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Who believes in fiscal and monetary stimulus? Evidence from a survey of Pennsylvania residents

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# Abstract

Does the public believe that fiscal and monetary stimulus reduce unemployment? I present survey evidence on this question from a random sample of Pennsylvania residents. Few respondents express a consistently Keynesian view of fiscal or monetary stimulus. In fact, the typical respondent believes that an increase in government spending makes unemployment worse. Views on monetary stimulus depend on how the question is framed. The typical respondent believes that Fed money creation worsens unemployment while a Fed interest rate cut improves it. Beliefs about policy effectiveness fall largely, but not entirely, along partisan lines. The Democratic "tilt" towards government spending - in terms of its alleged positive employment effects - appears stronger than the Republican tilt towards tax cuts.

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### 1. Introduction

Few economic policies are as controversial as fiscal and monetary stimulus. Fiscal stimulus involves increased government spending or lower taxes, while monetary stimulus involves creation of new money by the central bank, leading to lower interest rates. According to conventional Keynesian theory, both kinds of stimulus should increase output and reduce unemployment in a slack economy. Economists have debated the effectiveness of government stimulus for decades, and the debate is alive and well today. Despite an enormous academic literature, few studies have examined the opinions of ordinary people on the effectiveness of government stimulus. This paper presents findings from an opinion survey that asked a random sample of Pennsylvania residents about the unemployment effects of four broad stimulus programs.

Public opinion matters because voters' opinions help shape policy outcomes. Voters elect lawmakers, and lawmakers decide, for example, whether to increase government spending in a recession. Although central banks are farther removed from public opinion, they are still ultimately accountable to lawmakers.<sup>3</sup> Understanding the macroeconomic policies that emerge in practice therefore requires an understanding of public opinion about those policies. As emphasized by Blinder and Krueger (2004), this point remains valid even if people are poorly informed or confused about the policies.

In the survey, few respondents express a consistently Keynesian view of fiscal or monetary stimulus. The typical respondent believes that an increase in government spending makes unemployment worse while a tax cut makes unemployment better. Views on monetary stimulus depend on how the question is framed. The typical respondent believes that Fed money creation makes unemployment worse while a Fed interest rate cut makes unemployment better. To the extent that these views are representative of the U.S. public, they highlight challenges that policymakers are likely to face in winning political support for stimulus programs. The results also suggest a fairly fundamental public misunderstanding of monetary policy.

In the survey data, opinions about stimulus policies are strongly associated with political affiliation. By itself, this is unsurprising; Democrats are often labeled as "Keynesians" and Republicans as "supply-siders." However, a simple econometric model reveals some interesting results. First, the Democratic "tilt" towards government spending – in terms of its alleged positive employment effects – is stronger than the Republican tilt towards tax cuts. Second, independents are the least likely to find each stimulus policy effective. Third, a number of demographic variables have strong predictive power even after controlling for

<sup>&</sup>lt;sup>1</sup>The theoretical foundations of fiscal and monetary stimulus date back to Keynes' *General Theory* (Keynes 1936). See Snowdon and Vane (2005) and Blinder (2007) for an introduction to Keynesian economics.

<sup>&</sup>lt;sup>2</sup>Recent academic papers on fiscal and monetary stimulus include Ramey (2011), Romer (2012), and Stiglitz (2012).

<sup>&</sup>lt;sup>3</sup>In the U.S., the Fed's accountability to Congress has been especially visible in recent years. In 2009, Congress introduced legislation that would have opened the Fed's monetary policy decisions to government audits (Reuters 2009). The bill did not pass at the time but was reintroduced in 2012 (Reuters 2012a). In 2011, Congress blocked Peter Diamond's nomination to the Federal Reserve Board, largely due to his views on monetary stimulus (Bloomberg 2011). Another recent bill would have replaced the Fed's dual mandate with a single mandate of price stability (Reuters 2012b).

political party. Older respondents and those with higher incomes are more likely to believe that government spending reduces unemployment, while nonwhite respondents are less likely to find tax cuts effective and more likely to find Fed money creation effective.

