No. 11-34
September 2011

# WORKING PAPER

## DID STIMULUS DOLLARS HIRE THE UNEMPLOYED? ANSWERS TO QUESTIONS ABOUT THE AMERICAN RECOVERY AND REINVESTMENT ACT

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**Did stimulus dollars hire the unemployed? Answers to questions about the American Recovery and Reinvestment Act.**[*]

## Introduction

In an effort to boost hiring and job creation and to invest in a variety of domestic infrastructure programs, Congress passed and the president signed the American Recovery and Reinvestment Act (ARRA), commonly known as the economic stimulus package, in 2009. ARRA represented one of the largest peacetime fiscal stimulus packages in American history. But little is known about the ways in which organizations and workers responded to the incentives created by the bill.

To address this lack of knowledge, we surveyed hundreds of firms, non-profits, and local governments that received ARRA funding. We collected over 1,300 anonymous, voluntary responses from managers and employees that allow us to better understand what happened at the organizations that received contracts funded by ARRA spending. This bottom-up study of ARRA is the first of its kind. We hope that others, especially government agencies, will build upon this on-the-ground analysis.

The survey asked a number of questions critical to analyzing the effectiveness of ARRA: Were new workers mostly hired from the unemployment lines or did they get "poached" or "raided" from other organizations? Did workers "game" the unemployment insurance system by waiting until benefits ran out before taking a job? Did Davis-Bacon prevailing wage laws force organizations to pay above-market wages to new hires?

The quantitative survey results here complement our interview-based results in a companion paper (Jones and Rothschild, 2011) and suggest a number of interesting results, some expected and others surprising:

- ARRA funds led to worker hiring and retention at stimulus-receiving organizations that responded to our voluntary survey (Figure 1). On average[1] an organization that received stimulus funds equal to 10 percent of its annual revenue reported retaining or hiring workers equal to 5 percent to 6 percent of its workforce [Tables 1, 2].

  ARRA funds did more than just sit in bank accounts or pad company profits.[2] However, our data don't tell how many of these hires were for were part-time or temporary jobs. Our in-person interviews indicated companies frequently included part-time and temporary jobs in reported job totals.

- Hiring isn't the same as net job creation. In our survey, just 42.1 percent of the workers hired at ARRA-receiving organizations after January 31, 2009, were unemployed at the

[*]Many thanks to Andrew Knauer for his excellent assistance in managing the sample selection survey distribution process, as well as to

[1]Note that all empirical statements are only true "on average, conditioned on this sample of voluntary respondents." We only make correlation- or regression-specific statements if they are true at $p<0.1$, typically at $p<0.05$. To avoid pedantic repetition, we will avoid including the phrase "on average, conditioned on this voluntary sample" in each empirical statement.

[2] Rehiring of laid-off workers was rare: 4.4 percent of all employees according to the worker survey, 1.6 percent of all employees post-ARRA according to the employer survey. The employee survey did not explicitly ask when the rehiring occurred, which may explain the discrepancy. Regression results were little changed if rehired workers were excluded from the definition of jobs created.

time they were hired (Appendix C).[3] More were hired directly from other organizations (47.3 percent of post-ARRA workers), while a handful came from school (6.5%) or from outside the labor force (4.1%)(Figure 2). Thus, there was an almost even split between "job creating" and "job switching." This suggests just how hard it is for Keynesian job creation to work in a modern, expertise-based economy: even in a weak economy, organizations hired the employed about as often as the unemployed.

- Only about half (47 percent) of responding ARRA-receiving organizations said it was easier to hire high-quality workers than before the financial crisis. The rest said hiring good people was either as hard as (41 percent) or harder than (12 percent) before the financial crisis of 2008 (Appendix B).

- There was no tendency for stimulus funds to go to organizations that found it easy to hire good people. Under Keynesian theory, government spending has its greatest effect when targeted toward sectors of the economy with slack; by this job-focused measure, stimulus funds were poorly targeted (Tables 3, 4).

- However, there was a weak tendency among non-government organizations for stimulus funds to go to those organizations that said "things had been slow" before ARRA funds arrived. There was no such tendency among government organizations (Table 7, 8, 9).

- Workers did not game the unemployment insurance (UI) system when deciding when to take a job. There was no unusual tendency to take jobs right around the time of UI benefit expiration (Appendix C).

- Among organizations required to pay prevailing wages, 38.2 percent thought that they could have hired workers at wages below the Davis-Bacon prevailing wage (Figure 3) while another 17 percent were unsure. This meant higher costs for the federal government and fewer jobs created.

Throughout the paper, we use the terms "ARRA" and "stimulus" interchangeably.

**Who did we survey?**

In January 2011, we collected from publicly available data on Recovery.gov a random sample of the names and addresses of 10,000 organizations—firms, non-profits, and local governments—that received ARRA funding in amounts ranging from a few hundred to several million dollars.[4] We omitted organizations receiving less than $100 from this sampling procedure as such small organizations collectively received less than 2 percent of ARRA funding.

[3] The first question that workers were asked on their survey was the date of their initial hire at their current organization. Those who were hired February 2009 or later were considered to have been ARRA-funded hires; moving this date forward to June 2009 *increased* the ratio of previously employed to previously unemployed. It is impossible to determine which workers were hired specifically with ARRA funds, but since organization revenues are generally fungible, this is largely a moot point. Worker responses vary by 1 percent to 2 percent when excluding workers who left some questions blank.

[4] Approximately 66,000 total organizations were included in our original universe of ARRA recipients—a universe defined as all private companies, non-profits, and local government organizations receiving $100,000 or more. Throughout this paper, we refer to "organizations," a term that encompasses private firms, non-profits, and political entities other than state governments. All three types of organizations were major stimulus recipients. Details regarding the stratification are in the appendix.

We stratified this sample of 10,000 organizations into four different tiers based on the amount of ARRA funding received, but asked identical questions between tiers. Because our goal was to investigate ARRA's influence on the economy, we attempted to ensure dollar-weighted tiers. Since the overwhelming majority of ARRA-funded organizations received small contracts, grants, or loans, this was a legitimate concern.[5]

We then divided the sample of 10,000 into four tiers according to the size of their ARRA funding. Each tier consisted of a group of organizations that received roughly $24 billion in ARRA funds. In the highest tier (Tier I) were organizations that received the 250 largest contracts, grants, or loans, and in the second tier (Tier II) were the 1,750 organizations receiving the next-largest funding amounts. In the third tier (Tier III) were the next 4,000 organizations, and in the fourth tier (Tier IV) were the 4,000 organizations receiving the smallest funding amounts.[6] We ran these 10,000 organizations through the National Change of Address registry to ensure that we minimized the number of wrong or undeliverable addresses**.**

After this process, 7,994 addresses remained to which we sent survey packets.[7] Each survey packet contained a blue survey that we asked the firm or organization's manager or owner to complete, as well as two yellow-colored surveys that we asked the manager or owner to distribute to two employees "at your discretion." Minor formatting differences differentiated the surveys into one of four tiers based on the quantity of stimulus funding received. A business reply envelope for confidential return accompanied each survey (that is, three return envelopes were included in each packet).

Both the organization and worker surveys were one double-sided, letter-size piece of paper. While this size limited the number of questions we could ask, we concluded that a longer survey would have reduced response rates.

To comply with human-subject research guidelines, the survey neither asked for the name of the worker nor of the organization. Since ARRA-receiving organizations had to fill out federal disclosure forms on a regular basis, we expect that most of our forms were handed to ARRA compliance officers, but we have no concrete information on who responded to our surveys.

Our goal was to survey organizations that were closest to the actual hiring decisions. Thus, we screened out, to the best of our ability, state governor's offices, which were predominantly pass-through entities. We included county and city government agencies, in part because our earlier interview work indicated that these professionals were typically well informed about the details and practicalities of spending federal money, hiring workers, and finding subcontractors.

Of course, some of the organizations that responded did undoubtedly pass through some funds to other contractors or vendors—perhaps counties transferred ARRA revenue to city governments and police departments, for instance, while city governments hired private contractors to perform energy-saving retrofits of homes. In order to keep the survey as simple as possible, we avoided asking questions about pass-throughs, subcontracting, and purchases of material and equipment. But since our overall survey results indicated that a 10-percent increase in ARRA revenue was

[5] For brevity, we usually refer to "contracts" rather than "contracts, grants, or loans." Loans were less than 5 percent of the total.
[6] After eliminating incorrect addresses, we mailed packets in the following numbers: Tier I, 210; Tier II, 1,438, Tier III, 3,236; Tier IV, 3,110.
[7] We sent one survey packet for every eight ARRA-receiving organizations in our original universe (1/8~7,994/66,000).

associated with a 5-percent to 6-percent increase in hiring, and since the slope was indistinguishable between private-sector versus public-sector ARRA recipients, we may have succeeded in surveying organizations that actually did the on-the-ground spending. Alternately, survey respondents may have tracked how downstream recipients spent ARRA funds. In our separate interview-based paper, we found that local governments *were* well aware of the hiring and retention spurred by ARRA even when funds were passed through to other entities. And we place substantial weight on the survey respondents' estimates of hiring and retention since in most of our in-person interviews, ARRA recipients typically gave thoughtful responses that carefully considered the "what-if" question of how hiring would have differed without ARRA.

The total response consisted of 595 organizations and 759 workers. Of those workers, 277 had been hired after January 31, 2009.[8] While this represents a relatively low response rate (7 percent of organizations and 5 percent of workers), we have no indication that it represents anything other than a random sample of organizations and workers who received ARRA funding. Some indicators that our sample is representative: respondent workers' political views are similar to those of the median American, with the percentage of liberals (19%) slightly higher than the 15% describing themselves as "liberal" or "extremely liberal" in the 2006 General Social Survey; the percentage of conservatives (28%) is moderately higher than the 20% describing themselves as "conservative" or "extremely conservative" in the 2006 General Social Survey. (While we only included one such category, GSS has multiple "moderate" categories.) Education levels are higher than the U.S. average, with the median respondent holding a bachelor's degree, but this is to be expected since government agencies and contractors tend to hire skilled workers.

As discussed below, on the politically sensitive issue of Davis-Bacon prevailing wages, our estimates of the prevailing wage premium are modestly lower than the averages reported in the literature. In the modern U.S., conservatives tend to hold the position that Davis-Bacon wages are far higher than market wages; so our results on that question do not reflect an overrepresentation of the conservative point of view. The same holds true for workers' responses to our question about whether workers accepted a job around the time when unemployment insurance benefits are running out: modern U.S. conservatives are more likely to believe—or to politicize the possibility—that workers game the unemployment insurance system, taking a job when benefits run out. So in both politically sensitive cases, we fail to find an overrepresentation of the conservative position.

Further, recent studies of survey nonresponse bias indicate that, in the words of a leading survey researcher, "nonresponse rate *alone* is a weak predictor of nonresponse bias…" (Groves 2006, p.662, italics in original). Thus, a modest response rate is not *itself* a substantial predictor of biased results (Keeter et al. 2000, Curtin et al. 2000, Merkle and Edelman 2002). We hope that the results presented here encourage federal and state government agencies to collect employment data similar to those we have attempted to collect because response rates to government surveys, especially surveys backed by legal reporting requirements, are often near 100 percent.

The organization sample consisted of 199 non-profits and 104 private, for-profit firms. It also included 285 government entities, and 7 organizations that did not specify their type. In the four

[8] 287 rather than 277 if we omit workers who left "month hired" blank.

size-demarcated stimulus tiers, there were eight respondents from the highest tier (the largest recipients), 82 from the next tier, 213 from the third tier, and 291 from the lowest tier. Unless otherwise indicated, organization-level results reported below are robust across tier, with the obvious caveat that we can make no clear statements about the highest tier.

**Organization-level responses**

In this section, we present more detailed evidence regarding the organization-level claims made in the introduction.

