

Fall 2007

Economics Senior Thesis The United Way's Effects on Donor Behavior

Matt Bonniwell
University of Puget Sound

Follow this and additional works at: https://soundideas.pugetsound.edu/economics_theses



Part of the [Economics Commons](#)

Recommended Citation

Bonniwell, Matt, "Economics Senior Thesis The United Way's Effects on Donor Behavior" (2007).
Economics Theses. 70.
https://soundideas.pugetsound.edu/economics_theses/70

This Thesis is brought to you for free and open access by the Economics, Department of at Sound Ideas. It has been accepted for inclusion in Economics Theses by an authorized administrator of Sound Ideas. For more information, please contact soundideas@pugetsound.edu.

Economics Senior Thesis

The United Way's Effects on Donor Behavior

By

Matt Bonniwell

University of Puget Sound Class of 2008

The United Way's Effects on Donor Behavior

Introduction

The United Way of America (UWA) is one of the oldest charities in the United States. The United Way began in 1913 in Cleveland and has grown from that one branch into an organization of over 1,300 branches in the U.S.; each with local leadership from the community and a local branch manager. Each community branch follows the headquarters' guidelines and regulations. Every local United Way raises its own funds in an annual campaign that occurs in the fall. In 2006, the combined annual campaign of all United Ways generated over \$4.07 billion dollars, clearly making it the largest nonprofit in the United States¹.

Each United Way has member organizations. These member organizations sign a contract with the United Way that allows the United Way to fundraise for their organizations. The United Way's sole purpose is to fundraise; organizations whose purpose is to fundraise are called "federated funds". The United Way's service is to raise funds at a lower cost than most non-profits can on their own. The United Way, due to economies of scale, can raise funds at a small cost of only 10 cents per dollar². Once the funds have been collected they are distributed among member organizations. Member organizations are those that have a contract with the United Way, and there are hundreds of such partners. 57% of the United Way's funds are distributed among 13 member organizations or agencies³. The most popular agencies include the Family Service, Boy

¹ See: <http://www.unitedway.org/annualreport/index.cfm>, accessed 12/13/07

² See: <http://www.unitedway.org/annualreport/index.cfm>, accessed 12/13/07

³ Eleanor Brilliant, *The United Way: Dilemmas of Organized Charity* (Columbia: Columbia University Press 1990), p.30

Scouts, Girl Scouts, Boys Clubs, YMCAs, YWCAs, the Salvation Army, and the Red Cross.

The United Way has received much criticism for its allocation process and the small number of new member organizations that are admitted every year. The allocation process of the United Way involves community members that democratically decide where funding is placed. The United Way is uniquely structured to involve community members in the allocation process of community funds. The allocation process of the United Way begins with the formation of panels made up of community volunteers from all walks of life. United Way staff members organize the panels that review member agencies' programs to assess their importance. The panels then deliberate and complete an allocation recommendation to the board of governors (leaders of the United Way)⁴. The board of governors has the opportunity to amend the recommendations as it sees fit. Many criticize this process because they argue that the United Way may restrict the growth of young nonprofits because of the difficulty of becoming a member agency and its extreme loyalty to 13 of its member agencies. This thesis will look at whether the United Way's allocation process does in fact restrict entrance and if so, whether that inhibits the amount of social welfare in the nation.

In order for the United Way to allocate funds, it must first raise the funds to allocate. The major source of funding of the United Way is professional work places. The all branches of the United Way have adopted a weekly payroll deduction system to raise the majority of its funds.⁵ Under this system, the United Way asks a company's employees to pledge a portion of their weekly salary, which the employer automatically

⁴ Brilliant p.80

⁵ Brilliant p.77

deducts from employees' weekly paychecks and then gives this amount to the local UWA branch. This system is beneficial to the employer as well because there is less disruption in the workplace. The main access to this system is through the United Way, therefore giving it monopoly status in work place solicitation. This thesis will determine if the alleged monopoly status of the United Way is statistically proven by seeing what percent market share the United Way has in the nonprofit industry.

Once monopoly status has been identified, this thesis will study the effects of the monopoly on the nonprofit market. This study will answer whether the allocation process of the United Way prohibits entry. It will also answer whether the fundraising efforts of the United Way are more efficient than the average nonprofit. The thesis will also determine if the monopoly increases the funds raised or decreases the amount raised. A microeconomic model will be constructed to see if the existence of the monopoly affects the demand and supply of the market. I hypothesize that the United Way is a monopoly that engages in exclusionary pricing, which reduces the price to donate below the average variable costs of potential entrants into the market. This exclusionary pricing deters entry and fewer nonprofits enter the market. I hypothesize that the reduction in nonprofits will cause less aggregate donations to occur, and social welfare will be reduced.

Section 1: Literature Review

According to the findings of an anonymous article (1982) in *The Yale Law Journal*, only a small amount of nonprofits have access to become member agencies of the United Way and the fact that the United Way is the main nonprofit that can solicit in the workplace creates a barrier to entry into the nonprofit market. To charities that are unable to join federated funds like the United Way, the existence of federated funds

represents a large threat. The United Way exists to conduct joint fundraising on the behalf of their member agencies⁶. The United Way has adopted a very effective solicitation system: the payroll deduction system. This article found that this system accounted for approximately 2.4 billion dollars of the United Way's revenues, which account for 60% of the overall revenues in 1982⁷. Work place solicitations are generally disruptive so employers prefer to limit the number of charities that solicit⁸. The tension between the cost efficiency of the payroll deductions and the disruption of workplace solicitation lead to single-fund drives headed by the United Way. This article finds that most employers allow the United Way to solicit giving in the workplace because of their name recognition; this gives the United Way a natural advantage. .

Furthermore, this article finds that federated funds only admit organizations under their umbrella that have proven their validity as an independent charity for several years, therefore making it very difficult to gain the support of the United Way. In addition federated funds only admit agencies that share the same values, excluding many charities that address controversial issues⁹. *The Yale Law Journal* argues that this behavior excludes many nonprofits from entering the nonprofit market. The article demonstrates that many nonprofits that have been denied membership in a federated fund or direct access to workplace solicitation, have filed lawsuits claiming that the federated fund has violated the Sherman Act. *The Yale Law Journal* article brings attention to the possible legal actions that could be taken if the United Way continues to deter entry into the market.

⁶ Anonymous, "United Charities and the Sherman Act," *The Yale Law Journal*, Vol.91, No. 8 (July 1982): 1593.

⁷ *The Yale Law Journal* p. 1595

⁸ *The Yale Law Journal* p. 1599

⁹ *The Yale Law Journal* p. 1603

Jeremy Thorton (2006) in his article *Nonprofit Fund Raising in Competitive Donor Markets*, argues the opposite of the Yale Law Journal and states that the noncompetition is beneficial for the market. Thorton bases his argument on solicitation costs. He suggests that donors are sensitive to expense ratios and therefore the demand curve for donations is downward sloping. Thorton's theory is that an increase in competition may force fundraising costs to inefficiently high levels, meaning donors will donate less due to the increase in overhead costs¹⁰. Thorton is implying that the donation market is a natural monopoly where it is more efficient to have less competition and allow a monopoly to use its economies to scale to provide the most benefit at the smallest cost. Thorton uses the Herfindahl-Hirschman Index (HHI) index to prove the concentration of the market and that as the concentration of the market increases, aggregate solicitation decreases. The model in this paper suggests that as the HHI index becomes more concentrated, more donations are received. This suggests that the lack of competition reduces the amount of solicitation as Thorton suggests, and increases the number of donations because there is less competition. According to Thorton, the market should be highly concentrated because it is more efficient.

Solicitation and its costs have a large impact on the nonprofit market. According to Greenlee and Gordon (1998) solicitors increase the administration costs of the organization. Yet, professional solicitors increase the amount of donations the nonprofits receive. Greenlee and Gordon suggest that smaller nonprofits use professional solicitors because they lack in-house solicitors¹¹. This means that small nonprofits have higher

¹⁰ Jeremy Thorton, "Nonprofit Fund-Raising in Competitive Markets," *Nonprofit and Voluntary Sector Quarterly* 2006; 35; p.208

¹¹ Greenlee and Gordon. "The Impact of Professional Solicitors on Fundraising in Charitable Organizations," *Nonprofit and Voluntary Sector Quarterly* 1998;27. p.277.

overhead costs that might lead donors to choose a larger nonprofit because it is more cost efficient. A survey conducted by Greenlee and Gordon suggests that donors expect approximately 25% of their donation to go towards overhead costs. This suggests that nonprofits such as the United Way where only 10% of a donation goes to overhead costs will be more appealing to a typical donor. This overhead cost advantage once again leads to the conclusion that the United Way is a monopoly. Greenlee and Gordon suggest this cost advantage will lead to fewer nonprofits in the market and therefore aggregate donations will decrease.

Further research has documented the effects that an increase in competition will have on the nonprofit market. Emily Barman (2002) examines how the United Way/Crusade of Mercy in Chicago reacted to increases in competition. She suggests that as competition increases, nonprofits attempt to differentiate and send signals of quality¹². The United Way in her study stressed accountability and trust by stating that 90 cents of every dollar was donated to charitable services¹³. The United Way continued to differentiate itself by using the analogy that a donation to the United Way was an investment in the community and that an “investment” with the United Way had a greater return than other nonprofits. The United Way further identified itself by stating the variety of member agencies’ benefits to society. By supporting a diverse set of social problems with a donation to the United Way it is argued that an individual gets more out of their donation¹⁴. Barman finds that the United Way used the “investment” and “dollar goes further” analogies to signal quality to donors. The United Way, according to

¹² Emily Barman, “Asserting Difference: The Strategic Response of Nonprofit Organizations to Competition,” *Social Forces*, Vol.80, No.4,2002, p.1207

¹³ Barman p.1207

¹⁴ Barman p.1210

Barman, was able to send out a strong signal because branding campaigns are expensive and few nonprofits have the ability to do so. Barman links differentiation of the United Way as another reason people choose the United Way when they donate.

The United Way: Exercising Monopoly Power?

The United Way is one of the most dominant nonprofits in the United States, and its position in the nonprofit sector has a significant impact on the market. The point of this section is to determine whether or not the United Way is a monopoly so that we can analyze the impact that status has on the nonprofit sector. Economic monopolies are defined under the Section 2 of the Sherman Act as a company or nonprofit that controls over 50 percent of the market¹⁵. The key question, therefore, is what defines the scope of the market. Ford Motors does not have a monopoly on the world market for autos, but that market share is increased significantly when the scope is limited to the United States. Market share is at best a crude indicator of a firm's economic power because it does not take into account the elasticity of demand or how vulnerable the product is to substitution. Despite these imperfections, market share restriction has been more than sufficient to keep firms from gaining too much power within a given industry. Market share is an indicator of economic power because the larger a firm's market share, the more able it is to set the price of its good in the industry¹⁶. The ability of a firm to set the prices has a negative impact on consumers because firms can set the prices above the market price, and it is for this reason that the United States enacted the Sherman Act.

