



# **Tax Policy and Charitable Giving Results**May 2017

Researched and written by the staff at Indiana University Lilly Family School of Philanthropy Study commissioned by Independent Sector

# Acknowledgements

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## Introduction

In 2015, \$373.25 billion was donated in the United States (Dale & Colinvaux, 2015; Giving USA Foundation, 2016). Fifty-nine percent of the general population reports donating to charity (2013 Philanthropy Panel Study on giving in 2012 as cited in (Osili, Clark, St Claire, & Bergdoll, 2016). Recent policy debates have focused on how changes in tax policy could affect charitable giving. The charitable deduction was first built into the US tax code in 1917 to provide incentives for giving given increased wartime tax rates (Galle, Colinvaux, & Steuerle, 2012). In addition, there was a fear that by taxing high-income people, those people would stop (or reduce) their giving. The charitable deduction was intended to provide an incentive to give in the face of new taxes on income. After the income tax reached an unprecedented three-quarters of the U.S. populace in 1944 (Muthitacharoen & Giertz, 2011), the IRS introduced the standard deduction. The standard deduction provided benefits for some taxpayers who became eligible for a larger deduction than could be achieved through itemized expenses in addition to reduced administrative costs for the IRS. As of 2014, approximately 30 percent of households still choose to itemize (Urban-Brookings Tax Policy Center, 2017b).

Changes in tax policies are expected to have direct and indirect effects on a wide array of individual and household economic decisions, including charitable donations. As the White House and Congress consider new tax policies to stimulate economic growth, there has been significant debate about the potential impact of the proposed tax changes on charitable giving. An important question is whether changes in tax policy could encourage more people—specifically, non-itemizers—to give more.

On April 26, 2017, the White House unveiled a preliminary outline of their tax reform plan (White House Proposal; Trump, 2017). Legislation is still being crafted that combines the White House proposal with the tax plan proposed by Republicans in the House of Representatives. While further announcements are likely forthcoming to update the House tax plan, the most recent announced proposal from the House was the Tax Reform Blueprint proposed by House Speaker Paul Ryan and House Ways and Means Committee Chairman Kevin Brady on June 24, 2016 (House Tax Reform Blueprint; Brady & Ryan, 2016).

The goal of this study is to provide estimates of the potential effects of tax policy changes proposed in the 2014 Tax Reform Act by House Ways and Means Committee Chairman Dave Camp (R-MI) and changes proposed by the White House on charitable giving. The differences between the Camp Proposal, the White House Proposal, and the House Tax Reform Blueprint are negligible (see Table 1). Therefore, this study uses the Camp Proposal in its analyses, which has two benefits: 1) the Camp Proposal was an actual bill and is not subject to further changes that are likely to occur with both the White House and House proposals and 2) the Camp Proposal proposed smaller changes from the current law than the White House and House proposals.

Table 1. Comparison of current law, the Camp Proposal, the White House proposal, and the

House Tax Reform Blueprint

	Current Law	Camp Proposal	White House	House Tax
	(2016)		Proposal	Reform
				Blueprint
Standard	\$6,300	\$11,000	\$12,600	\$12,000
Deduction	(individuals);	(individuals);	(individuals);	(individuals);
	\$12,600 (joint	\$22,000 (joint	\$24,000 (joint	\$24,000 (joint
	filers)	filers)	filers)	filers)
Tax Brackets	10%, 15%,	10%, 25%, 35%	10%, 25%, 35%	0%/12%, 25%,
	25%, 28%,			33%
	33%, 35%,			
	39.6%			
Charitable	Itemizers only	Itemizers only	Itemizers only	Itemizers only
deduction				

Using data from the University of Michigan's Panel Study of Income Dynamics (<u>PSID</u>), including the Philanthropy Panel Study (<u>PPS</u>) created by the Lilly Family School of Philanthropy (LFSOP), and the 2009 IRS Statistics of Income Public Use File (<u>SOI PUF</u>)<sub>1</sub>, this report will answer the following questions:

- 1. What are the estimated effects of proposed tax policy changes on charitable giving?
- 2. What is the effect on charitable giving in tax reform if the charitable tax deduction is expanded to non-itemizers, in addition to itemizers?
- 3. How do the proposed tax policy changes affect taxpayers' charitable giving across income levels and by charitable subsector (religious versus non-religious)?
- 4. What are the effects of these policy changes on tax revenue collected by the U.S. Treasury?

# **Executive Summary**

This study used the Philanthropy Panel Study (PPS), which is the only panel study of philanthropy in America, and data from the Panel Study of Income Dynamics (PSID), which is the largest and longest running panel study in the world. The PSID has a rich array of data for over 9,000 households, including, income, wealth, marital status, existence and number of children, etc. We know from prior research that these variables play an important role in explaining and predicting giving patterns, and they are not all available in other datasets used for this type of research. Using this data, Indiana University's estimates suggest that it is important to consider where tax payers are responsive to changes in charitable giving incentives. However, because there is still significant debate with regards to the responsiveness of charitable giving to changes in tax policy (see pages 11-15 for a discussion on tax-price elasticity of charitable giving), analyses of each proposal were also conducted using the commonly used elasticities: less responsive, -0.5 & moderately responsive, -1.0.

This study examined the effects of proposed policy changes on charitable contributions and government tax revenue. The policy scenarios included in this study examined various

<sup>1 2009</sup> is the most recent available IRS Statistics of Income Public Use File.

combinations of three major policy changes: (1) increasing the value of the standard deduction to \$11,000 for individuals and \$22,000 for married couples, (2) extending the charitable tax deduction to non-itemizers, and (3) decreasing the highest marginal tax rate to 35 percent. Key findings include:

- 1. The current proposals, which include an increase in the standard deduction and a decrease in the top marginal tax rate, would have a negative effect on charitable giving with giving decreasing between \$4.9 and \$13.1 billion (-1.7 percent to -4.6 percent).
- 2. Expanding the charitable deduction to non-itemizers, as a stand-alone provision, increases total giving by between 1.3 percent and 4.3 percent and has a negligible effect on total tax revenue (decrease by 0.41 percent to 0.47 percent).
- 3. Combined with current tax reform proposals, expanding the charitable deduction to nonitemizers more than offsets the charitable giving lost by other tax reform proposals and increases giving by 0.4 percent to 1.7 percent. Increasing the standard deduction has a negative effect on charitable giving for both religious congregations and other charities but a larger negative effect on giving to congregations than on giving to other charities.
- 4. All policies proposed have a negative effect on federal tax revenue: expanding the charitable deduction to non-itemizers alone has the smallest effect on tax revenue decreasing revenue by .4 percent to .5 percent and all three proposals combined have the largest effect on tax revenue decreasing revenue by an estimated 3.8 percent.

It is important to note that studies examining proposed policy changes must make important assumptions regarding tax-price elasticity, or the responsiveness of charitable giving to changes in tax policy. Previous research on expanding the charitable deduction to non-itemizers has found slightly lower increases in charitable giving with slightly smaller decreases in tax revenue than those found for itemizers. This difference is primarily due to the use of less responsive elasticities. Using the Urban-Brookings Tax Policy Center Microsimulation Model, Rosenberg, Steuerle, Ovalle, and Stallworth (2016) estimated that expanding the charitable deduction to all tax payers would increase charitable contributions by \$5.0 billion (elasticity = -0.5) to \$10.2 billion (elasticity = -1.0) while simultaneously decreasing tax revenue by \$9.2 billion in 2017. This study extends the findings of Rosenberg et al. (2016) by using income dependent elasticities. Using the Open Source Policy Center's (OSPC) tax-calculator microsimulation, this study found that charitable contributions would be expected to increase by approximately \$12.2 billion with a simultaneous decrease in tax revenue of \$13.1 billion when highly responsive elasticities were used. In addition, when the standard elasticities (-0.5 and -1.0) are used in conjunction with the OSPC's tax-calculator microsimulations, this study found that charitable contributions would be expected to increase by \$3.8 billion (elasticity = -0.5) to \$7.5 billion (elasticity = -1.0) while simultaneously decreasing tax revenue by \$11.6 billion (elasticity = -0.5) to \$12.4 billion (elasticity = -1.0).

This study further expands upon the study conducted by Rosenberg et al. (2016) by examining the expansion of the charitable deduction to non-itemizers as an addition to the current proposals (increase in the standard deduction and decrease in the top marginal tax rate). Regardless of which elasticity is used, adding a non-itemizer charitable deduction to the current tax reform proposals would more than offset the amount of charitable giving that would otherwise be lost under the current proposals resulting in a \$1.1 billion to \$4.8 billion increase in total giving overall.

# **Background**

Nearly 100 years ago, the U.S. introduced the charitable deduction. In 2015, nearly \$217 billion were contributed to charity by itemizing households, an increase of 4.1 percent from 2014 (Giving USA Foundation, 2016). Federal tax policies have a significant effect on charitable giving. As taxpayers file their tax returns, they have a choice whether to itemize deductions, including charitable giving, or take the standard deduction. Certain personal expenses such as tuition or IRA contributions can be subtracted from a person's total income to determine the person's adjusted gross income (AGI; Frankel, 2017). These deductions, called "above-the-line" deductions, are available to all filers regardless of itemization status. From 1982 to 1986, charitable contributions were considered above-the-line contributions in U.S. tax policy (Duquette, 1999). Currently, taxpayers only claim itemized deductions (including the charitable deduction) if the sum of their itemized deductions is greater than the standard deduction.

Certain deductions are only allowed if the aggregate of those deductions exceeds two percent of the person's AGI. However, charitable deductions are not subject to this minimum, called a "particularized floor" (United States Internal Revenue Service, U.S. Code, 1933). The charitable deduction is subject to a maximum value for deductions. Generally, taxpayers cannot deduct more than 50 percent of their AGI in charitable contributions. More restrictive limits of 20 percent and 30 percent apply to specific types of charitable contributions (e.g. contributions of capital gain property is subject to the 20 percent limit; contributions to veterans' organizations, fraternal societies, nonprofit cemeteries, etc. are subject to the 30 percent limit; (United States Internal Revenue Service, 2017b). For high-income households (\$259,400 for individuals and \$311,300 for joint filers), the Pease limitation imposes an overall limit to most itemized deductions, including charitable deductions. If a filer is subject to the limit, the total of all of their itemized deductions is reduced either by 3 percent of their AGI over the threshold or to 80 percent of their itemized deductions, whichever is smaller (Ackerman & Auten, 2006; Lu, 2017). In an example provided by the IRS, a couple filing a joint return has an adjusted gross income of \$325,500 and itemized deductions totaling \$142,140. The couple's AGI is \$14,200 over the limit (\$325,500 - \$311,300). Therefore, they must subtract three percent of this difference (three percent of \$14,200 = \$426) from their total itemized deduction and the couple can only deduct \$141,714 (United States Internal Revenue Service, 2017a).

Both the percentage of all taxpayers who itemize deductions (ranging from 36 percent in 2005 to 30 percent in 2014) and the share of itemizers reporting charitable contributions (91 percent in 1988 to 82 percent in 2014) vary slightly over the years (Lu, 2017).

However, certain patterns have been maintained over time.

- 1. High-income taxpayers are much more likely to itemize. For example, in 2014, 92 percent of those taxpayers reporting AGI above \$500,000 itemized deductions, while 49 percent reporting AGI of \$50,000-99,000 itemized—and only 7 percent reporting AGI under \$30,000 itemized (Lu, 2017).
- 2. Itemizers are also far more likely to donate: PSID data reveal that 83 percent of itemizers reported donating any amount of charitable giving at all, compared to 44 percent of non-itemizers. In fact, non-itemizers contribute less than 20 percent of total giving (Rosenberg et al., 2016).

Policymakers have shown a growing interest in determining how changing the structure of the charitable deduction could encourage more people—specifically, non-itemizers—to give and give more.

Key issues that have dominated the policy discussion over the past century: the desire to maximize private donations without reducing taxpayer revenue ("tax efficiency" or "Treasury efficiency" (Ackerman & Auten, 2006) and simultaneously reducing the administrative burden of confronting fraud in enforcing an increasingly complex system (Rosenberg et al., 2016). The charitable deduction is expected to cost the Treasury \$51.2 billion in fiscal year 2018. However, it is still one of the "cheaper" tax expenditures: ten tax expenditures cost the Treasury more than the charitable deduction with the most expensive – exclusion of employer contributions for medical insurance premiums and medical care – costing over \$235 billion in FY2018 (Urban-Brookings Tax Policy Center, 2017c).

As tax policy changes take place, efficiency is not the only issue to be taken into account; determining the impact of changes in the charitable deduction on tax payers' equity is also important. The charitable deduction itself may be seen as a prioritization of charitable taxpayers—as the deduction has implications for tax revenue, the tax code compensates with a higher marginal income tax rate for taxpayers overall, if one assumes a balanced budget approach (Bakija, 2000). While favoring those policies that encourage high-income taxpayers to donate may result in the largest increase in charitable giving (Galle et al., 2012), any policy that incentivizes one type of taxpayer to itemize or donate more so than another shifts U.S. donations to that taxpayer's preferences. In other words, these tax policy changes may result in a change in the type of charities to which donations are made. For example, it has been noted that wealthy households give smaller proportions of their overall donations to support religious organizations or basic needs nonprofits and more to arts and education compared to other donors (Galle et al., 2012).

Before considering possible policy options that would modify the charitable deduction, research must first assess the efficacy of the current approach. The literature reveals two perspectives on the charitable deduction: income-adjustment (i.e. income effects) or subsidy payment (i.e., substitution or price effects; (Dale & Colinvaux, 2015; Galle et al., 2012). In the first perspective, the charitable deduction may be considered an adjustment to the taxpayer's bill. Because the tax burden is lower, taxpayers give more. In other words, charitable donations have reduced the taxpayer's ability to make personal consumption decisions (Galle et al., 2012). The second, and more popular, perspective, recognizes that charitable donations are personal consumption decisions made by taxpayers. In this view, the charitable deduction is a subsidy or incentive that the U.S. government grants taxpayers to promote philanthropy (Dale & Colinvaux, 2015). Because the cost of additional giving is less, taxpavers give more. Yet, in both models, taxpayers' private philanthropy is being used to fund various "public goods" either as a complement or a substitute to direct government funding. In other words, if taxpayers' donations are used as a complement to government funding, the level of government funding would remain constant regardless of the amount donated. However, if taxpayers' donations are used to substitute government funding, the government would reduce their funding as donations increase. In practice, neither model works perfectly; what actually occurs is more complicated.

The theory can inform policymakers' preferences when developing or supporting future proposals. Depending on which model policymakers favor (income-adjusted, subsidy payment, or a combination), they will be likely to favor different types of proposals (Dale & Colinvaux, 2015). These polices may include increasing the standard deduction, adding tax credits or caps, or changing the types of deductions allowed. These proposals might suggest only accepting deductions above a certain percent-of-AGI floor.

