations is inapposite because the tax benefits afforded private foundations are significantly less generous than those afforded DAFs. Since DAFs are treated the same as outright gifts to charity, we believe that a more appropriate comparison would be to the 100% payout benefits of outright gifts to public charities.

as the true measure of DAF payout rates.

We note that we are not the first to discover this formula for the payout rate. This same definition has appeared in reports by the US Treasury in 2011 and 2015, and by the Congressional Research Service in 2012.[6]

3. Comparing Formulae for Calculating Payout Rates

Figure 1 compares the three measures, P_1, P_2, and our preferred P^*, for all DAF sponsors from 2014 to 2017. As suggested above, $P_2 > P_1 > P^*$. This shows that using *BOY* asset as the denominator provides a payout rate that most overstates the true payout rate.

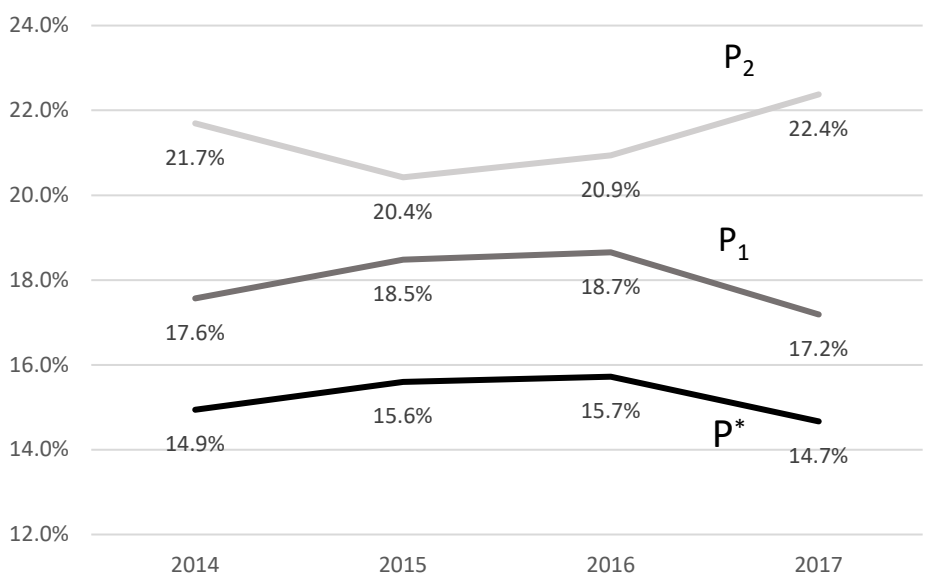

Figure 1. Comparing DAF Payout Measures

Table 1, panel B, reports payout rates for 2017 calculated by these three methods, separated by the type of DAF sponsor. As expected, this shows that both P_1 and P_2 significantly overstate the payout rate relative to the true payout rate P^*, and that the current industry favorite, P_2, overstates payout rates the most.

[6] See Gravelle and Sherlock (2012) and Arnsberger (2015), and the 2011 "Report to Congress on Supporting Organizations and Donor Advised Funds," available at https://www.treasury.gov/resource-center/tax-policy/Documents/Report-Donor-Advised-Funds-2011.pdf

Table 1. DAFs Payout rates and non-compliance with industry standards by DAF sponsor category 2017

	Commercial	Community Foundations	All Other Sponsors	All DAF Sponsors
	Panel A: Aggregate statistics on DAFs 2017			
Number of Sponsors	47	628	439	1114
Number of DAFs	213,639	78,701	56,182	348,522
BOY 2017 $Million	46,101	30,468	9,801	86,370
EOY 2017 $Million	61,095	40,278	11,380	112,753
Grants 2017 $Million	10,814	6,005	2,565	19,384
Average DAF Account Balance, at EOY 2017, dollars	285,974	511,779	224,478	323,518
	Panel B: Payout rates calculated three ways†			
Preferred Payout Rate, P*	15.04%	12.97%	18.39%	14.67%
2nd Industry Payout Rate P_2	23.46%	19.71%	26.17%	22.44%
1st Industry Payout rate P_1	17.70%	14.91%	22.54%	17.19%
Overstatement using P_2 vs P*	56.0%	51.9%	42.3%	53.0%
	Panel C: Non-compliance with industry standards by DAF sponsors			
Pct with payout rates < 5%	4%	28%	22%	24%
Pct with payout rates < 20%	62%	89%	53%	77%

