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Abstract

We use experimental data collected in Russia and in the United States using a simple ultimatum game to evaluate two alternative hypotheses that may account for previously observed behavior in multinational experiments. One hypothesis postulates that behavioral differences observed in bargaining experiments arise from country-specific cultural environments. We submit the alternative hypothesis that different behavior in such experiments stems from differences in the demographic characteristics of the subject pools within each country. Because of its simplicity, our experimental design allows us to discriminate between these two hypotheses. Our findings support the alternative hypothesis.

Keywords: multinational experiments, ultimatum bargaining
JEL classification: C78, C90, Z10

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1. Introduction

Recent years have witnessed a growth in the number of multinational laboratory experiments designed to assess the impact of culture on individuals' behavior, and there is little reason to believe that the trend will not continue. This growth is a beneficial one in our view, since such studies can provide valuable insights into the factors shaping policy successes and failures across countries. Furthermore, evidence gathered from cross-country laboratory experiments can be fed back into economic modeling to improve our ability to evaluate the role of beliefs and norms in supporting different economic institutions in different countries.

Starting with the work by Roth *et al.* (1991), a number of multinational experiments have been conducted on a wide range of contexts, including ultimatum games, public games, and trust games.[1] The evidence from these cross-country experiments is quite mixed concerning the statistical significance of nationality on behavior. There are, however, some problems with the way in which these data are interpreted as supporting the hypothesis that observed differences or similarities in behavior are culturally driven. These problems concern the control for the effects of extraneous variables that may account for the observed behavioral differences between countries. In this context, we follow the *operational* definition of "culture" proposed by Roth *et al.* (1991). According to the definition set forth by the authors, observed behavioral differences between subject pools may be interpreted as being culturally determined if such differences cannot be attributed to variables other than the nation in which the data were collected.

[1] See, for example, Yamagishi (1998a, 1998b), Saijo and Nakamura (1995), Buchan *et al.* (1998), Burlando and Hey (1997), Cason *et al.* (1997), Hayashi *et al.* (1997), and Brandts *et al.* (1997).

This very definition suggests that the art of finding culturally determined behavior by means of experiments is by no means easy. In fact, there are a number of methodological issues that experimental economists need to confront in testing for the effects of culture on people's behavior. Some of these issues include the implementation of cross-cultural experimental controls to ensure equivalence in experimental conditions across countries. In multinational experiments, uncontrolled language and currency effects, as well as uncontrolled experimenter and procedural effects may account for observed behavioral differences between countries. Roth *et al.* (1991) suggest several ingenious procedures that, if successfully implemented, ensure that careful comparative observations are obtained in this regard.

A further methodological issue, the sort of issue we mean to call attention to in this research note, is that arising out of differences in the demographic structure of subjects within countries. The hypothesis that demographic variables influence economic and strategic behavior is not new among economists, and there have been a few studies examining the effect of gender in economic experiments.[2] This suggests that behavioral differences or similarities observed in multinational experiments might arise from country-specific cultural environments, but also from differences in the socio-economic characteristics of the subject pools within each country. Although researchers conducting multinational experiments do not at all deny this possibility,[3] we are not aware of any

[2] See, for example, Eckel and Grossman (1996) examining gender differences in a punishment game; Bolton and Katok (1995), Andreoni and Vesterlund (1998), and Eckel and Grossman (1998a) investigating gender differences in the dictator game; Eckel and Grossman (1998b), and Solnick (1998) in the ultimatum game, and Croson and Buchan (1999) using a trust game.

[3] See, for example, the discussion in Roth *et al*. (1991) concerning the different percentage of military subjects across the countries.

such previous study that explicitly controls for the demographic composition of the subject pools when testing for the impact of nationality on individuals' behavior.

In this paper we look for the influence of selected demographic factors on bargaining behavior using a simple ultimatum game. We use data previously collected in the United States and in Russia to test not only for the effects of nationality on behavior, but also for the effects of other demographic factors that may be related to culturally determined behavior. We find no significant effect of nationality on behavior. However, we find significant gender-related differences in behavior. To a degree, the results presented here add weight to the argument that experimental economists need to worry about the demographic composition of the subjects in their economic experiments.

This paper proceeds as follows. Section 2 briefly reviews previous experimental findings concerning the impact of nationality and gender in ultimatum games. Section 3 presents a short summary of the experimental design and procedures. Experimental results are provided in Section 4. A brief discussion and concluding remarks are contained in Section 5.

2. Previous Experimental Evidence on the Impact of Nationality and Gender in the Ultimatum Game

The ultimatum game is a simple bargaining game between two players, which has been studied extensively in the experimental literature.[4] In this game, one of the players proposes a split of a given monetary pie, and the other player may either accept or reject the proposed split. If the second player accepts the proposal, the payoffs to each are

[4] For early studies of the ultimatum game see, for example, Guth *et al*. (1982), Guth and Tietz (1990), Eckel and Grossman (1992), Forsythe *et al*. (1994), Hoffman *et al*. (1994), Bolton and Zwick (1995). Roth (1995) provides an excellent review of this and other bargaining games.

dictated by the proposed split. If the second player rejects the proposal, they each get nothing. The perfect equilibrium prediction is for the first player to propose a split that gives him almost 100% of the pie, and for the second player to accept the proposal.