# Box 1. Key Concept: Tax-Price Elasticity

The degree to which donations change in response to changes in tax policy.

# Calculating the price of giving:

For itemizers, the after-tax cost or price of giving a \$1 donation is estimated as one minus the taxpayer's maximum marginal tax rate (MTR).

Price of giving 
$$$1 = 1 - MTR$$$
  
Example (marginal tax rate = 25%): Price of giving  $$1 = 1 - .25 = $0.75$ 

Calculating the tax-price elasticity:

$$Elasticity = \frac{\% \ Change \ in \ donations}{\% \ Change \ in \ price \ of \ giving}$$

Example: If a non-itemizer would normally donate \$100, what is the expected donation if the taxfiler were to switch from non-itemization to itemization status with a marginal tax rate of 25% holding all other assumptions constant?

% Change in price of giving = 
$$-25\%$$

Elasticity	Donation if non-	Donation if itemizer	Change in	% Change in
	itemizer	with $MTR = 25\%$	Charitable	donations
	(tax-price = 1)	(tax-price = \$0.75)	Giving	
-1*	\$100	\$125	↑ \$25	25%
-0.5	\$100	\$112.50	↑ \$12.5	12.5%
0**	\$100	\$100	↑↓ \$0	0%
1	\$100	\$75	↓ \$25	-25%
-1.44***	\$100	\$136	↑ \$36	36%

An absolute value price elasticity over 1 suggests that the amount donated surpasses that amount lost in taxpayer revenue (Duquette, 1999).

<sup>\*</sup> In this case (elasticity = -1), the amount of tax revenue lost is directly and equally offset by the additional amount of charitable giving (Dale & Colinvaux, 2015; Galle, et. al., 2012).

<sup>\*\*</sup> A price elasticity of 0 would indicate that the tax deductibility had no impact on the amount given to charity (Bakija, 2000).

<sup>\*\*\*</sup> The average tax-price elasticity of demand for charitable giving is -1.4 (Peloza & Steel. 2005).

Theory predicts that in deciding how much to donate, taxpayers will respond to the after-tax price (or cost) of giving. The degree to which donations change in response to changes in policy is the tax-price elasticity of giving (see *Box 1*).

There is still significant debate among scholars as to the best method to estimate tax price elasticity of giving, which in turn leads to a wide range in estimations of this elasticity. The general price elasticity of donations may vary between -.5 and -1.75 (Ackerman & Auten, 2006; Auten, Sieg, & Clotfelter, 2002; Dale & Colinvaux, 2015; Feldstein & Lindsey, 1983; Randolph, 1995). However, results of previous studies are highly dependent of the type of analysis conducted, the timeframe of analysis (short-run vs. long-run), and the nature of the datasets. For example, studies using panel data analysis show a lower price elasticity for charitable donations. (Barrett, McGuirk, & Steinberg, 1997; Broman, 1989; Duquette, 1999; Randolph, 1995; Ricketts & Westfall, 1993). Moreover, studies that rely on survey data show higher elasticity than studies using IRS tax-filer data. However, it is worth noting that a majority of the previous literature rely on tax-filer data rather than survey data (Peloza & Steel, 2005). In addition, few studies specifically examine price elasticity associated with non-itemizer donations (Duquette, 1999), because these data are not available from IRS tax filers for non-itemizers.

Table 2: *Sample tax-price elasticity of giving\** 

Citation	Estimated elasticity
Randolph (1995)	Permanent: -0.51
	Transitory: -1.55
Auten et al. (2002)	Persistent: -0.79 to -1.26
	Transitory: -0.40 to -0.52
Barrett et al. (1997)	Long-run: -0.47
Bakija and Heim (2011)	-0.7
Peloza and Steel (2005),	-1.4 (range +0.6 to -7.07)**
meta-analysis	
Clotfelter (1985)	-1.1 to -1.3

<sup>\*</sup>This is not a comprehensive list, but instead highlights tax-price elasticities found by studies that grapple with the major issues discussed regarding the difficulty in calculating tax-price elasticity of giving.

There is much debate as to what empirical approach should be used to calculate elasticities. One method is to use a fixed-effects model (one-way or two-way). This model assumes that there are individual and/or year specific variables that influence a household's giving (Barrett et al., 1997). Random-effects model is another method used in this literature. A random-effects model assumes that individual and/or year effects are not specific to an individual and/or year within the sample, but are drawn from various effects found in the population (Barrett et al., 1997). Barrett et al. (1997) found that fixed-effects models produced more robust consistency among estimated elasticities.

Another variable that needs to be considered when calculating the tax-price elasticity of giving is whether to measure short-run elasticity or long-run elasticity (measuring transitory income and tax price or permanent income and tax price respectively). Both income and tax price vary over

<sup>\*\*</sup>Large standard deviation = 1.21

time and may differ significantly in measures of short-run elasticity when compared to measures of long-run elasticity. Studies that do not account for this difference may be conflating the shortrun elasticity with the long-run elasticity (Bakija, 2000). People are willing to substitute charitable donations between years to take advantage of current and future tax policies that may result in a higher tax price of their donation. Randolph (1995) argued that this tendency to react to current tax policy has caused existing elasticity estimates to overestimate the effects of permanent price changes and transitory income and to underestimate the effects of transitory price changes and permanent income. In other words, giving is less sensitive to permanent price changes and more sensitive to transitory price changes than previously thought. Giving is also more sensitive to permanent income and less sensitive to transitory income than previously thought (Randolph, 1995). However, this issue is not settled and there is still debate among scholars as to the effects of permanent and transitory income and price changes. In contrast to the findings by Randolph (1995), Auten et al. (2002) found that giving is more sensitive to permanent price changes and less sensitive to transitory price changes and less sensitive to permanent income and more sensitive to transitory income. These differing findings typically result in the different methods used to measure income and tax prices. Many studies (including (Randolph, 1995), use an average or two or more years as a measure of income and tax-price, others use first-dollar tax-price and first-dollar tax liability to measure the price of giving and income (Barrett et al., 1997), and some, such as Ackerman and Auten (2006) build complex algorithms to attempt to account for additional variables affecting these measures. In addition, some previous studies only measure the combined average effects of permanent and transitory changes in income and tax price (Randolph, 1995).

The estimation of elasticity raises additional empirical concerns with regards to endogeneity. Endogeneity occurs when an explanatory variable is correlated with the error term. Endogeneity of income and endogeneity of giving both affect estimations of tax-price elasticity. Endogeneity of income occurs when a taxpayer chooses to work more or less (resulting in a higher or lower income) based on their expected taxable income. This can push the taxpayer into a higher (or lower) tax bracket. Endogeneity of giving occurs when a taxpayer chooses to donate more or less based on their expected tax rate. For example, if a taxpayer increases their donation, they could be pushed into a lower tax bracket since their taxable income will be lower (Bakija & Heim, 2011). Both types of endogeneity can result in a taxpayer switching from non-itemization status to itemization status (or vice versa). Any change in tax price that results from endogeneity will inflate the magnitude of the estimated tax price elasticity making it appear that charitable giving is more responsive to changes in tax policies than it actually is. This is one of the reasons the first-dollar tax price and first-dollar tax liability are used to measure tax price and income (Barrett et al., 1997).

Measurement of tax-price elasticity can further be broken down by whether it is measuring price elasticity on the intensive margin or extensive margin. Most studies referenced thus far have measured tax-price elasticity at the intensive margin (Almunia, Lockwood, & Scharf, 2017, draft). However, responsiveness, especially with respect to income differs based on whether elasticity is measured on the intensive margin or the extensive margin. The intensive margin measures the intensity or degree to which a resource is used. In other words, elasticities estimated on the intensive margin measure the percentage change in giving in response to the percentage change in price. This is the type of elasticity referred to throughout this paper.

Alternatively, the extensive margin measures how many people are using a resource. The extensive margin measures the total number of gifts (as opposed to the amount of the gift). High-income households are more responsive on the intensive margin and intensive margin price elasticity tends to increase as income rises. On the other hand, low-income households are more responsive on the extensive margin and extensive margin price elasticity tends to decrease as income rises. This means that the average gift amount increases more for high-income households, while the number of gifts increases more for low-income households (Almunia et al., 2017, draft).

Most literature finds that high income households are more responsive than low-income households (Auten et al., 2002). However, most of this research relies on administrative data from tax records and only includes itemizers. For a short time in the 1980s (1982 to 1986), the charitable deduction was available to non-itemizers. The "above-the-line" charitable deductions of the 1980s serves as a natural experiment for these calculations of the effects of a non-itemizer tax deduction. For 1982 and 1983, the IRS had set a ceiling of \$100 (\$50, married filing separately); non-itemizers could only deduct 25 percent of donations up to that amount. The ceiling was increased to \$300 in 1984 and in 1985 removed completely—and taxpayers could deduct up to 50 percent of contributions. In the legislation's final year (1986), non-itemized donations could be deducted at 100 percent (Duquette, 1999). Dunbar and Phillips (1997)'s study of 1985 and 1986 giving suggested that this policy change encouraged a substantial share of those who did not donate in 1985 to donate in 1986; overall, this policy change produced a price elasticity of non-itemizer donations of -3.36 (Dunbar & Phillips, 1997). In other words, if a nonitemizer's taxable income is decreased by 10 percent, their charitable giving will increase by 33.6 percent. However, it should be noted that the 33.6 percent increase is not an average across all donors, but is a marginal effect holding all else constant. For example, if a non-itemizer would normally donate \$100, the expected donation if the taxpayer were to switch from nonitemization to itemization status with a marginal tax rate of 25 percent holding all other assumptions constant would be \$184. Duquette (1999) contradicted this finding. Analyzing the same years as Dunbar and Phillips (1997), Duquette (1999) found that the price elasticities for both itemizers and non-itemizers indicate relatively low responsiveness (elasticities below one in absolute value). This finding is consistent with the findings by the Congressional Research Service, which suggest that price elasticities are relatively inelastic (Gravelle, 2005). Therefore, both the Congressional Research Service and Congressional Budget Office assume a price elasticity of -0.5 (Congressional Budget Office, 2011; Gravelle, 2005).

The tax-price elasticity of giving also varies based on the dataset(s) used in the analyses. Most studies use tax-filer data from the IRS. However, a growing number of studies that use survey data. A meta-analysis of tax-price elasticity of charitable donations found that survey data yield a more responsive elasticity (-1.29) compared to tax-filer data (-1.08) (Peloza & Steel, 2005). Similarly, studies differ as to whether they use cross-sectional data or panel data (Randolph, 1995). Cross-sectional data by definition only measures data at a single time-point. In doing so they only measure short-run price change (or incorrectly attribute permanence to transitory change in price) (Auten et al., 2002). Panel studies, which cover multiple years, allow for permanent price change and transitory price change to be measured separately. However, this introduces other complications (see above for a discussion of challenges in measuring permanent and transitory price change and the endogeneity effect).

# **Analysis of Proposals**

Since taxpayers compare the sum of deductions to the standard deduction when deciding whether to itemize, decreasing the value of any one of those itemized deductions may incentivize taxpayers to switch from itemizing to taking the standard deduction (Lu, 2017). This would raise the price of after-tax giving from \$1 multiplied by 1 minus the marginal tax rate (\$1\*(1-MTR)) to \$1 for every dollar donated. Increasing the standard deduction would also induce fewer taxpayers to itemize (Dale & Colinvaux, 2015).

# Types of Proposals

The most popularly proposed changes to the charitable deduction include floors, caps, and credits (Galle et al., 2012). However, other changes not specifically aimed at the charitable deduction would also have an impact. An increase in marginal tax rate, like that seen in American Taxpayer Relief Act of 2012 was estimated to increase the amount given to charity, especially for high-income individuals (Rosenberg, Steuerle, & Toran, 2013). However, most proposals today suggest decreasing the top marginal tax rate, which would likely decrease charitable giving by high-income individuals.

#### **Floors**

The argument made in favor of floors is that allowing taxpayers to itemize donations, no matter the size, would be too costly to monitor. A floor would establish a defined threshold below which total deductions could not be claimed (Lowry, 2014). In these proposals, the revenue loss would be less than if the floor were not in place since no tax benefit is given to contributions below the floor (Galle et al., 2012). A 2%-AGI floor, for example, would annually recover \$15 billion in taxpayer revenue (Urban-Brookings Tax Policy Center, 2017a). However, a 2%-AGI floor would decrease charitable giving by an estimated \$3 billion (Congressional Budget Office, 2011).

Ackerman and Auten (2006), studying 1987-1996 tax returns, simulated taxpayers' reactions to both a 1%-AGI floor and a flat-rate floor of \$210/\$420 married filing jointly, assuming price elasticities ranging from -0.5 to -1.0. While both the flat-rate and one percent floor would increase rates of giving and the total amount donated to charity, the flat-rate floor would incentivize slightly higher rates of charitable giving from both itemizers and non-itemizers and lead to increases in charitable giving by over \$1 billion more than the one percent floor.

A high floor could lead some donors to concentrate their giving in certain years in order to qualify for the charitable deduction in some years when they cannot in all years or simply discourage the possibility of smaller donations, but Ackerman and Auten (2006) found that a low floor of one percent would not encourage bunching.

## Caps

The argument for a cap on charitable deductions is a notion of vertical equity or fairness that stipulates that high income households do not need (or deserve) unlimited tax deductions for their charitable contributions. A cap establishes a total limit on the ability of a taxpayer to benefit from charitable deductions (Feldstein, 2015). While the floor would impact lower-income taxpayers the most, a cap would impact high-income households the most. As high-income

households are both more likely to donate to charity and respond more to the incentives in the charitable deduction, the Urban Institute predicts that a cap would reduce the amount given to philanthropy while not recovering as much in taxpayer revenue (Galle et al., 2012). Additionally, a cap would likely not induce increased donation rates from non-itemizers. Our previous research on tax caps found that there was a relatively small effect at the top MTR for each percentage change in the tax cap (Rooney et al., 2011).

## Credits

As opposed to tax deductions, which lower a taxpayer's taxable income, tax credits reduce a taxpayers' tax liability (United States Internal Revenue Service, 2012). A credit within the tax system could be available to both non-itemizers and itemizers (Galle et al., 2012), lowering taxes by a certain amount of the total amount donated by each taxpayer. The argument in favor of a tax credit is that it generates a stronger or clearer incentive to give to charities than a tax deduction and it can be designed for either all taxpayers or just for non-itemizers. In addition, everyone gets the same incentive as opposed to differing incentives based on their income level.

# **Previous Proposals**

As the White House and Congress have been considering new tax policies to stimulate economic growth, there has been much discussion about the potential impact of the proposed tax changes on charitable giving. Tax policies have direct and indirect effects on a wide array of individual and household economic decisions, including charitable donations.