† P*= Grants/ (EOY+Grants), P2 =Grants/BOY, P1+D9:H23 =Grants/EOY

In 2017 the DAF payout rate was reported by the industry formula to be 22.44%, while the true method calculates payout at only 14.67%. As we report in the final column of the table, P_2 for all DAF sponsors combined exceeded P^* by 53%. Looking across types of DAF sponsors, Commercial sponsors, who managed over $61 billion in DAF funds in 2017, overstated payout rates the most, at 56%.

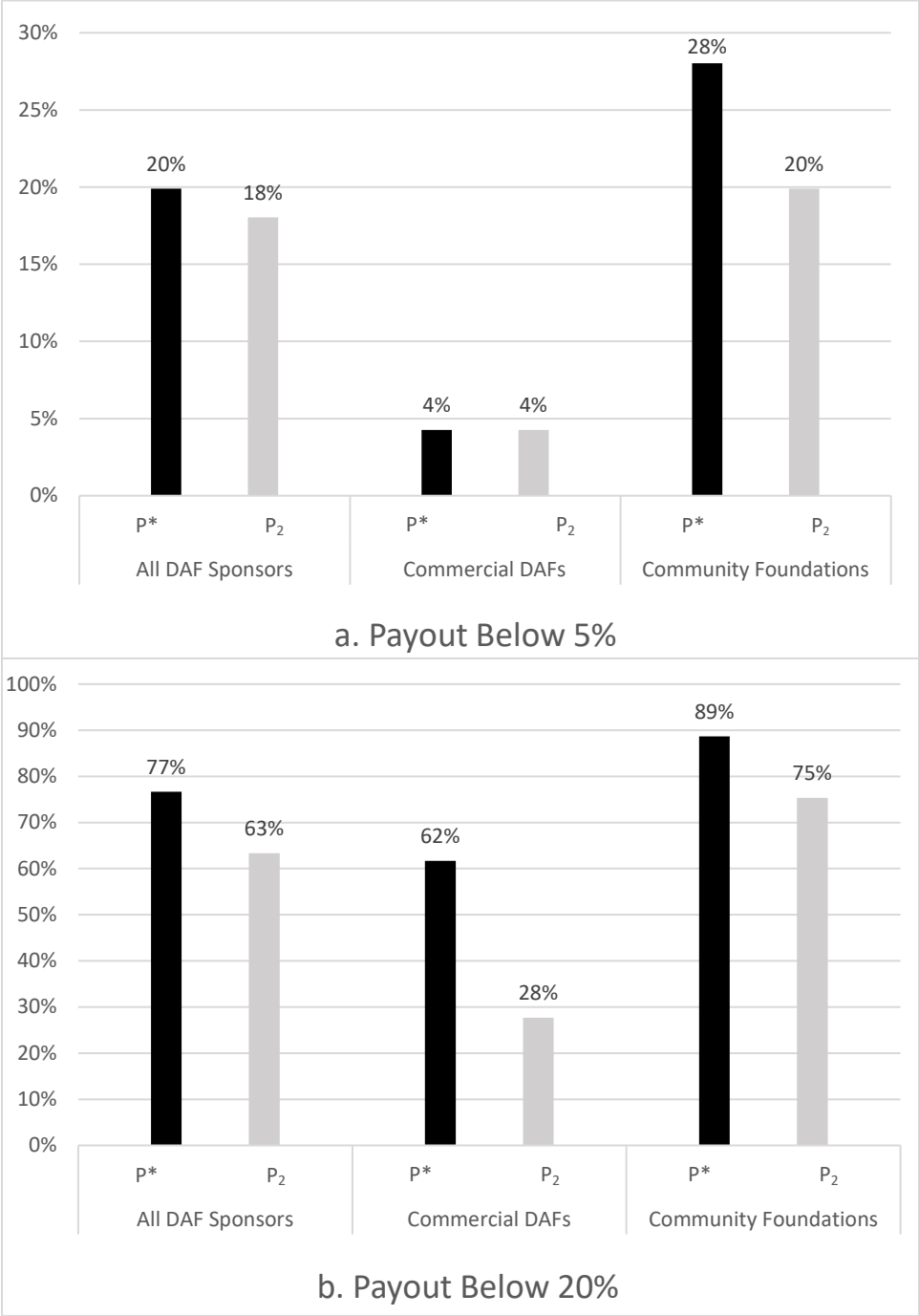

Figure 2: Percent of DAFs Failing to Meet Payout Thresholds.

Figure 2 explores the degree to which using P^* rather than P_2 affects how we see the performance of DAFs relative to two common benchmarks. The lowest benchmark is reaching a minimal 5% payout, and second is a more robust 20% payout. Panel *a* of the figure shows that 28% of community foundations failed to reach even minimal payout rates of 5%, while 89% failed to reach the 20% payout threshold. Commercial DAFs were much more likely to satisfy the 5% rule than were community foundations, but like the community foundations, high fractions of commercial DAFs, 62%, also failed to reach target payout of 20%. When compared to the same calculations using P_2, the evaluation of DAFs is substantially less favorable.

4. What About the *Flow Rate?*

H. Daniel Heist and Daniella Vance-McMullen (2019) recently suggested a new measure of the performance of DAFs, which they call the *flow rate.* The name originates in the fact that this measure is a function of only flows (contributions, grants), not stocks (assets on deposit in DAFs). High flow rates have been used to argue against regulation of DAFs. Consider the following quote from the Alliance for Charitable Reform (a group opposed to DAF regulation): "Median flow rates of 87% suggest that donor-advised funds act as pass-through philanthropic intermediaries, not as long-term parking lots for charitable dollars."[7] However, flow rate, by its terms, ignores the most relevant factor for those concerned about assets being parked in DAFs: namely, the amount of assets that are parked in DAFs.