*Hiring practices*

First, we turn to the link between revenue and hiring. We noted in the introduction that organizations receiving 10 percent more of their revenue through ARRA reported 5 percent to 6 percent of their current workers had jobs created or saved by ARRA funding (Table 1). The higher estimate of 6 percent excludes controls; the lower estimate of 5 percent controls for tier and sector-level dummies and numbers of workers (Table 2). As results were little changed if tier*revenue or sector*revenue interaction effects were included, we have omitted the latter results for the sake of brevity. Thus, the public sector, the private sector, and the non-profit sector each retained workers and hired new workers at least temporarily with ARRA funding. We found little evidence that there were economies or diseconomies of scale in stimulus spending: large percentages of stimulus or large amount of stimulus (proxied by tier) failed to shift the overall relationship (Table 5).[9]

We asked organizations whether it was easier to find "high-quality workers" than before the 2008 financial crisis.[10] Here the simple results tell the story: Of the 159 non-profits and 67 firms that responded to the question, half of each group (80 and 34, respectively) said hiring was easier than before the crisis. Of the other half, 11 percent and 16 percent, respectively, believed hiring was harder now, and the rest claimed it was just as hard (or equivalently, just as easy) as before the crisis. Both of these harder-to-hire results are statistically significantly different from 0 percent at the 5-percent level.

Among the 135 government organizations answering the question, 41 percent said it was easier to hire now, 10 percent said it was more difficult, and the rest indicated no change. Considering the real and dire news about the job market since the fall of 2008, one might have expected hiring to be easier almost everywhere except for in a few niche industries. Instead, our results indicate that for roughly half of the organizations, a bad economy does not mean it is a good time to find high-quality workers. Unless our sample is extremely skewed, it appears that perhaps half of the organizations receiving ARRA funding were in industries where a terrible national labor market led to no increase in the supply of well-qualified workers.

[9] We found limited evidence that ARRA produced less hiring and retention at larger organizations: an interaction term for workers*revenue was invariably negative and statistically significant across specifications. Taken literally, it implied that extra ARRA revenues would have led to zero job creation for organizations with tens of thousands of employees. However, since we had only one such organization in our sample, it would be inappropriate to extrapolate this far. The number of workers is more skewed than most of our other variables: the median number of workers per organization is 100 in our sample, while the standard deviation is 2,169.

[10] We used 2008 as the comparison rather than 2007, when recession officially began, since the labor market dramatically weakened after the passage of the Troubled Asset Relief Program in the fall of 2008.

*The Hiring-funding relationship*

A natural question is whether organizations that found it easier to hire good workers received a disproportionate share of the stimulus. We found little evidence that this was the case. Multiple statistical specifications, including the ones presented in Tables 3 and 4, failed to find a significant relationship (at a 95-percent confidence interval) between the percentage of an organization's annual revenue coming from ARRA and whether that organization found it easier to hire.[11] Similarly, we find no evidence that organizations that received more total stimulus dollars (as measured by an organization's tier) found it easier to find good workers.

Finding no relationship between the ease of finding good workers and ARRA dollars is obviously better than finding that ARRA dollars tended to go to organizations that found it harder to find good workers. However, mainstream Keynesian and New Keynesian economists like Lawrence Summers recommended that stimulus dollars be "targeted" at weak sectors of the economy—those sectors that could hire good and productive workers the most easily. Our survey finds no evidence of such targeting occurring, at least not successfully.

*Impact of prevailing wage laws*

We now turn to the controversial issue of Davis-Bacon prevailing wage legislation. Enacted in 1931, this federal law effectively requires government contractors to pay union-scale wages on most federal projects.[12] As was widely reported in the media, ARRA required Davis-Bacon wage scales for 40 new types of projects. This requirement slowed ARRA spending because federal workers needed to create Davis-Bacon wage scales before government agencies could hire contractors (GAO 2010; Cooper, 2009).

We asked organizations whether Davis-Bacon applied to them, and if so, whether they could have hired equivalent workers at wages lower than the prevailing wage. If they responded "yes," we also asked by what percentage they could have reduced offered wages and still attracted comparable workers. The difference between the market wage and the required Davis-Bacon wage represents, from a Keynesian perspective, a lost opportunity for job creation.[13]

Our median respondent who reported Davis-Bacon wages were above the market level said that Davis-Bacon wages were 13.3 percent higher than market wages; the mean response was 14.9 percent. Since only 35 percent of Davis-Bacon organizations said prevailing wages were above market wages (with an additional 17% unsure), one might with due caution conclude that Davis-

[11] Results were unchanged if we used [number of workers*percent of revenue from ARRA] as the dependent variable, a proxy for overall ARRA spending. To preserve respondent anonymity, we did not include a question about ARRA spending levels.

[12] 40 U.S.C. 3141 et seq.

[13] Non-profits, firms, and government agencies alike responded to the Davis-Bacon questions, and in our sample, 55 percent of government organizations that gave a clear yes-or-no response said that Davis-Bacon did apply to them. One might wonder whether it is appropriate to ask government agencies about prevailing wages since they themselves do not hire workers under Davis-Bacon. However, government agencies routinely hire contractors who are required to pay prevailing wages. And as we discuss in our interview-based paper (Jones and Rothschild, 2011), local government agencies were keenly aware of the tradeoff between paying prevailing wages and getting more work done. For example, one county government official reported that paying prevailing wages meant that fewer homes could be insulated under an ARRA-funded environmental improvement program. The higher per-hour wage rates meant fewer hours of labor and thus less economic and environmental benefit. Thus, local government officials are likely to be aware of the influence of Davis-Bacon wages on their budgets.

Bacon wages are 6 percent above the market level on average.[14] This is well within the range found in other studies (*inter alia,* Fraundorf et al. 1984, GAO 2010), though perhaps at the low end. Since conventional estimates of firms' demand for labor indicate that a 1-percent fall in wages leads to 1 percent more hiring (Hamermesh 1993), then both simple arithmetic and formal estimates point in the same direction: 6 percent more hours of work could have been performed on prevailing-wage-mandated federal contracts had Davis-Bacon been suspended under ARRA.

Another way to state this finding: 6 percent more workers could have been hired on Davis-Bacon projects, and more roads could have been repaved, more houses insulated, more levees repaired if ARRA-receiving organizations could have paid market wages. The General Accounting Office (GAO 2010) states that $102 billion of the ARRA's $787 billion went toward programs covered by Davis-Bacon (40 programs total, of which seven had never before been subject to prevailing wage laws).

GAO does not state how much of ARRA was specifically devoted to Davis-Bacon wages, but we can provide a cautious, yet suggestive, estimate of the stimulus jobs lost to Davis-Bacon, using estimates that tend to understate the amount. Taking our lower estimate of the relationship between additional revenue and additional hiring (5% more jobs for a 10% increase in revenue), if ARRA raised revenue to Davis-Bacon covered organizations by $102 billion, then contractors and government agencies may have spent $50.1 billion on Davis-Bacon wages. The Bureau of Labor Statistics reports average hourly earnings of production and non-supervisory employees as slightly below $20 per hour; accordingly, let us assume the average Davis-Bacon worker earns $40,000 per year, with an extra 35-percent cost in fringe benefits, for a total annual cost of $54,000 per job-year. ARRA may have funded 927,000 Davis-Bacon covered jobs ($50.1 billion/$54,000); and if Davis-Bacon had been suspended, perhaps it would have funded 6% more.

Thus, a suspension of Davis-Bacon would perhaps have created 55,000 additional federally funded jobs. Note that according to our own findings on "job shifting," this 55,000 figure likely overstates *net* job creation: Many of these 55,000 would likely have been hired away from other jobs.

A final point: our prevailing-wage results do not rely on government agency responses. Among the private-sector and non-profit organizations to whom Davis-Bacon applied and who offered clear views on the matter, 52 percent said they could have hired at lower than the prevailing wage, with the median (mean) respondent claiming essentially the same 15 percent (15.1 percent) prevailing-wage premium.

*How ARRA changed output*

In our in-person interviews, we found occasional comments from ARRA recipients indicating that the compressed timeline associated with ARRA projects and some unusual contracting rules hurt the quality of the finished product. (Note that this is not fraud and abuse, but waste caused by well-intentioned tight deadlines.) Thus, we included a related question on the survey, asking

[14] Some respondents answered "yes" to the question of whether they could hire workers at below the Davis-Bacon wage, then answered "zero" to the question of how large the Davis-Bacon wage premium was. We count that as a response of "no" to the question of whether a Davis-Bacon wage premium exists.

organizations whether ARRA-related work was of higher quality, about the same, or lower quality than a typical project. Only 1.4 percent of responding organizations indicated that quality was lower than usual. Thus, our surveys turned up negligible quantitative evidence for the wasteful-speed hypothesis.

*How well targeted was the stimulus?*

We now turn to the question of whether ARRA funds went to organizations with organizational slack, i.e., organizations with downtime. This question complements the question that began this section: Whether ARRA funds went to organizations that found it easier to hire. In both cases, under Keynesian theory, it is best to target temporary government spending programs at organizations that have either underutilized workers or the ability to quickly hire additional workers. This ability to quickly ramp up work is a critical assumption of stimulus proponents.

We asked organizations whether, before they received their ARRA-funded contracts, "things had been slow," "things had been busy," which caused them to turn work down, or "things had been busy," and ARRA funding just made them work harder. Only 14 organizations indicated that they turned down other work in order to take on ARRA projects; but by a 2:1 ratio, respondents indicated that they had "been busy" before ARRA and so "worked harder" with ARRA funding rather than indicating that "things had been slow" before receiving ARRA funding (305 organizations chose the former response, 152 the latter).

Probit results indicate that firms who said things had been slow (with a 1-0 indicator; there was no natural ordering for an ordered probit) were not more likely to be in the best-funded tiers. Further, only in the univariate regression was the ARRA fraction of a firm's revenue a reliable predictor of past slowness (Tables 6-8); this result fell to insignificance after including the most cursory controls. Again, one must interpret voluntary survey responses with due caution, but it appears that for the majority of organizations, ARRA was not a lifeline during a time of deep economic trouble: it was a new burden to carry. Once again, ARRA did poorly under Summers' "targeted" test.

**Worker responses**

Did stimulus-funded projects hire the unemployed or the already employed? Our surveys indicate a near-tie on this question. Of the 277 respondents hired after January 31, 2009, 42.1 percent had been unemployed immediately beforehand and 47.3 percent had come directly from another job. Of the rest, 4.1 percent had been out of the labor force, and 6.5 percent had been in school. Thus, the weight of the evidence suggests that ARRA did an enormous amount of "job shifting" rather than "job creating." There is evidence of the latter, but, under Keynesian reasoning, every worker hired away from another job reflects some weakening of the stimulus. We saw this "worker poaching" tendency in our interviews as well.

This is similar to the amount of job shifting that goes on in relatively normal economic times. Eva Nagypal (2008, p.1) notes that "employer-to-employer transitions…ma[de] up 49 percent of all—a separations from employers" in the decade prior to her study. Robert Hall (2005) finds a similar number, roughly 40 percent. Since on average separations equal hires (the minor factor of

net job growth aside), there is little difference between the recent U.S. average and our sample average. In other words, we find little evidence that stimulus spending was particularly effective at moving the unemployed into work. During the worst recession in generations, the ARRA-receiving organizations in our sample hired away employed workers at roughly the same rate as in normal economic times.

Indeed, economists' estimates of normal rates of job-switching overstate direct job-to-job transitions. The Nagypal estimate, like most other U.S. estimates we found in the literature (e.g., Hartweck 2007), is based on a Current Population Survey question that simply ask whether the person has a different job than four weeks ago.[15] By contrast, our survey questions ask directly about a job-to-job switch, without a stint of unemployment—and 10.6 percent of the previously unemployed in our survey were unemployed for six weeks or less, most of whom would count as "job switchers" under the CPS definition.

Our median and modal respondent was a woman with a college degree, partly reflecting the widely documented tendency of government employees (who make up the plurality of our worker sample) to be well-educated. About one-quarter of respondents had a graduate or professional degree.

But by no means was our sample an unusually fortunate group. Among the post-ARRA hires unemployed immediately before taking their current position, one-fourth had their unemployment benefits run out, and one-third had been out of work for over 26 weeks. Nor were these workers who had great power to pick and choose their jobs: only 14 percent had turned down a job market offer before taking the current position, and 36 percent had taken a pay cut compared to their previous positions.

With this reality check in mind, we should note that 43 percent of post-ARRA hires reported earning more than in their previous position and 15 percent reported earning at least 25 percent more. As might be expected, this phenomenon was particularly strong in the already employed: more than half of workers who came from another job reported a pay rise versus about one-third of workers who were previously unemployed. Further, 45 percent said they were receiving better fringe benefits than in their last job; only 21 percent reported lower benefit levels. If there was overwhelming labor market softness among ARRA-receiving organizations, it failed to show up either in the organization surveys or in the worker responses.