## 2. The survey

The survey was conducted by Muhlenberg College's Institute of Public Opinion (IPO) in December of 2011. IPO used random-digit dialing to survey Pennsylvanians eighteen years and older.<sup>4</sup> The response rate was 20%, which is typical for this kind of survey. Perhaps surprisingly, a number of studies suggest that response rates in this range do not necessarily cause serious biases in practice.<sup>5</sup> The sample consists of 447 adult Pennsylvanians, which I weighted to match the 2011 population estimates of the U.S. Census Bureau's Current Population Survey (CPS) for age, gender, educational attainment, and race/ethnicity. All the results reported in the main text reflect this weighting.<sup>6</sup>

This paper focuses on four questions about fiscal and monetary policy that I contributed to the survey.<sup>7</sup> The lead-in to these questions was as follows:

The unemployment rate measures the portion of the workforce that wants to work but can't find a job. The next few questions ask you to consider the effects of different government policies on unemployment in the United States.

The four questions were as follows:

- 1. First, when the government increases its spending in a given year, does that tend to make unemployment better or worse?
- 2. When the government cuts taxes in a given year, does that tend to make unemployment better or worse?
- 3. When the Federal Reserve creates more money in a given year, does that tend to make unemployment better or worse?
- 4. When the Federal Reserve lowers interest rates in a given year, does that tend to make unemployment better or worse?

Each question asked the respondent to choose between "better" or "worse," although a substantial percentage volunteered "no effect" or "not sure." I define the textbook Keynesian response to each question as "better." This definition is broadly consistent with Blinder (2007). Standard undergraduate textbook models, such as the AD-AS model in Mankiw

<sup>&</sup>lt;sup>4</sup>The interviews started on November 28, 2011 and ended on December 7, 2011. The survey protocol called for up to five callback attempts.

<sup>&</sup>lt;sup>5</sup>See, for example, Keeter et al. 2000, Keeter et al. 2006, and Holbrook et al. 2007.

<sup>&</sup>lt;sup>6</sup>Without weighting, the survey oversamples older citizens, women, college graduates, and non-Hispanic whites. I derive the weights using an iterative procedure that balances the four variables; therefore, I do not match the CPS proportions exactly. Most of the results reported in this paper also hold in the unweighted data. The appendix presents the unweighted results.

<sup>&</sup>lt;sup>7</sup>The survey also solicited opinions about various political figures, natural gas drilling in Pennsylvania's Marcellus shale, privatization of Pennsylvania's state-owned liquor stores, and same sex marriage.

(2011), also predict "better" for each question, at least in the short run. The words "in a given year" were intended to cue respondents to focus on the short run.

I tried to make the questions as simple and nontechnical as possible. Support for this approach comes from Blinder and Krueger (2004):

Economists often want to see survey questions that make sense to them. Such questions may involve complicated concepts and numerous provisos that leave ordinary people confused. Good poll questions need to be understandable by ordinary people with limited attention spans and no training in economics.

The wording of the questions aims for simplicity in several ways. First, I kept the policies as general as possible. For example, I didn't spell out exactly what the government spends its money on in Question 1. Second, I avoided asking whether the unemployment rate "increases" or "decreases," since some respondents might inadvertently associate "increases" with "good" and "decreases" with "bad." Third, I didn't restrict the questions to a "less than fully employed economy." Admittedly, respondents' views about these policies could depend on the state of the economy. However, at the time of the survey, the unemployment rate was quite high (8.5%), and only 8% of respondents described the economy as "good" or "excellent." It is unlikely that respondents had a fully employed economy in mind when answering these questions.

The questions do not ask about inflation or budget deficits. So, for example, a respondent could (plausibly) believe that Fed money creation would make unemployment "better" while making inflation "worse." I made no attempt to solicit opinions about these kinds of trade-offs. My goal was much simpler: to evaluate whether the public believes that government stimulus can improve unemployment.

# 3. Results

#### 3.1. Fiscal stimulus

Does the public believe that fiscal stimulus reduces unemployment? A large plurality (45%) of the sample said that increased government spending makes unemployment worse; only 26% said better (Figure 1). On the other hand, 44% of the sample said that a tax cut makes unemployment better; 24% said worse (Figure 2). Only 14% of respondents said that both increased government spending and a tax cut would improve unemployment. This contrasts strikingly with a simple Keynesian model, which would predict an improvement in unemployment in response to both policies.