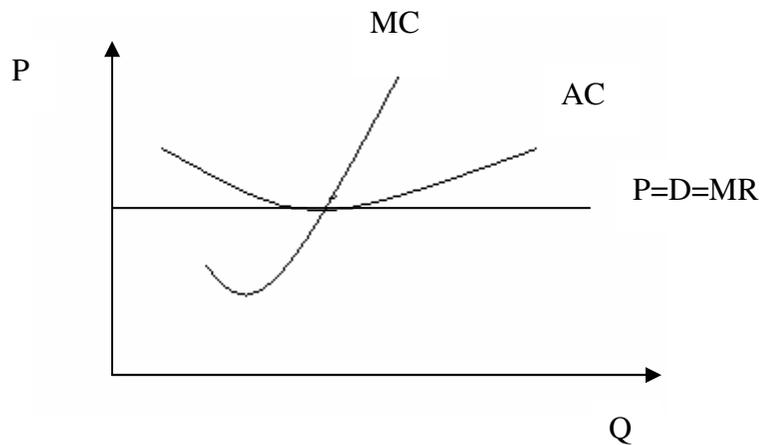
Most monopolistic studies have been conducted in for-profit industries. In a market with imperfect competition, such as a monopolized market, there exists the ability

¹⁵ Dominick Armentano, *Antitrust and Monopoly: Anatomy of a Policy Failure* (New York: New York, John Wiley & Sons, 1982) p.20

¹⁶ Armentano p. 21

to differentiate and collude.¹⁷ In perfectly competitive markets, there exist enough firms that one firm has no effect on the price, the product in the market is homogenous, and perfect knowledge exists (the same information is available to all). Neoclassical competition theory suggests that in a perfectly competitive market the market fixes the price; therefore a firm's marginal revenue is the horizontal line that represents the price as figure 1 demonstrates. That is to say, the demand curve for a firm in a perfectly competitive market is horizontal. In a perfectly competitive market, a firm produces where the marginal cost is equal to the marginal revenue and the average cost. Where $MC = MR = AC$, there are no economic profits to be realized, resource allocation is efficient, and social welfare is maximized. Is the nonprofit industry structure that of perfect competition as described above?

Figure 1



¹⁷ Armentano p. 19

At first glance the nonprofit market seems to be perfectly competitive. It is a market that consists of over 1,064,191 nonprofits in 2007¹⁸. Furthermore, it demonstrates perfect information because financial data on the internet is easily available; yet the product nonprofits produce is not identical. However, due to the ability to differentiate through advertising and using the donations in very different ways, the nonprofit market can be accurately described as an imperfectly competitive market. This suggests that nonprofits such as the United Way have a negatively sloped demand curve for donations, meaning that if they increase their price they would not lose all of their customers as a nonprofit in a perfectly competitive market would¹⁹. The price of a product for the United Way is the cost of donating, which is the amount donated plus the transaction costs of donating. For example, if an individual were to donate a dollar to the United Way it would cost a dollar plus the 10-cent envelope and the 41 cent stamp to mail the contribution for a total price of \$1.51 (this does not include the cost of the time it takes). In this case it cost \$1.51 to donate a dollar! The United Way can therefore reduce the price of donations by reducing the transaction costs of donating. The question is by how much can the United Way reduce transaction costs? If the United Way is able to reduce its transaction cost significantly more than its competitors, this may give it a monopoly position. If the United Way has monopoly power it is important to determine whether or not this is beneficial to society.

According to modern theory, the great benefit of monopolies is that they produce at extremely high quantities that enable them to produce at a smaller per unit cost, known as economies of scale. In theory, consumers pay less because a dominant for-profit firm

¹⁸ Ann Kaplan., *Giving USA 2007* (Indiana: Indianapolis. AAFRC Trust for Philanthropy, 2007) p.16

¹⁹ Armentano p.21

produces at a lower cost, and transfers the cost savings onto the consumer by charging a lower price²⁰. However, it is important to note the negative impacts of a monopoly as well. Monopolistic firms rarely transfer the savings of scale economies to the consumer because the firm realizes its demand curve is downward sloping²¹. The downward sloping demand curve means that if the firm raises its prices it will not lose all of its customers²². The price that the monopolistic nonprofit charges will be greater than the market determined price²³. The increase in prices will decrease the quantity consumed, which will lead to resource misallocation. A decrease in consumption will reduce the quantity supplied and resources that are best used in production of the good with the reduction in supply are used in a different manner. When the resources are used in a less efficient capacity, they are in essence wasted. The final negative impact of monopolies is the reduction in social welfare that is a result of higher prices. In Figure 2²⁴, price X is the price in a perfectly competitive market where the marginal cost (MC_1) is equal to the average cost (AC_1). The price PM is the price of the good when under imperfect competition due to a monopoly. The price PM is greater than X and the quantity produced by the monopoly, QM, is less than the quantity produced under perfect competition, QC. The higher price and reduction in quantity produced leads to a reduction in the social welfare; represented by the triangle ABC. However, it is important to note that the emergence of the monopoly reduces the average cost to AC_2 and the marginal cost to MC_2 , both of which are represented by line Y. The area XYBT is the cost savings due to the monopoly's economies of scale. If area XYBT exceeds area

²⁰ Armentano p.37

²¹ Armentano p.19

²² Armentano p.19

²³ Armentano p.20

²⁴ Armentano p.21

ABC, then the monopoly improves social welfare because the cost reduction is greater than the welfare loss. If the opposite case is true (ABC is greater than XYBT) then antitrust laws should be enforced to ensure that social welfare is maximized.

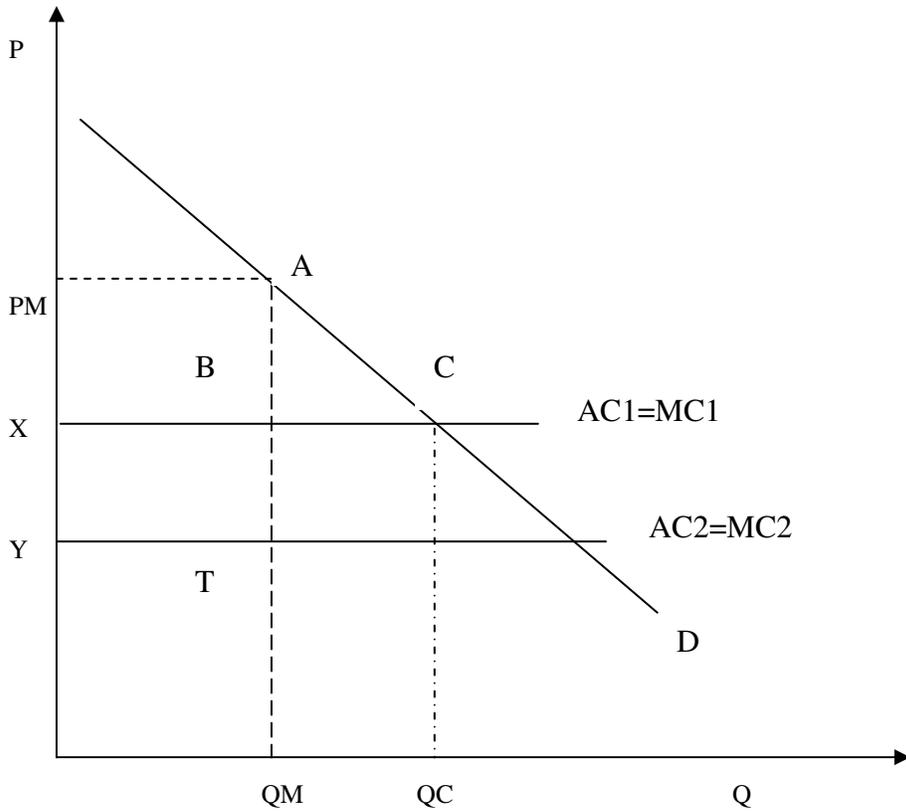


Figure 2

As stated earlier scope presents a problem in determining whether the UWA is a monopoly, therefore I plan to determine whether or not the United Way is a monopoly on several levels. The levels under study will be the national level, the state level, urban county level, rural county level, and the workplace. The percentage or market share will be determined by the amount of donations the United Way receives in comparison to the total amount of donations in the specified market. By examining market share in percentage of donations I will be determining whether or not the United Way has a monopolistic position in the donation market.

The first level of analysis will be on the national level. Last year over \$295.02 billion was donated in the United States²⁵. Of this, individual donations make up 75.6% of contributions²⁶. The market for donations is therefore a vast industry with over a million nonprofits vying for as much of the \$295.02 billion as they can. The largest nonprofit, the United Way of America, only receives a small fraction of the donations. Although over 12 million people donate to the United Way annually, it was only able to raise \$4.07 billion in 2006²⁷. The \$4.07 billion raised represents 1.3% of the total given to nonprofits nationwide in 2006, clearly showing that despite its size, the United Way on the national level does not qualify as a monopoly.

The next level of analysis is the state level. Washington State data will be used in this analysis to determine whether or not the United Way has a monopoly advantage on the state level. In 2005, Washington State had 7,695 nonprofit organizations that collected \$5.3 million in contributions²⁸. Of this, the 27 United Ways of Washington counties collected \$156,163,318²⁹. Therefore, United Ways of Washington account for 2.92% of donations in the state of Washington. Although 2.9% is an increase in market concentration from the national level, it still does not constitute a monopolistic position in the market. It is clear that as we narrow the scope, the market becomes more concentrated and the United Way grows in power.

At the urban county level, I will analyze the two most populated counties in Washington; King and Pierce Counties. According to the National Center for Charitable

²⁵ Kaplan p. 7

²⁶ Kaplan p.5

²⁷ See: <http://www.unitedway.org/annualreport/index.cfm>, retrieved 1/3/2008.

²⁸ See: <http://www.nccs.org>., retrieved 1/4/2008.

²⁹ See: <http://www.uwkc.org/newsevents/researchreports/2005report/default.asp>, retrieved 1/8/2008.

Statistics (NCCS) data, in 2005 King County raised more than \$3,593,160,033³⁰. King County had 3,039 nonprofits, showing that market is relatively saturated and monopoly power does not exist. Due to the large number of nonprofits in the county; the United Way of King County and its branches raised \$100,700,000³¹ in 2005, meaning it captured 2.8% of donations. This figure is almost identical to that of the United Ways at the state level. This demonstrates that the urban market is large enough that it does not allow a large nonprofit to have a favorable market position, and once again we find that the United Way is not a monopoly. The scenario in Pierce County is similar. NCCS data states that Pierce County has eight hundred and ninety six 503 (C₁) nonprofit organizations that collected \$326, 952, 349³². The United Way of Pierce County collected \$9,955,581 or 3.01% of the market³³. This is slightly higher than in King County but, once again, falls short of the 50% market share required to exhibit monopolistic power. Thus far, the United Way has not exhibited monopoly power on all three levels analyzed.

In rural counties, the number and diversity of nonprofits are far smaller. By looking at Clark County and Columbia County, we will examine rural United Ways. In 2005 Columbia County nonprofits raised \$970, 523³⁴ of which the United Way contributed only \$44, 575³⁵. The United Way only contributed 4.61% of the market, which were far below my expectations. Due to the rural area Columbia County encompasses, I expected market dominance by the United Way because there are fewer

³⁰ See: <http://www.nccs.org>, retrieved 1/4/2008.

³¹ See: <http://www.uwkc.org/newsevents/researchreports/2005report/default.asp>, retrieved 1/4/2008.

³² See: <http://www.nccs.org>, retrieved 1/4/2008.