One question of great interest to labor economists is whether workers attempt to use up their unemployment benefits before taking a job. We found no evidence for this: only 17.8 percent of respondents said they had started their job within a month of their benefit expiration. If 17.8 percent of workers accepted a job *every* month, this would yield 9.8 percent of workers unemployed for a year or more, even less than the 17.8 percent found in our sample.[16] This suggests that, at least for the types of worker who were hired by ARRA recipients, few workers consciously wait until benefits run out before accepting a job.

[15] Some studies in the literature find higher job-to-job transition probabilities. Based on our reading of the U.S. literature, these studies use samples of young people, especially the National Longitudinal Survey of Youth. Young workers have higher job-to-job transfer rates as a fraction of separations. (*inter alia*, Royalty, 1998; In Anne Royalty's study, the mean age was 24. In our sample, the mean is 45 with a median of 47.)

[16] Indeed, our question is phrased to create a two-month job acceptance window (workers could accept jobs four weeks after exhaustion as response "yes"), so the evidence against workers timing their job acceptances is even stronger.

Employees hired in the ARRA timeframe are nine years younger than those hired before ARRA (40 years old versus 49 years old), but since job tenure must be at least partly influenced by age as a matter of arithmetic, this result is unsurprising. Employees hired during the ARRA timeframe were also more likely to report a liberal or progressive political outlook and less likely to report a conservative political outlook than those hired before ARRA.

**Assessing ARRA: Did practice match theory?**

Keynesian theory requires strong conditions to work: In the words of Lawrence Summers, stimulus spending must be "targeted" at unemployed workers and underused organizations.[17] Roughly half of the new hires and one-third of the organizations in our sample fit the description.

That means that almost half of ARRA jobs in our sample went to workers hired away from other organizations and two-thirds of our organizations already had plenty of work to do before receiving ARRA funds. This is far from the ideal prescribed by Keynesian macroeconomics. In the Keynesian ideal, spending should be targeted toward the slack sectors, and workers should overwhelmingly be hired away from unemployment lines. Instead, the direct job-to-job shifts for ARRA-receiving organizations were similar to the average job-to-job shift rates in the U.S. during normal economic times.

ARRA was implemented at time when the Keynesian model had every chance of succeeding on its own terms. The high level of unemployment and the rapid deadline for spending created both the supply of workers and the demand for workers. If the job market results are so lackluster in this setting, economists should expect even weaker stimulative results during more modest recessions.

As economists and policy makers calculate the short-run effects of government spending, they should consider the immediate effect of that spending on hiring decisions. This survey and its companion interview-based paper (Jones and Rothschild 2011) provide the first broad-based evidence that hiring good, unemployed workers on short notice is harder and rarer than most would expect. We hope that government agencies will ask past and future stimulus recipients some of the questions we asked, including: "How many of your new workers already had a job elsewhere when you hired them?"

[17] We discuss this in more depth in Jones and Rothschild (2011).

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**APPENDIX**

A. Figures and tables

B. Organization survey descriptive and crosstab results

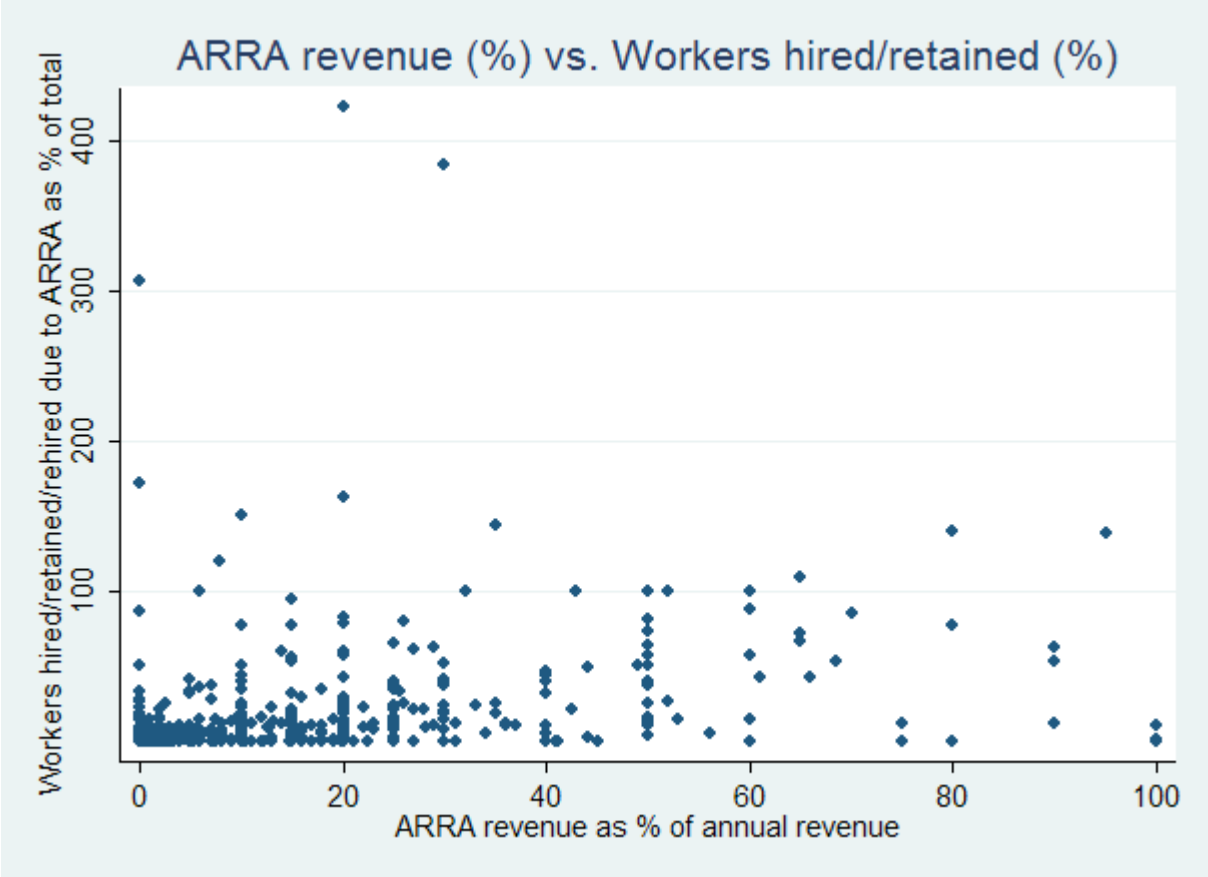
C. Worker survey descriptive and crosstab results

D. Variable code book

E. Survey packet:
   Cover letter
   Organization survey
   Worker survey

## A. Figures and tables

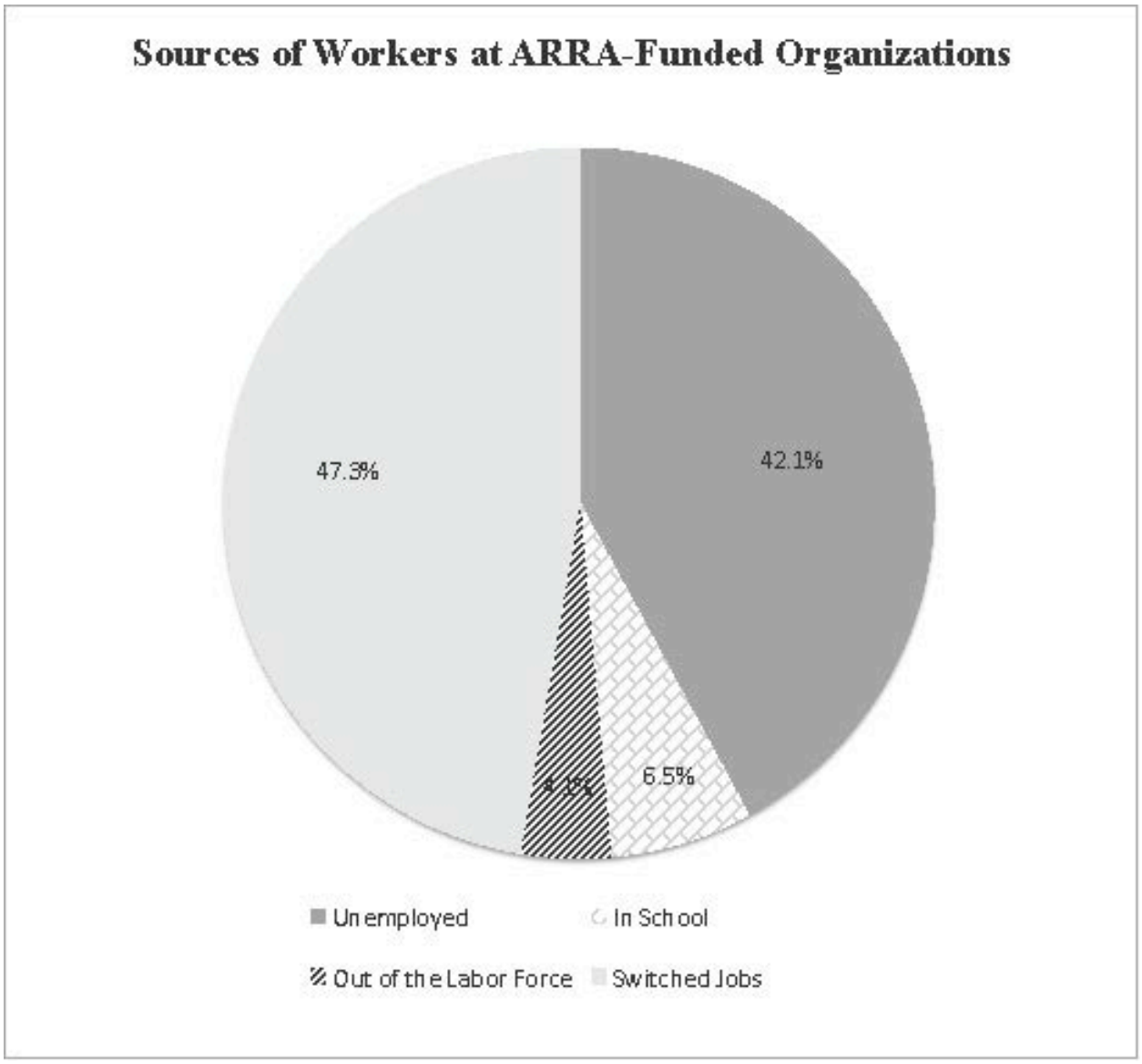
**Figure 1**




Note: Each marker indicates the response of one organization. Regression results are insensitive to omitting job-added values greater than 200%. Job creation numbers greater than 100% are possible due to temporary workers among other possibilities.