Beliefs about the effectiveness of government spending differed significantly across subsets of the population. Not surprisingly, Democrats (40%) were much more likely than Republicans (17%) to say that government spending improves unemployment (p = 0.000)

<sup>&</sup>lt;sup>8</sup>According to the AD-AS model (e.g., as in Mankiw 2011), if the economy is at full employment when the policy is implemented, than the decrease in the unemployment rate will be temporary; if the economy is under-employed, then the decrease will be permanent. Therefore, a respondent focused on the *long run* might have answered "no effect" if she had a fully employed economy in mind and "better" if she had an underemployed economy in mind. However, note that the wording of the questions was intended to focus respondents on the short run.

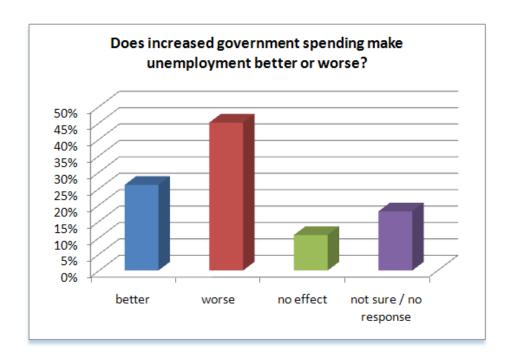


Figure 1: Beliefs about the effect of increased government spending on unemployment.

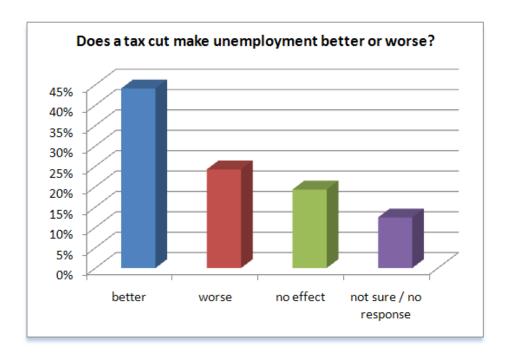


Figure 2: Beliefs about the effect of a tax cut on unemployment.

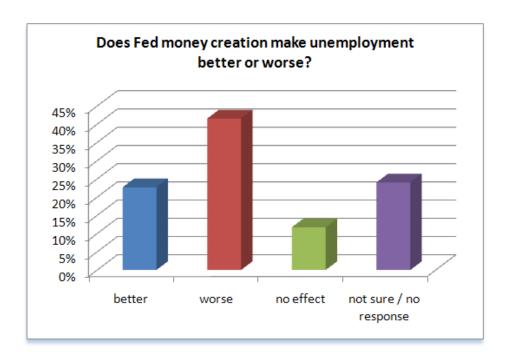


Figure 3: Beliefs about the effect of Fed money creation on unemployment.

on a design-based F-test). Interestingly, though, independents were the least likely to hold this belief (4%). Respondents with high incomes (36%) were more likely than low-income respondents (20%) to say that government spending is effective (p = 0.001). Men (32%) were somewhat more likely than women (21%) to give a positive response (p = 0.015).

Views on tax cuts also ran along partisan lines. Republicans (57%) were more likely than Democrats (41%) to say that a tax cut improves unemployment (p = 0.006), with independents (34%) the least likely to hold this view. Married (51%) and separated/divorced people (50%) were more likely to find a tax cut effective than single (28%) or widowed (29%) people (p = 0.000 on a design-based F-test).

# 3.2. Monetary stimulus

Opinions on monetary stimulus hinged crucially on how the question was framed. A large plurality (42%) said that increased Fed money creation makes unemployment worse; only 23% said better (Figure 3). On the other hand, 46% said that a Fed interest rate cut makes unemployment better; 16% said worse (Figure 4). Only 16% of respondents said that both Fed money creation and a Fed interest rate cut would improve unemployment. This split view is at odds with mainstream theories of monetary policy. Increased Fed money creation should cause interest rates to fall via the liquidity effect (see, e.g., Mankiw 2011). By the

<sup>&</sup>lt;sup>9</sup>I coded 4 respondents from "other" parties as independents, grouping them with 46 respondents who explicitly claimed to be "independent."

<sup>&</sup>lt;sup>10</sup>The question about income asked respondents to choose one of the following categories: under \$20,000, \$20-40,000, \$40-60,000, \$60-80,000, \$80-100,000, or over \$100,000. I coded the first three categories as "low income" and the last three as "high income," so the dividing point was \$60,000. Using this split, about 46% of the sample was high income and 54% was low income.