³³ See: http://www.uwpc.org/About_Us/ABOUT.HTML, retrieved 1/5/2008

³⁴ See: <http://www.nccs.org>, retrieved 1/5/2008

³⁵ See: <http://www.uwccmc.org/clark-county.html>, retrieved 1/5/2008

nonprofits in rural areas. The United Way has a large brand image and support from headquarters that give it competitive advantages, yet these advantages did not seem to make a difference. However, Clark County demonstrates a market share closer to my expectations. In 2005, Clark County nonprofits raised \$122,309,909 among only 289 organizations.³⁶ The United Way of Clark County itself raised \$18,421,044³⁷ for a significant 15% of the donations market. Although 15% is much greater than the national, state, and urban levels it is not large enough to exhibit monopoly power, but it is large enough to be able to impact the market. If the United Way was able to exhibit monopoly power in the nonprofit market, they would reduce costs which would allow them to increase output and receive more donations.

The final area of interest is the workplace. Workplace donations are donations that are made in the workplace, more specifically automatic paycheck deductions and campaigns within the office. Data available on workplace donations is limited, so the analysis of the workplace market is on the national level. Campaigns in the workplace in 2001 accounted for approximately two percent of total contributions in the United States that totaled \$200 billion.³⁸ This may seem insignificant, but it is a key source of funding for The United Way and many other nonprofits. 25% of American workers are employed by companies with workplace campaigns; showing the importance of this resource to nonprofits³⁹. However, since 1991, workplace donations have been on the decline with the participation rate of employees in workplace campaigns falling to 35% in 2001⁴⁰.

³⁶ See: <http://www.nccs.org>, retrieved 1/5/2008

³⁷ See: <http://www.uwccmc.org/clark-county.html>, retrieved 1/5/2008

³⁸ National Committee for Responsive Philanthropy (NCRP), *Giving At Work 2003* (Washington DC: National Committee for Responsive Philanthropy, 2003), p. 8

³⁹ NCRP *Giving at Work 2003* p.8

⁴⁰ NCRP *Giving at Work 2003* p.9

The United Way is one of approximately 205 charities able to partake in workplace campaigns⁴¹. Despite the seemingly large amount of nonprofits in this market, the United Way in 2001 had an astounding market share of 88.85% of donations less than \$1,000⁴². This alone accounts for 43.5% of the United Way's contributions in 2001 or \$1,771,290,814⁴³. When including gifts of over \$1,000, the United Way's market share increases to 92.84%⁴⁴. The 92.84% market share in workplace donations clearly defines the United Way as a monopoly. The United Way monopoly in the workplace has two theoretical effects. The first is that the monopoly is beneficial because having no competition means lower overhead costs and therefore more of each dollar donated is actually received by those in need. The countering argument is that the monopoly means that many areas of need are neglected, and donors are not able to choose where their funds are directed.

To counter donor's inability to choose where funds are allocated, the United Way has adapted a donor choice program that allows donors to choose where their money is allocated. However, this program is not as efficient as it seems. The United Way's changing focus has led donors to seek out different nonprofits and as a result many Alternative Funds, small nonprofits with a social change emphasis, have been formed.

The United Way has changed its focus from the workplace to gaining more corporate and large individual gifts. In 1991, the traditional workplace campaign made up of 61.48% of all contributions while that number has decreased to 44.86% in 2001⁴⁵. The 16.62% decrease has been replaced by a large increase in major gifts (over \$1,000).

⁴¹ NCRP *Giving at Work 2003* p.9

⁴² NCRP *Giving at Work 2003* p.9

⁴³ NCRP *Giving at Work 2003* p.11

⁴⁴ NCRP *Giving at Work 2003* p.13

⁴⁵ NCRP *Giving at Work 2003* p.14

Major donations as a percentage of all allocations have increased 18.72% to 28.10% in 2001⁴⁶. Corporate gifts have increased as well; increasing 17.7% from 1991 to 2001 while traditional gifts (under a \$1,000) have decreased 9.09 % during the same period. The United Way's focus in courting large donors and corporations has enabled smaller alternative funds to enter the workplace market. Alternative Funds in 2001 had only a small 11.5% market share, but are gaining much support because donors want to choose the cause they donate to and Alternative Funds represent a variety of social causes. As Alternative Funds become more popular in workplace giving, the question of how people decide where to donate becomes more prominent. Why do people choose to give to the United Way rather than Alternative Funds? Does the United Way monopoly in the workplace market affect donors? What effect does the United Way monopoly have on the charitable market? With over one million nonprofits to choose from how does a donor decide where to donate, and is that choice rational and efficient? The next section will attempt to find a model that helps answer the questions above so that we are able to better understand donor behavior.

Effects of Fundraising

One of the most important impacts on donor behavior is fundraising. The ability to fundraise enables nonprofits to win donors and receive funds from a wide range of people and places. The large size of the United Way enables it to fundraise more effectively due to the availability of resources. The United Way's connection with many large companies may make employees of those companies feel obligated to donate. This section will analyze the effects of the United Way's monopolistic position in the workplace donation market and how it affects donors' decisions.

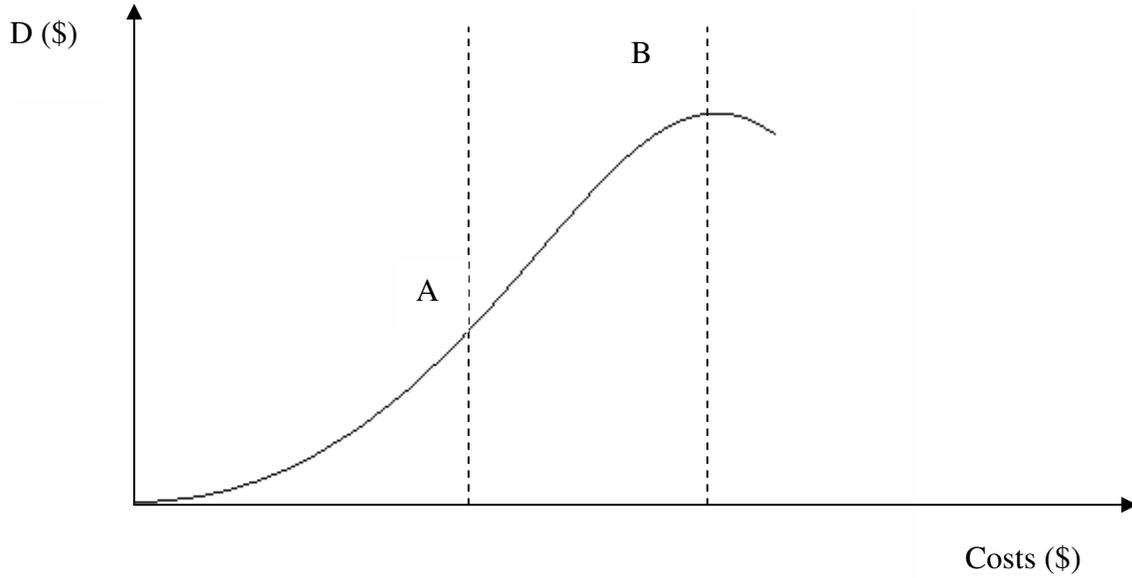
⁴⁶ NCRP *Giving at Work 2003* p.17

The United Way, due to its size, has resources and technology that allow it to fundraise more efficiently than other nonprofits, resulting in over allocation to the United Way. Fundraising has inputs such as volunteer time and unpaid media advertising that lead to the output of donations⁴⁷. It is a widely held that as fundraising costs increase, the amount of donations received will increase as well. Figure 3 represents the production function of fundraising⁴⁸. The vertical axis is the amount of donations received (D) and the horizontal axis is the fundraising costs (C). As you follow the production curve from left to right you will see that the curve exhibits increasing marginal returns until point A, where each additional dollar produces more donations than the previous dollar. From point A to point B, the production curve demonstrates decreasing marginal returns, meaning each additional dollar spent on fundraising produces fewer donations. From point B on, the production function displays negative marginal returns, where an additional dollar in fundraising expenditures actually reduces the total amount of donations. What is the optimal fundraising expenditure for a nonprofit?

⁴⁷ S.E. Boyle and Phil Jacobs, "The Economics of Charitable Fundraising," *The Philanthropy Monthly*, (1978): p.21

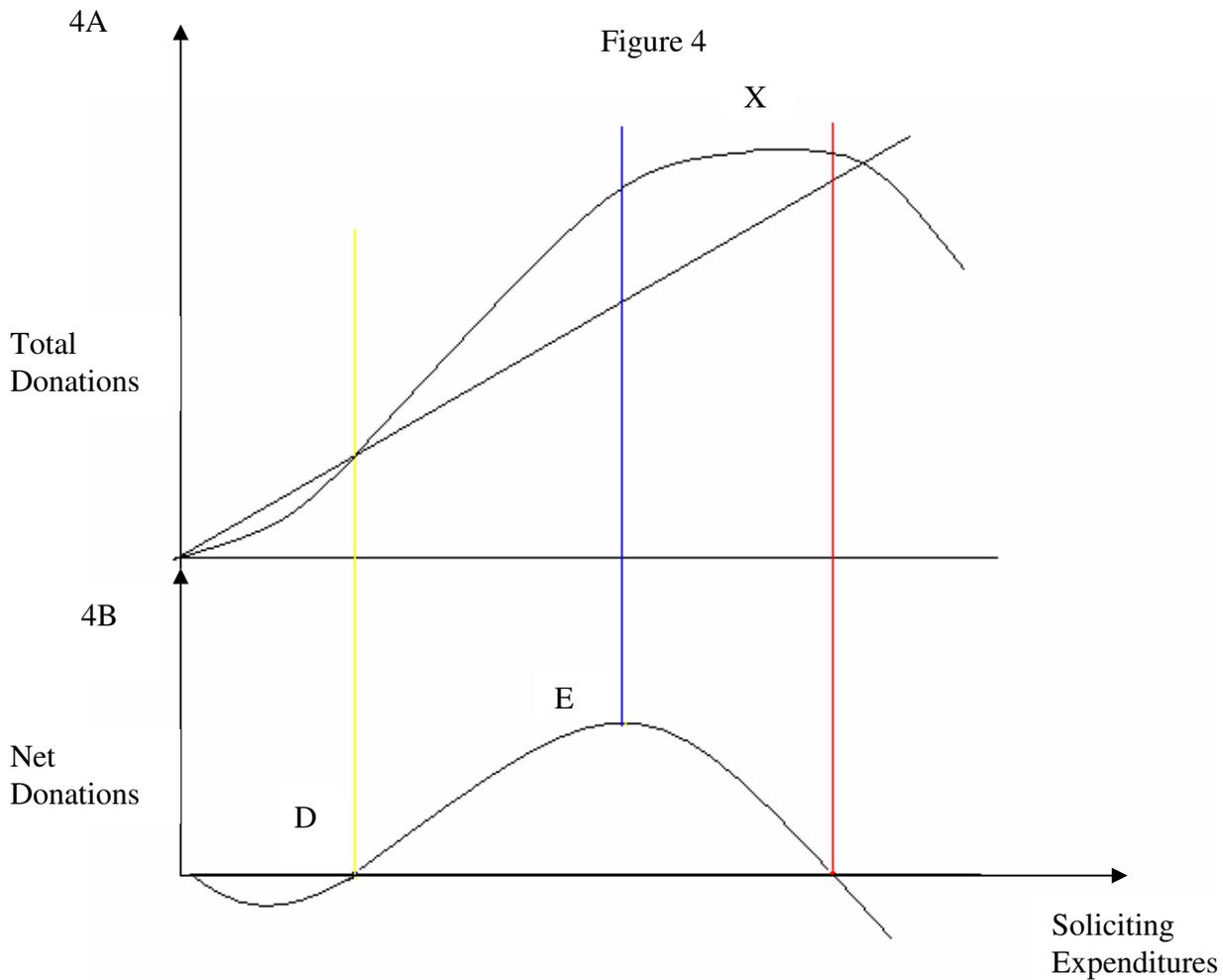
⁴⁸ Boyle and Jacobs p.23

Figure 3



To determine the optimal fundraising costs we must derive a curve for the total donations and one for the net donations. Figure 4A demonstrates a production function for a nonprofit firm, where the vertical axis is the total donations and once again the fundraising costs are on the horizontal axis. A 45-degree line is placed in the graph where anywhere along this line donations equal fundraising costs. If the production function lies above the 45-degree line then the nonprofit is producing positive net donations as figure 4B demonstrates. Net donations will vary with the amount of fundraising expenditures. Figure 4B demonstrates that initially, net donations are negative until the nonprofit has raised enough to cover the costs of fundraising, represented by point D. Net donations are maximized at point E, which is not the point where total donations are maximized, (point X in figure 4A).