Most proposed policies combine potential approaches to addressing the charitable deduction. While not ultimately passed, the Tax Reform Act of 2014, introduced by then-House Ways and Means Committee Chairman Rep. Dave Camp (R-MI), indicated a potential future direction for tax reform. Rosenberg, Steuerle, Steele, and Eng (2014) estimated that, taken together, all provisions in the proposed Act would increase the after-tax cost of charitable donations by 14 percent, decreasing total charitable giving by individuals by between 7 and 14 percent (Rosenberg et al., 2014). The proposed legislation specifically suggested instituting both a floor of 2 percent AGI and a limit of 40 percent AGI to the charitable deduction, most impacting the top share of wealthiest taxpayers, but these suggested policies constituted less than half of the total projected reduction in charitable giving with the rest of the reduction in charitable giving resulting from an increased standard deduction and the elimination of other itemized deductions (Rosenberg et al., 2014).

While potential directions for tax reform under the new administration are still unclear, the Tax Policy Center's analysis of Trump's proposals on the campaign trail offers a hint of the potential direction such reforms might take (Stallworth, Lu, & Steuerle, 2016). Taken together, the policies would reduce incentives for both low- and high-income households to give to charity. Greatly increasing the standard deduction would reduce the share of itemizing taxpayers by 60 percent. While reducing marginal tax rates would result in lower taxes and increased after-tax income, which could be given to charity, the after-tax cost of private philanthropy would be higher, which would theoretically reduce giving – at least in the short-run. The proposals also include capping itemized deductions at \$100,000 for individuals (\$200,000 married filing jointly). Tax data for 2014 demonstrates that ultra-high-income taxpayers (over \$1 million AGI) deducted, on average, \$260,000 in state and local taxes and \$165,000 in charitable gifts. With

such a low cap, high-income taxpayers—those most likely to donate—would face greatly reduced incentives to do so. By their estimates, these suggested reforms would result in a 4.5-9 percent decline in individual giving, costing the nonprofit sector up to \$26.1 billion in 2017.

# Methodology

Tax policy analysis often relies on IRS Statistics of Income Public Use Files (SOI PUF). However, for analyses of policies that could affect the charitable giving of non-itemizers, these data in isolation are inadequate, as these files do not include data on giving by non-itemizers. In addition, much of this analysis relies on assumed elasticities for the effect of tax price on giving (-0.5 and -1.0) which may be an underestimate (see pages 11-15 for a full discussion on tax-price elasticity of giving) since the mean elasticity of giving found in a meta-analysis is approximately -1.4 (Peloza & Steel, 2005). We use the Panel Study of Income Dynamics (PSID) to generate estimates for both giving by non-itemizers and elasticities for three different income groups (<50,000; \$50-\$99,999; ≥\$100,000). The methods used to reach these estimates are described briefly below and in detail in *Appendix A*. These values are then used in conjunction with an IRS PUF to generate estimates of the policy effects of some common tax reform proposals: a decrease in the top marginal tax rate, an increase in the value of the standard deduction, and the expansion of the charitable deduction to all filers.

Data from the Panel Study of Income Dynamics (PSID) and the Philanthropy Module

The PSID is the largest and longest running longitudinal household survey in the world. From 1968 through 2015, the PSID has collected 39 waves of data from the same families and their descendants, making the PSID a key empirical social science study in the United States. The long panel duration, genealogical design, and broad content provide social scientists with a unique and powerful opportunity to study the evolution and change within the same families and lineages as well as across households over decades. The PSID is ideally suited for the proposed research due to its longitudinal design and high quality of data. The Philanthropy Panel Study is the Philanthropy Module in the PSID and is the only existing panel dataset on charitable giving from a nationally representative sample of U.S. households. Currently, seven waves of PSID data (2001, 2003, 2005, 2007, 2009, 2011, and 2013) have information on household giving. The 2013 PSID includes approximately 9,000 families in the sample. The PSID currently provides a comprehensive picture of generosity for American families over a 12-year span, thus strengthening its position as a leading resource on life-course and multigenerational generosity behavior concerning the U.S. population.

## Federal individual income tax microsimulation model

The Tax-Calculator simulates the U.S. federal individual income tax. In conjunction with micro data that represent the U.S. population (IRS PUF) and a set of behavioral assumptions, the Tax-Calculator can be used to conduct revenue scoring and distributional analyses of tax policies. The Tax-Calculator is written in Python, an interpreted language that can execute on Windows, Mac, or Linux. Additional modifications have been made to the Tax Calculator for this project in order to incorporate data available from the PSID but not the IRS, such as non-itemizer giving and newly calculated tax-price elasticities of giving. See *Appendix B* for additional information regarding the methods used in the tax calculator.

Results from the Tax-Calculator microsimulation were generated by the Open-Source Policy Center at the American Enterprise Institute. (<a href="https://www.ospc.org/taxbrain/">https://www.ospc.org/taxbrain/</a>; <a href="https://github.com/open-source-economics/Tax-Calculator">https://github.com/open-source-economics/Tax-Calculator</a>)

The microsimulation compared projected charitable giving and net government revenue under six policy conditions to the current law. The six policy scenarios, described in *Table 3*, examine various combinations of three major policy changes:

- 1. Increasing the value of the standard deduction to \$11,000 for individuals and \$22,000 for married couples
- 2. Extending the charitable deduction to non-itemizers, and
- 3. Decreasing the highest marginal tax rate to from 39.6 percent to 35 percent.

*Table 3. Summary of microsimulations* 

	Increased value of the Standard Deduction*	Extension of Charitable Deduction	Decrease in highest marginal tax rate to 35%
Current Law	N/A	N/A	N/A
Scenario 1	Yes	No	No
Scenario 2	No	Yes	No
Scenario 3	No	No	Yes
Scenario 4	Yes	No	Yes
Scenario 5	Yes	Yes	No
Scenario 6	Yes	Yes	Yes

<sup>\*\$11,000</sup> for individuals; \$22,000 for joint filers

# Estimating tax-price elasticity of giving

Table 4. Average giving & elasticities

Income Bracket	Percentage of Non-Itemizers	Non-Itemizer Average Giving	Elasticity
<\$50,000	73.5%	\$343	-2.236
\$50,000-99,999	21.3%	\$858	-1.490
\$100,000+	5.3%	\$1,586	-1.182

To estimate elasticities for each income group, we first use the PSID data mentioned earlier to construct a panel dataset of households with several years of information per each household. With panel data, we can run an ordinary least squares (OLS) fixed-effects regression which looks at the year-to-year changes in the variables tested. This helps by eliminating any time-constant sources of variation (e.g., gender, race). We also control for select time-variant variables, like income and wealth. We run this analysis on each of our three income brackets (See *Appendix A* for more detailed methods).

Lower income brackets had larger reactions to changes in the tax price of giving, which is important for the interpretation of the effects, and particularly for estimating the change if the charitable deduction is expanded to all filers. While this finding differs from the majority of the literature, there is still significant debate among scholars with regards to calculations of these elasticities. It is logical that lower income households might have larger reactions to changes in the tax price of giving. Lower income households have less discretionary income. Because they

are making larger "sacrifices" to give or to give more, it makes sense that they would be more responsive than higher income households. However, on the other hand, because higher income households have more discretionary income, they have a greater ability to shift their giving based on anticipated changes in policy. Based on these findings for variable elasticities by income group, using an elasticity of -1.0 is only a slight underestimate of the changes for the upper-income group (and may not be an underestimate of the very highest income groups – we can only test to \$100,000+2 and it is possible that those in the very highest levels of income brackets would have an even smaller elasticity, given the directionality we see at the other levels), but it is significantly different from the elasticities most relevant to non-itemizers: <\$50,000 AGI and \$50,000-\$99,999 (-2.2 and -1.5 respectively; see *Table 4*).

This panel design opens up the research to methodologies that allow for an increase in accuracy over single wave data, as well as providing a unique glimpse into household giving among households who change itemization status between waves.

Using the PSID, we can isolate households who either gained or lost itemizing status between waves. On average, 1,174 households (16.6 percent of the relevant sample) either gained or lost itemizing status between waves with households relatively evenly split between those gaining and losing. In addition to examining their change in itemization status, we looked at their change in giving (overall and by subsector) between each wave and can compare that change with the difference among those whose itemization status did not change.

While pooled data from the five waves are used for most of these analyses, we also have the ability to separately examine the waves to determine if and when households change itemization status. There is an asymmetric effect on gaining itemization status, with four of the five waves showing a larger increase among those gaining itemization status than a decrease among those losing itemization status (both figures relative to those whose itemization status did not change). The differences in giving between new itemizers and new non-itemizers are always significant, even when looking at subsectors (see below for more information).

<sup>&</sup>lt;sup>2</sup> The PSID is representative of the income distribution for the bottom 97-98 percent (Gouskova, Andreski, & Schoeni, 2010; Pfeffer, Schoeni, Kennickell, & Andreski, 2016).

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# What are the potential effects of potential tax policy changes on charitable giving?

Table 5: Changes in charitable giving and government revenue

Tuble 5. Changes	Giving,	, ,	Revenue,			Net
	Total \$	Giving,	Total \$	Revenue,		Difference
	Change	Total %	Change	Total %	Net	(as % of
	(millions)	Change	(millions)	Change	Difference*	revenue)
Scenario 1 (Incre	ease Standard	Deduction,	)			
Elasticity of5	-\$3,994.26	-1.40%	-\$64,222.32	-2.30%	-\$68,216.58	-2.44%
Elasticity of -1.0	-\$7,987.71	-2.81%	-\$64,222.32	-2.30%	-\$72,210.03	-2.59%
Variable Elasticity	-\$10,966.58	-3.86%	-\$64,222.32	-2.30%	-\$75,188.90	-2.69%
Scenario 2 (Univ	ersal Charital	ole Deducti	on)			
Elasticity of5	\$3,772.16	1.33%	-\$11,574.28	-0.41%	-\$7,802.12	-0.28%
Elasticity of -1.0	\$7.543.56	2.65%	-\$12,353.78	-0.44%	-\$4,810.22	-0.17%
Variable Elasticity	\$12,185.18	4.28%	-\$13,134.71	-0.47%	-\$949.53	-0.03%
Scenario 3 (Deci	rease Top MTF	R to 35%)				
Elasticity of5	-\$904.06	-0.32%	-\$24,483.74	-0.88%	-\$25,387.80	-0.91%
Elasticity of -1.0	-\$1.807.93	-0.64%	-\$24,180.15	-0.87%	-\$25,988.08	-0.93%
Variable Elasticity	-\$2,137.19	-0.75%	-\$24,069.69	-0.86%	-\$26,206.88	-0.94%
Scenario 4 (Incre	ease Standard	Deduction	& Decrease To	p MTR)		
Elasticity of5	-\$4,891.42	-1.72%	-\$88,654.97	-3.17%	-\$93,546.39	-3.35%
Elasticity of -1.0	-\$9.781.86	-3.44%	-\$88,353.53	-3.16%	-\$98,135.39	-3.51%
Variable Elasticity	-\$13,087.48	-4.60%	-\$88,243.88	-3.16%	-\$101,331.36	-3.63%
Scenario 5 (Incre	ease Standard	Deduction	& Universal Ch	haritable De	duction	
Elasticity of5	\$1,985.11	0.70%	-\$81,150.20	-2.91%	-\$79,165.09	-2.83%
Elasticity of -1.0	\$3.969.83	1.40%	-\$81,682.52	-2.92%	-\$77,712.69	-2.78%
Variable Elasticity	\$6,983.23	2.46%	-\$82,246.69	-2.94%	-\$75,263.46	-2.69%
Scenario 6 (Incre	ease Standard	Deduction,	Universal Cha	ritable Dedi	iction, Decrease	Top MTR)
Elasticity of5	\$1,075.01	0.38%	-\$105,463.10	-3.78%	-\$104,388.09	-3.74%
Elasticity of -1.0	\$2.149.80	0.76%	-\$105,685.63	-3.78%	-\$103,535.83	-3.71%
Variable Elasticity	\$4,831.75	1.70%	-\$106,137.32	-3.80%	-\$101,305.57	-3.63%
*Charitable Change	e + Revenue Char	198		<u> </u>		

 $*Charitable\ Change\ +\ Revenue\ Change$ 

Using the Camp Proposal as an estimate of the various proposals currently under discussion in the White House and Congress (see *Table 1* for a comparison of the current proposals), our analyses show a universally negative effect of increasing the standard deduction and decreasing the top marginal tax rate to 35 percent on both household charitable giving and federal tax revenue. First, examining the increase in the standard deduction (*scenario 1*) and the decrease in the top marginal tax rate to 35 percent separately (*scenario 3*) shows that the proposed increase in the standard deduction has a larger predicted effect on both charitable giving and tax revenue than the proposed decrease in the marginal tax rate.

#### Results

We analyzed the various proposals using the tax-price elasticities calculated from panel data as well as estimates used in prior studies. The panel data used to calculate the estimates of tax-price elasticity includes data on both itemizers' and non-itemizers' giving. These estimates, which vary by income category (see *Table 2* for elasticities), may be larger than some prior estimates and suggest that taxpayers are more responsive to changes in tax policy.

## Scenario 1: Increase in standard deduction

Using the tax-price elasticities that we found, increasing the standard deduction would decrease charitable giving by \$11.0 billion (-3.9 percent) and tax revenue by \$64.2 billion (-2.3 percent).

# Scenario 3: Decrease in top marginal tax rate

Using the tax-price elasticities that we found, decreasing the top marginal tax rate would decrease charitable giving by \$2.1 billion (-0.8 percent) and tax revenue by \$24.1 billion (-0.9 percent).

Scenario 4: Combined effect of increase in the standard deduction and decrease in the top marginal tax rate

Scenario 4 is based on the Camp Proposal and closely resembles the proposals currently under consideration by the White House and Congress. Using the tax-price elasticities that we found, the combined proposals would decrease charitable giving by \$13.1 billion (-4.6 percent) and tax revenue by \$88.2 billion (-3.2 percent).

To summarize, if taxpayers are highly responsive to changes in tax policy, increasing the standard deduction would decrease charitable giving by \$11.0 billion (-3.9 percent) and decrease tax revenue by \$64.2 billion (-2.3 percent); decreasing the top marginal tax rate to 35 percent would decrease charitable giving by \$2.1 billion (-0.8 percent) and decrease tax revenue by \$24.5 billion (-0.88 percent); and the combined proposals would decrease charitable giving by \$13.1 billion (-4.6 percent) and decrease tax revenue by \$88.7 billion (-3.2 percent).

## **Additional Results**

We also consider the analysis of each proposal using some commonly used elasticities: less responsive, -0.5 & moderately responsive, -1.0.

# Scenario 1: Increase in standard deduction

When a less responsive elasticity (-0.5) is assumed, increasing the standard deduction would decrease charitable giving by \$4.0 billion (-1.4 percent) and tax revenue by \$64.2 billion (-2.3 percent). Using a moderately responsive elasticity (-1.0), increasing the standard deduction would decrease charitable giving by \$8.0 billion (-2.8 percent) and tax revenue by \$64.2 billion (-2.3 percent).