**Figure 2**

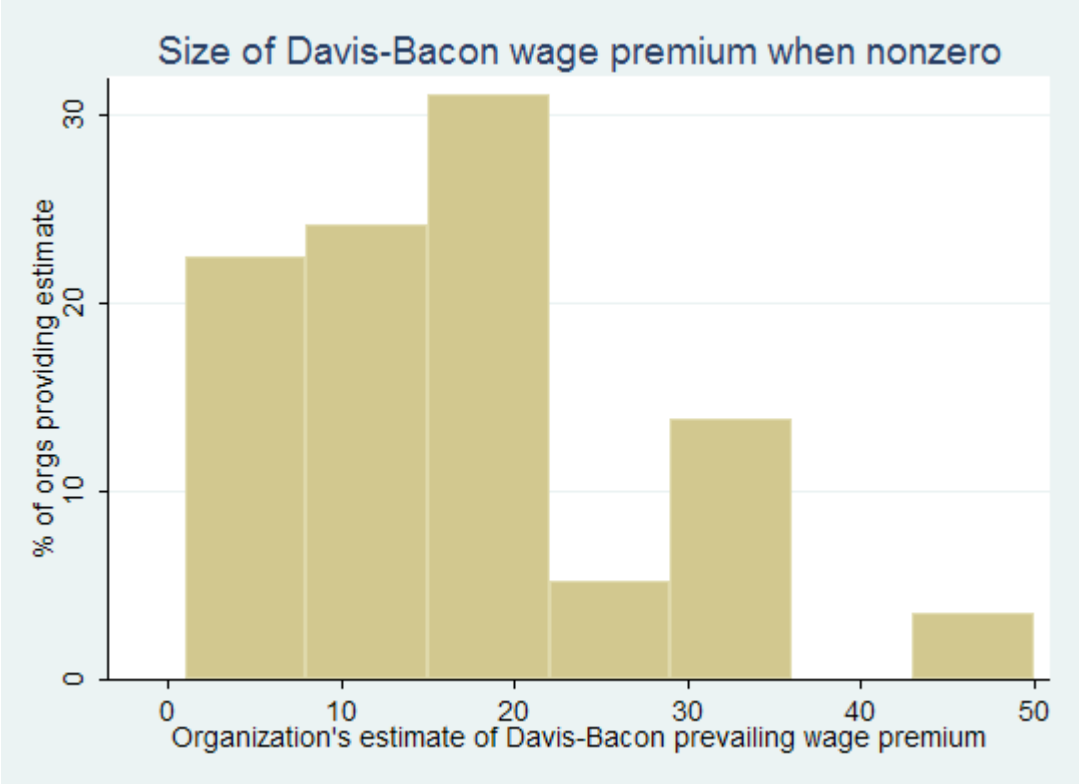
Reported sources of workers hired after January 31, 2009, at ARRA-receiving organizations




Note: Numbers may not add up to 100% due to rounding. Chart represents all 277 workers hired after January 31, 2009, at ARRA-receiving organizations who responded to our voluntary survey.

**Figure 3**

Histogram of estimates of the Davis-Bacon prevailing wage premium




Note: 35 percent of organizations required to pay the prevailing wage agreed with the statement that they "would...have been able to hire workers at lower wages than the legal 'prevailing wage'" *and* provided a specific estimate of the prevailing wage premium. An additional 17 percent of organizations required to pay the prevailing wage were "not sure" if they could find workers at lower wages.

## Table 1

When ARRA funding rises by 10 percent of annual revenue, employment, and retention rise by 6%

```
. regresspctjobaddpctrevenuecorr

   Source |   SS   df   MS       Number of obs =  572
-------------+------------------------------     F( 1, 570) = 62.03
   Model | 7.29576184  1 7.29576184     Prob> F   = 0.0000
  Residual | 67.0375441 570 .117609726     R-squared  = 0.0981
-------------+------------------------------     Adj R-squared = 0.0966
   Total | 74.3333059 571 .130180921     Root MSE   = .34294

------------------------------------------------------------------------------
pctjobadd |   Coef. Std. Err.   t  P>|t|  [95% Conf. Interval]
-------------+----------------------------------------------------------------
pctrevenue~r | .0060373 .0007665  7.88 0.000  .0045317  .0075428
   _cons | .0712513 .0179508  3.97 0.000  .0359936  .1065091
```

## Table 2

When ARRA funding rises by 10% of annual revenue, employment, and retention rise by 5% Controls for tier of ARRA funding and sector

```
. xi: regress pctjobaddpctrevenuecorri.tieri.sector workers
i.tier      _Itier_1-4     (naturally coded; _Itier_1 omitted)
i.sector     _Isector_1-6    (naturally coded; _Isector_1 omitted)

   Source |   SS   df   MS       Number of obs =  568
-------------+------------------------------     F( 8, 559) = 10.12
   Model | 9.39416017  8 1.17427002     Prob> F   = 0.0000
  Residual | 64.8845079 559 .116072465     R-squared  = 0.1265
-------------+------------------------------     Adj R-squared = 0.1140
   Total | 74.278668 567 .131002942     Root MSE   = .34069

------------------------------------------------------------------------------
pctjobadd |   Coef. Std. Err.   t  P>|t|  [95% Conf. Interval]
-------------+----------------------------------------------------------------
pctrevenue~r | .0051788 .0007984  6.49 0.000  .0036105  .0067471
  _Itier_2 | .0616459  .145089  0.42 0.671  -.2233404  .3466321
  _Itier_3 | .0234621 .1415712  0.17 0.868  -.2546144  .3015386
  _Itier_4 | -.0124147 .1413537  -0.09 0.930  -.290064  .2652346
 _Isector_3 | -.0164937 .0437786  -0.38 0.707  -.1024845  .069497
 _Isector_4 | .0754248 .1061249  0.71 0.478  -.1330276  .2838771
 _Isector_6 | -.1092626 .0326917  -3.34 0.001  -.1734762  -.045049
workers| -.000012 6.68e-06  -1.79 0.074  -.0000251  1.16e-06
   _cons | .1339538 .1434781  0.93 0.351  -.1478682  .4157759
------------------------------------------------------------------------------
```

## Table 3

No tendency for stimulus to go to organizations that found it easier to hire.

```
. ologit hiring pctrevenuecorr if hiring <9

Iteration 0: log likelihood = -500.45402
Iteration 1: log likelihood = -500.15642
Iteration 2: log likelihood = -500.15638

Ordered logistic regression           Number of obs =    361
                        LR chi2(1)    =   0.60
Prob> chi2  =  0.4404
Log likelihood = -500.15638           Pseudo R2     =  0.0006

------------------------------------------------------------------------------
hiring |   Coef. Std. Err.    z  P>|z|  [95% Conf. Interval]
-------------+----------------------------------------------------------------
pctrevenue~r | -.003671  .004763  -0.77 0.441  -.0130064  .0056644
-------------+----------------------------------------------------------------
   /cut1 | -1.227187 .1498196          -1.520828 -.9335459
   /cut2 | -.1890653 .1323498          -.4484662  .0703355
   /cut3 | 1.915439 .1777786           1.567  2.263879
   /cut4 |  2.67446 .2330922           2.217608  3.131313
------------------------------------------------------------------------------
```

## Table 4

No tendency for ARRA to go to organizations where hiring is easier:
Controls for tier and sector.

```
. xi: oprobit hiring pctrevenuecorr worker i.tieri.sector if hiringhe<8
i.tier      _Itier_1-4     (naturally coded; _Itier_1 omitted)
i.sector     _Isector_1-6    (naturally coded; _Isector_1 omitted)

Iteration 0: log likelihood = -487.25805
Iteration 1: log likelihood = -486.53638
Iteration 2: log likelihood = -486.53619

Ordered probit regression             Number of obs =    350
                        LR chi2(8)    =   1.44
Prob> chi2  =  0.9936
Log likelihood = -486.53619           Pseudo R2     =  0.0015

------------------------------------------------------------------------------
hiring|   Coef. Std. Err.    z  P>|z|  [95% Conf. Interval]
-------------+----------------------------------------------------------------
pctrevenue~r | -.0006092 .0029975  -0.20 0.839  -.0064841  .0052657
workers| -.0000138 .0000268  -0.51 0.607  -.0000664  .0000388
  _Itier_2 | .1809419 .5601497  0.32 0.747  -.9169313  1.278815
  _Itier_3 | .2693926 .5472052  0.49 0.623  -.8031098  1.341895
  _Itier_4 | .2222813 .5447886  0.41 0.683  -.8454847  1.290047
 _Isector_3 | .0841045 .1646925  0.51 0.610  -.2386869  .4068959
 _Isector_4 | .1204931 .4141617  0.29 0.771  -.691249  .9322351
 _Isector_6 | .1011709 .1286678  0.79 0.432  -.1510133  .3533551
-------------+----------------------------------------------------------------
   /cut1 | -.452138 .5518716          -1.533786  .6295104
   /cut2 | .1796261 .5509774          -.9002696  1.259522
   /cut3 | 1.414708 .5554873           .3259733  2.503443
   /cut4 | 1.798773 .5597664           .7016509  2.895895
------------------------------------------------------------------------------
```

## Table 5

Was job-creation (in percentage terms) higher at particular tiers of organizations? No.

```
. xi: regress pctjobaddi.tieri.sector
i.tier      _Itier_1-4     (naturally coded; _Itier_1 omitted)
i.sector     _Isector_1-6    (naturally coded; _Isector_1 omitted)

   Source |   SS   df   MS       Number of obs =  573
-------------+------------------------------     F( 6, 566) =  5.37
   Model | 4.2540792  6 .709013199     Prob> F   = 0.0000
  Residual | 74.7271153 566 .132026706     R-squared  = 0.0539
-------------+------------------------------     Adj R-squared = 0.0438
   Total | 78.9811945 572 .138079011     Root MSE   = .36335

------------------------------------------------------------------------------
pctjobadd |   Coef. Std. Err.   t  P>|t|  [95% Conf. Interval]
-------------+----------------------------------------------------------------
  _Itier_2 | -.1295876 .1437636  -0.90 0.368  -.4119628  .1527876
  _Itier_3 | -.155856 .1397927  -1.11 0.265  -.4304319  .1187198
  _Itier_4 | -.2194404 .1392812  -1.58 0.116  -.4930115  .0541307
 _Isector_3 | .0011749 .0461837  0.03 0.980  -.0895374  .0918873
 _Isector_4 | .0701914 .1130161  0.62 0.535  -.1517909  .2921736
 _Isector_6 | -.1537688 .0342948  -4.48 0.000  -.2211294 -.0864082
   _cons | .4160324 .1401652  2.97 0.003  .1407249  .6913399
------------------------------------------------------------------------------
```

## Table 6

Overall, high-stimulus organizations more likely to say things had been "slow" before ARRA.

```
. probitarraslowpctrevenuecorr

Iteration 0: log likelihood = -296.21236
Iteration 1: log likelihood = -292.65046
Iteration 2: log likelihood = -292.65007

Probit regression               Number of obs =    471
                        LR chi2(1)   =   7.12
Prob> chi2  =  0.0076
Log likelihood = -292.65007           Pseudo R2   =  0.0120

------------------------------------------------------------------------------
arraslow|   Coef. Std. Err.   z  P>|z|  [95% Conf. Interval]
-------------+----------------------------------------------------------------
pctrevenue~r | .0077051  .002887  2.67 0.008  .0020466  .0133636
   _cons | -.5908608 .0779811  -7.58 0.000  -.743701 -.4380206
------------------------------------------------------------------------------
```

## Table 7

After controls for non-profit, for-profit, and government, high-stimulus organizations *not* more likely to say things had been "slow" before ARRA.

```
. xi: probitarraslowpctrevenuecorri.sector
i.sector     _Isector_1-6    (naturally coded; _Isector_1 omitted)

Iteration 0: log likelihood = -294.30204
Iteration 1: log likelihood = -261.87102
Iteration 2: log likelihood = -261.76254
Iteration 3: log likelihood = -261.76254

Probit regression                 Number of obs =    468
                        LR chi2(4)    =   65.08
Prob> chi2  =  0.0000
Log likelihood = -261.76254           Pseudo R2   =  0.1106

------------------------------------------------------------------------------
arraslow |   Coef. Std. Err.   z  P>|z|  [95% Conf. Interval]
-------------+----------------------------------------------------------------
pctrevenue~r | .0044169 .0030878  1.43 0.153  -.001635  .0104688
 _Isector_3 | 1.278254 .1856997  6.88 0.000  .9142895  1.642219
 _Isector_4 | 1.124815 .3996101  2.81 0.005  .3415931  1.908036
 _Isector_6 | .1642568 .1433237  1.15 0.252  -.1166524  .445166
   _cons | -.8667788 .1204633  -7.20 0.000  -1.102882 -.6306751
------------------------------------------------------------------------------
```

## Table 8

Outside of government sector, weak evidence ARRA was targeted at organizations that said things had been "slow" before ARRA (p=11%).

```
. xi: probitarraslowpctrevenuecorri.sector if sector<6
i.sector     _Isector_1-6    (naturally coded; _Isector_1 omitted)

note: _Isector_6 dropped because of collinearity
Iteration 0: log likelihood = -173.66869
Iteration 1: log likelihood = -144.51614
Iteration 2: log likelihood = -144.36786
Iteration 3: log likelihood = -144.36784

Probit regression                 Number of obs =    263
                        LR chi2(3)    =   58.60
Prob> chi2  =  0.0000
Log likelihood = -144.36784           Pseudo R2   =  0.1687

------------------------------------------------------------------------------
arraslow |   Coef. Std. Err.   z  P>|z|  [95% Conf. Interval]
-------------+----------------------------------------------------------------
pctrevenue~r | .0063527 .0040211  1.58 0.114  -.0015285  .0142338
 _Isector_3 | 1.269108  .186281  6.81 0.000  .9040043  1.634212
 _Isector_4 | 1.120868 .3992372  2.81 0.005  .3383772  1.903358
   _cons | -.9027483 .1300538  -6.94 0.000  -1.157649 -.6478475
```