The effect of size and resources is shown in the figure 5 production function. A nonprofit such as the United Way would increase productivity and the effectiveness of fundraising through programs such as paycheck deductions and volunteer fundraisers. This productivity due to these resources would shift the production function upwards as shown by figure 5. The increase in productivity allows the larger nonprofit to gain a higher amount of total donations as well as net donations. If a second steeper production function was drawn in figure 4A, then it would intersect the 45 degree line closer to the origin, therefore allowing the larger nonprofit to realize positive net donations more quickly as well as a higher maximum net donations than the smaller nonprofit that does not have these resources available. The United Way, because it has more technology (paycheck deductions, email campaigns, and mail campaigns) and resources, can spend less and raise more. Since the United Way has this advantage, it is more available and accessible to potential donors; it receives donations that may potentially go to other causes. The existence of this advantage acts as a barrier to entry and reduces the amount of potential nonprofits in the industry. A nonprofit that doesn't have the technology or manpower to run workplace campaigns, email campaigns, and mail campaigns may never be able to enter the market and be a sustainable nonprofit.



A key factor in fundraising productivity is the number of renewals versus new donors⁴⁹. The more renewal donors the charity has, the higher the production curve will be because it does not have to fundraise to receive a renewing donor's donation. Figure 5 demonstrates that technology and a large donor base will effectively increase the number of donations by shifting the production curve upwards. The United Way is undoubtedly producing at a higher production curve than most nonprofits due to its access to technology and its large donor base. A study done by Boyle and Jacobs (1974) demonstrates the extreme efficiency of the United Way by looking at per capita

⁴⁹ Boyle and Jacobs p.24

donations. For the sample of over 171 United Ways across the country, the mean value of per capita giving to the United Way was \$6.09⁵⁰. The fundraising costs per person for the campaign had a mean value of \$0.27⁵¹. Meaning that the United Way spent an average of 27 cents and received an average of \$6.09; this is 2,255.55% return on fundraising expenditure, which is the most efficient in the industry⁵². Compare this figure to the American Cancer Society where the return was 940% and the American Heart Association with a 725% return. The United Way is over two times more efficient than the American Cancer Society and more than three times as efficient than the American Heart Association.

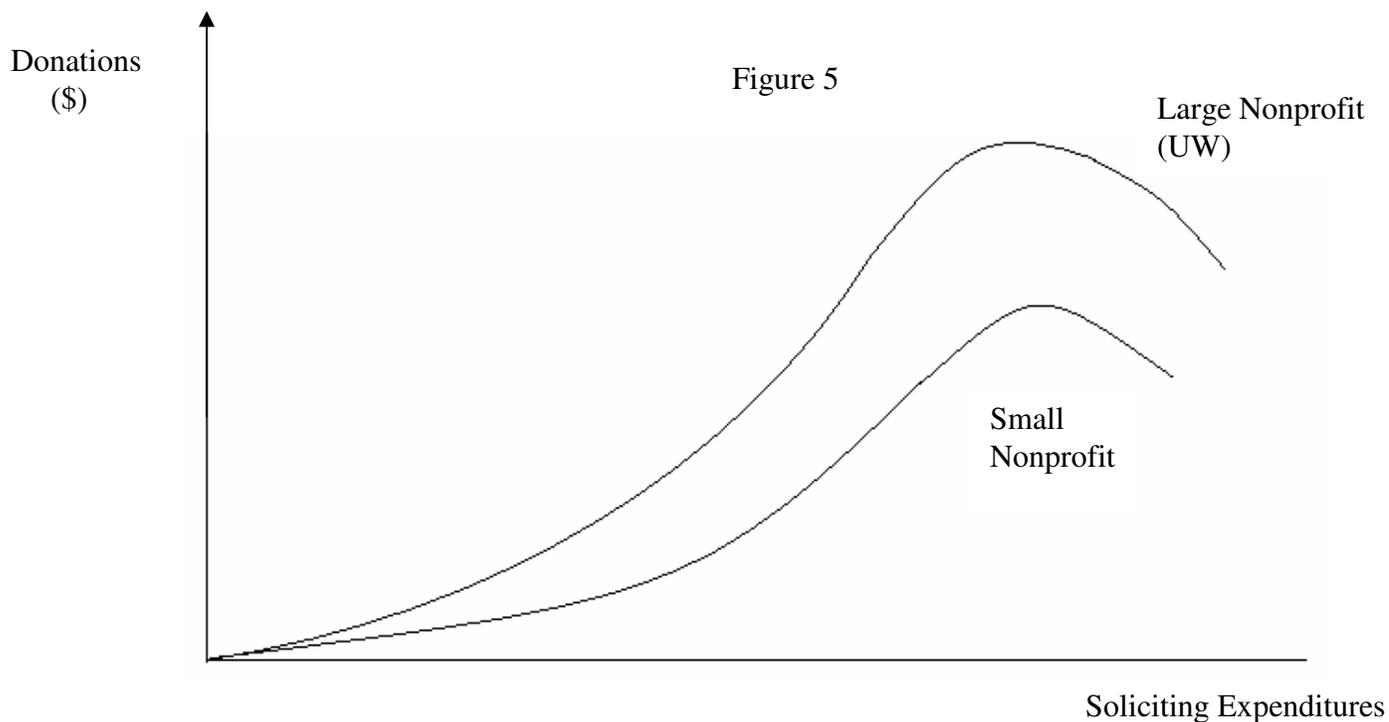
The United Way's monopoly on workplace donations means that other nonprofits do not have access to the technology of the United Way; therefore, they will not be able to reach the United Way's levels of productivity. Despite this productivity, the United Way according to Jacobs and Boyle is not functioning at the optimal level of point E in figure 4B. Jacobs and Boyle calculate that the United Way could increase fundraising expenses by \$.10 per capita and receive a \$1.64 increase in per capita donations⁵³. This suggests that the United Way is operating at a point on the production curve that exhibits increasing returns to scale. The United Way could improve its efficiency in fundraising and reach a wider audience through additional solicitation. Therefore, fundraising campaigns greatly affect potential donors and have a large influence on where donors donate.

⁵⁰ Boyle and Jacobs p.24

⁵¹ Boyle and Jacobs p.25

⁵² Boyle and Jacobs p.23

⁵³ Boyle and Jacobs p.25



Reasons People Donate and the United Way

Fundraising efforts is not the only reason that people give. Above we mentioned the positive impact of fundraising: increasing total donations. However, there are negative impacts that will be described in the pages that follow. Studies have been conducted to attempt to understand why and how people donate. I will define six reasons people donate (the fundraising effect, warm-glow effect, age/trust effect, demonstration effect, and the tax effect) and demonstrate their impact on the United Way.

Fundraising affects donors by soliciting people to donate to specific causes. Potential donors worry about where their dollars are being spent, and they hope that the money they donate goes to the greatest good. A cause most consider unworthy is fundraising costs. Donors are very conscious of the fundraising costs and overhead costs of nonprofits. Fundraising costs are receiving growing attention, and many local

governments are attempting to regulate fundraising costs to reassure donors of fair practice. In 1980 The Village of Schaumburg brought a case against Citizens for a Better Environment for violating the municipal ordinance that prohibited fundraising costs to exceed 25 percent of the nonprofit's revenues⁵⁴. The court ruled in favor of the nonprofit, but since that trial, fundraising regulations have been put into legislation in all but 11 states⁵⁵. The widespread support of such legislation suggests that the public and prospective donors do care about the fundraising percentage and take that into account when deciding where to donate. Higher fundraising costs therefore have a negative correlation to donations. That is to say if a potential donor were to be deciding between two nonprofits A and B that had fundraising expenditures of 35% and 25% respectively, then the donor would donate to nonprofit B. This is of course assuming that the service A and B provide is identical. Weisbrod proves this in his 1988 study where he found that donations do respond negatively to the fundraising percentage⁵⁶. It was negative for all 7 industries in the study and statistically significant for 6 of those industries. A one percent increase in the price of giving due to fundraising would decrease donations an estimated 2.65%⁵⁷. As competition between nonprofits becomes more prevalent, fundraising costs will be forced to increase. The competition will also force nonprofits to disclose their fundraising costs and donors will look for the nonprofit with the lowest fundraising cost that gives them the lowest price. When donors care about fundraising costs and overhead costs this benefits the United Way in the form of capturing a larger market share because its monopoly status allows it to reduce transaction, solicitation, and overhead costs.

⁵⁴ Burton Weisbrod, *The Nonprofit Economy* (Massachusetts: Cambridge. Harvard University Press, 1988), p.96

⁵⁵ Weisbrod p.97

⁵⁶ Weisbrod p.99

⁵⁷ Weisbrod p.99.

Advertising and its costs are not the only factors that affect donor behavior. It has been proven that the behavior of an individual is affected by what others decide. This theory is known as the demonstration effect and it assumes that choices made by individuals are interdependent. Jen Shang and Rachel Croson researched the impacts of demonstration effects on giving. People use two processes to form accurate views of themselves; objective standards and social comparisons. Objective standards come into play when attempting to make a decision on how much to donate towards a campaign and a donation amount is suggested (donate \$5 for cancer)⁵⁸. Social comparisons become important when there is no objective standard or the donor believes the suggested donation amount is not sufficient. When placed in this scenario, individuals will often compare themselves to similar others and donate the amount that their peers did. Frey and Meier (2004) demonstrate this effect through a university mailing campaign. In this study, two mailings were sent out: the first mailing said that 64% of students have previously donated and the other stated that only 46% have done so⁵⁹. The results show that the 3% more students in the group with the high social comparison gave than the group with the lower social comparison⁶⁰. This shows that the participation rate is increased if people perceive that others are participating.