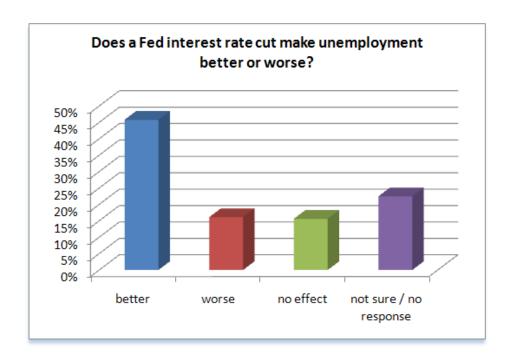


Figure 4: Beliefs about the effect of a Fed interest rate cut on unemployment.

same token, Fed open market operations that reduce interest rates require an expansion of the money supply. If one policy reduces unemployment, then both should do so. Respondents' answers suggest a fundamental misunderstanding of monetary policy.<sup>11</sup>

Looking across subpopulations, Democrats (29%) were more likely than Republicans (17%) to believe that Fed money creation makes unemployment better (p = 0.011); independents (8%) were the least likely to hold this view. Non-whites (38%) were more likely than whites (20%) to find money creation effective in reducing unemployment (p = 0.014). Interestingly, Democrats (53%) and Republicans (49%) had similar views on interest rate cuts, with independents (18%) less likely to find them effective (p = 0.000 on a design-based F-test across all three categories). Belief in the effectiveness of interest rate cuts was also significantly higher for separated/divorced people (71%) than for others (43%, p = 0.004).

# 3.3. A simple econometric model

What characteristics of the respondents best predict their beliefs about the effectiveness of the different stimulus policies? To address this question, I employ a simple econometric model. The goal of this exercise is to identify *predictors* of respondents' beliefs, not necessarily the *causes* of those beliefs. Of course, causation may run in both directions. For example, political affiliation may cause an individual to doubt that government spending will reduce unemployment, but a skepticism of government spending may also shape a respondent's political affiliation. The results in this section should therefore be interpreted as conditional associations rather than causal effects.

<sup>&</sup>lt;sup>11</sup>Non-response rates were also substantially higher for the monetary stimulus questions than for fiscal stimulus, suggesting that respondents felt less knowledgeable about monetary policy.

Let  $OP_{i,j}$  be respondent i's opinion about the unemployment effects of stimulus policy j, where the four policies (in order) are increased government spending, a tax cut, Fed money creation, and a Fed interest rate cut. I code  $OP_{i,j}$  as 1 for respondents who say that policy j will make unemployment "worse," 2 for "no effect" or "not sure" (or no response), and 3 for respondents who say "better." Let  $P_i$  be respondent i's self-reported political affiliation (Democrat, Republican, or Independent/Other). Let  $X_i$  be a vector of self-reported demographic variables. These are educational attainment (college graduate versus non-graduate), income (high income versus low), age (older versus younger), gender, race (nonwhite plus Hispanic versus non-Hispanic white), and marital status. I focused on discrete explanatory variables because all survey responses were recorded categorically. The basic model for predicting opinions about stimulus policies is as follows:

$$OP_{i,i} = f(P_i, X_i) + \epsilon_{i,i} \tag{1}$$

where  $\epsilon_{i,j}$  is a normally distributed, zero-mean error term. I estimated ordered probit models for each stimulus policy.

Table I reports estimates for the two fiscal policies – increased government spending and a tax cut. All independent variables are discrete, and the table reports average discrete marginal effects (the average discrete first difference from the base category of the probability of reporting "better"). Holding other variables constant, high-income respondents (over \$60,000) and older respondents (over 49) are significantly more likely to find government spending effective in reducing unemployment. When political party is included, it is highly significant. Democrats are much more likely than independents to find government spending effective. Republicans are close to independents after controlling for demographic characteristics.

Turn next to tax cuts. Holding other variables constant, married and separated/divorced respondents are more likely to believe that a tax cut improves unemployment. Nonwhites are less likely to think so. When political party is included, it is only marginally significant, with Republicans slightly more likely than independents to find a tax cut effective. Democrats are very close to independents after controlling for demographic characteristics. Interestingly, the Democratic "tilt" towards government spending – in terms of its alleged positive employment effects – appears stronger than the Republican tilt towards tax cuts.