**Table 9**

Within government sector, ARRA was *not* targeted at organizations that said things had been "slow" before ARRA.

```
. probitarraslowpctrevenuecorr if sector==6

Iteration 0: log likelihood = -117.16174
Iteration 1: log likelihood = -117.10944
Iteration 2: log likelihood = -117.10943

Probit regression                 Number of obs =    205
                        LR chi2(1)    =   0.10
Prob> chi2  =  0.7464
Log likelihood = -117.10943           Pseudo R2   =  0.0004

------------------------------------------------------------------------------
arraslow |   Coef. Std. Err.   z  P>|z|  [95% Conf. Interval]
-------------+----------------------------------------------------------------
pctrevenue~r | .0015847 .0048877  0.32 0.746  -.007995  .0111644
   _cons | -.6672828 .1121222  -5.95 0.000  -.8870384 -.4475272
------------------------------------------------------------------------------
```

## B. Firm survey descriptive and crosstab results

## Questions 1 to 3

**Statistics**

| | | REHIRE | REHIREEXACT | NEWWORK | NEWWORKEXACT | AVOIDLAY | AVOIDLAYEXACT |
|---|---|---|---|---|---|---|---|
| N | Valid | 578 | 544 | 586 | 570 | 583 | 559 |
| | Missing | 17 | 51 | 9 | 25 | 12 | 36 |
| Mean | | 1.5097 | .88 | 8.0009 | .81 | 10.4253 | .72 |
| Median | | .0000 | 1.00 | 1.0000 | 1.00 | .0000 | 1.00 |
| Std. Deviation | | 5.70459 | .329 | 24.92952 | .392 | 40.38673 | .447 |
| Range | | 54.00 | 1 | 347.00 | 1 | 600.00 | 1 |

For REHIREEXACT, NEWWORKEXACT, and AVOIDLAYEXACT, 1=Exact and 0=Best guess. Means thus indicate the percentage of respondents saying "Exact." Blank answers are excluded from all responses.

## Question 4

**Statistics**

| | | PCTREVENUECORR | PCTREVENUEEXACT |
|---|---|---|---|
| N | Valid | 590 | 538 |
| | Missing | 5 | 57 |
| Mean | | 14.3507 | .36 |
| Median | | 7.0000 | .00 |
| Percentiles | 10 | .0000 | .00 |
| | 20 | 1.0000 | .00 |
| | 30 | 2.0000 | .00 |
| | 40 | 4.7000 | .00 |
| | 50 | 7.0000 | .00 |
| | 60 | 10.0000 | .00 |
| | 70 | 16.0000 | 1.00 |
| | 80 | 25.0000 | 1.00 |
| | 90 | 40.0000 | 1.00 |

## Question 5

OUTLOAN

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | No | 354 | 59.5 | 59.6 | 59.6 |
| | Yes | 221 | 37.1 | 37.2 | 96.8 |
| | Not Sure | 19 | 3.2 | 3.2 | 100.0 |
| | Total | 594 | 99.8 | 100.0 | |
| Missing | Blank | 1 | .2 | | |
| Total | | 595 | 100.0 | | |

OUTLOANSOURCE

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Bank/credit union loan | 69 | 11.6 | 33.7 | 33.7 |
| | Line of credit | 72 | 12.1 | 35.1 | 68.8 |
| | Both | 64 | 10.8 | 31.2 | 100.0 |
| | Total | 205 | 34.5 | 100.0 | |
| Missing | Blank | 390 | 65.5 | | |
| Total | | 595 | 100.0 | | |

## Question 6

NOTIFYBANK

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | No | 388 | 65.2 | 65.3 | 65.3 |
| | Yes | 122 | 20.5 | 20.5 | 85.9 |
| | Not Sure | 84 | 14.1 | 14.1 | 100.0 |
| | Total | 594 | 99.8 | 100.0 | |
| Missing | Blank | 1 | .2 | | |
| Total | | 595 | 100.0 | | |

NOTIFYMATTER

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Not at all | 151 | 25.4 | 72.2 | 72.2 |
| | A little | 24 | 4.0 | 11.5 | 83.7 |
| | A lot | 23 | 3.9 | 11.0 | 94.7 |
| | Great deal | 11 | 1.8 | 5.3 | 100.0 |
| | Total | 209 | 35.1 | 100.0 | |
| Missing | Blank | 386 | 64.9 | | |
| Total | | 595 | 100.0 | | |

## Question 7

ATBCUTS

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | No | 414 | 69.6 | 69.7 | 69.7 |
| | Yes | 163 | 27.4 | 27.4 | 97.1 |
| | Not Sure | 17 | 2.9 | 2.9 | 100.0 |
| | Total | 594 | 99.8 | 100.0 | |
| Missing | Blank | 1 | .2 | | |
| Total | | 595 | 100.0 | | |

## Questions 5 to 7 by Sector

OUTLOAN * SECTOR Crosstabulation

| | | | SECTOR | | | | |
|---|---|---|---|---|---|---|---|
| | | | Nonprofit | Corporation | Non-corp firm | Government | Total |
| OUTLOAN | No | Count | 100 | 38 | 5 | 204 | 347 |
| | | % within SECTOR | 50.3% | 40.9% | 45.5% | 71.8% | 59.1% |
| | Yes | Count | 90 | 53 | 5 | 73 | 221 |
| | | % within SECTOR | 45.2% | 57.0% | 45.5% | 25.7% | 37.6% |
| | Not Sure | Count | 9 | 2 | 1 | 7 | 19 |
| | | % within SECTOR | 4.5% | 2.2% | 9.1% | 2.5% | 3.2% |
| Total | | Count | 199 | 93 | 11 | 284 | 587 |
| | | % within SECTOR | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

NOTIFYBANK * SECTOR Crosstabulation

| | | | SECTOR | | | | |
|---|---|---|---|---|---|---|---|
| | | | Nonprofit | Corporation | Non-corp firm | Government | Total |
| NOTIFYBANK | No | Count | 111 | 63 | 6 | 202 | 382 |
| | | % within SECTOR | 55.8% | 67.7% | 54.5% | 71.1% | 65.1% |
| | Yes | Count | 56 | 20 | 3 | 43 | 122 |
| | | % within SECTOR | 28.1% | 21.5% | 27.3% | 15.1% | 20.8% |
| | Not Sure | Count | 32 | 10 | 2 | 39 | 83 |
| | | % within SECTOR | 16.1% | 10.8% | 18.2% | 13.7% | 14.1% |
| Total | | Count | 199 | 93 | 11 | 284 | 587 |
| | | % within SECTOR | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

ATBCUTS * SECTOR Crosstabulation

| | | | SECTOR | | | | |
|---|---|---|---|---|---|---|---|
| | | | Nonprofit | Corporation | Non-corp firm | Government | Total |
| ATBCUTS | No | Count | 153 | 68 | 7 | 182 | 410 |
| | | % within SECTOR | 76.9% | 73.1% | 63.6% | 64.1% | 69.8% |
| | Yes | Count | 41 | 22 | 3 | 95 | 161 |
| | | % within SECTOR | 20.6% | 23.7% | 27.3% | 33.5% | 27.4% |
| | Not Sure | Count | 5 | 3 | 1 | 7 | 16 |
| | | % within SECTOR | 2.5% | 3.2% | 9.1% | 2.5% | 2.7% |
| Total | | Count | 199 | 93 | 11 | 284 | 587 |
| | | % within SECTOR | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

## Question 8

QUALITY * SECTOR Crosstabulation

| | | | SECTOR | | | | |
|---|---|---|---|---|---|---|---|
| | | | Nonprofit | Corporation | Non-corp firm | Government | Total |
| QUALITY | Much lower | Count | 1 | 0 | 1 | 0 | 2 |
| | | % within QUALITY | 50.0% | .0% | 50.0% | .0% | 100.0% |
| | | % within SECTOR | .5% | .0% | 10.0% | .0% | .4% |
| | | % of Total | .2% | .0% | .2% | .0% | .4% |
| | Little lower | Count | 0 | 0 | 0 | 6 | 6 |
| | | % within QUALITY | .0% | .0% | .0% | 100.0% | 100.0% |
| | | % within SECTOR | .0% | .0% | .0% | 2.3% | 1.1% |
| | | % of Total | .0% | .0% | .0% | 1.1% | 1.1% |
| | Same | Count | 99 | 76 | 8 | 150 | 333 |
| | | % within QUALITY | 29.7% | 22.8% | 2.4% | 45.0% | 100.0% |
| | | % within SECTOR | 51.0% | 85.4% | 80.0% | 56.4% | 59.6% |
| | | % of Total | 17.7% | 13.6% | 1.4% | 26.8% | 59.6% |
| | Little higher | Count | 45 | 9 | 1 | 61 | 116 |
| | | % within QUALITY | 38.8% | 7.8% | .9% | 52.6% | 100.0% |
| | | % within SECTOR | 23.2% | 10.1% | 10.0% | 22.9% | 20.8% |
| | | % of Total | 8.1% | 1.6% | .2% | 10.9% | 20.8% |
| | Much higher | Count | 49 | 4 | 0 | 49 | 102 |
| | | % within QUALITY | 48.0% | 3.9% | .0% | 48.0% | 100.0% |
| | | % within SECTOR | 25.3% | 4.5% | .0% | 18.4% | 18.2% |
| | | % of Total | 8.8% | .7% | .0% | 8.8% | 18.2% |
| Total | | Count | 194 | 89 | 10 | 266 | 559 |
| | | % within QUALITY | 34.7% | 15.9% | 1.8% | 47.6% | 100.0% |
| | | % within SECTOR | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| | | % of Total | 34.7% | 15.9% | 1.8% | 47.6% | 100.0% |

## Question 9

SPENDPRESSURE * SECTOR Crosstabulation

| | | | SECTOR | | | | |
|---|---|---|---|---|---|---|---|
| | | | Nonprofit | Corporation | Non-corp firm | Government | Total |
| SPENDPRESSURE | No | Count | 106 | 74 | 8 | 130 | 318 |
| | | % within SPENDPRESSURE | 33.3% | 23.3% | 2.5% | 40.9% | 100.0% |
| | | % within SECTOR | 53.5% | 79.6% | 72.7% | 45.6% | 54.2% |
| | | % of Total | 18.1% | 12.6% | 1.4% | 22.1% | 54.2% |
| | Yes | Count | 80 | 18 | 3 | 132 | 233 |
| | | % within SPENDPRESSURE | 34.3% | 7.7% | 1.3% | 56.7% | 100.0% |
| | | % within SECTOR | 40.4% | 19.4% | 27.3% | 46.3% | 39.7% |
| | | % of Total | 13.6% | 3.1% | .5% | 22.5% | 39.7% |
| | Not Sure | Count | 12 | 1 | 0 | 23 | 36 |
| | | % within SPENDPRESSURE | 33.3% | 2.8% | .0% | 63.9% | 100.0% |
| | | % within SECTOR | 6.1% | 1.1% | .0% | 8.1% | 6.1% |
| | | % of Total | 2.0% | .2% | .0% | 3.9% | 6.1% |
| Total | | Count | 198 | 93 | 11 | 285 | 587 |
| | | % within SPENDPRESSURE | 33.7% | 15.8% | 1.9% | 48.6% | 100.0% |
| | | % within SECTOR | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| | | % of Total | 33.7% | 15.8% | 1.9% | 48.6% | 100.0% |