The demonstration effect also has an effect on contribution amount. A study by Shang and Croson used a telethon campaign for a public radio station to understand the demonstration effect. During an on-air campaign, potential donors were asked to call in to donate. When a donor called in, he was given one of two prompts from the

⁵⁸ Isaac and Davis et al, *Experiments Investigating Fundraising and Charitable Contributions* (Oxford United Kingdom. Elsevier Publishing Inc., 2006), p.145

⁵⁹ Isaac and Davis p. 143

⁶⁰ Isaac and Davis p. 144

receptionist. The first prompt stated that another donor called in and contributed \$300 then the receptionist asked how much the caller wanted to contribute⁶¹. The second prompt simply asked how much the caller would like to donate. The prompts were assigned randomly to each caller and the results were surprising. The average contribution with the high social comparison was \$119.70, which is \$13 greater than the average contribution without the social comparison⁶². This \$13 dollar increase would result in a 12% increase in revenue for the station if all callers had been given the first prompt⁶³. This proves that social comparisons impact donor behavior and a nonprofit can greatly improve its revenues by using social comparisons. The United Way uses the social comparison method to increase donations by displaying donors either on their website or in their annual report. The United Way can greatly benefit from further use of social comparisons in marketing campaigns.

Donor behavior can also be affected by the warm glow effect. The warm glow effect suggests donors receive a benefit from donating to charity. The benefit these donors get from donating provides them an incentive to donate, and therefore, their donation is not purely altruistic. There are two types of warm glowers. The first type is those who give if they can make a difference, they only give when they can make an impact⁶⁴. These givers are motivated by gratitude. They expect gratitude in return for their gift, and they only donate when there is a possibility for gratitude. The second type of warm glow is the individual who gives simply because they want more of the public good and therefore benefit from their donation. In this perspective, the contribution

⁶¹ Isaac and Davis p. 146

⁶² Isaac and Davis p. 146

⁶³ Isaac and Davis p. 147

⁶⁴ J. Atsu Amegashie, "Economics, Gratitude, and Warm Glow," *Journal of Public Economics*, 2003: 2000-2017. p. 2011

enters an individual's utility function twice: once as a private good and once as a public good⁶⁵. The following therefore represents the utility function of a warm glower:

$$U_i = U_i(x_i, G, g_i)^{66}$$

U_i represents the utility of the individual, x_i is the private goods consumption, G is the benefit from the public good, and g_i is the individual's donation to the public good. G and g_i are present in the warm glower's utility function because they derive a benefit from giving (g_i) and they derive a benefit from the addition provision of the public good (G).

Nunes and Onfri give titles to the two types of warm glow donors described above: social-oriented donors and ego driven donors. Social oriented donors are those that get moral satisfaction from contributing to the social good or G . Ego driven donors are those that receive more satisfaction from the pride or personal benefit derived from their gift. The motivation for donating is important, but the effect it has on people is of greater significance. Videras and Owen (2006) found that individuals who contribute to public goods report higher levels of life satisfaction and happiness than individuals who do not contribute. This suggests that there is a great incentive for people to donate, for they will be happier. Warm glow theory gives us another cause for donating that has very large implications.

The government has a large impact on consumer's willingness to donate through the tax effect. The government's tax rate directly affects the price of donating. The price of donating is represented by the equation $\text{Price} = 1 - T_p$ where T_p is the marginal income tax rate facing the potential donor who itemizes his contribution to a tax-deductible

⁶⁵ Paulo Nunes and Laura Onfri, "The Economics of Warm Glow: A Note on Consumer's Behavior and Public Policy Implications," *University of Bologna Department of Economics*, 2004.p.7

⁶⁶ Nunes and Onfri p.8

organization. This suggests that as the government reduces the tax rate, consumers will donate less because the costs savings of tax-deductible donations is reduced. Weisbrod and Dominguez (1986) broaden the definition of price by emphasizing the price of giving a dollar's worth of output. Price is represented by the equation, $Price = (1-T) / (1-(A+F))$, where $(1-(A+F))$ represents the amount the donor must pay the nonprofit for the marginal dollar of output. Price can therefore adjust when the government changes the tax rate or when a nonprofit changes its efficiency by reducing its overhead costs.

The government in 1981, under the Reagan administration, made several tax reductions. The maximum tax rate was reduced from 70% to 50%, and marginal tax rates were reduced by 25%⁶⁷. These reductions allow us to analyze the effects of the tax cuts. Salamon and Clotfelter (1981) constructed a model using the *Statistics of Income* provided by the IRS to test the effects of the 1981 tax cut on charitable donations. According to their model, under constant income and price elasticities, they project that the tax act will depress individual giving, continuing the decline of charitable giving as a percentage of income that began in the 1970's⁶⁸. Donations in the years to follow did increase; however, data suggests that if the 1981 tax act had not been enacted, donations would have been 14.2 billion dollars greater⁶⁹. This shows the astonishing effect that the government can have in the nonprofit market, and that future tax cuts could be detrimental to the nonprofit sector.

Another factor that impacts donor behavior is the age of the nonprofit. Donors feel more comfortable donating to a non-profit that has given proven results. Long-

⁶⁷ Clotfelter and Salamon in Susan Rose-Ackerman, et al, *The Economics of Nonprofit Institutions* (New York, New York. Oxford University Press, 1986), p.156

⁶⁸ Clotfelter and Salamon p.158

⁶⁹ Clotfelter and Salamon p.159

standing nonprofits gain much more trust in the community, and as a result, they receive more donations. According to Weisbrod and Dominguez, if the nonprofit builds up a stock of goodwill among potential donors, it affects the donor's perception of quality⁷⁰. The perception of quality affects where the donor places funds. If a potential donor expects greater output and use of funds by a well established nonprofit like the United Way, then he will forgo donating to a less established nonprofit that produces less output of the same service. Age also affects the information asymmetries of the nonprofit market. The older the nonprofit, the more available information is, and advertising is not as effective because the information provided by ads has already entered the market. Weisbrod and Dominguez (1986) support this with empirical findings that show age has a negative impact on the marginal productivity of additional fundraising⁷¹. Age of the nonprofit, because it affects potential donor's perceptions of quality, gives older nonprofits a comparative advantage over newer nonprofit firms. This means that older nonprofits with certain services will receive more funds than newer nonprofits that fight new social issues. This may mean that the distribution of funds is not efficient.

Donor Choice Model

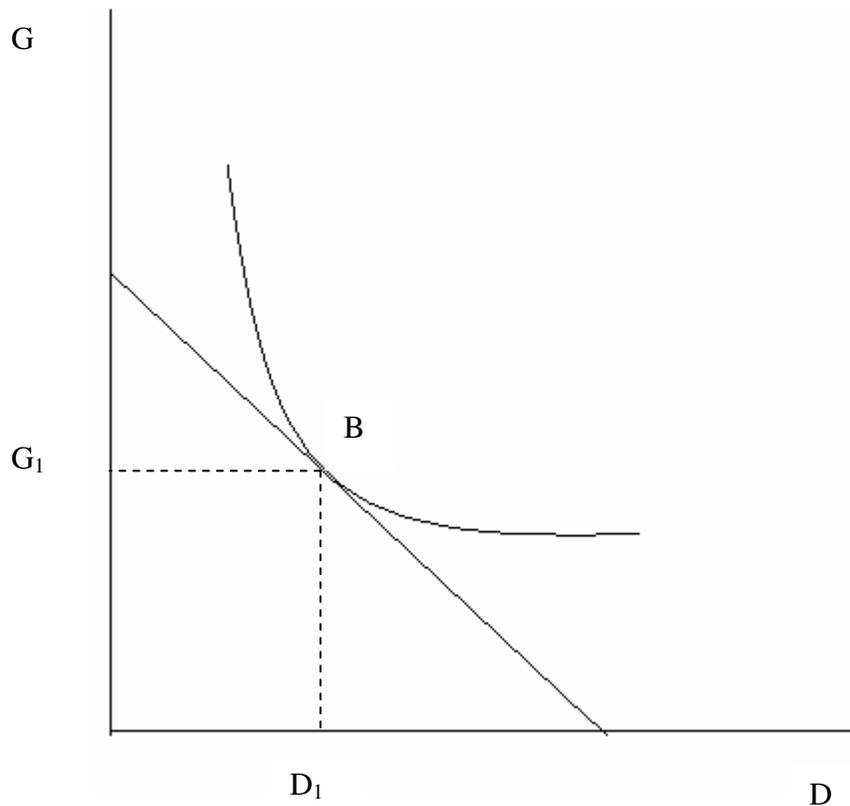
The section above describes the factors that affect how much people donate. When people donate they have two options: donate directly to the charity of their choice or donate through a federated fund like the United Way. This section will use the factors described above to demonstrate how an individual decides how much to donate and where a rational donor would donate funds. I will begin with an individual donor i with a

⁷⁰ Burton Weisbrod and Nestor Dominguez, "Demand for Collective Goods in Private Nonprofit Markets: Can Fundraising Expenditures Help Overcome Free-rider Behavior?" *Journal of Public Economics*, Vol. 30 (1986):84-96. p. 88

⁷¹ Burton Weisbrod and Nestor Dominguez p.87

utility function $U_i=U(G, D)$ where G is the amount of goods the individual consumes and D represents the amount the individual donates. The graph below shows this individual's indifference curve and his budget constraint. The individual can give all that he has to charity; use all of his money to purchase goods, or a combination of donating and consuming goods. Given the budget constraint and the individual's indifference curves, the individual would maximize his utility by choosing the indifference curve that is tangent to the budget constraint (point B in figure 6). The individual would maximize his utility by donating D_1 dollars and consuming G_1 goods.

Figure 6



To maximize utility, the individual must donate and purchase goods in the amounts that satisfy the equation $U_g/P_g=U_d/P_d$ (see appendix on p.47). Where U_g is the utility derived from consuming goods, P_g is the price of those goods, U_d is the utility derived from donating, and P_d is the price of donating. The left hand side of the equation can be interpreted as the extra utility gained from the last dollar spent on goods.

Likewise, the right hand of the equation is interpreted as the utility gained from the last dollar spent on donations. The optimal values of D and G must therefore be where the utility gained from the last dollar spent on D equals G. Suppose this weren't the case, and the extra utility gained from the last dollar spent on D exceeded that of G. The consumer would then spend a dollar less on G and a dollar more on D and end up with more utility than he had under the original allocation. The consumer would continue to substitute this way until the marginal utility of the last dollar spent on D equals that of G.

Now, by using similar framework, we can show how an individual decides where to donate D. There are over a million nonprofits an individual can donate to. Seeing that a potential donor has set aside a given amount of funds to donate (D), and he wants to maximize the utility of his donations. Therefore he must choose the right charities.

Consider an individual with a utility function $U_i=U(D_a,D_b)$ where D_a is the amount donated to charity A, and D_b is the amount donated to charity B. Using the maximizing criteria from above, we assume that the maximizing identity is $U_{da}/P_{da}=U_{db}/P_{db}$. This states that the marginal utility of an additional dollar spent on D_b and D_a is the same. If the donor displays warm glow behavior, then the individual receives utility from a gift. There are however two types of utility derived from the act of giving. The first type of utility is utility derived from knowing that your gift benefitted someone. This can be

shown using the Russell Roberts model where an individual A has the following Utility function $U_a=U_a(X_a,X_c)$ where X_a is the amount of goods the individual A has and X_c is that amount of goods individual C has. Therefore individual A derives utility from the amount of wealth that C has⁷². The other type of utility is not derived from the wellbeing of the third party, but rather, the act of giving is what this individual derives utility from. The donor is indifferent to the recipient's endowment (X_c), but rather receives utility simply from giving to the public good⁷³.