Table II presents estimates for the two monetary policies – Fed money creation and a Fed interest rate cut. Holding other variables constant, college graduates and nonwhites are more likely to believe that Fed money creation improves unemployment. When political party is included, Democrats are marginally more likely to find Fed money creation effective. Interestingly, both Democrats and Republicans are much more likely than independents to find an interest rate cut effective in reducing unemployment.

<sup>&</sup>lt;sup>12</sup>I chose to keep three categories because a substantial number of respondents volunteered "no effect" or "not sure." Dropping respondents who reported "not sure" (along with non-responders) doesn't change the main results.

 $<sup>^{13}</sup>$  "High income" refers to respondents earning over \$60,000. "Older" refers to respondents over 49 years old.

Table I: Ordered probit models explaining opinions about the effect of fiscal stimulus on unemployment.<sup>a</sup>

-	Governm	ent spending	Tax cut	
$Independent\ variable$	s1	s2	t1	t2
Republican <sup>b</sup>		0.04		0.14*
		(0.06)		(0.07)
$Democrat^{b}$		0.22***		-0.00
		(0.06)		(0.08)
College graduate	-0.00	0.02	0.08	0.07
	(0.04)	(0.04)	(0.06)	(0.05)
High income <sup>c</sup>	0.17***	0.15***	-0.01	-0.01
	(0.05)	(0.04)	(0.06)	(0.06)
$\mathrm{Older^d}$	0.10**	0.13***	0.10**	0.09*
	(0.04)	(0.04)	(0.05)	(0.05)
Female	-0.06	-0.08*	0.03	0.04
	(0.04)	(0.04)	(0.05)	(0.05)
Nonwhite	0.01	-0.05	-0.30***	-0.28***
	(0.08)	(0.07)	(0.07)	(0.08)
$Married^e$	-0.05	-0.01	0.21***	0.21***
	(0.06)	(0.06)	(0.07)	(0.07)
Separated/divorced <sup>e</sup>	-0.17*	-0.15*	0.35***	0.33***
	(0.09)	(0.09)	(0.08)	(0.08)
$ m Widowed^e$	-0.16**	-0.10	-0.04	-0.09
	(0.07)	(0.08)	(0.07)	(0.08)
No. of observations	358	342	358	342
Design-based F	3.96	5.82	6.36	4.59
p-value for F	0.000	0.000	0.000	0.000

<sup>&</sup>lt;sup>a</sup> The dependent variable for columns s1 and s2 is the respondent's opinion about the effect of increased government spending on unemployment, where "worse" = 1, "no effect" or "not sure" = 2, and "better" = 3. The dependent variable for columns t1 and t2 is the respondent's opinion about the effect of a tax cut on unemployment, similarly coded. Non-responders were classified as "not sure." All independent variables are discrete. The top number in each row is the average discrete first difference from the base category of the probability of reporting "better" ("average discrete marginal effect"). Standard errors are in parentheses. \*\*\* denotes significance at the 1% level, \*\* at the 5% level, and \* at the 10% level.

 $<sup>^{\</sup>rm b}\, {\rm The}\,$  base category is those who answered "Independent" or "Other."

<sup>&</sup>lt;sup>c</sup> Over \$60,000 per year.

<sup>&</sup>lt;sup>d</sup> Over 49 years old.

<sup>&</sup>lt;sup>e</sup> The base category is "Single."

Table II: Ordered probit models explaining opinions about the effect of monetary stimulus on unemployment.<sup>a</sup>

	Money creation		Interest rate cut	
$Independent\ variable$	m1	m2	i1	i2
Republican		-0.04		0.19***
		(0.06)		(0.08)
Democrat		0.10*		0.25***
		(0.06)		(0.08)
College graduate	0.09**	0.10**	0.08	0.10*
	(0.04)	(0.04)	(0.06)	(0.06)
High income	-0.06	-0.07	-0.001	-0.02
	(0.04)	(0.04)	(0.06)	(0.07)
Older	-0.03	-0.005	0.03	0.02
	(0.04)	(0.04)	(0.06)	(0.06)
Female	0.06*	0.06	-0.02	-0.003
	(0.03)	(0.04)	(0.05)	(0.05)
Nonwhite	0.30***	0.23***	0.10	0.06
	(0.08)	(0.08)	(0.08)	(0.08)
Married	-0.05	-0.05	0.01	-0.02
	(0.05)	(0.06)	(0.08)	(0.08)
Separated/divorced	0.05	0.07	0.22**	0.21**
	(0.09)	(0.09)	(0.11)	(0.11)
Widowed	-0.04	-0.01	0.001	-0.00
	(0.07)	(0.07)	(0.10)	(0.10)
No. of observations	358	342	358	342
Design-based F	3.42	3.20	1.06	1.78
p-value for F	0.001	0.001	0.388	0.062

