The Estimated Economic Value of a US Volunteer Abroad

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2007

CSD Working Papers
No. 07-29
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Summary

The labor performed by domestic volunteers is commonly assigned an economic value to determine the product volunteers contribute to the national economy (Independent Sector, 2007). This brief summarizes several approaches to estimating the economic value of US volunteers abroad, and compares these estimates to calculations using the 2005 Current Population Survey volunteer supplement (U.S. Bureau of the Census, 2006) and the Independent Sector’s 2005 estimation of the hourly “wage” of a volunteer at $18.04. By these standards, in 2005 the value of US volunteer time abroad was $2.92 billion.

This demonstrates the economic benefits of voluntary labor, assuming a wage would be paid to an employee to complete the same work in the absence of a voluntary contribution of time. Quantifying the economic value of volunteers is challenging because it ignores other intangibles that volunteers may provide beyond time. As with any economic estimation, there are multiple assumptions and limitations to this approach.

One important assumption in this calculation is that the profile of international volunteers and domestic volunteers is fairly equal in terms of hourly earnings. Differences in income are minimal; however, there are significant differences in age, employment status, and education. These discrepancies could alter the value of voluntary labor performed overseas (Lough, forthcoming).

The hourly wage of volunteers, as determined by the Independent Sector, is based on the assumption that volunteers perform specialized skills for host organizations (Independent Sector, 2007). It could be that international volunteers perform unskilled services for host organizations, in which case the estimated value would be lower. Also, the calculation assumes that beneficiaries would have purchased the services if they had not been donated, and is based on the cost of wage labor in the United States (Independent Sector, 2007). The actual value of international volunteer labor could be lower due to differences in wage parity between countries.

Methods

In 2005, according to the US Current Population Survey, approximately one million individuals reported engaging in some form of international service (Lough, 2006). The table below reports the average amount of volunteer time spent in other countries. Based on its calculation that one year’s worth of volunteer time is 1700 hours, the Independent Sector assumes that full-time volunteers average 32.6 hours per week (Hudson Institute, 2007). For a conservative estimate, missing values are assumed to be less than one week in length. Because the absolute time spent abroad by those reporting serving “more than two months” is unknown, the length of their service was estimated to be approximately 5 months (22 weeks), based on measures of central tendency as reported by these
volunteers in the 2005 Current Population Survey (Lough, 2006); although the actual length could be shorter or longer.

Based on these assumptions and estimates, total US volunteer hours abroad in 2005 are estimated at 161.8 million (see Table 1). When multiplied by an hourly wage of a skilled volunteer at $18.04, the total value of US volunteer hours abroad was $2.92 billion.

Table 1. Estimated dollar value of US volunteers in 2005 based on CPS data

<table>
<thead>
<tr>
<th>Length of Service Abroad</th>
<th>Number of international volunteers in thousands (N = 995)</th>
<th>Hours</th>
<th>Total hours in thousands</th>
<th>Total dollars at $18.04/hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than a week</td>
<td>196</td>
<td>33</td>
<td>6468</td>
<td>116,682,720</td>
</tr>
<tr>
<td>1-2 weeks (average 1.5 weeks)</td>
<td>448</td>
<td>49</td>
<td>21,952</td>
<td>396,014,080</td>
</tr>
<tr>
<td>3-4 weeks (3.5 weeks)</td>
<td>119</td>
<td>114</td>
<td>13,566</td>
<td>244,730,640</td>
</tr>
<tr>
<td>1-2 months (6 weeks)</td>
<td>78</td>
<td>196</td>
<td>15,288</td>
<td>275,795,520</td>
</tr>
<tr>
<td>More than 2 months (22 weeks)</td>
<td>145</td>
<td>719</td>
<td>104,255</td>
<td>1,880,760,200</td>
</tr>
<tr>
<td>Missing</td>
<td>8</td>
<td>33</td>
<td>264</td>
<td>4,762,560</td>
</tr>
<tr>
<td>Total</td>
<td>875</td>
<td>1,144</td>
<td>161,793</td>
<td>2,918,745,720</td>
</tr>
</tbody>
</table>


Additional calculations using data from multiple sources are fairly consistent with these findings, as summarized in Table 2 below. These calculations are based on similar assumptions. In order to generate a more accurate assessment, a thorough benefit-cost analysis based on actual impact data will be necessary.