Heist and Vance-McMullen define the flow rate as the ratio of grants to contributions. Unfortunately, this index is uninformative for most policy purposes. First, it is ill-defined since true flow rate would be more accurately defined by using the ratio of grants to revenues (contributions plus investment returns). According to the data summarized in Table 1, this correction to the flow rate would reduce the average rate from 63% to 55%.

Second, and more fundamentally, flow rate fails to differentiate among DAF sponsors on the most policy-relevant questions. Imagine three DAF sponsors. Sponsor A has end-of-year assets of $100,000 and annual contributions and grants both equal to $1,000. Sponsor B has end-of-year assets of $1,000, and annual contributions and grants both equal to $100,000. Sponsor C has end-of-year balances of 100,000 and contributions and grants of $600,000. Cleary sponsor A should be of far greater concern to society than sponsor B, while C might be seen as a model of successful DAF management, with a two-month supply of gifts "in inventory." Nonetheless, all can report flow rates of 1.

[7] Marques Chavez, "Data Contradict Common Myths of Donor-Advised Funds," *Alliance for Charitable Reform (Blog), March 8, 2019,* http://acreform.org/blog/data-contradicts-common-myths-donor-advised-funds/

4.1. A more informative measure of flow.

If we want an index of how effectively DAFs are managing their flow of funds, can we design a new measure that gives the flow more meaning by reporting flow relative to the assets held by the DAF? We propose a new measure that looks at the net flow, $REVENUES - GRANTS$, as a proportion of BOY assets. We call it the *stockpiling rate*:

$$S = \frac{REVENUES - GRANTS}{BOY}$$

Note, there are important similarities between stockpiling and flow rates. A value of $S \geq 0$ indicates the stockpile of donations is rising and $S < 0$ means donors are spending down the stockpile. The rate at which the stockpile is changing will be expressed in terms of BOY assets. To continue the analogy to DAF assets as an inventory of charitable assets awaiting donation, the numerator is the change in inventory of donations to charity and the denominator is the base level of that inventory. What is most desirable is a numerator close to 0 (that is, a flowrate close to 1) combined with a denominator that is small to minimize the carrying cost of that inventory.