a The dependent variable for columns m1 and m2 is the respondent's opinion about the effect of increased Fed money creation on unemployment, where "worse" = 1, "no effect" or "not sure" = 2, and "better" = 3. The dependent variable for columns i1 and i2 is the respondent's opinion about the effect of a Fed interest rate cut on unemployment, similarly coded. Non-responders were classified as "not sure." See table I, notes b-e, for more detail about the specification. All independent variables are discrete. The top number in each row is the average discrete first difference from the base category of the probability of reporting "better" ("average discrete marginal effect"). Standard errors are in parentheses. \*\*\* denotes significance at the 1% level, \*\* at the 5% level, and \* at the 10% level.

### 4. Conclusion

This paper presented results from an opinion survey of Pennsylvania residents. Few respondents expressed consistently Keynesian beliefs in the unemployment effects of broadly framed stimulus programs. Strikingly, the typical respondent believed that increased government spending makes unemployment worse. Beliefs about different stimulus policies fell largely along partisan lines. Democrats were more likely to find government spending and Fed money creation effective in reducing unemployment, while Republicans were more likely to find tax cuts effective. However, the Democratic "tilt" towards government spending was stronger than the Republican tilt towards tax cuts. Interestingly, both Democrats and Republicans were much more likely than independents to find a Fed interest rate cut effective.

Respondents appear generally skeptical of "big government" interventions, judging from the low numbers of respondents finding government spending and Fed money creation effective. At the same time, a clear plurality found tax cuts effective, perhaps reflecting a desire for smaller government (or at least for lower taxes). It is hard to square the respondents' divergent views on Fed money creation and a Fed interest rate cut. This suggests a fairly fundamental misunderstanding about monetary policy. While economists may disagree about the wisdom of monetary stimulus, few would argue that Fed money creation and interest rate cuts have opposite effects on unemployment.

Further polling should look more closely at the tradeoffs among job creation, inflation, and deficit reduction. What priority do people place on deficit reduction versus job creation, and do they see a tradeoff between the two? Do people understand that Fed money creation is closely linked to lower interest rates? When respondents answer questions about policy, to what extent do they rely on ideological heuristics (e.g., "government spending is always wasteful" or "tax cuts only benefit the rich")? The answers could inform educators in their efforts to improve the public's understanding of macroeconomics, as well as guide policymakers in assessing or influencing political support for different stimulus programs.

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# Appendix: Unweighted results

The main text reports results from data that is weighted to match the 2011 CPS population estimates for age, gender, educational attainment, and race/ethnicity. As a robustness check, this appendix presents results from the unweighted data. Table III summarizes the sample's beliefs about the unemployment effects of the different stimulus policies. Tables IV and V reproduce the econometric analysis of Section 3.3. The unweighted and weighted results are very similar.

Table III: Beliefs about the effect of fiscal and monetary stimulus on unemployment (percent of sample, unweighted).<sup>a</sup>

	Better	Worse	No effect	Not sure/no response
Government spending	25	43	11	21
Tax cut	45	21	18	16
Fed money creation	23	41	11	26
Fed interest rate cut	46	15	16	23

<sup>&</sup>lt;sup>a</sup> The numbers in each row are the percent of the sample reporting that the given policy makes unemployment better, worse, has no effect, or not sure/no response. Rows may not sum to 100 due to rounding.