SPENDRESPOND * SECTOR Crosstabulation

| | | | SECTOR | | |
|---|---|---|---|---|---|
| | | | Nonprofit | Corporation | Non-corp firm |
| SPENDRESPOND | Spent slowe than usual | Count | 1 | 0 | 0 |
| | | % within SPENDRESPOND | 33.3% | .0% | .0% |
| | | % within SECTOR | 1.1% | .0% | .0% |
| | | % of Total | .4% | .0% | .0% |
| | Spent same as usual | Count | 39 | 20 | 3 |
| | | % within SPENDRESPOND | 31.2% | 16.0% | 2.4% |
| | | % within SECTOR | 44.3% | 66.7% | 50.0% |
| | | % of Total | 14.6% | 7.5% | 1.1% |
| | Spent more quickly | Count | 48 | 10 | 3 |
| | | % within SPENDRESPOND | 34.3% | 7.1% | 2.1% |
| | | % within SECTOR | 54.5% | 33.3% | 50.0% |
| | | % of Total | 17.9% | 3.7% | 1.1% |
| Total | | Count | 88 | 30 | 6 |
| | | % within SPENDRESPOND | 32.8% | 11.2% | 2.2% |
| | | % within SECTOR | 100.0% | 100.0% | 100.0% |
| | | % of Total | 32.8% | 11.2% | 2.2% |

SPENDRESPOND * SECTOR Crosstabulation

| | | | SECTOR | |
|---|---|---|---|---|
| | | | Government | Total |
| SPENDRESPOND | Spent slowe than usual | Count | 2 | 3 |
| | | % within SPENDRESPOND | 66.7% | 100.0% |
| | | % within SECTOR | 1.4% | 1.1% |
| | | % of Total | .7% | 1.1% |
| | Spent same as usual | Count | 63 | 125 |
| | | % within SPENDRESPOND | 50.4% | 100.0% |
| | | % within SECTOR | 43.8% | 46.6% |
| | | % of Total | 23.5% | 46.6% |
| | Spent more quickly | Count | 79 | 140 |
| | | % within SPENDRESPOND | 56.4% | 100.0% |
| | | % within SECTOR | 54.9% | 52.2% |
| | | % of Total | 29.5% | 52.2% |
| Total | | Count | 144 | 268 |
| | | % within SPENDRESPOND | 53.7% | 100.0% |
| | | % within SECTOR | 100.0% | 100.0% |
| | | % of Total | 53.7% | 100.0% |

Question 10

ARRAEFFECTS * SECTOR Crosstabulation

| | | | SECTOR | | |
|---|---|---|---|---|---|
| | | | Nonprofit | Corporation | Non-corp firm |
| ARRAEFFECTS | Had been slow | Count | 39 | 53 | 7 |
| | | % within SECTOR | 22.0% | 69.7% | 63.6% |
| | Had been busy, turned down work | Count | 3 | 6 | 1 |
| | | % within SECTOR | 1.7% | 7.9% | 9.1% |
| | Had been busy, worked harder | Count | 135 | 17 | 3 |
| | | % within SECTOR | 76.3% | 22.4% | 27.3% |
| Total | | Count | 177 | 76 | 11 |
| | | % within SECTOR | 100.0% | 100.0% | 100.0% |

ARRAEFFECTS * SECTOR Crosstabulation

| | | | SECTOR | |
|---|---|---|---|---|
| | | | Government | Total |
| ARRAEFFECTS | Had been slow | Count | 53 | 152 |
| | | % within SECTOR | 25.6% | 32.3% |
| | Had been busy, turned down work | Count | 4 | 14 |
| | | % within SECTOR | 1.9% | 3.0% |
| | Had been busy, worked harder | Count | 150 | 305 |
| | | % within SECTOR | 72.5% | 64.8% |
| Total | | Count | 207 | 471 |
| | | % within SECTOR | 100.0% | 100.0% |

## Question 11

**DBAPPLY * SECTOR Crosstabulation**

| | | | SECTOR | | | | |
|---|---|---|---|---|---|---|---|
| | | | Nonprofit | Corporation | Non-corp firm | Government | Total |
| DBAPPLY | No | Count | 57 | 19 | 4 | 65 | 145 |
| | | % within SECTOR | 34.1% | 30.2% | 57.1% | 40.9% | 36.6% |
| | Yes | Count | 98 | 37 | 3 | 80 | 218 |
| | | % within SECTOR | 58.7% | 58.7% | 42.9% | 50.3% | 55.1% |
| | Not Sure | Count | 12 | 7 | 0 | 14 | 33 |
| | | % within SECTOR | 7.2% | 11.1% | .0% | 8.8% | 8.3% |
| Total | | Count | 167 | 63 | 7 | 159 | 396 |
| | | % within SECTOR | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

**DBLOWER * SECTOR Crosstabulation**

| | | | SECTOR | | | | |
|---|---|---|---|---|---|---|---|
| | | | Nonprofit | Corporation | Non-corp firm | Government | Total |
| DBLOWER | No | Count | 48 | 19 | 1 | 51 | 119 |
| | | % within SECTOR | 42.5% | 46.3% | 25.0% | 53.1% | 46.9% |
| | Yes | Count | 46 | 16 | 1 | 22 | 85 |
| | | % within SECTOR | 40.7% | 39.0% | 25.0% | 22.9% | 33.5% |
| | Not Sure | Count | 19 | 6 | 2 | 23 | 50 |
| | | % within SECTOR | 16.8% | 14.6% | 50.0% | 24.0% | 19.7% |
| Total | | Count | 113 | 41 | 4 | 96 | 254 |
| | | % within SECTOR | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

DBLOWERPCT

| SECTOR | Mean | Median | N | Std. Deviation |
|---|---|---|---|---|
| Nonprofit | 11.714 | 10.000 | 42 | 10.0572 |
| Corporation | 17.906 | 16.500 | 16 | 14.8910 |
| Non-corp firm | 25.000 | 25.000 | 2 | 21.2132 |
| Government | 10.824 | 5.000 | 17 | 13.0155 |
| Total | 13.149 | 10.000 | 77 | 12.2770 |

## Question 12

HIRING * SECTOR Crosstabulation

| | | | SECTOR | | | | |
|---|---|---|---|---|---|---|---|
| | | | Nonprofit | Corporation | Non-corp firm | Government | Total |
| HIRING | Much easier | Count | 42 | 13 | 1 | 31 | 87 |
| | | % within SECTOR | 26.4% | 21.7% | 14.3% | 23.0% | 24.1% |
| | Little easier | Count | 38 | 17 | 3 | 25 | 83 |
| | | % within SECTOR | 23.9% | 28.3% | 42.9% | 18.5% | 23.0% |
| | Same | Count | 60 | 19 | 2 | 66 | 147 |
| | | % within SECTOR | 37.7% | 31.7% | 28.6% | 48.9% | 40.7% |
| | Little harder | Count | 9 | 8 | 0 | 5 | 22 |
| | | % within SECTOR | 5.7% | 13.3% | .0% | 3.7% | 6.1% |
| | Much harder | Count | 10 | 3 | 1 | 8 | 22 |
| | | % within SECTOR | 6.3% | 5.0% | 14.3% | 5.9% | 6.1% |
| Total | | Count | 159 | 60 | 7 | 135 | 361 |
| | | % within SECTOR | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

## Firm Demographics

Report

| SECTOR | | WORKERS | YEARSEXIST |
|---|---|---|---|
| Nonprofit | Mean | 485.245 | 40.482 |
| | Median | 79.500 | 35.000 |
| | N | 196 | 196 |
| | Std. Deviation | 2640.3580 | 40.5373 |
| Corporation | Mean | 341.837 | 29.016 |
| | Median | 45.000 | 25.000 |
| | N | 92 | 92 |
| | Std. Deviation | 1415.7134 | 21.5369 |
| Non-corp firm | Mean | 1317.182 | 18.818 |
| | Median | 25.000 | 15.000 |
| | N | 11 | 11 |
| | Std. Deviation | 4206.9811 | 16.0426 |
| Government | Mean | 652.006 | 101.441 |
| | Median | 154.000 | 82.500 |
| | N | 279 | 270 |
| | Std. Deviation | 1881.3022 | 180.9494 |
| Total | Mean | 558.747 | 67.135 |
| | Median | 97.000 | 41.000 |
| | N | 578 | 569 |
| | Std. Deviation | 2169.9380 | 131.2813 |

MFGSRV

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Manufacturing | 16 | 2.7 | 2.7 | 2.7 |
| | Services | 482 | 81.0 | 82.5 | 85.3 |
| | Both | 18 | 3.0 | 3.1 | 88.4 |
| | Neither/don't know | 68 | 11.4 | 11.6 | 100.0 |
| | Total | 584 | 98.2 | 100.0 | |
| Missing | Blank | 11 | 1.8 | | |
| Total | | 595 | 100.0 | | |

SECTOR

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Nonprofit | 199 | 33.4 | 33.8 | 33.8 |
| | Corporation | 93 | 15.6 | 15.8 | 49.7 |
| | Non-corp firm | 11 | 1.8 | 1.9 | 51.5 |
| | Government | 285 | 47.9 | 48.5 | 100.0 |
| | Total | 588 | 98.8 | 100.0 | |
| Missing | System | 7 | 1.2 | | |
| Total | | 595 | 100.0 | | |

## C. Employee survey descriptive and crosstab results

## Question 1 (year only)

**Descriptive Statistics**

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| HIREYEAR | 750 | 1960 | 2011 | 2003.39 | 8.716 |
| Valid N (listwise) | 750 | | | | |

## Question 2

**LAIDOFF**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | No | 701 | 92.4 | 95.6 | 95.6 |
| | Yes | 32 | 4.2 | 4.4 | 100.0 |
| | Total | 733 | 96.6 | 100.0 | |
| Missing | Blank | 26 | 3.4 | | |
| Total | | 759 | 100.0 | | |

## Questions 3 to 6

**SITUATION**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Unemployed | 123 | 40.9 | 42.1 | 42.1 |
| | Switched jobs | 138 | 45.8 | 47.3 | 89.4 |
| | In school | 19 | 6.3 | 6.5 | 95.9 |
| | Out of labor force | 12 | 4.0 | 4.1 | 100.0 |
| | Total | 292 | 97.0 | 100.0 | |
| Missing | Blank | 9 | 3.0 | | |
| Total | | 301 | 100.0 | | |

**PAYFORGOV**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Worse | 101 | 33.6 | 35.1 | 35.1 |
| | Same | 132 | 43.9 | 45.8 | 80.9 |
| | Better | 55 | 18.3 | 19.1 | 100.0 |
| | Total | 288 | 95.7 | 100.0 | |
| Missing | Blank | 13 | 4.3 | | |
| Total | | 301 | 100.0 | | |

TURNDOWN

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | No | 252 | 83.7 | 86.3 | 86.3 |
| | Yes | 40 | 13.3 | 13.7 | 100.0 |
| | Total | 292 | 97.0 | 100.0 | |
| Missing | Blank | 9 | 3.0 | | |
| Total | | 301 | 100.0 | | |

SPECIALEFFORT

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Linked to government | 42 | 14.0 | 14.4 | 14.4 |
| | Private sector | 15 | 5.0 | 5.1 | 19.5 |
| | Did not focus | 235 | 78.1 | 80.5 | 100.0 |
| | Total | 292 | 97.0 | 100.0 | |
| Missing | Blank | 9 | 3.0 | | |
| Total | | 301 | 100.0 | | |

## Questions 7 to 9

PAYDIFF * SITUATION Crosstabulation

| | | | SITUATION | | | | |
|---|---|---|---|---|---|---|---|
| | | | Unemployed | Switched jobs | In school | Out of labor force | Total |
| PAYDIFF | More | Count | 39 | 71 | 8 | 4 | 122 |
| | | % within SITUATION | 31.7% | 52.6% | 42.1% | 44.4% | 42.7% |
| | Same | Count | 27 | 27 | 1 | 0 | 55 |
| | | % within SITUATION | 22.0% | 20.0% | 5.3% | .0% | 19.2% |
| | Less | Count | 55 | 37 | 6 | 5 | 103 |
| | | % within SITUATION | 44.7% | 27.4% | 31.6% | 55.6% | 36.0% |
| | First job | Count | 2 | 0 | 4 | 0 | 6 |
| | | % within SITUATION | 1.6% | .0% | 21.1% | .0% | 2.1% |
| Total | | Count | 123 | 135 | 19 | 9 | 286 |
| | | % within SITUATION | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