In the most recent data, for 2017, $S = 0.32$, meaning stockpiles rose in value by 32% over the prior year. When the stockpile rises, it is unavoidable -that the social cost of holding this stockpile of donations must rise as well.

5. Complications from DAF-to-DAF transfers

All calculations of payout rates and flow rates overstate charitable benefit because they are contaminated by unknown amounts of DAF-to-DAF transfers. A customer of Fidelity Charitable can move DAF funds to Vanguard Charitable (or to a DAF at a community foundation), the same way funds would be moved from a DAF to a traditional charity, like the American Red Cross. Logging in to their DAF account at Fidelity Charitable, the donor simply selects Vanguard Charitable Endowment Program as the designated charity rather than the American Red Cross. When a donor does this, however, Fidelity Charitable's ledger will reflect this transfer as a grant to charity, the same as it would if the donor had designated the American Red Cross as recipient, even though the money is simply going to a donor's DAF account with a different DAF sponsor. Furthermore, this grant will enter Vanguard Charitable's books as a new contribution. Both accounting entries will affect the impression that, in this example, Fidelity Charitable is increasing payout while Vanguard Charitable is attracting contributions, while in truth no charity and no donor has been financially affected. When the donor finally grants the money to the American Red Cross, it will be counted twice, once as a grant from Fidelity and second as a grant from Vanguard.

To illustrate the problem let's again imagine two fictional DAF sponsors, each with one customer. Both customers have DAFs worth $100,000 at the beginning of the year. Mid-year, the two decide to switch DAF sponsors. So, each customer grants $100,000 to the other sponsor and each ends the year with no grants to charities and $100,000 in DAF assets. In

terms of charitable benefit, both sponsors should be reporting a zero-payout rate. However, since the law has no mechanism to reflect that the grant was simply a DAF-to-DAF transfer, using both P_1 and P_2 results in a payout rate of 100%, while P^* also errs by stating a payout rate of 50%.

Importantly, this is not a problem of the payout rate formula, but an issue of proper accounting. Honest treatment of DAF-to-DAF transfers would require a transfer to another DAF to be reported in a separate category, not as part of grants or contributions, and folded into the EOY total along with market returns. That is, we would employ a new accounting identity:

$$\begin{aligned} EOY &= BOY + CONTRIBS + (RETURNS + TRANSFERS_{IN} - TRANSFERS_{OUT}) \\ &\quad - GRANTS \\ &= BOY + CONTRIBS + (RETURNS + NetTRANSFER) - GRANTS \end{aligned}$$

where *CONTRIBS* and *GRANTS* no longer include any transfers.

5.1. How much can DAF-to-DAF transfers matter?

To illustrate the potential importance of this problem in the actual data, we looked at a sample of 46 commercial DAF sponsors in 2017 and found 24 (51%) had received transfers of DAF funds from Fidelity Charitable.[8] Surprisingly, these 24 transfers alone artificially inflated Fidelity's grants by 3.03% and erroneously raised their payout rate from 14.75% to 15.17%. We did not inspect the roughly 1100 remaining DAF sponsors, nor did we do a dive into transfers between DAFs for all sponsors, as this would require well over a million operations. But the size of the effect from just 24 DAF-to-DAF transfers seems to be convincing evidence that learning more about these transfers could alter our picture of payout rates in consequential ways.[9]

6. Conclusion

Payout rates have been at the center of discussion on evaluation of DAFs. What we hope to establish in this note is that, in order to provide meaningful information about the efficacy of DAFs, payout rates must be calculated with reference to all of the funds in the DAF available for payout. In addition, by its very name, a payout rate should be a number between 0 (no payout)

[8] This calculation likely significantly understates the prevalence of DAF to DAF transfers because it does not include transfers between commercial DAFs and DAFs sponsored by community foundations or mission driven organizations. Reportedly many wealthy donors have multiple DAF accounts using different DAF sponsors. For example, it is not uncommon for a donor to have both a commercial DAF (for low fees) and a community foundation DAF (in order to support the local community) and to transfer assets between their two DAFs.