Table IV: Ordered probit models explaining opinions about the effect of fiscal stimulus on unemployment (unweighted).<sup>a</sup>

Governme	ent spending	Tax cut		
s1	s2	t1	t2	
	0.04	•••	0.13	
	(0.05)		(0.09)	
	0.25***		-0.01	
	(0.06)		(0.09)	
0.02	0.03	0.07	0.06	
(0.04)	(0.04)	(0.05)	(0.05)	
0.13***	0.11**	-0.05	-0.04	
(0.04)	(0.04)	(0.05)	(0.05)	
0.12***	0.13***	0.08*	0.08	
(0.04)	(0.04)	(0.05)	(0.05)	
-0.10**	-0.10**	0.05	0.06	
(0.04)	(0.04)	(0.05)	(0.05)	
0.03	-0.04	-0.29***	-0.25***	
(0.08)	(0.07)	(0.07)	(0.08)	
-0.04	0.00	0.23***	0.22***	
(0.06)	(0.06)	(0.06)	(0.07)	
-0.20***	-0.16**	0.33***	0.30***	
(0.07)	(0.07)	(0.09)	(0.10)	
-0.12*	-0.06	-0.08	-0.13	
(0.07)	(0.07)	(0.08)	(0.08)	
358	342	358	342	
37.14	69.32	48.08	55.50	
0.000	0.000	0.000	0.000	
	s1 0.02 (0.04) 0.13*** (0.04) 0.12*** (0.04) -0.10** (0.04) 0.03 (0.08) -0.04 (0.06) -0.20*** (0.07) -0.12* (0.07) 358 37.14	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	

<sup>&</sup>lt;sup>a</sup> The dependent variable for columns s1 and s2 is the respondent's opinion about the effect of increased government spending on unemployment, where "worse" = 1, "no effect" or "not sure" = 2, and "better" = 3. The dependent variable for columns t1 and t2 is the respondent's opinion about the effect of a tax cut on unemployment, similarly coded. Non-responders were classified as "not sure." All independent variables are discrete. The top number in each row is the average discrete first difference from the base category of the probability of reporting "better" ("average discrete marginal effect"). Standard errors are in parentheses. \*\*\* denotes significance at the 1% level, \*\* at the 5% level, and \* at the 10% level.

 $<sup>^{\</sup>rm b}\, {\rm The}\,$  base category is those who answered "Independent" or "Other."

<sup>&</sup>lt;sup>c</sup> Over \$60,000 per year.

<sup>&</sup>lt;sup>d</sup> Over 49 years old.

<sup>&</sup>lt;sup>e</sup> The base category is "Single."

Table V: Ordered probit models explaining opinions about the effect of monetary stimulus on unemployment (unweighted).<sup>a</sup>

	Money creation		Interest rate cut	
$Independent\ variable$	m1	m2	i1	i2
Republican		-0.02		0.18**
		(0.06)		(0.08)
Democrat		0.12*		0.23***
		(0.06)		(0.08)
College graduate	0.12***	0.12***	0.12**	0.12**
	(0.04)	(0.04)	(0.05)	(0.05)
High income	-0.02	-0.03	0.02	0.01
	(0.04)	(0.04)	(0.06)	(0.06)
Older	-0.00	0.01	0.07	0.06
	(0.04)	(0.04)	(0.05)	(0.05)
Female	0.07*	0.07*	-0.01	0.02
	(0.04)	(0.04)	(0.05)	(0.05)
Nonwhite	0.26***	0.19**	0.10	0.06
	(0.08)	(0.08)	(0.09)	(0.09)
Married	-0.04	-0.04	-0.01	-0.03
	(0.05)	(0.06)	(0.07)	(0.07)
Separated/divorced	0.05	0.08	0.19*	0.19*
	(0.08)	(0.09)	(0.10)	(0.10)
Widowed	0.03	0.06	-0.01	-0.02
	(0.07)	(0.08)	(0.10)	(0.10)
No. of observations	358	342	358	342
$LR \chi^2$	25.96	34.66	13.12	19.55
p-value for $\chi^2$	0.001	0.000	0.108	0.034

a The dependent variable for columns m1 and m2 is the respondent's opinion about the effect of increased Fed money creation on unemployment, where "worse" = 1, "no effect" or "not sure" = 2, and "better" = 3. The dependent variable for columns i1 and i2 is the respondent's opinion about the effect of a Fed interest rate cut on unemployment, similarly coded. Non-responders were classified as "not sure." See table I, notes b-e, for more detail about the specification. All independent variables are discrete. The top number in each row is the average discrete first difference from the base category of the probability of reporting "better" ("average discrete marginal effect"). Standard errors are in parentheses. \*\*\* denotes significance at the 1% level, \*\* at the 5% level, and \* at the 10% level.