# Scenario 3: Decrease in top marginal tax rate

When a less responsive elasticity (-0.5) is assumed, decreasing the top marginal tax rate would decrease charitable giving by \$0.9 billion (-0.3 percent) and tax revenue by \$24.5 billion (-0.9

percent). Using a moderately responsive elasticity (-1.0), decreasing the top marginal tax rate would decrease charitable giving by \$1.8 billion (-0.6 percent) and tax revenue by \$24.2 billion (-0.9 percent).

Scenario 4: Combined effect of increase in the standard deduction and decrease in the top marginal tax rate

Scenario 4 is based on the Camp Proposal and closely resembles the proposals currently under consideration by the White House and Congress. When a less responsive elasticity (-0.5) is assumed, the combined proposals would decrease charitable giving by \$4.9 billion (-1.7 percent) and tax revenue by \$88.7 billion (-3.2 percent). Using a moderately responsive elasticity (-1.0), the combined proposals would decrease charitable giving by \$9.8 billion (-3.4 percent) and tax revenue by \$88.4 billion (-3.2 percent).

Overall, taxpayers responsiveness to changes in tax policy could vary based on the extent of responsiveness to changes in incentives, holding other factors constant. However, it is highly unlikely that they will not respond at all to potential changes in tax policy. In fact, the results of our calculations to estimate elasticity by income suggest that taxpayers will tend to be more responsive to these changes. Regardless, it is important to consider the possible range of outcomes. If low responsiveness, moderate responsiveness, and high responsiveness are all taken into account, increasing the standard deduction would decrease charitable giving by \$4.0 billion to \$11.0 billion (-1.4 percent to -3.9 percent) and decrease tax revenue by \$64.2 billion (-2.3 percent); decreasing the top marginal tax rate to 35 percent would decrease charitable giving by \$0.9 billion to \$2.1 billion (-.3 percent to -0.8 percent) and decrease tax revenue by \$24.1 billion to \$24.5 billion (-0.86 percent to -0.88 percent); and the combined proposals would decrease charitable giving by \$4.9 billion to \$13.1 billion (-1.7 percent to -4.6 percent) and decrease tax revenue by \$88.2 billion to \$88.7 billion (-3.2 percent). On the whole, it is clear that increasing the standard deduction and decreasing the top marginal tax rate will have a negative effect on both household charitable giving and federal tax revenue. These reductions are likely to have a negative effect on the non-profit sector as a whole, both because of lower donations and reductions federal funding to the sector.

# What is the effect on charitable giving if the charitable deduction is expanded to non-itemizers, in addition to itemizers?

Extending the charitable deduction to non-itemizers may be one way to recoup some of the potential losses in charitable donations caused by the various proposals under consideration. Our analyses show a positive effect of extending the charitable deduction to non-itemizers on charitable giving. However, this policy (alone and combined with other proposals) still has a negative effect on treasury revenue.

## **Results**

We analyzed the various proposals using the tax-price elasticities calculated from panel data as well as estimates used in prior studies. The panel data used to calculate the estimates of tax-price elasticity includes data on both itemizers' and non-itemizers' giving. These estimates, which

vary by income category (see *Table 2* for elasticities), may be larger than some prior estimates and suggest that taxpayers are more responsive to changes in tax policy.

Scenario 2: Extension of the charitable deduction to non-itemizers

Using the tax-price elasticities that we found, extending the charitable deduction to non-itemizers would *increase* charitable giving by \$12.2 billion (4.3 percent) and decrease tax revenue by \$13.1 billion (-0.5 percent). The net difference between charitable giving and tax revenue would be -\$0.9 billion (-0.03 percent). Among the presented policy options, this scenario has the greatest positive impact on charitable giving and the smallest negative impact on Treasury revenues.

Scenario 5: Increase of the standard deduction and extension of the charitable deduction to nonitemizers

Using the tax-price elasticities that we found, increasing the standard deduction along with the extension of the charitable deduction to non-itemizers would increase charitable giving by \$7.0 billion (2.5 percent) and decrease tax revenue by \$82.2 billion (-2.9 percent).

Scenario 6: Increase of the standard deduction, decrease in the marginal tax rate, and extension of the charitable deduction to non-itemizers

Under the two proposed policies (increase in the standard deduction and decrease in the top marginal tax rate), giving decreases. However, if the charitable deduction is extended to non-itemizers, total giving increases. In other words, the positive effects of extending the charitable deduction to non-itemizers more than offsets the negative effects of the other two policy changes on giving. Using the tax-price elasticities that we found, the combined effects of all three proposals would increase charitable giving by \$4.8 billion (1.7 percent) and decrease tax revenue by \$106.1 billion (-3.8 percent).

Isolated effects of adding the extension of the charitable deduction to non-itemizers to the current proposals of increasing the standard deduction and decreasing the top marginal tax rate. By comparing Scenario 6 to Scenario 4, it is possible to isolate the effect of including the extension of the non-itemizer deduction with the currently proposed increase in the standard deduction and decrease in the top marginal tax rate. Using the tax-price elasticities that we found, adding the non-itemizer charitable deduction to the other proposals has a slightly greater effect on charitable giving than the loss in tax revenue (\$26 million). However, this difference is small and disappears completely when moderate or low responsiveness is assumed, -\$5.4 billion and -\$10.8 billion respectively.

All policies that include extending the charitable deduction to all filers (scenarios 2, 5, and 6) have a positive effect on charitable giving. However, the gain in charitable giving comes at an equivalent or greater cost in federal tax revenue. None of the proposals analyzed in this study are treasury efficient ways to increase donations to charity. To summarize, only extending the charitable deduction to non-itemizers would increase charitable giving by \$12.2 billion (4.3 percent) and decrease tax revenue by \$13.1 billion (-0.5 percent), increasing the standard deduction and extending the charitable deduction to non-itemizers would increase charitable giving by \$7.0 billion (2.5 percent) and decrease tax revenue by \$82.2 billion (-2.9 percent), and

the three proposals combined would increase charitable giving by \$4.8 billion (1.7 percent) and decrease tax revenue by \$106.1 billion (-3.8 percent).

## **Additional Results**

We also consider the analysis of each proposal using some commonly used elasticities: less responsive, -0.5 & moderately responsive, -1.0.

Scenario 2: Extension of the charitable deduction to non-itemizers

When a less responsive elasticity (-0.5) is assumed, extending the charitable deduction to non-itemizers would *increase* charitable giving by \$3.8 billion (1.3 percent) and decrease tax revenue by \$11.6 billion (-0.4 percent). Using a moderately responsive elasticity (-1.0), extending the charitable deduction to non-itemizers would *increase* charitable giving by \$7.5 billion (2.7 percent) and decrease tax revenue by \$12.4 billion (-0.44 percent). Most importantly, the net effect of extending the charitable deduction to non-itemizers is negligible (less than -0.3 percent of revenue) regardless of the assumed elasticity used in the analysis. If low responsiveness, moderate responsiveness, and high responsiveness are all taken into account, the net difference between charitable giving and tax revenue would be expected to range from -\$7.8 billion (-0.3 percent) to -\$0.9 billion (-0.03 percent). Regardless of the assumed elasticity, this scenario has the greatest positive impact on charitable giving across all of the proposed policy options.

Scenario 5: Increase of the standard deduction and extension of the charitable deduction to non-itemizers

When a less responsive elasticity (-0.5) is assumed, increasing the standard deduction along with the extension of the charitable deduction to non-itemizers would increase charitable giving by \$2.0 billion (0.7 percent) and decrease tax revenue by \$81.2 billion (-2.9 percent). Using a moderately responsive elasticity (-1.0), increasing the standard deduction along with the extension of the charitable deduction to non-itemizers would increase charitable giving by \$4.0 billion (1.4 percent) and decrease tax revenue by \$81.7 billion (-2.9 percent).

Scenario 6: Increase of the standard deduction, decrease in the marginal tax rate, and extension of the charitable deduction to non-itemizers

When the extension of the charitable deduction is included with the two proposed policies (increase in the standard deduction and decrease in the top marginal tax rate), total giving increases. When a less responsive elasticity (-0.5) is assumed, the combined effects of all three proposals would increase charitable giving by \$1.1 billion (0.4 percent) and decrease tax revenue by \$105.5 billion (-3.8 percent). Using a moderately responsive elasticity (-1.0), the combined effects of all three proposals would increase charitable giving by \$2.1 billion (0.8 percent) and decrease tax revenue by \$105.7 billion (-3.8 percent).

Overall, taxpayers responsiveness to changes in tax policy could fall anywhere from not at all responsive to highly responsive. However, it is highly unlikely that they will not respond at all to potential changes in tax policy. In fact, the results of our calculations to estimate elasticity by income suggest, that taxpayers will be highly responsive to these changes. Regardless, it is important to consider the possible range of outcomes. If low responsiveness, moderate responsiveness, and high responsiveness are all taken into account, only extending the charitable

deduction to non-itemizers would increase charitable giving by \$3.8 billion to \$12.2 billion (1.3 percent to 4.3 percent) and decrease tax revenue by \$11.6 billion to \$13.1 billion (-0.4 percent to -0.5 percent), increasing the standard deduction and extending the charitable deduction to non-itemizers would increase charitable giving by \$2.0 billion to \$7.0 billion (0.7 percent to 2.5 percent) and decrease tax revenue by \$81.2 billion to \$82.2 billion (-2.9 percent), and the three proposals combined would increase charitable giving by \$1.1 billion to \$4.8 billion (0.4 percent to 1.7 percent) and decrease tax revenue by \$105.5 billion to \$106.1 billion (-3.8 percent).

How do the proposed tax policy changes affect taxpayers' charitable giving across income levels and by charitable subsector (giving to religious congregations vs. giving to other charities)?

# By income level

Table 6. Percent change in total giving by income group

	Under \$50,000	\$50,000-\$99,999	\$100,000+		
Scenario 1 (Increase Standard Deduction)					
Elasticity of5	-0.60	-2.31	-1.39		
Elasticity of -1.0	-1.19	-4.63	-2.77		
Variable Elasticity	-2.67	-6.90	-3.28		
Scenario 2 (Universal C	haritable Deduction)				
Elasticity of5	1.87	2.81	0.66		
Elasticity of -1.0	3.74	5.62	1.31		
Variable Elasticity	8.37	8.38	1.55		
Scenario 3 (Decrease To	pp MTR to 35%)				
Elasticity of5	0.00	0.00	-0.53		
Elasticity of -1.0	0.00	0.00	-1.06		
Variable Elasticity	0.00	0.00	-1.25		
Scenario 4 (Increase Sta	ndard Deduction &	Decrease Top MTR)			
Elasticity of5	-0.60	-2.31	-1.91		
Elasticity of -1.0	-1.19	-4.63	-3.82		
Variable Elasticity	-2.67	-6.90	-4.52		
Scenario 5 (Increase Sta	ndard Deduction &	Universal Charitable Ded	duction)		
Elasticity of5	1.18	2.43	-0.03		
Elasticity of -1.0	2.37	4.87	-0.06		
Variable Elasticity	5.30	7.25	-0.07		
Scenario 6 (Increase Standard Deduction, Universal Charitable Deduction, Decrease Top MTR)					
Elasticity of5	1.18	2.43	-0.56		
Elasticity of -1.0	2.37	4.87	-1.13		
Variable Elasticity	5.30	7.25	-1.34		

Regardless of the assumed elasticity, middle-income households are most affected by each proposal, showing the largest percent change in total giving.

#### Results

# *Low-income* (<\$50,000)

Increasing the standard deduction has a universally negative effect on total giving by middle-income households. Using the tax-price elasticities that we found (-2.2), total charitable giving by low-income households will decrease 1.2 percent. On the other hand, extending the charitable deduction to non-itemizers has a universally positive effect on total giving by low-income households. Using the tax-price elasticities that we found (-2.2), total charitable giving by low-income households will increase 8.4 percent.

Decreasing the top marginal tax rate to 35 percent has no effect on giving by low-income households. Together, increasing the standard deduction and expanding the charitable deduction to non-itemizers has an overall positive effect on total giving by low-income households (with or without decreasing the top marginal tax rate). Using the tax-price elasticities that we found (-2.2), total charitable giving by low-income households will increase 5.3 percent.

# Middle-income (\$50,000-\$99,999)

Increasing the standard deduction has a universally negative effect on total giving by middle-income households. Using the tax-price elasticities that we found (-1.5), total charitable giving by middle-income households will decrease 6.9 percent. On the other hand, extending the charitable deduction to non-itemizers has a universally positive effect on total giving by middle-income households. Using the tax-price elasticities that we found (-1.5), total charitable giving by middle-income households will increase 8.4 percent.

Decreasing the top marginal tax rate to 35 percent has no effect on giving by middle-income households. Together, increasing the standard deduction and expanding the charitable deduction to non-itemizers has an overall positive effect on total giving by middle-income households (with or without decreasing the top marginal tax rate). Using the tax-price elasticities that we found,(-1.5), total charitable giving by middle-income households will increase 7.3 percent.

# *High-income* (≥\$100,000)

Increasing the standard deduction has a universally negative effect on total giving by high-income households. Using the tax-price elasticities that we found (-1.2), total charitable giving by high-income households will decrease 3.3 percent. On the other hand, extending the charitable deduction to non-itemizers has a universally positive effect on total giving by high-income households. Using the tax-price elasticities that we found (-1.2), total charitable giving by high-income households will increase 1.6 percent.

Unlike low- and middle-income households, decreasing the top marginal tax rate to 35 percent has a negative effect on giving by high-income households. Using the tax-price elasticities that we found (-1.2), total charitable giving by high-income households will decrease 1.3 percent.

Increasing the standard deduction and decreasing the top marginal tax rate will have the largest negative effect on total giving by high-income households. Using the tax-price elasticities that we found (-1.2), total charitable giving by high-income households will decrease 4.5 percent.

Together, increasing the standard deduction and expanding the charitable deduction to non-itemizers has an overall *negative*, *but minimal* effect on total giving by high-income households. Regardless of the assumed responsiveness, charitable giving by high-income households will decrease by less than 0.1 percent.

If the expanded charitable deduction to non-itemizers is included with an increase in the standard deduction and a decrease in the top marginal tax rate, giving by high-income households will still *decrease*. Using the tax-price elasticities that we found (-1.2), total charitable giving by high-income households will decrease 1.4 percent.

## **Additional Results**

We also consider the analysis of each proposal using some commonly used elasticities: less responsive, -0.5 & moderately responsive, -1.0.