The two different types of derived utility can have a large effect on the maximizing function $U_{da}/P_{da}=U_{db}/P_{db}$. If the individual cares about the utility of a third party, X_c , then he will care about who X_c is. That is, who benefits from a donation has an effect on this individual's utility. An individual that exhibits this type of behavior will donate to a group that will benefit the target recipient. For example, the marginal utility of giving to the poor would have a higher utility than giving to Microsoft because the same donation helps the poor more than it would Microsoft, making the giver happier. Individuals that exhibit this type of warm glow may even pay a higher price to ensure that their target audience receives the help they need. However, if the individual cares only about the amount that he gives, the utilities of U_{da} and U_{db} will be identical and the price of donating will have a larger effect.

The second type of warm glow utility is derived solely from the act of giving. This person derives utility from the amount they give, not to whom receives the gift. Therefore the price to donate greatly affects this type of donor because this donor will

⁷² Russell Roberts, "A Positive Model of Private Charity and Public Transfers," *The Journal of Political Economy*, Vol.92, No. 1 (1984): 136-148

⁷³ James Konow. "Mixed Feelings: Theories and Evidence of Warm Glow and Altruism". *Loyola Marymount University Department of Economics*, 2006.

maximize their utility by giving more to the cheaper charity. If we assume that an individual has amount X to give to charities D_a and D_b , the donor will give until $U_{da}/P_{da}=U_{db}/P_{db}$. To test the effects of price, we assume that $U_{da}=U_{db}$ and that P_{da} is twice as much as P_{db} . That means that the potential donor will receive twice as much utility for the same dollar amount donated if he chooses to donate to charity B because its price to donate is half of A. Seeing this donor receives twice the utility for the same donation, he will donate all his resources to charity B. If charity A and charity B represent the same cause, then the purely altruistic donor will be very conscious of the price to donate because he can maximize his utility by donating all his funds to the cheaper priced charity. The United Way is commonly the cheaper charity, and as a result they receive more donations because when potential donors whom receive the same amount of utility from their donation (as described above) they will maximize their utility by donating all their funds to the United Way. The maximizing points for these two types of warm glowers may be different. Figure 7 shows the allocation for a donor where B is the cheaper charity and the donor derives their utility from the amount they give. Figure 8 shows the allocation for a donor where the marginal utility from A is greater than B.

Figures 7 & 8

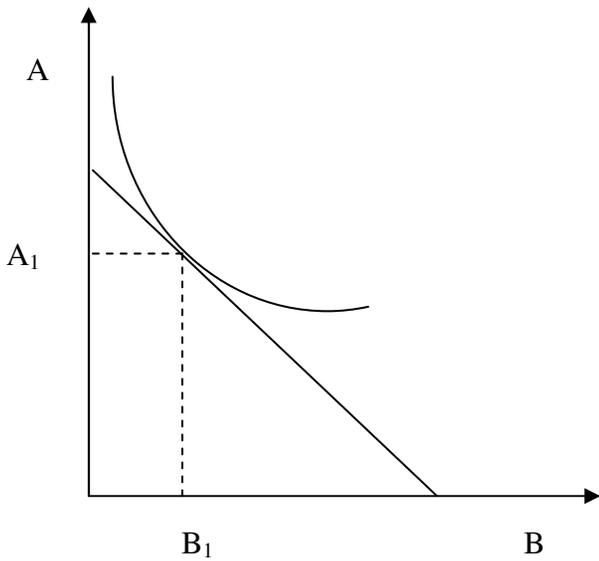


Figure 7 (Total Amount Given)

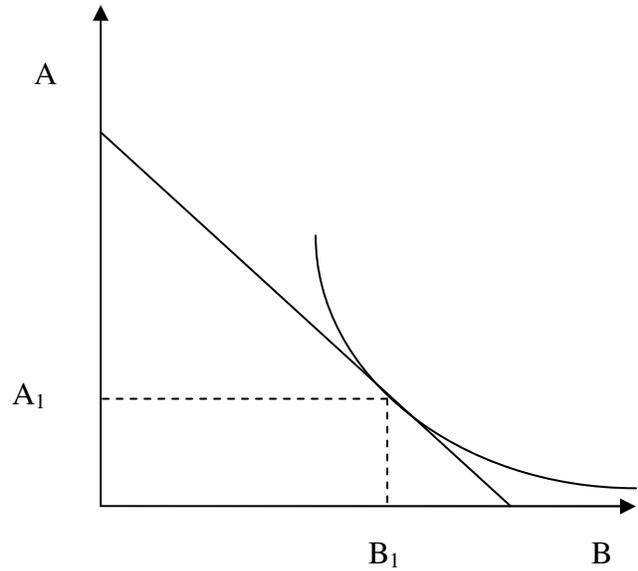
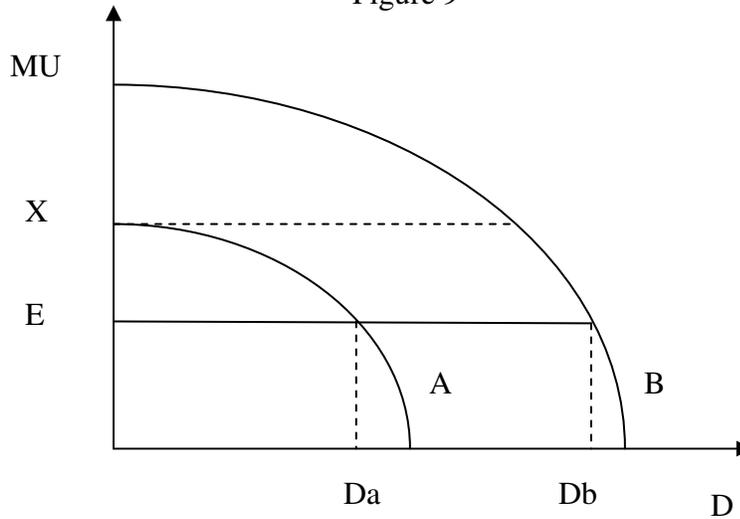


Figure 8 (Where Donation is Made)

The donor may have different preferences as shown above. Yet, despite the differences the individual is going to donate where $U_{da}/P_{da}=U_{db}/P_{db}$. The differences in preferences will change the amount that the donor will donate to each charity as figures 7 and 8 show. Figure 9 shows why a donor will donate more to one charity than the other. The curve representing charity B is larger than that of charity A, suggesting that the donor gets more utility from charity B. The donor, because he gets more utility from B, would donate all his funds to B until he reaches the line X. Line X represents the point where the donor starts deriving utility from a donation to A. The donor will donate until he reaches a point where the marginal utility of a donation to A equals B, shown by line E. At this point the donor donates more to B than A, showing a preference for a donation to B. This preference may be a result of the cause that the charity represents.

Figure 9



The United Way exhibits several benefits to potential donors that give it a monopoly advantage. The United Way lowers transaction costs, has lower fundraising costs, has lower overhead costs, and has sole access to several markets. A donor can either research to find the right charities or donate to the United Way who has already done that research. Consider the cost to donate for an individual. The cost to donate of an individual is $C_i = (P_i * I) + (TC * T) + D$, where P_i is the price of information, I is the amount of information, TC is the transaction costs of donating, T is the size of the transaction, and D is the amount of the donation. If the individual has to do a lot of research, the cost to donate may be very high. Once he finds the right charity to donate to, getting the donation to the charity may be very difficult. You may have to cut a check and mail it. You may also have to drive to the charity's office and drop it off or make a phone call. All of these options take time, and the more time it takes to donate, the less time a donor spends working or enjoying leisure time.

The United Way, through its paycheck deduction system, dramatically cuts down on the time it takes to donate. A donation to the United Way also reduces the amount of time that one has to spend conducting research. The United Way has paid professionals that sit on allocation committees that allow the United Way to donate wisely. The United Way conducts research on charities for their donors, so they don't have to. Donors simply have to trust that the United Way is donating their money to charities that the donors would support. The cost to donate to the United Way would be $C_{uw}=(TC*T)+D$. Donating to the United Way rids the consumer of the information cost, because the United Way does all of the research, and the transaction costs are much lower. This makes donating to the United Way more efficient for most potential donors, assuming that $C_{uw}<C_i$. If C_{uw} is less than C_i then many donors will donate to the United Way instead of collecting information themselves. However, a donor may not donate to the United Way if he feels that the United Way does not donate to the proper charities. These donors may take on the higher costs to ensure that their donation is allocated to the charity they deem most worthy. Yet, the United Way gains many donors due to its lower cost to the individual.

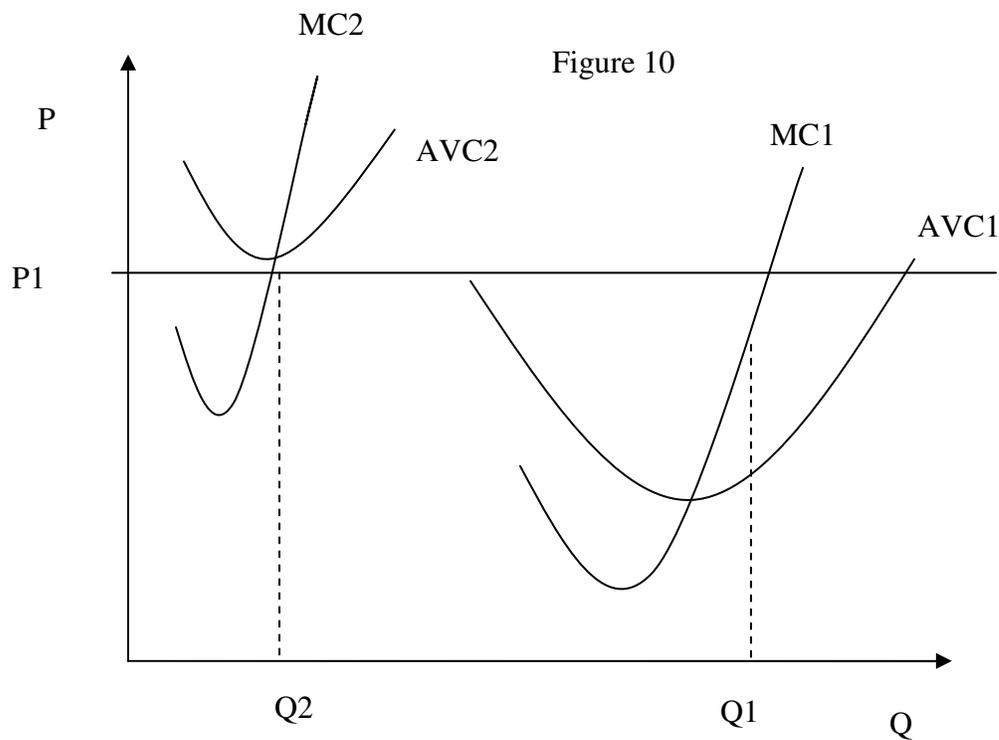
Another advantage that the United Way has is in overhead costs. Smaller charities have higher overhead costs because they cannot spread the fixed costs out as much as the United Way. Higher overhead costs in small charities occur because they don't have as many volunteers, and they don't have the technology that the United Way has. The United Way, because of its size and history, has lower overhead costs and transaction costs per dollar. The lower overhead costs of the United Way mean that more of a donation reaches its intended use. The United Way boasts of its low overhead costs of 10

cents of every dollar donated, which is significantly lower than the 20-30 cents of every dollar smaller institutions such as the University of Puget Sound must charge. Yet donors do not strictly donate on the basis of overhead costs. Many donors donate on the basis of the utility others derive from their donation, so they may derive more utility from a donation that benefits those who the donor believes need assistance. The United Way however, has a large advantage on the section of the donation market where costs are important to the donor.