[9] Notice that we only need to adjust for transfers once, and that is to remove transfers-out from GRANTS. To adjust the payout formula for transfers-in as well would be to double-count transfers. However, if one is reporting on contributions, one must be careful to remove transfers-in from CONTRIBS while leaving the transfers-in as part of the EOY total assets.

and 1 (100% payout) and paying out $x\%$ of the maximum available money should give a payout rate of $x/100$. The two measures of payout rates advocated by the DAF industry both fail to satisfy this logical interpretation of the term and, in fact, can produce preposterous payout rates, such as the suggestions DAFs pay out 9 or 10 times what they have on hand to give.

To address these concerns, we derived a formula for the payout rate constrained to satisfy the logical interpretations just spelled out:

$$P^* = \frac{GRANTS}{EOY + GRANTS}$$

Using P^* rather than either formula of payout devised by the DAF industry, P_2 or P_1, we find that overall average payout rates for 2017 fall from over 22% to under 15%. In addition, the number of DAFs meeting key thresholds of payout rates changes, often quite dramatically. The difference between P^* and P_2 can be seen most starkly when looking at the fraction of DAF sponsors who fail to reach a payout rate of 20%. Using the industry-defined P_2 we see fewer than a third (28%) fail to reach this payout target. However, using P^*we discover that the true number is actually 62% paying out less than 20%, or more than double that following from the industry-designed formula. The pattern repeats when examining community foundations. P^* adds eight percentage points to the probability of failing to payout 5% (28% vs 20%) and adds 14 percentage points to the probably of a payout below 20% (89% vs 75%).

Next, we explored new measure, the flow rate, and found that without grounding it a stock-variable like beginning-of-year assets, the flow rate carries far too little information to be used reliably as an index of DAF efficiency. A measure like the stockpiling rate, $S = (REVENUES - GRANTS)/BOY$, uses the elements of the flow rate in the numerator, but by grounding it in beginning-of-year assets tells us how fast the pile of future charitable donations is stacking up ($S > 0$) or is being drawn down ($S < 0$), a more useful measure of flow.

The stockpiling rate also puts attention back on a variable at the center of discussion about DAFs. In the latest year of data available, 2017, $S = 0.32$ or a 32% increase in the stockpile of gifts. As with any other stockpile, the bigger the stockpile the greater the carrying costs of the stockpile. In this case the costs are mainly felt by taxpayers, since these people have, collectively, pre-paid the charitable deduction and are waiting for $S < 0$ so the contribution to charity to be taken from the stockpile and made into a charitable contribution.

Finally, we have shown that all measures of the performance of DAF will be more accurate, and so inform better policy, if we can account for the effects of DAF-to-DAF transfers.

In sum, how we measure and report on the performance of DAFs can make a tremendous difference to how policy makers may evaluate the impacts of DAFs. In particular, the argument that DAFs are always preferable to private foundations is belied by the fact that close to 1 in 4 DAF sponsors (24%) distributed less than 5% of their assets in 2017.

Agreeing on the facts—and their interpretations—is essential for meaningful policy discussions. When it comes to DAFs, P^* is the most accurate measure of payout rate for both marketing and policy discussion purposes. The flow rate provides too little information to be a reliable

indicator of DAF performance. Finally, reporting DAF-to-DAF transfers separately from either contributions or grants on 990 filings with the IRS will allow those evaluating DAFs to measure payout without bias.

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