# *Low-income* (<\$50,000)

Increasing the standard deduction has a universally negative effect on total giving by low-income households. If low responsiveness (-0.5) is assumed, total charitable giving by low-income households will decrease by 0.6 percent. Using a moderately responsive elasticity (-1.0), total charitable giving by low-income households will decrease by 2.7 percent. On the other hand, extending the charitable deduction to non-itemizers has a universally positive effect on total giving by low-income households. If low responsiveness (-0.5) is assumed, total charitable giving by low-income households will increase by 1.9 percent. Using a moderately responsive elasticity (-1.0), total charitable giving by low-income households will increase by 3.7 percent.

Decreasing the top marginal tax rate to 35 percent has no effect on giving by low-income households. Together, increasing the standard deduction and expanding the charitable deduction to non-itemizers has an overall positive effect on total giving by low-income households (with or without decreasing the top marginal tax rate). If low responsiveness (-0.5) is assumed, total charitable giving by low-income households will increase by 1.2 percent. Using a moderately responsive elasticity (-1.0), total charitable giving by low-income households will increase by 2.4 percent.

# Middle-income (\$50,000-\$99,999)

Increasing the standard deduction has a universally negative effect on total giving by middle-income households. If low responsiveness (-0.5) is assumed, total charitable giving by middle-income households will decrease by 2.3 percent. Using a moderately responsive elasticity (-1.0), total charitable giving by middle-income households will decrease by 4.6 percent. On the other hand, extending the charitable deduction to non-itemizers has a universally positive effect on total giving by middle-income households. If low responsiveness (-0.5) is assumed, total charitable giving by middle-income households will increase by 2.8 percent. Using a moderately responsive elasticity (-1.0), total charitable giving by middle-income households will increase by 5.6 percent.

Decreasing the top marginal tax rate to 35 percent has no effect on giving by middle-income households. Together, increasing the standard deduction and expanding the charitable deduction

to non-itemizers has an overall positive effect on total giving by middle-income households (with or without decreasing the top marginal tax rate). If low responsiveness (-0.5) is assumed, total charitable giving by middle-income households will increase by 2.4 percent. Using a moderately responsive elasticity (-1.0), total charitable giving by middle-income households will increase by 4.9 percent.

# *High-income* (≥\$100,000)

Increasing the standard deduction has a universally negative effect on total giving by high-income households. If low responsiveness (-0.5) is assumed, total charitable giving by high-income households will decrease by 1.4 percent. Using a moderately responsive elasticity (-1.0), total charitable giving by high-income households will decrease by 2.8 percent. On the other hand, extending the charitable deduction to non-itemizers has a universally positive effect on total giving by high-income households. If low responsiveness (-0.5) is assumed, total charitable giving by high-income households will increase by 0.7 percent. Using a moderately responsive elasticity (-1.0), total charitable giving by high-income households will increase by 1.3 percent.

Unlike low- and middle-income households, decreasing the top marginal tax rate to 35 percent has a negative effect on giving by high-income households. If low responsiveness (-0.5) is assumed, total charitable giving by high-income households will decrease by 0.5 percent. Using a moderately responsive elasticity (-1.0), total charitable giving by high-income households will decrease by 1.1 percent.

Increasing the standard deduction and decreasing the top marginal tax rate will have the largest negative effect on total giving by high-income households. If low responsiveness (-0.5) is assumed, total charitable giving by high-income households will decrease by 1.9 percent. Using a moderately responsive elasticity (-1.0), total charitable giving by high-income households will decrease by 3.8 percent.

Together, increasing the standard deduction and expanding the charitable deduction to non-itemizers has an overall *negative*, *but minimal* effect on total giving by high-income households. Regardless of the assumed responsiveness, charitable giving by high-income households will decrease by less than 0.1 percent.

If the expanded charitable deduction to non-itemizers is included with an increase in the standard deduction and a decrease in the top marginal tax rate, giving by high-income households will still *decrease*. If low responsiveness (-0.5) is assumed, total charitable giving by high-income households will decrease by 0.6 percent. Using a moderately responsive elasticity (-1.0), total charitable giving by high-income households will decrease by 1.1 percent.

# By charitable subsector

Table 7. Percent change in religious vs. secular giving

Tubic 7. I creeni change	Giving % Change,	Giving % Change,	Giving % Change,		
	Total	Religious	Secular		
Scenario 1 (Increase Standard Deduction)					
Elasticity of5	-1.40%	-1.44%	-1.36%		
Elasticity of -1.0	-2.81%	-2.87%	-2.72%		
Variable Elasticity	-3.86%	-4.00%	-3.66%		
Scenario 2 (Universal	Charitable Deduction)				
Elasticity of5	1.33%	1.10%	1.64%		
Elasticity of -1.0	2.65%	2.21%	3.27%		
Variable Elasticity	4.28%	3.81%	4.95%		
Scenario 3 (Decrease 7	<i>Top MTR to 35%)</i>				
Elasticity of5	-0.32%	-0.31%	-0.33%		
Elasticity of -1.0	-0.64%	-0.62%	-0.66%		
Variable Elasticity	-0.75%	-0.73%	-0.78%		
Scenario 4 (Increase S	tandard Deduction & I	Decrease Top MTR)			
Elasticity of5	-1.72%	-1.74%	-1.69%		
Elasticity of -1.0	-3.44%	-3.48%	-3.38%		
Variable Elasticity	-4.60%	-4.72%	-4.43%		
Scenario 5 (Increase S	tandard Deduction & V	Universal Charitable De	eduction)		
Elasticity of5	0.70%	0.49%	0.98%		
Elasticity of -1.0	1.40%	0.99%	1.97%		
Variable Elasticity	2.46%	1.99%	3.10%		
Scenario 6 (Increase S	Scenario 6 (Increase Standard Deduction, Universal Charitable Deduction, Decrease Top MTR)				
Elasticity of5	0.38%	0.18%	0.65%		
Elasticity of -1.0	0.76%	0.37%	1.30%		
Variable Elasticity	1.70%	1.26%	2.31%		

The various policy proposals discussed throughout this study have varying impacts on both giving to religious congregations and giving to other charities.

## **Results**

Both increasing the standard deduction alone and increasing the standard deduction in conjunction with decreasing the top marginal tax rate to 35% have a slightly larger effect on giving to religious congregations than on giving to other charities. Using the tax-price elasticities that we found, increasing the standard deduction alone will decrease giving to religious congregations by 4.0 percent and giving to other charities by 3.7 percent. Decreasing the top marginal tax rate to 35% will have a slightly larger effect on giving to other charities than on giving to religious congregations: using the tax-price elasticities that we found, giving to other charities will decrease by 0.8 percent and giving to religious congregations will decrease by 0.7 percent. Increasing the standard deduction and decreasing the top marginal tax rate together will

decrease giving to religious congregations by 4.7 percent and giving to other charities by 4.4 percent. This is driven by the effects of increasing the standard deduction.

Extending the charitable deduction to non-itemizers has a larger effect on giving to other charities than giving to religious congregations: using the tax-price elasticities that we found, giving to other charities will increase by 4.9 percent and giving to religious congregations will increase by 3.8 percent. Together, increasing the standard deduction and extending the charitable deduction to non-itemizers will have a larger effect on giving to other charities: using the tax-price elasticities that we found, giving to other charities will increase by 3.1 percent and giving to religious congregations will increase by 2.0 percent.

With all three proposals together (increase in the standard deduction, decrease in the top marginal tax rate, and universal charitable deduction), giving to other charities is more affected than giving to religious congregations: using the tax-price elasticities that we found, giving to other charities will increase by 2.3 percent and giving to religious congregations will increase by 1.3 percent.

While there are some differences in how religious and giving to other charities are affected by the proposed policy changes, most differences are relatively small and overall, giving to religious congregations and giving to other charities are affected relatively evenly.

These results somewhat contrast what we found when looking at the changes in giving among households that changed itemization status within the PSID panel. In our tests of itemization change and its effect on giving, for the earlier waves, we see a very marked difference between subsectors, with giving to religious congregations being about twice as affected by the itemization change than giving to other charities. For instance, between 2001 and 2013 households that gained itemization status give about \$45 *more*, on average, to other causes than those whose itemization status didn't change. Those same households give about \$81 *more* to religious congregations than those whose itemization status didn't change. Households that lost itemization status, give about \$21 *less* to other causes and about \$58 *less* to religious congregations than households whose itemization status didn't change.

This discrepancy is likely a matter of income representation. If looking only at the two lower income brackets in our microsimulation, we continue to see a similar split, with giving to religious congregations being affected at between 137-194 percent the extent of giving to other charities.

# **Additional Results**

We also consider the analysis of each proposal using some commonly used elasticities: less responsive, -0.5 & moderately responsive, -1.0.

Both increasing the standard deduction alone and increasing the standard deduction in conjunction with decreasing the top marginal tax rate to 35% have a slightly larger effect on giving to religious congregations than on giving to other charities. Assuming a low to moderate responsiveness (elasticities: -0.5 to -1.0), increasing the standard deduction alone will decrease

giving to religious congregations by 1.4 to 2.9 percent and giving to other charities by 1.4 to 2.7 percent. Decreasing the top marginal tax rate to 35% will have a slightly larger effect on giving to other charities than on giving to religious congregations: assuming a low to moderate responsiveness (elasticities: -0.5 to -1.0), giving to other charities will decrease by 0.3 to 0.7 percent and giving to religious congregations will decrease by 0.3 to 0.6 percent. Assuming a low to moderate responsiveness (elasticities: -0.5 to -1.0), increasing the standard deduction and decreasing the top marginal tax rate together will decrease giving to religious congregations by 1.7 to 3.5 percent and giving to other charities by 1.7 to 3.4 percent. This is driven by the effects of increasing the standard deduction.

Extending the charitable deduction to non-itemizers has a larger effect on giving to other charities than giving to religious congregations: assuming a low to moderate responsiveness (elasticities: -0.5 to -1.0), giving to other charities will increase by 1.7 to 3.3 percent and giving to religious congregations will increase by 1.1 to 2.2 percent. Together, increasing the standard deduction and extending the charitable deduction to non-itemizers will have a larger effect on giving to other charities: assuming a low to moderate responsiveness (elasticities: -0.5 to -1.0), giving to other charities will increase by 1.0 to 2.0 percent and giving to religious congregations will increase by 0.5 to 1.0 percent.

With all three proposals together (increase in the standard deduction, decrease in the top marginal tax rate, and universal charitable deduction), giving to other charities is more affected than giving to religious congregations: assuming a low to moderate responsiveness (elasticities: -0.5 to -1.0), giving to other charities will increase by 0.7 to 1.3 percent and giving to religious congregations will increase by 0.2 to 0.4 percent.

## Strengths and limitations

## Assumptions about non-itemizers

One limitation of that is common to this literature is the assumption that non-itemizers will share a tax-price of giving elasticity with itemizers. In other words, the assumption being made is that their behavior will be the same when it is likely that there are actually some differences in their behavior. However, there is no feasible way to calculate a tax price elasticity for a sample defined by not having any variation in tax price.

# Endogeneity

Endogeneity is another limitation common to research in this area. This study deals with this issue by using a fixed-effects model containing itemizers & non-itemizers and controlling for itemization status.

# Reliance on 2009 PUF data

The 2009 IRS SOI PUF is the most recently available dataset. While it would be ideal to have data from the most recent tax year, this is not possible. Therefore, we use the best available dataset and project forward to 2017. Also, we use the PPS in addition to the PUF to better capture giving at all income levels and the PPS is available through 2013 providing slightly more recent data.

# Use of the PSID

Since the PSID is not representative for high net-worth households (top 2-3% of households), the estimated baseline total for individual giving might be an underestimate. However, most of the previous research in this area is based on tax return data which do not accurately capture giving by low- and middle-income households. Therefore, the benefits of using the PSID, which is nationally representative for 97-98% of the population and includes a cross-section of lower- and middle-class households, greatly outweigh the limitations at the highest net-worth households. Another strength of the PSID is the wealth of information collected about each household. The PPS is the most comprehensive data currently available measuring household giving. Since the PPS is part of the larger PSID, household level data is available on a wide range of variables including wealth, income, family composition, etc.

Using a fixed-effects model requires panel data and, unlike with tax data, households stay in the sample whether or not the household gains or loses itemizing status, so the direct effect of this can be somewhat controlled for. The fixed-effects model helps to control for time-invariant conditions, down to the household level, so that even variables that cannot be observed can be controlled for. The model also allows control for key variables – income, wealth, marital status – which can change over time and are observed, so that their effect is factored out of the value found for change due to price of giving.

## **Conclusions**

Changes in tax policy have the potential to affect charitable giving across income levels to both religious and secular giving. With the new administration in the White House, tax reform has once again become a central issue in Washington, D.C. Therefore, it is important to consider how changes in tax policy, particularly policies about the charitable deduction and itemization status, will affect charitable giving overall and by subsector. In particular, all policies considered in this study that include expanding the charitable deduction to all filers have a positive effect on charitable giving. However, the gain in charitable giving comes at cost to government revenue.

## References

- Ackerman, D., & Auten, G. (2006). Floors, ceilings, and opening the door for a non-itemizer deduction. *National Tax Journal*, 509-530.
- Almunia, M., Lockwood, B., & Scharf, K. (2017, draft). More giving or more givers? The effects of tax incentives on charitable donations in the UK.
- Auten, G. E., Sieg, H., & Clotfelter, C. T. (2002). Charitable giving, income, and taxes: An analysis of panel data. *The American Economic Review*, 92(1), 371-382.
- Bakija, J. (2000). Distinguishing transitory and permanent price elasticities of charitable giving with pre-announced changes in tax law. Retrieved August, 1, 2014.
- Bakija, J., & Heim, B. T. (2011). How does charitable giving respond to incentives and income? New estimates from panel data. *National Tax Journal*, 64(2), 615.
- Barrett, K. S., McGuirk, A. M., & Steinberg, R. (1997). Further evide nce on the dynamic impact of taxes on charitable giving. *National Tax Journal*, 321-334.