The final advantage of the United Way is that it is often the only the only charity allowed to seek donations in the workplace. Many companies do not want several companies in the workplace seeking funds because it would distract workers and make them less productive. Seeing that the United Way is the most recognizable nonprofit, many companies decided to partner with the United Way in hopes to improve their public image. The United Way's ability to be the sole entrant into large companies' workplace enables it to have a monopoly position. Although the monopoly position is beneficial to the United Way, it has several negative effects on the charitable market. The United Way's monopoly position creates a barrier to entry for several nonprofits, it reduces the amount of choice in the market, it reduces social welfare, and misallocates resources.

The United Way creates two barriers to entry for other potential nonprofits in the industry. The first barrier is the fact that companies do not let other nonprofits enter into the workplace. The United Way, due to its brand recognition, attracts many larger for-profit firms that are looking to improve their public relations. The for-profit firm and the United Way then enter into an agreement or partnership that allows the United Way exclusive rights to fundraise within the for-profit company. Therefore, new nonprofits do

not have access to a very lucrative market (the workplace). The second barrier is the lack of technology new nonprofits have, which keeps overhead costs high. This means that new nonprofits will have higher transaction costs and it makes it very difficult for nonprofits to compete with the United Way on the basis of cost. New nonprofits will also have very high advertising costs as they need to advertise heavily in an attempt to enter the nonprofit industry. New nonprofits have higher costs than the United Way, and if the price to donate is low enough, they will not be able to enter the market as figure 10 shows.



In figure 10, there are two nonprofits with two different Average Variable Cost (AVC) curves and Marginal Cost (MC) curves. Nonprofit 1 is the United Way which has

very low variable costs due to its size and technology. Nonprofit 2, however, is a new small nonprofit, which has high variable costs. Nonprofit 2 has an AVC curve that is higher than the market price to donate. This suggests that the nonprofit will actually shut down or in this case they will not enter the market because they will not be able to keep costs low enough to be competitive. The United Way, because it can keep transaction costs low, drives out potential competition. The United Way therefore reduces the amount of choice that the market offers. A new nonprofit whose activity is to save the glaciers, for instance, may not enter because it can't compete with the United Way's donation price. Yet, there may exist a potential donor who really cares about glaciers (cause motivated donor), yet the nonprofit market may not offer the cause that he wants to support. This individual may not find a substitute cause that he wants to donate to. The individual may not decide to donate at all. This suggests that the reduction in the supply may cause a reduction in the demand or desire to donate.

The reduction in the choices available to a donor will reduce the demand for that donor to donate, resulting in fewer aggregate donations. The reduction in donations will then lead to a reduction in social welfare. Figure 11 demonstrates the effect the United Way has on the workplace donation market. In the diagram, S is the number of giving opportunities that nonprofit organizations offer. A shift to the right would represent an increase in the opportunities to donate, meaning nonprofits are entering the market. D represents the number of dollars the donors want to give and once again a shift to right would demonstrate an increase in the number dollars donors want to give. The X-axis represents the donative opportunities, so as you move to the right on this axis, it represents more donative opportunities. The Y-axis is the price of giving a dollar, which

in this model is the transaction costs of donating plus the overhead costs of the nonprofit. The figure shows that as you increase the transaction cost, which includes the overhead costs of nonprofits, more nonprofits enter and the quantity supplied increases because it moves to the right along the line labeled S. However, as you increase the transaction costs, the quantity of the number of dollars donors want to donate decreases. As the transaction costs to donate increase it becomes more inconvenient for donors to donate, so donors reduce the amount they are willing to donate. These are the basic ramifications on which the theory of the United Way's entry deterrence is based.

The United Way deters entry into the nonprofit market in the following manner. In figure 11 the market for workplace donations represents a competitive market where S and D intersect at an equilibrium price; P_1 . P_1 represents the transaction costs of the nonprofits in the market. At the price P_1 there is Q number of giving opportunities, which is the number of nonprofit organizations in the market at that price. When a nonprofit grows through differentiation and has over 50% market share, like the United Way, it has several negative impacts on the market. First and foremost, the large market share means that the United Way can influence the price. That is they can influence how large the transaction cost are going to be. The United Way may attempt to gain market share by making it more convenient to donate and lowering the transaction costs. The lowering in transaction costs would attract cost sensitive donors to donate to the United Way. The lower costs to donate due to the United Way's efficiency is beneficial to consumers, but at the same time it excludes less efficient firms from entering, which has negative social impacts. Figure 10 demonstrates that a drop in the transaction costs may decrease the revenues of a small nonprofit below their average variable cost curve and

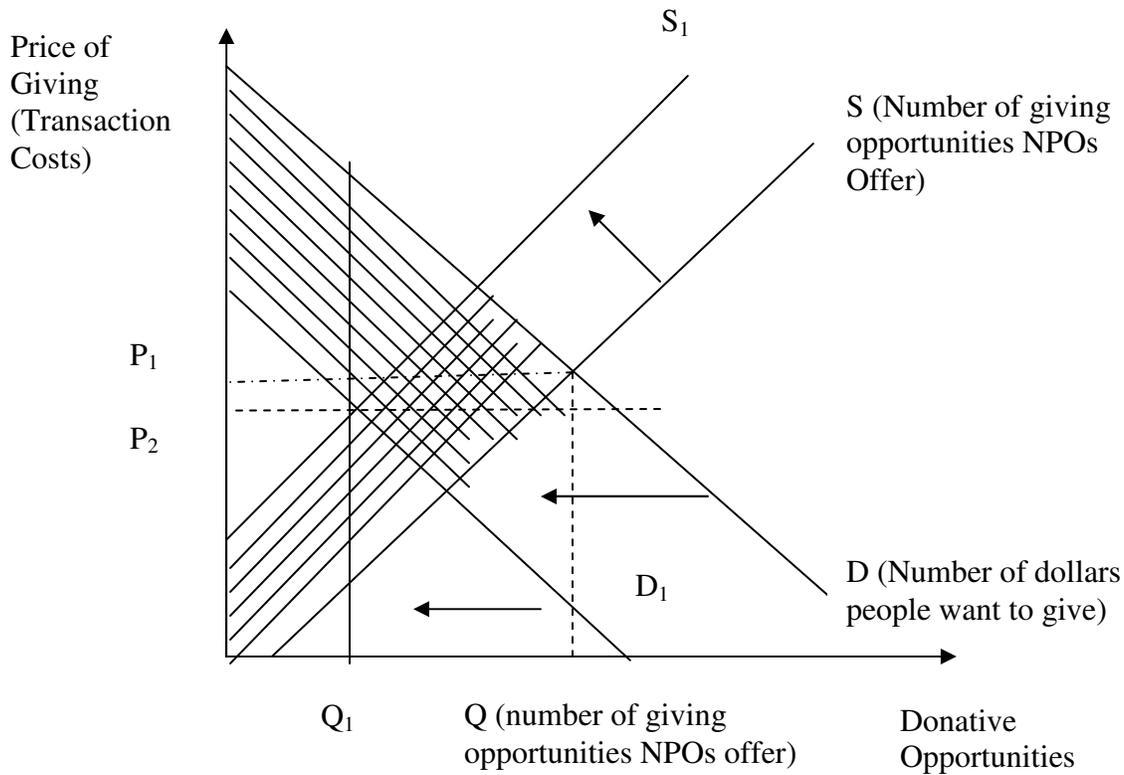
force them to leave the market. The number of nonprofits therefore decreases, which is shown by a leftward shift in the number of giving opportunities from S to S_1 in figure 11. The decrease in the number of opportunities to give has an impact on the number of dollars donors want to donate.

The decrease in the number of nonprofits causes donors to want to donate less. This is because I assume that the majority of donors represent those that are cause related donors, meaning that they want to donate for a specific cause. When the number of nonprofits decreases, it is likely that the cause donors would like to donate to will no longer exist and that will reduce the utility that that individual receives to zero and they will no longer want to donate at all. The decrease in the number of dollars donated, which is the result of nonprofits leaving the market, will shift the number of dollars donors want to give from D to D_1 . The market will then settle at an equilibrium where the price of giving is P_2 and the quantity of nonprofits at this price is Q_1 . The new market equilibrium decreases the total amount of social welfare because there are less funds donated to causes that provide services that increase social welfare. The shaded region represents the loss in social welfare. The United Way's exclusive pricing forces nonprofits to leave the market causing a misallocation of funds. Seeing that there are fewer nonprofits to donate to, the United Way receives a higher portion of the funds because donors overvalue the United Way because there are less valuable places to donate funds.

In addition to the loss of social welfare, donors lose the association value of donating to a specific nonprofit. The association value of donating to a charity is that you intimately know the nonprofit that you donate to. The donor feels a connection to a cause

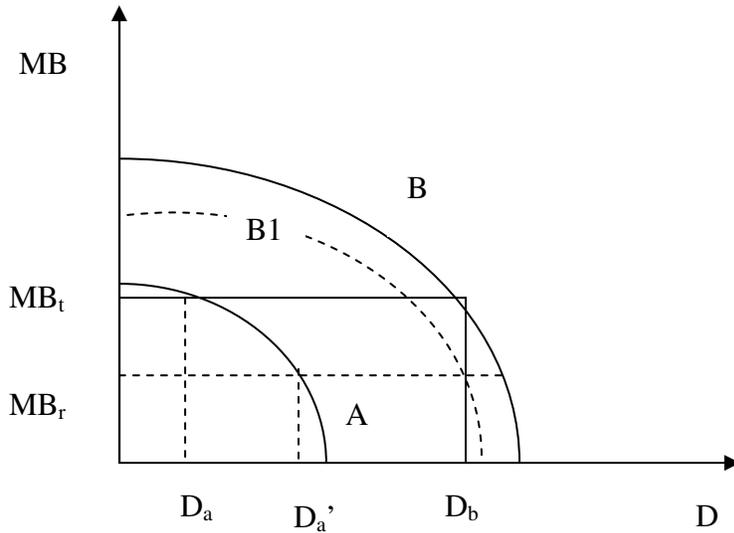
and a group of people that support the same cause. However, when a donor donates to the United Way, the United Way has conducted all the research on the nonprofit that they decide to allocate the funds to, meaning that the United Way donor has forgone the benefit of the association value. The United Way donor will never know where their donation is allocated unless they decide to use the donor choice system within the United Way that allows a donor to donate to whichever charity they desire. The donor choice system allows a donor to regain the association value, however the donor choice model is very costly for the United Way and increases its overhead costs.