PAYDIFFQUANT * SITUATION Crosstabulation

| | | | SITUATION | | | | |
|---|---|---|---|---|---|---|---|
| | | | Unemployed | Switched jobs | In school | Out of labor force | Total |
| PAYDIFFQUANT | 50%+ more | Count | 5 | 7 | 2 | 0 | 14 |
| | | % within SITUATION | 4.2% | 5.1% | 11.8% | .0% | 5.0% |
| | 25-50% more | Count | 5 | 18 | 4 | 1 | 28 |
| | | % within SITUATION | 4.2% | 13.2% | 23.5% | 11.1% | 10.0% |
| | 10-25% more | Count | 28 | 46 | 2 | 3 | 79 |
| | | % within SITUATION | 23.5% | 33.8% | 11.8% | 33.3% | 28.1% |
| | About the same | Count | 28 | 29 | 0 | 0 | 57 |
| | | % within SITUATION | 23.5% | 21.3% | .0% | .0% | 20.3% |
| | 10-25% less | Count | 27 | 24 | 5 | 2 | 58 |
| | | % within SITUATION | 22.7% | 17.6% | 29.4% | 22.2% | 20.6% |
| | 25-50% less | Count | 20 | 8 | 1 | 2 | 31 |
| | | % within SITUATION | 16.8% | 5.9% | 5.9% | 22.2% | 11.0% |
| | 50%+ less | Count | 5 | 4 | 0 | 1 | 10 |
| | | % within SITUATION | 4.2% | 2.9% | .0% | 11.1% | 3.6% |
| | First job | Count | 1 | 0 | 3 | 0 | 4 |
| | | % within SITUATION | .8% | .0% | 17.6% | .0% | 1.4% |
| Total | | Count | 119 | 136 | 17 | 9 | 281 |
| | | % within SITUATION | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

BENEFITS * SITUATION Crosstabulation

| | | | SITUATION | | | | |
|---|---|---|---|---|---|---|---|
| | | | Unemployed | Switched jobs | In school | Out of labor force | Total |
| BENEFITS | Worse | Count | 27 | 28 | 2 | 3 | 60 |
| | | % within SITUATION | 22.0% | 20.6% | 10.5% | 27.3% | 20.8% |
| | Same | Count | 37 | 44 | 4 | 6 | 91 |
| | | % within SITUATION | 30.1% | 32.4% | 21.1% | 54.5% | 31.5% |
| | Better | Count | 57 | 63 | 8 | 2 | 130 |
| | | % within SITUATION | 46.3% | 46.3% | 42.1% | 18.2% | 45.0% |
| | First job | Count | 2 | 1 | 5 | 0 | 8 |
| | | % within SITUATION | 1.6% | .7% | 26.3% | .0% | 2.8% |
| Total | | Count | 123 | 136 | 19 | 11 | 289 |
| | | % within SITUATION | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

## Question 10

SEARCHTIME

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | <2 weeks | 2 | 1.6 | 1.7 | 1.7 |
| | 3-6 weeks | 11 | 8.9 | 9.3 | 11.0 |
| | 7-12 weeks | 22 | 17.9 | 18.6 | 29.7 |
| | 13-26 weeks | 34 | 27.6 | 28.8 | 58.5 |
| | 27-52 weeks | 28 | 22.8 | 23.7 | 82.2 |
| | One year or more | 21 | 17.1 | 17.8 | 100.0 |
| | Total | 118 | 95.9 | 100.0 | |
| Missing | Blank | 5 | 4.1 | | |
| Total | | 123 | 100.0 | | |

## Questions 11 to 12

UNEMPLOYOUT

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | No | 73 | 59.3 | 70.9 | 70.9 |
| | Yes | 30 | 24.4 | 29.1 | 100.0 |
| | Total | 103 | 83.7 | 100.0 | |
| Missing | Blank | 20 | 16.3 | | |
| Total | | 123 | 100.0 | | |

ACCEPTOUT

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | No | 83 | 67.5 | 82.2 | 82.2 |
| | Yes | 18 | 14.6 | 17.8 | 100.0 |
| | Total | 101 | 82.1 | 100.0 | |
| Missing | Blank | 22 | 17.9 | | |
| Total | | 123 | 100.0 | | |

## Questions 13 to 14

HINCOMECHANGE * HSPENDCHANGE Crosstabulation

Count

| | | HSPENDCHANGE | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Increased | Stayed the same | Decreased <15% | Decreased 15-40% | Decreased 40-60% | Decreased 60-85% | Decreased >85% | Total |
| HINCOMECHANGE | Increased | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 3 |
| | Stayed the same | 0 | 3 | 1 | 2 | 0 | 0 | 0 | 6 |
| | Decreased <15% | 0 | 0 | 2 | 1 | 0 | 1 | 0 | 4 |
| | Decreased 15-40% | 0 | 3 | 6 | 15 | 7 | 0 | 0 | 31 |
| | Decreased 40-60% | 0 | 3 | 2 | 15 | 14 | 6 | 0 | 40 |
| | Decreased 60-85% | 0 | 1 | 1 | 0 | 6 | 6 | 4 | 18 |
| | Decreased >85% | 0 | 0 | 0 | 4 | 2 | 2 | 5 | 13 |
| Total | | 1 | 11 | 12 | 38 | 29 | 15 | 9 | 115 |

## Question 15

CUT_NUM

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 0 | 6 | 4.9 | 4.9 | 4.9 |
| | 1 | 46 | 37.4 | 37.4 | 42.3 |
| | 2 | 30 | 24.4 | 24.4 | 66.7 |
| | 3 | 28 | 22.8 | 22.8 | 89.4 |
| | 4 | 10 | 8.1 | 8.1 | 97.6 |
| | 5 | 3 | 2.4 | 2.4 | 100.0 |
| | Total | 123 | 100.0 | 100.0 | |

CUT_COSTS

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Not identified | 44 | 35.8 | 35.8 | 35.8 |
| | Identified | 79 | 64.2 | 64.2 | 100.0 |
| | Total | 123 | 100.0 | 100.0 | |

CUT_SVG

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Not identified | 56 | 45.5 | 45.5 | 45.5 |
| | Identified | 67 | 54.5 | 54.5 | 100.0 |
| | Total | 123 | 100.0 | 100.0 | |

CUT_OFM

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Not identified | 84 | 68.3 | 68.3 | 68.3 |
| | Identified | 39 | 31.7 | 31.7 | 100.0 |
| | Total | 123 | 100.0 | 100.0 | |

CUT_BORROW

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Not identified | 101 | 82.1 | 82.1 | 82.1 |
| | Identified | 22 | 17.9 | 17.9 | 100.0 |
| | Total | 123 | 100.0 | 100.0 | |

CUT_SELL

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Not identified | 102 | 82.9 | 82.9 | 82.9 |
| | Identified | 21 | 17.1 | 17.1 | 100.0 |
| | Total | 123 | 100.0 | 100.0 | |

CUT_OTHER

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Not identified | 106 | 86.2 | 86.2 | 86.2 |
| | Identified | 17 | 13.8 | 13.8 | 100.0 |
| | Total | 123 | 100.0 | 100.0 | |

Listed here in descending order of respondents volunteering a "Yes" answer.

## Employee Demographics

Statistics

EMPAGE

| | | |
|---|---|---|
| N | Valid | 738 |
| | Missing | 21 |
| Mean | | 44.91 |
| Median | | 46.00 |
| Mode | | 48 |
| Std. Deviation | | 12.113 |

MALE

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Female | 450 | 59.3 | 60.6 | 60.6 |
| | Male | 293 | 38.6 | 39.4 | 100.0 |
| | Total | 743 | 97.9 | 100.0 | |
| Missing | Blank | 16 | 2.1 | | |
| Total | | 759 | 100.0 | | |

HIGHESTED

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Less than high school | 2 | .3 | .3 | .3 |
| | High school | 89 | 11.7 | 12.1 | 12.3 |
| | Some college/AA/AS | 190 | 25.0 | 25.7 | 38.1 |
| | College graduate | 271 | 35.7 | 36.7 | 74.8 |
| | Grad/pro/higher degree | 186 | 24.5 | 25.2 | 100.0 |
| | Total | 738 | 97.2 | 100.0 | |
| Missing | Blank | 21 | 2.8 | | |
| Total | | 759 | 100.0 | | |

EMPPOLITICS

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Liberal/progressive | 144 | 19.0 | 20.7 | 20.7 |
| | Moderate/middle of the road | 335 | 44.1 | 48.3 | 69.0 |
| | Conservative | 215 | 28.3 | 31.0 | 100.0 |
| | Total | 694 | 91.4 | 100.0 | |
| Missing | Blank | 65 | 8.6 | | |
| Total | | 759 | 100.0 | | |

## D. Variable code book

### Firm Survey

REHIRE = Question 1 (rehire workers)
REHIREEXACT = Exact=1, Best Guess=0, Blank=9
NEWWORK = Question 2 (new workers)
NEWWORKEXACT = Exact=1, Best Guess=0, Blank=9
AVOIDLAY = Question 3 (avoid laying off)
AVOIDLAYEXACT = Exact=1, Best Guess=0, Blank=9
PCTJOBADD = (REHIRE + NEWWORK + AVOIDLAY) / WORKERS
PCTREVENUE = Question 4 (revenue from ARRA)
PCTREVENUECORR = Corrected question 4 (same as PCTREVENUE unless >100% in which case blank)
PCTREVENUEEXACT = Exact=1, Best Guess=0, Blank=9
OUTLOAN = Question 5 (outstanding loans), Yes=1, No=0, Not sure=8, Blank=9
OUTLOANSOURCE
- Bank/CU loan=1
- Line of credit=2
- Both=5
- Blank=9

NOTIFYBANK = Question 6 (notify bank?), Yes=1, No=0, Not sure=8, Blank=9
NOTIFYMATTER
- Great Deal = 4
- A lot = 3
- A little = 2
- Not matter = 1
- Blank = 9

ATBCUTS = Question 7 (across the board cuts?), Yes=1, No=0, Not sure=8, Blank=9
QUALITY = Question 8 (quality of final product)
- Much higher = 5
- Little higher = 4
- Same = 3
- Little lower = 2
- Much lower = 1
- Blank = 9

QUALITYHILO = Derived from QUALITY
- Higher quality than usual = 7
- Same as usual = 5
- Lower than usual = 3
- Blank = 9

SPENDPRESSURE = Question 9, Yes=1, No=0, Not sure=8, Blank=9
SPENDRESPOND
- More quickly = 7
- Same as usual = 5

Slower than usual = 3
Blank = 9

ARRAEFFECTS = Question 10 (effects of ARRA)
Had been slow = 1
Had been busy, turned down work = 4
Had been busy, worked harder = 5
Blank = 9

ARRAEFFECTSBIN = Separates NOT BUSY and BUSY

DBAPPLY = Question 11 (Does Davis-Bacon apply?), Yes=1, No=0, Not sure=8, Blank=9

DBLOWER = Question 11b (Could have hired lower?), Yes=1, No=0, Not sure=8, Blank=9

DBLOWERPCT = Question 11c (How much lower?)