- Brady, K., & Ryan, P. (2016). *A better way: Our vision for a confident America*. Washington, D.C.: Retrieved from <a href="https://waysandmeans.house.gov/taxreform/">https://waysandmeans.house.gov/taxreform/</a>.
- Broman, A. J. (1989). Statutory tax rate reform and charitable contributions: Evidence from a recent period of reform. *Journal of the American Taxation Association*, 10, 7-20.
- Clotfelter, C. T. (1985). Front matter" Federal Tax Policy and Charitable Giving" *Federal Tax Policy and Charitable Giving* (pp. -14-10): University of Chicago Press.
- Congressional Budget Office. (2011). Options for changing the tax treatment of charitable giving. Washington, D.C.: The Congress of the United States.
- Dale, H. P., & Colinvaux, R. (2015). The Charitable Contributions Deduction: Federal Tax Rules. *Tax Lawyer*, 68(2), 331-366.
- Dunbar, A. E., & Phillips, J. (1997). The effect of tax policy on charitable contributions: The case of nonitemizing taxpayers. *The Journal of the American Taxation Association*, 19, 1.
- Duquette, C. M. (1999). Is charitable giving by nonitemizers responsive to tax incentives? New evidence. *National Tax Journal*, 195-206.
- Feldstein, M. (2015). Raising revenue by limiting tax expenditures. *Tax Policy and Economy*, 29(1), 1-11.
- Feldstein, M. S., & Lindsey, L. (1983). Simulating nonlinear tax rules and nonstandard behavior: an application to the tax treatment of charitable contributions *Behavioral simulation methods in tax policy analysis* (pp. 139-172): University of Chicago Press.
- Frankel, M. (2017, February 5, 2017). What is the standard deduction for 2017? *The Motley Fool.* Retrieved April 14, 2017, from <a href="https://www.fool.com/retirement/2017/02/05/what-is-the-standard-deduction-for-2017.aspx">https://www.fool.com/retirement/2017/02/05/what-is-the-standard-deduction-for-2017.aspx</a>
- Galle, B. D., Colinvaux, R., & Steuerle, C. E. (2012). Evaluating the Charitable Deduction and Proposed Reforms. Urban Institute Tax Policy and Chartities Priject, 2012.
- Giving USA Foundation. (2016). Giving USA: The Annual Report on Philanthropy for the year 2015. Chicago.
- Gouskova, E., Andreski, P., & Schoeni, R. F. (2010). Comparing estimates of family income in the Panel Study of Income Dynamics and the March Current Population Survey, 1968-2007: Survey Research Center, Institute for Social Research, University of Michigan Ann Arbor, MI.
- Gravelle, J. G. (2005). *Economic analysis of the charitable contribution deduction for non-itemizers*. (Order Code RL31108). Washington, D.C.: Retrieved from <a href="http://www.pgdc.com/pgdc/crs-analyzes-charitable-contribution-deduction-non-itemizers">http://www.pgdc.com/pgdc/crs-analyzes-charitable-contribution-deduction-non-itemizers</a>.
- Lowry, S. (2014). Itemized tax deductions for individuals: Data analysis. Congressional Research Service.
- Lu, C. (2017). What are itemized deductions? Washington, D.C.: Tax Policy Center, Urban Institute & Brookings Institution.
- Muthitacharoen, A., & Giertz, S. H. (2011). Options for changing the tax treatment of charitable giving. Congressional Budget Office
- Osili, U., Clark, C., St Claire, M., & Bergdoll, J. (2016). The 2016 US Trust® Study of High Net Worth Philanthropy.
- Peloza, J., & Steel, P. (2005). The price elasticities of charitable contributions: a meta-analysis. *Journal of Public Policy & Marketing*, 24(2), 260-272.

- Pfeffer, F. T., Schoeni, R. F., Kennickell, A., & Andreski, P. (2016). Measuring wealth and wealth inequality: Comparing two US surveys. *Journal of Economic and Social Measurement*, 41(2), 103-120.
- Randolph, W. C. (1995). Dynamic income, progressive taxes, and the timing of charitable contributions. *Journal of Political Economy*, 103(4), 709-738.
- Ricketts, R. C., & Westfall, P. H. (1993). New evidence on the price elasticity of charitable contributions. *The Journal of the American Taxation Association*, 15(2), 1.
- Rooney, P., Osili, U., Bhakta, R., Raghavan, S., Davis Kalugyer, A., & Hyatte, C. (2011). Impact of the Obama administration's proposed tax policy changes on itemized charitable giving.
- Rosenberg, J., Steuerle, C. E., Ovalle, J., & Stallworth, P. (2016). The new debate over a charitable deduction for nonitemizers. Washington, D.C.: Urban Institute.
- Rosenberg, J., Steuerle, C. E., Steele, E., & Eng, A. (2014). Preliminary estimates of the impact of the Camp Tax Reform Plan on charitable giving. Washington, DC: Urban Institute. <a href="http://www.urban.org/research/publication/preliminary-estimates-impact-camp-tax-reform-plan-charitablegiving">http://www.urban.org/research/publication/preliminary-estimates-impact-camp-tax-reform-plan-charitablegiving</a>.
- Rosenberg, J., Steuerle, C. E., & Toran, K. (2013). What does the fiscal cliff deal mean for nonprofits? Washington, D.C.: Urban Institute and Tax Policy Center.
- Stallworth, P., Lu, C., & Steuerle, C. E. (2016). Both Clinton and Trump would reduce tax incentives for charitable giving *TaxVox: Campaigns, Proposals, and Reforms*. Washington, D.C: Tax Policy Center: Urban Institute & Brookings Institution.
- Trump, D. (2017). 2017 tax reform for economic growth and American jobs: The biggest individual and business tax cut in American History. Retrieved from <a href="http://www.cnn.com/2017/04/26/politics/white-house-donald-trump-tax-proposal/">http://www.cnn.com/2017/04/26/politics/white-house-donald-trump-tax-proposal/</a>.
- 26 U.S. Code § 67 2-percent floor on miscellaneous itemized deductions (1933).
- United States Internal Revenue Service. (2012). Tax credits vs. tax deductions. *U.S. Tax Center*. from <a href="https://www.irs.com/articles/tax-credits-vs-tax-deductions">https://www.irs.com/articles/tax-credits-vs-tax-deductions</a>
- United States Internal Revenue Service. (2017a). 29. *Limit on Itemized Deductions*. Washington, D.C.: Retrieved from <a href="https://www.irs.gov/publications/p17/ch29.html">https://www.irs.gov/publications/p17/ch29.html</a>.
- United States Internal Revenue Service. (2017b). *Publication 526*. Retrieved from <a href="https://www.irs.gov/publications/p526/ar02.html">https://www.irs.gov/publications/p526/ar02.html</a>.
- Urban-Brookings Tax Policy Center. (2017a). How could we improve incentives for charitable giving? *Tax Policy Center Briefing Book: Key Elements of the U.S. Tax System*. Washington, D.C.
- Urban-Brookings Tax Policy Center. (2017b). How do the standard deduction and itemized deductions compare? *Tax Policy Center Briefing Book: Key Elements of the U.S. Tax System.* Washington, D.C.
- Urban-Brookings Tax Policy Center. (2017c). What are the largest tax expenditures? *Tax Policy Center Briefing Book: Some Background*. Washington, D.C.

# Appendix A: Methodology for calculating tax-price elasticity of giving

To estimate our tax-price elasticities, we conducted a fixed-effects ordinary least squares (OLS) regression on the PSID panel, 2001-2013. The dependent variable was giving; the independent variables were age, if the household had children living with them, if they were married, pre-tax family income, wealth without home equity, itemization status, and the tax price faced by the household (as estimated by Taxsim). The amounts were all logged, and all dollar amounts were inflated to 2016 dollars. We separated the sample into 3 brackets based on estimated AGI: <\$50k, \$50k-\$100k, and \$100k+, so that different elasticities could be found for each.

Fixed-effects was chosen, instead of a pooled OLS or random effects, so that as much time-invariant effects could be eliminated, and specifically so that year-to-year differences could be correlated. This helps correct for some of the permanent vs transitory income effects referenced in pooled OLS/pooled tobit work. The year-to-year effects help boost FE over random-effects, and is also why we chose to do a panel OLS instead of a panel tobit. A random effects panel tobit was estimated (with year dummies being added to those models), and the elasticities found then were typically larger (in an absolute sense) than in the fixed-effects model. Additionally, there are very few households (~15%) in our sample who never give, which lessens (but not totally eliminates) the necessity of tobit to take help in the controlling of incidence effects.

PSID offers a few advantages over the tax data used for much of this work. It's a more accurate distribution of households, since non-itemizers represent the bulk of US households and are not captured in tax data. Income brackets being done on tax data, then, must be checked before direct comparison with ours; an income bracket that begins at <\$200k does not tell the same story as ours, and any finding that the directionality of the results is not the same is not necessarily surprising. Additionally, wealth, which is pretty important to giving, is not recorded in income work, and so cannot be controlled for with tax data only.

Including itemization status helps control for the endogeneity caused by those threshold households which flip between itemizing and not; we see that this impact is, in fact, a relatively large & significant one, and without this control we would see a larger result.

There are problems with using the PSID for this work. Tax data, for instance, must largely be imputed. AGI is imputed from taxsim (a widely used resource to impute tax rates for households when the actual rate is unknown), as is the tax-price.

To check the robustness of our estimated elasticities, we calculated elasticities under a number of conditions. Wealth does not have a large effect on the elasticities; if wealth is not controlled for, all three elasticities decrease in absolute value only slightly (less than 0.1). Since there is not a commonly accepted way to deal with endogeneity when calculating elasticities, we dealt with this issue by controlling for itemization status. However, we conducted checks by calculating elasticities with slight modifications to how itemization is measured and/or controlled for. If we do not control for itemization status, the magnitude of the elasticities all increase with the elasticity for the low income bracket increasing significantly. One of the strengths of using the PSID to calculate elasticities is the inclusion of non-itemizers in the sample. However, if we limit our sample to itemizers, then we see a slight drop in the <\$50k elasticity and slight

increases in the other two elasticities. On the other hand, if we limit the sample to households which itemized both in the present period and the period prior ("consistent itemizers"), there would be almost no change in the elasticities for the low- and middle-income brackets (decreases in the elasticity by 0.02 and 0.03 respectively). However, the high-income elasticity would drop to -0.818. This is important to note because this estimate is relatively close to what the literature gives as the "general" elasticity and these would be the households that a lot of this literature is based on (particularly studies that reliant on tax data).

*Table A-1. Calculated elasticities with various restrictions* 

Restriction	Full Sample	Low-Income	Middle-Income	High-Income
Restriction	Tun Sample	Sample Only	Sample Only	Sample Only
All income	-1.344	-2.236*	-1.490*	-1.182*
Only Itemizers (Current Period Itemized)	-1.550	-2.06	-1.774	-1.366
Only Itemizers (Current + Previous Period Itemized)	-1.227	-2.216	-1.46	-0.818
Only Itemizers (Always Itemize)	-1.271	-2.355	-1.393	-1.192
Only Married Households	-1.306	-3.449	-1.508	-1.285
Exclude wealth	-1.336	-2.203	-1.480	-1.179
Exclude itemization status	-2.328	-4.054	-2.346	-1.339
Exclude demographic				
variables (number of	-1.452	-2.438	-1.402	-1.174
children)				
Use average income	-1.615	-2.450	-1.708	-1.380

<sup>\*</sup>These are the elasticities used throughout this study.

#### **Appendix B:** *Methodology for tax-calculator*

The Tax-Calculator simulates the U.S. federal individual income tax. In conjunction with micro data that represent the U.S. population (IRS PUF) and a set of behavioral assumptions, the Tax-Calculator can be used to conduct revenue scoring and distributional analyses of tax policies. The Tax-Calculator is written in Python, an interpreted language that can execute on Windows, Mac, or Linux. Additional modifications have been made to the Tax-Calculator for this project in order to incorporate data available from the PSID but not the IRS, such as non-itemizer giving and newly calculated tax-price elasticities of giving.

Results from the Tax-Calculator microsimulation were generated by the Open-Source Policy Center at the American Enterprise Institute. (<a href="https://www.ospc.org/taxbrain/">https://www.ospc.org/taxbrain/</a>; <a href="https://github.com/open-source-economics/Tax-Calculator">https://github.com/open-source-economics/Tax-Calculator</a>)

The microsimulation compared projected charitable giving and net government revenue under six policy conditions to the current law. The six policy scenarios, described in *Table 3*, examine various combinations of three major policy changes:

- 1. Increasing the value of the standard deduction to \$11,000 for individuals and \$22,000 for married couples
- 2. Extending the charitable deduction to non-itemizers, and
- 3. Decreasing the highest marginal tax rate to from 39.6 percent to 35 percent.

OSPC modified the Tax-Calculator to allow us to simulate specific policy changes under certain conditions (low responsiveness, moderate responsiveness, and high responsiveness). Tax Brain is the easy to use interface for the Tax-Calculator (https://www.ospc.org/taxbrain/). The interface allows users to estimate changes in income tax liability and payroll tax liability under different policy assumptions and includes key provisions for the Clinton 2016 Campaign Proposal, Trump 2016 Campaign Proposal, the Brady-Ryan Plan, and the 2017 Trump Administration Proposal. Tax Brain allows users to change a variety of parameters: payroll taxes, social security taxability, above-the-line deductions, personal exemptions, standard deduction, personal refundable credit, itemized deductions, capital gains and dividends, personal income, nonrefundable credits, other taxes, refundable credits, and surtaxes. Freely available analyses rely on a subset of the 2009 IRS SOI Public Use File (PUF) and the 2013 Census Current Population Survey (https://github.com/open-source-economics/taxdata). However, the Tax-Calculator can be used in conjunction with the full IRS SOI PUF if the data has been purchased from the IRS. Therefore, this study uses the full 2009 IRS SOI PUF for the most accurate results possible given the data that is currently available. The underlying Tax-Calculator computes federal individual income taxes and treasury revenues for tax filing years beginning with 2013. The Tax-Calculator code also is open source and is freely available (https://github.com/open-source-economics/Tax-Calculator). However, the calculator did not previously have the ability to estimate charitable giving. Upon request, changes were made to the Tax-Calculator code to estimate charitable giving in addition to treasury revenue and to estimate these outcomes at three different sets of elasticities. The full code for these changes and the analyses of the six different policy proposals is recorded online: http://nbviewer.jupyter.org/github/andersonfrailey/Notebook-Uploads/blob/master/Non-Itemizer%20Tax%20Policy%20Changes.ipynb

## **Appendix C:** Tables

*Table C-1. Total giving under current law and six policy options (Seven policy scenarios run under three different sets of elasticities)* 

	V	,			Change	in Total
					Contribut	ions from
	Increased	Extension	Decrease in	Total	Current-L	Law Level
	value of the	of	highest	contributions	Billions	
	Standard	Charitable	marginal tax	(billions of	of	
	Deduction3	Deduction	rate to 35%	2017 dollars)	dollars	Percent
Current Law	N/A	N/A	N/A	\$284.42	N/A	N/A
				Changes fr	om Curren	t Law
Scenario 1	Yes	No	No			
Elasticity of5				\$280.42	-\$4.00	-1.41%
Elasticity of -1.0				\$276.43	-\$7.99	-2.81%
Variable Elasticity				\$273.45	-\$10.97	-3.86%
Scenario 2	No	Yes	No			
Elasticity of5				\$288.19	\$3.77	1.33%
Elasticity of -1.0				\$291.96	\$7.54	2.65%
Variable Elasticity				\$296.60	\$12.18	4.28%
Scenario 3	No	No	Yes			
Elasticity of5				\$283.51	-\$0.91	-0.32%
Elasticity of -1.0				\$282.61	-\$1.81	-0.64%
Variable Elasticity				\$282.28	-\$2.14	-0.75%
Scenario 4	Yes	No	Yes			
Elasticity of5				\$279.52	-\$4.90	-1.72%
Elasticity of -1.0				\$274.63	-\$9.79	-3.44%
Variable Elasticity				\$271.33	-\$13.09	-4.60%
Scenario 5	Yes	Yes	No			
Elasticity of5				\$286.40	\$1.98	0.70%
Elasticity of -1.0				\$288.39	\$3.97	1.40%
Variable Elasticity				\$291.40	\$6.98	2.45%
Scenario 6	Yes	Yes	Yes			
Elasticity of5				\$285.49	\$1.07	0.38%
Elasticity of -1.0				\$286.57	\$2.15	0.76%
Variable Elasticity				\$289.25	\$4.83	1.70%