Figure 11



The United Way due to its monopoly status in workplace donations may receive more funds than what is market efficient. The United Way may skew the donor's perception of marginal benefit. Figure 12 shows an individual's distribution between two nonprofits where A is a small nonprofit and B is the United Way. The United Way due to its high advertising and brand recognition may receive allocations of funding where the actual marginal benefit of that donation is very low, but the donor perceives their donation to have a large impact and therefore overvalues a donation to the United Way. Figure 12 shows the overvalued marginal benefit curve, B, where the consumer believes due to advertising, that the benefit of their donation is very high. Given this perceived marginal benefit the donor will donate the amount D_b to charity B and D_a to charity A. They will give these amounts because by giving these amounts the marginal benefit is equal for both charities, meaning that the donor is donating the optimal amounts to both charities at the misperceived benefit level. However, knowing that the true marginal benefit of giving to B is B_1 , giving D_a to charity A is an inefficient amount. This is because the real marginal benefit gained from an allocation to charity is represented by the dashed curve B_1 . If B_1 is the actual marginal benefit, that will change the optimal allocation of donations. If B_1 is the true marginal benefit gained from giving to charity B, then the donor should donate D_b to charity B and D_a' to charity A. If the donor donates any less than D_a' , the allocation is inefficient because the marginal benefits of both charities are not the same. The donor should donate where line MB_r intersects curves A and B, at these points the true marginal benefit of the charities will be the same and the allocation of donations will be economically efficient.

Figure 12



Conclusion

I have shown that the United Way has a monopoly position in the workplace donation market and that this monopoly position has several implications. First is that the United Way, due to its size and position, has lower fundraising costs as well as lower transaction costs. The lower costs make the United Way a lucrative choice for those donors that are price sensitive. The lower transaction costs enable the United Way to make the price of donating much cheaper by making it more convenient by reducing the need to gather information. The convenience drives the price down to a level where many nonprofits cannot enter because they do not have the technology to raise the funds that would allow them to cover their variable costs. Therefore, the United Way deters entry into the market through exclusive pricing. The reduction of competition in the market reduces social welfare by reducing the amount of donations due to a lack of variety of services provided by nonprofits.

The United Way therefore exerts its monopoly power in a very different manner than its for-profit counterparts. Rather than attempting to raise the costs of potential entrants through capital requirements, as many for profit monopolies do, the United Way deters entry by reducing the transaction costs and bars entry through contractual obligations (only one allowed to fundraise in certain workplaces). For-profit monopolies also reduce prices to deter entry; the one difference is that the United Way reduces costs because it is more efficient, not because it can afford to predatory price its services. The United Way's entry deterring behavior reduces the number of nonprofits in the market that leads to a reduction in the amount of dollars donors want to give (figure 11). The reduction in dollars donated means less people are being helped and this reduces social welfare. Therefore, having one dominate firm in the nonprofit industry is undesirable.

The United Way can help the nonprofit industry reach its full potential by not behaving in a monopolistic way and deterring entry into the workplace donation market. The United Way should allow other nonprofits to enter the workplace market so there is a greater variety of nonprofits for donors to choose from. The United Way should also share its technology and fundraising tools to allow new nonprofits to have lower variable costs. The reduction in variable costs will allow the new nonprofits to be competitive and provide an outlet for donors that want to support their causes. Having more nonprofits in the market will create a more efficient allocation of donations because there will be a smaller probability for nonprofits being overvalued. The nonprofit industry will only be able to maximize output if they take actions to make the nonprofit market more competitive and efficient.

Appendix

$$U_i = U(G, D) - \lambda(Y - P_g * G - P_d * D) \quad (1)$$

Where P_g is the price of consumer goods and G is the amount of consumer goods purchased. P_d is the price of donations and D is the amount donated. G is the amount of goods and D is the amount of donations. Y represents the budget constraint of U_i .

By taking the partial derivatives:

$$\partial F / \partial G = U_G + \lambda P_g \quad (2)$$

$$\partial F / \partial D = U_D + \lambda P_d \quad (3)$$

$$\partial F / \partial \lambda = Y - P_g G - P_d D \quad (4)$$

To maximize the utility of the function we solve all three equations for U_g , U_d , and λ .

We solve for the equations by setting them equal to zero and then solving.

$$\partial F / \partial G = U_G + \lambda P_g = 0 \quad (5)$$

$$\partial F / \partial D = U_D + \lambda P_d = 0 \quad (6)$$

If we divide $\partial F / \partial G$ by $\partial F / \partial D$ we will have:

$$(\partial F / \partial G) / (\partial F / \partial D) = (U_G) / (U_D) = (P_g / P_d) \quad (7)$$

Equation 7 states that the optimal values of G and D must satisfy the $MRS = (P_g / P_d)$.

Seeing that $(\partial F / \partial G)$ is the marginal utility of G and $(\partial F / \partial D)$ is the marginal utility of D this tells us that the marginal utility of a good is the extra utility obtained per additional unit of the good consumed. By rearranging the equation we are able to derive the utility maximizing function.

$$U_g / P_g = U_d / P_d \quad (8)$$

Bibliography

- Amegashie, J. Atsu. "Economics, Gratitude, and Warm Glow." *Journal of Public Economics*, 2003: 2000-2017.
- Andreoni, James. "Giving with Impure Altruism: Applications to Charity and Ricardian Equivalence." *The Journal of Political Economy*, Vol. 97, No. 6 (December 1989): 1447-1458.
- Armentano, Dominick. *Antitrust and Monopoly: Anatomy of a Policy Failure*. New York: New York, John Wiley & Sons, 1982.
- Asch, Peter. *Economic Theory and the Antitrust Dilemma*. New York: New York, John Wiley & Sons, Inc., 1970
- Barman, Emily. "Asserting Difference: The Strategic Response of Nonprofit Organizations to Competition." *Social Forces*, Vol. 80, No.4 (June 2002): 1191-1222.
- Becker, Gary. "A Theory of Social Interactions." *The Journal of Political Economy*, Vol. 82, No. 6 (Nov.-Dec., 1974): 1063-1093.
- Bennett and DiLorenzo. *The Profits of Nonprofits*. London: Hamilton Press, 1989.
- Boyle, S.E., and Phil Jacobs. "The Economics of Charitable Fundraising." *The Philanthropy Monthly*, (1978): 21-27.
- Brody, Evelyn. "Charitable Endowments and the Democratization of Dynasty." *Arizona Law Review* (1997).
- Burlingame and Young. *Corporate Philanthropy at the Crossroads*. Indiana: Bloomington, Indiana University Press, 1996.
- Chen, Yan, and Xin Li. "Online Fund-Raising Mechanisms: A Field Experiment." *Contributions to Economic Analysis & Policy*, Vol. 5, No. 2 (2006):1-36.
- Cordes, Joseph et al. "The Effects of Expanded Donor Choice in United Way Campaigns on Nonprofit Human Service Providers in the Washington, D. C., Metropolitan Area." *Nonprofit and Voluntary Sector Quarterly*, Vol. 28 (1999): 127-150.
- Cutlip, Scott. *Fundraising in the United States*. London, United Kingdom. Transaction Publishers, 1990.
- Egger, Robert. *Begging for Change*. New York: New York, Harper Collins, 2004
- Flanagan, Joan. *Successful Fundraising: A Complete Handbook for Volunteers and Professionals*. Illinois: Chicago, Contemporary Books 1999.

Greenlee, Janet, and Teresa Gordon. "The Impact of Professional Solicitors on Fund-Raising in Charitable Organizations." *Nonprofit and Voluntary Sector Quarterly*, Vol. 28, No.277 (1998): 277-298.

Grimm, Robert, and Richard Steinberg. "The Philanthropic Giving Index: A New Indicator of the Climate for Raising Funds." *Nonprofit and Voluntary Sector Quarterly*, Vol. 28, No. 28 (1999):491-499.

Hammack and Young. *Nonprofit Organizations in a Market Economy*. San Francisco, California. Jossey-Bass Publishers, 1993.

Isaac and Davis et al. *Experiments Investigating Fundraising and Charitable Contributions*. Oxford United Kingdom. Elsevier Publishing Inc., 2006.

Kaplan, Ann. *Giving USA 2007*. Indiana: Indianapolis. AAFRC Trust for Philanthropy, 2007.

Keating, Barry et al. "United Way Contributions: Coercion, Charity or Economic Self-Interest?" *Southern Economic Journal*, Vol. 47, No. 3 (January 1981): 816-823.

Konow, James. "Mixed Feelings: Theories and Evidence of Warm Glow and Altruism." *Loyola Marymount University Department of Economics*, 2006.

Luksetich, William, and Patricia Hughes. "Efficiency of Fund-Raising Activities: An application of Data Envelopment Analysis." *Nonprofits and Voluntary Sector Quarterly*, Vol. 26 (1997): 73-84.

National Committee for Responsive Philanthropy. *Giving At Work 2003*. Washington DC: National Committee for Responsive Philanthropy, 2003.

Newman, Raquel. *Giving Away Your Money: A personal Guide to Philanthropy* Maryland: Rockville. Schreiber Publishing, 2000.

Nunes, Paulo, and Laura Onofri. "The Economics of Warm Glow: A Note on Consumer's Behavior and Public Policy Implications." *University of Bologna Department of Economics*, 2004.

Ray, Leonard. "Why We Give: Testing Economic and Social Psychological Accounts of Altruism." *Polity*, Vol. 30, No. 3 (Spring 1998): 383-415

Roberts, Russell. "A Positive Model of Private Charity and Public Transfers." *The Journal of Political Economy*, Vol.92, No. 1 (1984): 136-148

Rose-Ackerman, Susan et al. *The Economics of Nonprofit Institutions*. New York, New York. Oxford University Press, 1986.

Rose-Ackerman, Susan. "Charitable Giving and Excessive Fundraising." *The Quarterly Journal of Economics*, Vol. 97, No. 2 (May 1982): 193-212.

Salamon and Anheier. *The Emerging Nonprofit Sector: An Overview*. Manchester, United Kingdom. Manchester University Press, 1996.

Steckel and Simons. *Doing Best by Doing Good: How to use public purpose partnerships to boost corporate profits and benefit your community*. New York: Dutton, 1992

Stone, Melissa et al. "Organizational Characteristics and Funding Environments: A Study of a Population of United Way-Affiliated Nonprofits." *Public Administration Review*, Vol. 61, No. 3 (May 2001): 276-289

Sugden, Robert. "Reciprocity: The Supply of Public Goods Through Voluntary Contributions." *The Economic Journal*, Vol. 94, No. 376 (December 1984): 772-787.

Sugden, Robert. "On the Economics of Philanthropy." *The Economic Journal*, Vol. 92, No. 366 (June 1982): 341-350

The Yale Law Journal Company. "United Charities and the Sherman Act." *The Yale Law Journal*, Vol.91, No. 8 (July 1982): 1593-1613.

Thorton, Jeremy. "Nonprofit Fund-Raising in Competitive Donor Markets." *Nonprofit and Voluntary Sector Quarterly*, Vol. 35 (2006): 204-223

Weisbrod, Burton. "The Nonprofit Mission and Its Financing." *Journal of Policy Analysis and Management*, Vol. 17, No. 2 (Spring 1998): 165-174.

Weisbrod, Burton, and Nestor Dominguez. "Demand for Collective Goods in Private Nonprofit Markets: Can Fundraising Expenditures Help Overcome Free-rider Behavior?" *Journal of Public Economics*, Vol. 30 (1986):84-96.

Weisbrod, Burton. *The Nonprofit Economy*. Massachusetts: Cambridge. Harvard University Press, 1988.

Wiener, Joshua, and Tabitha Doescher. "A Framework for Promoting Cooperation." *Journal of Marketing*, Vol. 55, No. 2 (April 1991): 38-47.

Videras, Julio and Abb L. Owen. "Public Goods Provision and Well-Being: Empirical Evidence Consistent with the Warm Glow Theory." *Contributions to Economic Analysis & Policy*, 5, No.1 (2006)