HIRING = Question 12 (Hiring easier or harder)
Much harder = 5
Little harder = 4
Same = 3
Little easier = 2
Much easier = 1
Blank = 9

HIRINGHE = Derived from HIRING
Harder = 7
Same = 5
Easier = 3
Blank = 9

WORKERS = Number of workers

YEARSEXIST = Years in existence

MFGSRV = Manufacturing or service sector
Manufacturing = 1
Services = 2
Both = 3
Neither/don't know = 8
Blank = 9

SECTOR = Type of organization
Nonprofit = 1
Corporation = 3
Non-inc private firm = 4
Government = 6
Blank = 9

TIER = Tier number

**Employee Survey**

HIREMONTH = Month first hired (1=Jan...12=Dec, 99=Don't Know, Blank)
HIREYEAR = Year first hired
LAIDOFF = Question 2 (Previously laid off and brought back), 1=Yes, 0=No, 9=Blank
SITUATION = Question 3 (situation before being hired)
    Unemployed = 1
    Other job = 2
    In school = 3
    Out of labor force = 4
PAYFORGOV = Question 4 (opinion of pay in public sector jobs)
    Better = 7
    Same = 5
    Worse = 3
    Blank = 9
TURNDOWN = Question 5 (turn down private sector jobs?), 1=Yes, 0=No, 9=Blank
SPECIALEFFORT = Question 6 (effort to apply for sectors)
    Linked to government = 3
    Private sector = 4
    Did not focus = 6
    Blank = 9
PAYDIFF = Question 7 (pay compared with last job)
    More = 1
    Same = 2
    Less = 3
    First job = 6
    Don't know = 8
    Blank = 9
PAYDIFFQUANT = Question 8 (how much more/less)
    50% more = 11
    25-50% more = 12
    10-25% more = 13
    About same = 21
    10-25% less = 31
    25-50% less = 32
    50% less = 33
    First job = 66
    Blank = 99
BENEFITS = Question 9 (how do benefits compare)
    Better = 7
    Same = 5
    Worse = 3
    First job = 8
    Blank = 9
SEARCHTIME = Question 10 (how long were you searching)
    <2 weeks = 1

3-6 weeks = 2
7-12 weeks = 3
13-26 weeks = 4
27-52 weeks = 5
More than 52 = 6
Blank = 9

UNEMPLOYOUT = Question 11 (unemployment benefits run out?)
Yes = 1
No = 0
Blank = 9

ACCEPTUOUT = Question 12 (accept job within a month of UE expire?)
Yes = 1
No = 0
Blank = 9

HINCOMECHANGE = Question 13 (household income change)
Increased = 1
Stayed same = 2
Decreased <15% = 3
Decreased 15-40% = 4
Decreased 40-60% = 5
Decreased 60-85% = 6
Decreased >85% = 7
Blank = 9

HSPENDCHANGE = Question 14 (household spending change)
Increased = 1
Stayed same = 2
Decreased <15% = 3
Decreased 15-40% = 4
Decreased 40-60% = 5
Decreased 60-85% = 6
Decreased >85% = 7
Blank = 9

CUT_ (see below...), Identified=1, Not identified=0
_LONG = Long-text version of cutting strategies
_NUM = Number of strategies employed
_OFM = Used income of other family members
_SVG = Used savings
_BORROW = Borrow
_SELL = Selling household items
_CCOST = Cutting costs
_OTHER = Other

EMPAGE = Employee age

MALE = Employee gender, Male=1, Female=0, Blank=9

HIGHESTED = Highest level of education
Less than high school = 1
High school = 2

Some college/AA/AS = 3
College grad = 4
Grad/pro/higher = 5
Blank = 9

EMPPOLITICS = Employee politics
Liberal/progressive = 1
Moderate/middle of the road = 2
Conservative = 3
Blank = 9

EMPWORKYR = Number of years worked since age 18

EMPTIER = Tier

Dear Sir or Madam:

We are writing to ask for your assistance completing a brief survey.

We are researching how the American Recovery and Reinvestment Act, commonly known as the "economic stimulus," works in practice. We have randomly selected your business from the thousands of stimulus recipients nationwide to take part in a brief survey to help us better understand how stimulus funds are being used by businesses.

Your response should take no more than 5 minutes and it will be an important and anonymous contribution to a new research project.

We are conducting this survey anonymously, and the data will only be used for research purposes. We are not acting on behalf of any government entity. The Mercatus Center is a university-based research organization focused on the economics of public policy.

Enclosed is a survey on blue paper that we would like to ask a manager or owner with knowledge about stimulus funds to fill out. There are also two surveys on yellow paper that we would ask you to pass to two workers in your firm at your discretion. We have included an addressed and stamped envelope for you to return each of the surveys in individually.

If you have any questions, please don't hesitate to call us at 703-993-4930.

Thank you very much for your time and your participation.

Sincerely,

Garett Jones, Ph.D.
Assistant Professor of Economics

Daniel M. Rothschild
Managing Director, State and Local Policy Project

# MERCATUS CENTER
## George Mason University

*Dear respondent: Your answers to this survey will help economists and public officials understand how the American Recovery and Reinvestment Act of 2009 (also known as ARRA, the "Recovery Act," or the "stimulus package") has impacted the U.S. economy.*

*Unless otherwise indicated, please provide only one answer per question.*

**1. Since January 2009, how many laid-off workers did your organization *rehire* as a result of ARRA-funded contracts?**

_____ workers

**Is this number...**

❑ Exact ❑ Best Guess

**2. Since January 2009, how many entirely new workers did your organization *hire* as a result of ARRA spending?**

_____ workers

**Is this number...**

❑ Exact ❑ Best Guess

**3. Since January 2009, how many workers did your organization *avoid laying off* as a result of ARRA spending?**

_____ workers

**Is this number...**

❑ Exact ❑ Best Guess

**4. About what percentage of your revenue in 2009 and 2010 came from ARRA funding?**

_____ percent

**Is this number...**

❑ Exact ❑ Best Guess

**5. Does your organization have loans outstanding from a bank or credit union, or a credit line at a bank or credit union?**

❑ YES ❑ NO ❑ NOT SURE

**If yes, which? Check all that apply:**

❑ Bank/credit union loans
❑ Line of credit from a bank/credit union

**6. When your organization learned it would receive ARRA funds, did you notify your bank of this fact?**

❑ YES ❑ NO ❑ NOT SURE

**If yes, would you say this fact made a big difference in how the bank treats you as a borrower, no noticeable difference, or somewhere in between?**

❑ It mattered a great deal/was crucial
❑ It mattered a lot
❑ It mattered only a little
❑ It did not matter at all

**7. Since the financial crisis began in summer 2008, has your organization had across-the-board cuts in wages or benefits for current employees?**

❑ YES ❑ NO ❑ NOT SURE

**8. Just thinking about the work your organization did with ARRA funds, would you say the quality of your final product or service was:**

❑ Much higher than you usually provide
❑ Slightly higher than you usually provide
❑ The same as you usually provide
❑ Slightly lower than you usually provide
❑ Much lower than you usually provide

***Please turn over to the other side.***

**9. Did your firm receive encouragement or pressure from any outside source to spend ARRA funds particularly quickly?**

❑ YES ❑ NO ❑ NOT SURE

**If yes, how did you respond to this?**

❑ Spent more quickly than usual
❑ Spent at the same timeline as usual
❑ Spent slower than usual

**10. Which best describes the effects of ARRA funds on your organization?**

❑ Things had been slow, and ARRA funding gave us more work to do
❑ Things had been busy, and ARRA funding meant we turned down other work
❑ Things had been busy, and ARRA funding meant we worked harder than usual

***If your organization hired new workers—not just rehired laid-off workers—please answer the following questions. Otherwise, please skip to the section labeled "DEMOGRAPHICS."***

**11. Do federal government prevailing wage laws (e.g., the Davis-Bacon Act) apply to your organization?**

❑ YES ❑ NO ❑ NOT SURE

**If yes, would you have been able to hire workers at lower wages than the legal "prevailing wage" if the government allowed you to?**

❑ YES ❑ NO ❑ NOT SURE

**If yes, how much would your organization have likely cut wages for new hires, as a percent, if prevailing wage laws had not applied?**

_____ percent

**12. Now let's return to the entirely new workers you hired. Compared to the way your organization hired back before the financial crisis—before the summer of 2008—would you say that hiring high-quality workers has become easier or harder?**

❑ Hiring is much easier now than in 2008
❑ Hiring is a little easier now than in 2008
❑ Hiring is neither easier nor harder now
❑ Hiring is a little harder now than in 2008
❑ Hiring is much harder now than in 2008

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**DEMOGRAPHICS**

**How many workers does your organization employ (counting both full and part-time workers)?**

_____ workers

**About how many years has your organization been in existence?**

_____ years

**Is your organization primarily engaged in manufacturing or providing services?**

❑ Manufacturing
❑ Services
❑ Both
❑ Neither/don't know

**What best describes your organization?**

❑ A nonprofit organization
❑ A government agency
❑ A corporation
❑ A non-incorporated private firm

**In what city and state is your office located?**

_____, _____

**In what city and state is your organization's headquarters located?**

_____, _____

# MERCATUS CENTER
## George Mason University

*Dear respondent: Your answers to this survey will help economists and public officials understand how the American Recovery and Reinvestment Act of 2009 (also known as ARRA, the "Recovery Act" or the "stimulus package") has impacted the U.S. economy.*

*Unless otherwise indicated, please provide only one answer per question.*

**1. When were you first hired at this company?**

_____ _____
Month Year

**2. Since you've been with this company have you ever been temporarily laid off, and then brought back?**

❑ YES ❑ NO

***If you were first hired at this company after January 31, 2009, please answer the following questions. Otherwise, please skip to the section labeled "DEMOGRAPHICS."***

**3. Which of the following best describes your job situation before you came here?**

❑ Unemployed before I got this job.
❑ I switched right over from another job.
❑ I was in school full-time.
❑ I was completely out of the labor force beforehand (Examples: Retired, ill, or full-time homemaker).

**4. Before you took this job, did you think that the pay for government-funded jobs was, on average, higher than for jobs in the private sector , about the same as jobs in the private sector, or lower than jobs in the private sector?**

❑ Better ❑ About the same ❑ Worse

**5. When you were searching for this job, did you turn down any private-sector job offers?**

❑ YES ❑ NO

**6. The last time you searched for a job, did you make a special effort to <u>apply</u> for jobs that were government-related, for private-sector jobs, or did you just not focus on whether the job was linked to the government?**

❑ Jobs that were linked to the government
❑ Private-sector jobs
❑ Did not focus on whether the job was government-related

**7. Does this new job pay more, about the same, or less than your old job?**

❑ MORE ❑ SAME ❑ LESS
❑ Don't know ❑ This is my first job

**8. How much more or less?**

If more...
❑ More than 50% more
❑ 50%-25% more
❑ 25%-10% more

If the same...
❑ About the same (10% less to 10% more)

If less...
❑ 10%-25% less
❑ 25%-50% less
❑ More than 50% less

If this is your first job...
❑ This is my first job.

**9. How would you compare the fringe benefits (health insurance, automobile insurance, pension plan, free meals, uniforms, etc.) at this job to your last one?**

❑ Better ❑ About the same ❑ Worse
❑ This is my first job.

***Please turn over to the other side.***

***If you answered "Unemployed before I got this job" to question 3, please answer the following questions. Otherwise, please skip to the section labeled "DEMOGRAPHICS."***

**10. Before you took this job, how many weeks had you been out of work and searching for work?**

- ❑ Two or fewer weeks
- ❑ 3-6 weeks
- ❑ 7-12 weeks
- ❑ 13-26 weeks
- ❑ 27-52 weeks
- ❑ More than a year

**11. Did your unemployment benefits run out before you accepted this job?**

❑ YES ❑ NO

**12. Did you accept your job within a month of when your unemployment benefits would have run out?**

❑ YES ❑ NO

**13. When you were unemployed, by what percentage did your household income fall compared to when you were working? "Household income" includes the value of any unemployment benefits, health care benefits, and food stamps. It also includes the income of any other workers in your household.**

- ❑ My household income increased.
- ❑ My household income stayed the same.
- ❑ My household income decreased up to 15%.
- ❑ My household income decreased 15% to 40%.
- ❑ My household income decreased 40% to 60%.
- ❑ My household income decreased 60% to 85%.
- ❑ My household income decreased by more than 85%.

**14. When you were unemployed by what percentage did your household spending fall on consumer goods and services, like food, clothing, medical visits, and the like? Leave out any change in rent or mortgage payments.**

- ❑ My household spending increased.
- ❑ My household spending stayed the same.
- ❑ My household spending decreased up to 15%.
- ❑ My household spending decreased 15% to 40%.
- ❑ My household spending decreased 40% to 60%.
- ❑ My household spending decreased 60% to 85%.
- ❑ My household spending decreased by more than 85%.

**15. While you were unemployed, which approaches below best describes how your household paid for consumer goods and housing? Check <u>all</u> that apply:**

- ❑ With the income of other family members
- ❑ By using savings
- ❑ By borrowing
- ❑ By selling household items, cars, etc.
- ❑ By cutting costs in other areas of spending
- ❑ Other

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**<u>DEMOGRAPHICS</u>**

Age: _____

Gender:

❑ Male ❑ Female

Highest level of education completed:

- ❑ Less than high school
- ❑ High school
- ❑ Some college or associates degree
- ❑ College graduate
- ❑ Graduate or professional degree

*City and State of Residence:*

_____, _____

Would you consider yourself politically:

- ❑ Liberal/progressive
- ❑ Moderate/middle of the road
- ❑ Conservative

Number of years since age 18 you worked full- or part time: _____

## E. Cover letter and firm and employee surveys