<sup>3 \$11,000</sup> for individuals; \$22,000 for joint filers

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Table C-2. Giving by itemizers under current law and six policy options (Seven policy scenarios run under three different sets of elasticities)

	V	,			Char	ige in		
					Contribu	Contributions by		
					Itemize	ers from		
	Increased	Extension	Decrease in	Contributions	Current-I	Law Level		
	value of the	of	highest	by Itemizers	Billions			
	Standard	Charitable	marginal tax	(billions of	of			
	Deduction4	Deduction	rate to 35%	2017 dollars)	dollars	Percent		
Current Law	N/A	N/A	N/A	\$209.67	N/A	N/A		
				Changes fr	om Curren	t Law		
Scenario 1	Yes	No	No					
Elasticity of5				\$205.90	-\$3.77	-1.33%		
Elasticity of -1.0				\$202.14	-\$7.53	-2.65%		
Variable Elasticity				\$199.32	-\$10.35	-3.64%		
Scenario 2	No	Yes	No					
Elasticity of5				\$209.46	-\$0.21	-0.07%		
Elasticity of -1.0				\$209.25	-\$0.42	-0.15%		
Variable Elasticity				\$209.09	-\$0.58	-0.20%		
Scenario 3	No	No	Yes					
Elasticity of5				\$208.77	-\$0.90	-0.32%		
Elasticity of -1.0				\$207.86	-\$1.81	-0.64%		
Variable Elasticity				\$207.53	-\$2.14	-0.75%		
Scenario 4	Yes	No	Yes					
Elasticity of5				\$205.01	-\$4.66	-1.64%		
Elasticity of -1.0				\$200.34	-\$9.33	-3.28%		
Variable Elasticity				\$197.20	-\$12.47	-4.38%		
Scenario 5	Yes	Yes	No					
Elasticity of5				\$208.20	-\$1.47	-0.52%		
Elasticity of -1.0				\$206.72	-\$2.95	-1.04%		
Variable Elasticity				\$205.79	-\$3.88	-1.36%		
Scenario 6	Yes	Yes	Yes					
Elasticity of5				\$207.29	-\$2.38	-0.84%		
Elasticity of -1.0				\$204.91	-\$4.76	-1.67%		
Variable Elasticity				\$203.65	-\$6.02	-2.12%		
Source: The sim	ulation results	use the IRS F	Public-Use File	for 2009 to proje	ect forward	for 2017.		

<sup>4 \$11,000</sup> for individuals; \$22,000 for joint filers

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Table C-3. Giving by non-itemizers under current law and six policy options (Seven policy scenarios run under three different sets of elasticities)

Change in Contributions by Non-Itemizers from Current-Law Contributions Level Increased Extension Decrease in by Nonvalue of the of highest **Itemizers** Billions Charitable marginal tax (billions of Standard of dollars Deduction<sub>5</sub> Deduction rate to 35% 2017 dollars) Percent Current Law \$74.75 N/A N/A N/A N/A N/A Changes from Current Law Scenario 1 Yes No No \$74.52 -\$0.23 -0.08% Elasticity of -.5 \$74.29 -\$0.46 -0.16% Elasticity of -1.0 \$74.13 -\$0.62 -0.22% Variable Elasticity Scenario 2 No Yes No \$78.72 \$3.97 1.40% Elasticity of -.5 \$82.71 \$7.96 2.80% Elasticity of -1.0 \$87.51 \$12.76 4.49% Variable Elasticity Scenario 3 No No Yes \$74.75 \$0.00 0.00% Elasticity of -.5 \$74.75 \$0.00 0.00% Elasticity of -1.0 \$74.75 \$0.00 0.00% Variable Elasticity Scenario 4 Yes No Yes \$74.52 -\$0.23 -0.08% Elasticity of -.5 \$74.29 -\$0.46 -0.16% Elasticity of -1.0 -0.22% Variable Elasticity \$74.13 -\$0.62 Scenario 5 Yes Yes No \$78.21 \$3.46 1.22% Elasticity of -.5 \$81.67 \$6.92 2.43% Elasticity of -1.0 \$85.61 3.82% \$10.86 Variable Elasticity Yes Yes Yes Scenario 6 \$78.20 \$3.45 1.21% Elasticity of -.5 \$81.65 \$6.90 2.43% Elasticity of -1.0 \$85.60 \$10.85 3.81% Variable Elasticity

<sup>5 \$11,000</sup> for individuals; \$22,000 for joint filers

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Table C-4. Total revenue under current law and six policy options (Seven policy scenarios run

under three different sets of elasticities)

	•	·			Change in Total				
	Increased	Extension	Decrease in		Revenu	e from			
	value of the	of	highest	Total Revenue	Current-L	aw Level			
	Standard	Charitable	marginal tax	(billions of	Billions of				
	Deduction6	Deduction	rate to 35%	2017 dollars)	dollars	Percent			
Current Law	N/A	N/A	N/A	\$2,793.03	N/A	N/A			
				Changes f	rom Current	Law			
Scenario 1	Yes	No	No						
Elasticity of5				\$2,728.81	-\$64.22	-22.58%			
Elasticity of -1.0				\$2,728.81	-\$64.22	-22.58%			
Variable Elasticity				\$2,728.81	-\$64.22	-22.58%			
Scenario 2	No	Yes	No						
Elasticity of5				\$2,781.45	-\$11.58	-4.07%			
Elasticity of -1.0				\$2,780.67	-\$12.36	-4.35%			
Variable Elasticity				\$2,779.89	-\$13.14	-4.62%			
Scenario 3	No	No	Yes						
Elasticity of5				\$2,768.54	-\$24.49	-8.61%			
Elasticity of -1.0				\$2,768.85	-\$24.18	-8.50%			
Variable Elasticity				\$2,768.96	-\$24.07	-8.46%			
Scenario 4	Yes	No	Yes						
Elasticity of5				\$2,704.37	-\$88.66	-31.17%			
Elasticity of -1.0				\$2,704.67	-\$88.36	-31.07%			
Variable Elasticity				\$2,704.78	-\$88.25	-31.03%			
Scenario 5	Yes	Yes	No						
Elasticity of5				\$2,711.88	-\$81.15	-28.53%			
Elasticity of -1.0				\$2,711.35	-\$81.68	-28.72%			
Variable Elasticity				\$2,710.78	-\$82.25	-28.92%			
Scenario 6	Yes	Yes	Yes						
Elasticity of5				\$2,687.56	-\$105.47	-37.08%			
Elasticity of -1.0				\$2,687.34	-\$105.69	-37.16%			
Variable Elasticity				\$2,686.89	-\$106.14	-37.32%			
	1 1.	1 IDC	D 11: II E:1	a fan 2000 ta musi	i a at farmu and	c 2017			

<sup>6 \$11,000</sup> for individuals; \$22,000 for joint filers

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Table C-5. Number of itemizers and non-itemizers under current law and six policy options

	J	Itemizers	Non-Itemizers				
		Change from	m Current	_	Change from Current		
		Law L	evel	_	Law Level		
	Number	Number		Number	Number		
	(millions)	(millions)	Percent	(millions)	(millions)	Percent	
Baseline	45.29			125.13			
Scenario 1	29.41	-15.88	-35.06%	141.01	15.88	12.69%	
Scenario 2	40.35	-4.94	-10.91%	130.07	4.94	3.95%	
Scenario 3	45.29	0	0%	125.13	0	0%	
Scenario 4	29.41	-15.88	-35.06%	141.01	15.88	12.69%	
Scenario 5	24.92	-20.37	-44.98%	145.50	20.37	16.28%	
Scenario 6	24.92	-20.37	-44.98%	145.50	20.37	16.28%	

Source: The simulation results use the IRS Public-Use File for 2009 to project forward for 2017.

Table C-6. Number of itemizers and non-itemizers under current law and six policy options, AGI <\$50,000

1900,000	1420,000							
		<u>Itemizers</u>	<u>1</u>	Non-Itemizers	<u>s</u>			
		Change from	n Current		Change from Current			
		Law L	evel		Law I	Level		
	Number	Number		Number	Number			
	(millions)	(millions)	Percent	(millions)	(millions)	Percent		
Baseline	7.45			100.64				
Scenario 1	3.57	-3.88	-52.08%	104.52	3.88	3.86%		
Scenario 2	6.20	-1.25	-16.78%	101.89	1.25	1.24%		
Scenario 3	7.45	0	0%	100.64	0	0%		
Scenario 4	3.57	-3.88	-52.08%	104.52	3.88	3.86%		
Scenario 5	2.79	-4.66	-62.55%	105.30	4.66	4.63%		
Scenario 6	2.79	-4.66	-62.55%	105.30	4.66	4.63%		

Table C-7. Number of itemizers and non-itemizers under current law and six policy options, AGI \$50,000-\$99,999

+,		<u>Itemizers</u>			Non-Itemizers			
		Change from	Change from Current			Change from Current		
		Law L	evel		Law I	Level		
	Number	Number		Number	Number			
	(millions)	(millions)	Percent	(millions)	(millions)	Percent		
Baseline	13.99			18.41				
Scenario 1	8.11	-5.88	-42.03%	24.29	5.88	31.94%		
Scenario 2	11.87	-2.12	-15.15%	20.53	2.12	11.52%		
Scenario 3	13.99	0	0%	18.41	0	0%		
Scenario 4	8.11	-5.88	-42.03%	24.29	5.88	31.94%		
Scenario 5	6.43	-7.56	-54.04%	25.97	7.56	41.06%		
Scenario 6	6.43	-7.56	-54.04%	25.97	7.56	41.06%		

Source: The simulation results use the IRS Public-Use File for 2009 to project forward for 2017.

*Table C-8. Number of itemizers and non-itemizers under current law and six policy options, AGI* \$100.000+

φ100,000 1								
		<u>Itemizers</u>		<u> </u>	Non-Itemizers			
		Change from	Change from Current			Change from Current		
		Law L	evel		Law 1	Law Level		
	Number	Number	Number		Number	_		
	(millions)	(millions)	Percent	(millions)	(millions)	Percent		
Baseline	23.85			6.08		_		
Scenario 1	17.73	-6.12	-25.66%	12.20	6.12	100.66%		
Scenario 2	22.29	-1.56	-6.54%	7.64	1.56	25.66%		
Scenario 3	23.85	0	0.00%	6.08	0	0.00%		
Scenario 4	17.73	-6.12	-25.66%	12.19	6.11	100.49%		
Scenario 5	15.70	-8.15	-34.17%	14.23	8.15	134.05%		
Scenario 6	15.71	-8.14	-34.13%	14.23	8.15	134.05%		

Table C-9. Percentage of sample by itemization status and AGI in PSID

	Non-itemizers	<u>Itemizers</u>	Full Sample
AGI <\$50,000	73.5%	26.7%	54.4%
AGI \$50,000-\$99,999	21.3%	39.7%	33.6%
AGI \$100,000+	5.3%	33.6%	16.8%

Table C-10. Percentage of sample by itemization status and AGI in ISR PUF

	Non-itemizers	<u>Itemizers</u>	Full Sample
AGI <\$50,000	80.4% (100.64M)	16.4% (7.45M)	63.6% (108.09M)
AGI \$50,000-\$99,999	14.7% (18.41M)	30.9% (13.99M)	19.1% (32.4M)
AGI \$100,000+	4.9% (6.08M)	51.4% (23.29M)	17.3% (29.37M)
Full sample	73.7% (125.13M)	26.3% (44.73M)	169.86M

Table C-11. Average giving by itemization status and AGI

	Non-itemizers	Non-itemizers	Itemizers	Full Sample
	(PSID)	(IRS PUF)	(IRS PUF)	(IRS PUF)
AGI <\$50,000	\$342.96	\$453.42	\$1,732.02	\$541.54
AGI \$50,000-\$99,999	\$857.90	\$965.05	\$2,681.69	\$1,706.28
AGI \$100,000+	\$1,585.56	\$1,866.37	\$6,677.15	\$5,699.88
Full Sample	\$479.54	\$597.35	\$4,629.51	\$1,668.91

Figure C-1. Percentage changes from baseline in total giving under six policy scenarios, by income group (Variable elasticity)

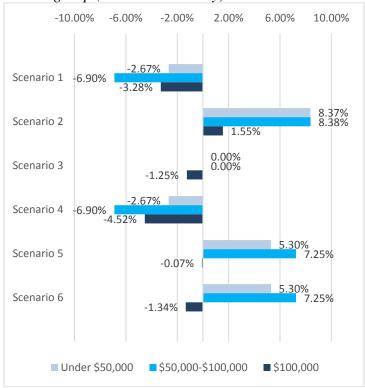


Figure C-2. Percentage changes from baseline in total giving under six policy scenarios, by income group (Elasticity=-1.0)

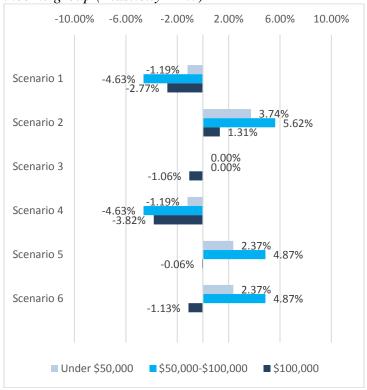


Figure C-3. Percentage changes from baseline in total giving under six policy scenarios, by income group (Elasticity=-.5)

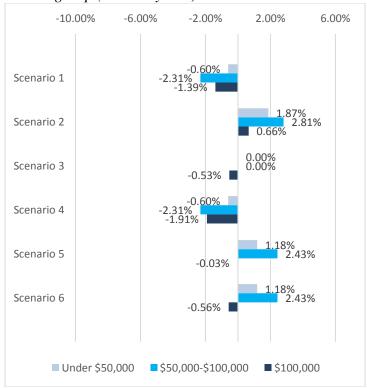
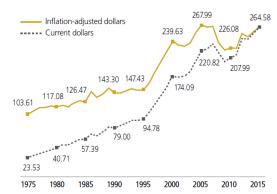


Figure C-4. Total Charitable contributions by individual donors, 1975 to 2015

Giving by individuals, 1975–2015

(in billions of dollars)



Source: *Giving USA 2016: The Annual Report on Philanthropy for the year 2015* (Giving USA Foundation, 2016)