Table 2. Estimated dollar value of US volunteers in 2005 from various sources

<table>
<thead>
<tr>
<th>Data Source*</th>
<th>Estimated Value of Domestic Volunteering</th>
<th>Percent of Volunteer Time Spent Abroad</th>
<th>Estimated Value of International Volunteering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johns Hopkins Comparative Nonprofit Sector Project</td>
<td>$283 billion</td>
<td>1%</td>
<td>$2.83 billion</td>
</tr>
<tr>
<td>Hudson Institute Index of Global Philanthropy</td>
<td>$276 billion</td>
<td>1%</td>
<td>$2.76 billion</td>
</tr>
<tr>
<td>Corporation of National and Community Service</td>
<td>$152 billion</td>
<td>1 to 1.5%</td>
<td>$1.50 to $2.30 billion</td>
</tr>
<tr>
<td>Washington University in St. Louis, Center for Social Development</td>
<td>—</td>
<td>1%</td>
<td>$2.92 billion</td>
</tr>
</tbody>
</table>

*For greater detail on these calculations, see Appendix
Appendix: Estimates of Volunteer Value

**Johns Hopkins University Approach.** The Johns Hopkins Comparative Nonprofit Sector Project has estimated that U.S. domestic volunteer labor accounts for approximately 2.18% of GDP in the U.S. (JHU, 2005). This figure is derived from the number of volunteer hours and the wage at which these hours are valued, averaged over data gathered from 1995 to 2000 (JHU, 2006). Using this estimation, a total dollar amount is computed based on the Central Intelligence Agency estimate of GDP in the United States for 2006 (purchasing power parity), which equals approximately $12.98 trillion (CIA, 2007). Multiplying the total GDP of the United States by 2.18%, the estimated value of domestic volunteering is valued at $282.96 billion in 2006. Using the Independent Sector’s updated approximation that one percent of volunteer time is dedicated to international service, the total dollar figure representing volunteer time abroad equals $2.83 billion.

**Hudson Institute Approach.** The 2007 Hudson Index of Global Philanthropy arrives at a similar figure based on an average annual wage of volunteer labor and the number of volunteers’ hours spent overseas. The Hudson Index draws primarily from estimations made by the Independent Sector, a coalition of 575 charitable organizations in the U.S. The Independent Sector estimates the value of volunteer labor based on the U.S. Bureau of Labor Statistics figures representing the average annual wage of non-management, non-agricultural workers. In 2005, the average hourly wage of a volunteer was estimated at $18.04 or an annual salary of $30,668 based on 1,700 hours of labor (Independent Sector, 2007). A 2001 survey performed by the Independent Sector further estimates that volunteer time in the U.S. is equal to 9 million full-time workers, and that nearly one percent of volunteer time is spent on service overseas, resulting in an estimation of time dedicated to service overseas equaling 90,000 workers (Hudson Institute, 2007). Multiplying their value by the average salary of $30,688 gives an annual value of volunteer time equaling $2.76 billion.

**Corporation of National and Community Service Approach.** The Corporation of National and Community Service estimates that the total value of domestic service is equal to approximately $152 billion. This figure was based on a calculation of 8.1 billion hours volunteered at $18.77 per hour (the Independent Sector 2006 estimated value of volunteer labor). Hours of service were approximated using Current Population Survey data. Although this figure represents national volunteerism only, using the Independent Sector assumption that international volunteering is nearly one percent of total volunteering in the US, volunteer labor overseas would equal approximately $1.5 billion. However to be consistent with CPS data, as 1.5% of volunteers report spending some or all of their time internationally, this figure could be estimated to be as high as $2.3 billion.
References