# Appendix D: Microsimulation Outputs

## **Baseline**

	Number of Itemizers (m)	Number of Non-Itemizers (m)	Revenue (\$m)	Total Giving (\$m)	Total Giving: Itemizers (\$m)	Total Giving: Non-Itemizers (\$m)	Average Total Giving	Average Giving Itemizers	Average Giving Non-Itemizers
\$0-50K	7.45	100.64	206210.44	58535.34	12903.53	45631.81	541.54	1732.02	453.42
\$50K-100K	13.99	18.41	477849.84	55283.41	37516.91	17766.51	1706.28	2681.69	965.05
\$100K+	23.85	6.08	2108967.48	170597.52	159249.97	11347.55	5699.88	6677.15	1866.37
All	45.29	125.13	2793027.75	284416.28	209670.41	74745.87	1668.91	4629.51	597.35

## Scenario 1

Elasticity -.5

	Number of Itemizers (m)	Number of Non-Itemizers (m)	Revenue (\$m)	Total Giving (\$m)	Total Giving: Itemizers (\$m)	Total Giving: Non-Itemizers (\$m)	Average Total Giving	Average Giving Itemizers	Average Giving Non- Itemizers
\$0-50K	3.57	104.52	184714.26	58186.17	12569.1	45617.07	538.31	3520.76	436.44
\$50K-100K	8.11	24.29	453012.48	54004.03	36318.07	17685.96	1666.79	4478.18	728.12
\$100K+	17.73	12.2	2091078.69	168231.83	157016.19	11215.64	5620.84	8855.96	919.31
All	29.41	141.01	2728805.43	280422.02	205903.35	74518.68	1645.48	7001.13	528.46

Elasticity -1

	Number of Itemizers (m)	Number of Non-Itemizers (m)	Revenue (\$m)	Total Giving (\$m)	Total Giving: Itemizers (\$m)	Total Giving: Non-Itemizers (\$m)	Average Total Giving	Average Giving Itemizers	Average Giving Non- Itemizers
\$0-50K	3.57	104.52	184714.26	57837.06	12234.73	45602.33	535.08	3427.10	436.30
\$50K-100K	8.11	24.29	453012.48	52724.9	35119.46	17605.44	1627.31	4330.39	724.80
\$100K+	17.73	12.2	2091078.69	165866.61	154782.85	11083.76	5541.82	8730.00	908.50
All	29.41	141.01	2728805.43	276428.57	202137.04	74291.53	1622.04	6873.07	526.85

Variable Elasticit	V
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	Number of Itemizers (m)	Number of Non-Itemizers (m)	Revenue (\$m)	Total Giving (\$m)	Total Giving: Itemizers (\$m)	Total Giving: Non-Itemizers (\$m)	Average Total Giving	Average Giving Itemizers	Average Giving Non- Itemizers
\$0-50K	3.57	104.52	184714.26	56973.82	11407.94	45565.88	527.10	3195.50	435.95
\$50K-100K	8.11	24.29	453012.48	51470.85	33944.36	17526.49	1588.61	4185.49	721.55
\$100K+	17.73	12.2	2091078.69	165005.02	153969.3	11035.72	5513.03	8684.11	904.57
All	29.41	141.01	2728805.43	273449.7	199321.6	74128.09	1604.56	6777.34	525.69

Elasticity -.5

	Number of Itemizers (m)	Number of Non-Itemizers (m)	Revenue (\$m)	Total Giving (\$m)	Total Giving: Itemizers (\$m)	Total Giving: Non-Itemizers (\$m)	Average Total Giving	Average Giving Itemizers	Average Giving Non- Itemizers
\$0-50K	6.2	101.89	203486.26	59631.14	12871.63	46759.51	551.68	2076.07	458.92
\$50K-100K	11.87	20.53	473426.92	56838.38	37485.75	19352.62	1754.27	3158.02	942.65
\$100K+	22.29	7.64	2104540.29	171718.92	159103.88	12615.04	5737.35	7137.90	1651.18
All	40.35	130.07	2781453.47	288188.44	209461.26	78727.18	1691.05	5191.11	605.27

Elasticity -1

	Number of Itemizers (m)	Number of Non-Itemizers (m)	Revenue (\$m)	Total Giving (\$m)	Total Giving: Itemizers (\$m)	Total Giving: Non-Itemizers (\$m)	Average Total Giving	Average Giving Itemizers	Average Giving Non- Itemizers
\$0-50K	6.2	101.89	203339.06	60726.71	12839.73	47886.98	561.82	2070.92	469.99
\$50K-100K	11.87	20.53	473108.46	58393.03	37454.61	20938.42	1802.25	3155.40	1019.89
\$100K+	22.29	7.64	2104226.46	172840.1	158957.82	13882.28	5774.81	7131.35	1817.05
All	40.35	130.07	2780673.97	291959.84	209252.16	82707.69	1713.18	5185.93	635.87

	Number of Itemizers (m)	Number of Non-Itemizers (m)	Revenue (\$m)	Total Giving (\$m)	Total Giving: Itemizers (\$m)	Total Giving: Non-Itemizers (\$m)	Average Total Giving	Average Giving Itemizers	Average Giving Non- Itemizers
\$0-50K	6.2	101.89	202977.64	63435.74	12760.86	50674.88	586.88	2058.20	497.35
\$50K-100K	11.87	20.53	472798.57	59917.2	37424.07	22493.13	1849.30	3152.83	1095.62
\$100K+	22.29	7.64	2104116.83	173248.52	158904.62	14343.9	5788.46	7128.96	1877.47
All	40.35	130.07	2779893.04	296601.46	209089.54	87511.91	1740.41	5181.90	672.81

Elasticity -.5

	Number of Itemizers (m)	Number of Non-Itemizers (m)	Revenue (\$m)	Total Giving (\$m)	Total Giving: Itemizers (\$m)	Total Giving: Non-Itemizers (\$m)	Average Total Giving	Average Giving Itemizers	Average Giving Non- Itemizers
\$0-50K	7.45	100.64	206210.44	58535.34	12903.53	45631.81	541.54	1732.02	453.42
\$50K-100K	13.99	18.41	477849.84	55283.41	37516.91	17766.51	1706.28	2681.69	965.05
\$100K+	23.85	6.08	2084483.73	169693.46	158345.83	11347.63	5669.68	6639.24	1866.39
All	45.29	125.13	2768544.01	283512.22	208766.27	74745.95	1663.61	4609.54	597.35

Elasticity -1

	Number of Itemizers (m)	Number of Non-Itemizers (m)	Revenue (\$m)	Total Giving (\$m)	Total Giving: Itemizers (\$m)	Total Giving: Non-Itemizers (\$m)	Average Total Giving	Average Giving Itemizers	Average Giving Non- Itemizers
\$0-50K	7.45	100.64	206210.44	58535.34	12903.53	45631.81	541.54	1732.02	453.42
\$50K-100K	13.99	18.41	477849.84	55283.41	37516.91	17766.51	1706.28	2681.69	965.05
\$100K+	23.85	6.08	2084787.32	168789.59	157441.87	11347.72	5639.48	6601.34	1866.40
All	45.29	125.13	2768847.6	282608.35	207862.31	74746.04	1658.31	4589.59	597.35

	Number of Itemizers (m)	Number of Non-Itemizers (m)	Revenue (\$m)	Total Giving (\$m)	Total Giving: Itemizers (\$m)	Total Giving: Non-Itemizers (\$m)	Average Total Giving	Average Giving Itemizers	Average Giving Non- Itemizers
\$0-50K	7.45	100.64	206210.44	58535.34	12903.53	45631.81	541.54	1732.02	453.42
\$50K-100K	13.99	18.41	477849.84	55283.41	37516.91	17766.51	1706.28	2681.69	965.05
\$100K+	23.85	6.08	2084897.78	168460.33	157112.58	11347.75	5628.48	6587.53	1866.41
All	45.29	125.13	2768958.06	282279.09	207533.02	74746.07	1656.37	4582.31	597.35
Scenario 4									
Elasticity5									
	Number of Itemizers (m)	Number of Non-Itemizers (m)	Revenue (\$m)	Total Giving (\$m)	Total Giving: Itemizers (\$m)	Total Giving: Non-Itemizers (\$m)	Average Total Giving	Average Giving Itemizers	Average Giving Non- Itemizers
\$0-50K	3.57	104.52	184714.26	58186.17	12569.1	45617.07	538.31	3520.76	436.44
\$50K-100K	8.11	24.29	453012.48	54004.03	36318.07	17685.96	1666.79	4478.18	728.12
\$100K+	17.74	12.19	2066646.04	167334.66	156118.87	11215.8	5590.87	8800.39	920.08
All	29.41	141	2704372.78	279524.86	205006.03	74518.83	1640.31	6970.62	528.50
F1									
Elasticity -1	Number of Itemizers (m)	Number of Non-Itemizers (m)	Revenue (\$m)	Total Giving (\$m)	Total Giving: Itemizers (\$m)	Total Giving: Non-Itemizers (\$m)	Average Total Giving	Average Giving Itemizers	Average Giving Non- Itemizers
\$0-50K	3.57	104.52	184714.26	57837.06	12234.73	45602.33	535.08	3427.10	436.30
\$50K-100K	8.11	24.29	453012.48	52724.9	35119.46	17605.44	1627.31	4330.39	724.80
\$100K+	17.74	12.19	2066947.48	164072.46	152988.39	11084.07	5481.87	8623.92	909.28
All	29.41	141.01	2704674.22	274634.42	200342.58	74291.83	1611.52	6812.06	526.86
Variable Elas	ticity								
	Number of Itemizers (m)	Number of Non-Itemizers (m)	Revenue (\$m)	Total Giving (\$m)	Total Giving: Itemizers (\$m)	Total Giving: Non-Itemizers (\$m)	Average Total Giving	Average Giving Itemizers	Average Giving Non- Itemizers

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\$0-50K	3.57	104.52	184714.26	56973.82	11407.94	45565.88	527.10	3195.50	435.95
\$50K-100K	8.11	24.29	453012.48	51470.85	33944.36	17526.49	1588.61	4185.49	721.55
\$100K+	17.74	12.19	2067057.13	162884.12	151848.04	11036.08	5442.17	8559.64	905.34
All	29.41	141.01	2704783.87	271328.8	197200.34	74128.45	1592.12	6705.21	525.70

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	Number of Itemizers (m)	Number of Non-Itemizers (m)	Revenue (\$m)	Total Giving (\$m)	Total Giving: Itemizers (\$m)	Total Giving: Non-Itemizers (\$m)	Average Total Giving	Average Giving Itemizers	Average Giving Non- Itemizers
\$0-50K	2.79	105.3	182216.23	59228.81	12768.88	46459.93	547.96	4576.66	441.21
\$50K-100K	6.43	25.97	446558.06	56628.55	37337.4	19291.14	1747.79	5806.75	742.82
\$100K+	15.7	14.23	2083103.27	170544.04	158088.79	12455.24	5698.10	10069.35	875.28
All	24.92	145.5	2711877.55	286401.39	208195.07	78206.32	1680.56	8354.54	537.50

## Elasticity -1

	Number of Itemizers (m)	Number of Non-Itemizers (m)	Revenue (\$m)	Total Giving (\$m)	Total Giving: Itemizers (\$m)	Total Giving: Non-Itemizers (\$m)	Average Total Giving	Average Giving Itemizers	Average Giving Non- Itemizers
\$0-50K	2.79	105.3	182111.63	59922.13	12634.25	47287.88	554.37	4528.41	449.08
\$50K-100K	6.43	25.97	446276.29	57973.41	37157.93	20815.48	1789.30	5778.84	801.52
\$100K+	15.7	14.23	2082957.3	170490.56	156927.85	13562.72	5696.31	9995.40	953.11
All	24.92	145.5	2711345.23	288386.11	206720.03	81666.08	1692.21	8295.35	561.28

	Number of Itemizers (m)	Number of Non-Itemizers (m)	Revenue (\$m)	Total Giving (\$m)	Total Giving: Itemizers (\$m)	Total Giving: Non-Itemizers (\$m)	Average Total Giving	Average Giving Itemizers	Average Giving Non- Itemizers
\$0-50K	2.79	105.3	181856.94	61636.52	12301.36	49335.15	570.23	4409.09	468.52
\$50K-100K	6.43	25.97	446002.06	59291.91	36981.98	22309.93	1830.00	5751.47	859.07

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\$100K+	15.7	14.23	2082922.06	170471.09	156504.95	13966.14	5695.66	9968.47	981.46
All	24.92	145.5	2710781.06	291399.51	205788.29	85611.22	1709.89	8257.96	588.39

Elasticity -.5

	Number of Itemizers (m)	Number of Non-Itemizers (m)	Revenue (\$m)	Total Giving (\$m)	Total Giving: Itemizers (\$m)	Total Giving: Non-Itemizers (\$m)	Average Total Giving	Average Giving Itemizers	Average Giving Non- Itemizers
\$0-50K	2.79	105.3	182216.23	59228.81	12768.88	46459.93	547.96	4576.66	441.21
\$50K-100K	6.43	25.97	446558.06	56628.55	37337.4	19291.14	1747.79	5806.75	742.82
\$100K+	15.71	14.23	2058790.36	169633.93	157184.27	12449.67	5665.80	10005.36	874.89
All	24.92	145.5	2687564.65	285491.29	207290.55	78200.74	1675.22	8318.24	537.46

Elasticity -1

	Number of Itemizers (m)	Number of Non-Itemizers (m)	Revenue (\$m)	Total Giving (\$m)	Total Giving: Itemizers (\$m)	Total Giving: Non-Itemizers (\$m)	Average Total Giving	Average Giving Itemizers	Average Giving Non- Itemizers
\$0-50K	2.79	105.3	182111.63	59922.13	12634.25	47287.88	554.37	4528.41	449.08
\$50K-100K	6.43	25.97	446276.29	57973.41	37157.93	20815.48	1789.30	5778.84	801.52
\$100K+	15.71	14.23	2058954.19	168670.54	155118.98	13551.56	5633.62	9873.90	952.32
All	24.92	145.5	2687342.12	286566.08	204911.17	81654.92	1681.53	8222.76	561.20

	Number of Itemizers (m)	Number of Non-Itemizers (m)	Revenue (\$m)	Total Giving (\$m)	Total Giving: Itemizers (\$m)	Total Giving: Non-Itemizers (\$m)	Average Total Giving	Average Giving Itemizers	Average Giving Non- Itemizers
\$0-50K	2.79	105.3	181856.94	61636.52	12301.36	49335.15	570.23	4409.09	468.52
\$50K-100K	6.43	25.97	446002.06	59291.91	36981.98	22309.93	1830.00	5751.47	859.07
\$100K+	15.71	14.23	2059031.43	168319.6	154366.65	13952.95	5621.90	9826.01	980.53
All	24.92	145.5	2686890.43	289248.03	203650	85598.03	1697.27	8172.15	588.30