The experimental data consistently shows that the first player offers substantial positive amounts, and that the second player often rejects small, but positive, offers. These observations have led many researchers to propose the existence of some uncontrolled for element in utility, such as preferences dictated by concepts of "fairness". One motivation behind multinational tests of the ultimatum game is the possibility that such preferences are culturally determined, and that behavior therefore may vary across nations.

Roth *et al.* (1991) ran a series of ultimatum games in Japan, Israel, Yugoslavia, and the United States. Consistent with the proposition of culturally determined fairness preferences, the authors found significant behavioral differences between subject pools across countries. In particular, they found that while groups in the United States and Yugoslavia displayed the usual 50-50 split, the groups from Japan and Israel were closer to a 60-40 split. The authors also found that the propensity to reject lower offers was significantly less in the latter two countries.

In the spirit of Roth *et al.* (1991), testing for cultural influences in bargaining behavior correlated with nationality, there have also been a couple of experimental studies testing for cultural influences correlated with gender in the ultimatum game. Eckel and Grossman (1998b) found that both men and women accept lower offers from women than from men. In contrast to these findings, Solnick (1998) found that subjects, irrespective of gender, demand more from women than from men. In both studies, higher

offers were observed to men than to women. However, none of the studies found statistically significant differences in proposers' behavior across genders.

As noted at the outset, conflicting results have also been reported in the experimental literature concerning, on the one hand, the effect of gender, and, on the other hand, the effect of nationality on bargaining behavior within the context of games other than the ultimatum game. We submit that the conflicting results reported in the literature may be due to the failure of analysts to control for the gender of the subjects in multinational experiments, and the failure to control for the income of subjects in experiments looking for behavioral differences across genders, given previously observed significant wealth effects in decisions where risk is involved.[5]

3. Experimental Design

A total of 218 subjects participated in this study. In the Russian experiments, 60 students were recruited from the student population at the Moscow Institute of Electronics Technology. Most of these subjects were students in the business department at Zelenograd Business College. There were two sessions, one held in November of 1994 and one in March of 1995. Each session included 30 subjects with fifteen making offers and fifteen accepting or rejecting offers. Subjects were paid 7000 Rubles for participating, and they bargained over 14000 Rubles in the first session. In the second

[5] See, for example, Schubert *et al*. (1999), and references therein.

session, subjects were paid 8000 Rubles for participating, and bargained over 16000 Rubles due to devaluation of the Ruble over the period between sessions.[6]

The remainder students were recruited from the student population at the University of South Carolina, and at the Midlands Technical College in the United States. Six sessions were conducted with these students. The number of subjects in each session varied between 20 and 60 subjects. Most of these subjects were economics or business students. Again, half of the subjects in each session played the role of proposer, and the other half played the role of responder. These subjects were paid $5 for participating, and bargained over $10.

All of the experimental sessions were conducted in a regular classroom where there was plenty of room for subjects to spread out for privacy. Subjects were given a folder which contained all the instructions, and the message forms. The language in the instructions used terms like “buyers” and “sellers”, rather than “proposers” and “responders”. Proposals were formulated in terms of number of “tokens”, each of which had the same value to both players. The total number of tokens that could be divided up between the two players was 1000. All players went through a practice round before starting.[7]

[6] The amounts were chosen based on comparative purchasing power for a student in either Russia or the United States. The values were meant to be large enough to purchase two reasonable student lunches at a University cafeteria. Therefore, while the Ruble was devalued significantly over this time period, the price of a reasonable student lunch at the university had not changed as much.

[7] A complete set of instructions can be found at http://theweb.badm.sc.edu/lisa/bargain.htm.

4. Experimental Results

In this section we present the experimental results. We focus not only on possible behavioral differences between American and Russian subjects, but also on possible differences in behavior between male and female subjects. Because gender differences in bargaining behavior might be confounded by gender-specific income differentials outside the laboratory, we further control for the income level of the subjects. We begin with the analysis of proposer behavior.

4.1. Proposer Behavior

Before commencing substantive analysis of the proposer data, we describe the composition of the subject pools with respect to the demographic variables used in the analysis. Table 1 depicts the proportion of each gender/income group in the US and Russian samples.

(TABLE 1 ABOUT HERE)

The figures in the Table show that men had the highest representation among the US subjects, as well as among the Russian subjects. The distribution of subjects by gender was, however, rather similar across the two countries. In contrast, the distribution of the subjects by income was quite different across the countries. Roughly 53% of the Russian subjects reported household income over $50000 per year, whereas only 30% of the US subjects reported this income level.

Primary conclusions concerning proposer behavior in the two countries can be drawn from the results reported in Table 2. Ignoring the demographic characteristics of

the subjects, the median offer in the United States and in Russia is 40% of the pie, and the between-country difference in average offers is rather small. Aggregated over income levels, female subjects in the United States display median and average offers similar to their Russian counterparts. The same pattern of behavior is born out for male subjects. Moreover, the similarities in proposer behavior across countries persist after the income level of the subjects is controlled for.

(TABLE 2 ABOUT HERE)

In stark contrast to these findings, female subjects in both countries seem to offer substantially more than their male counterparts. The average offer made by female subjects in the two countries equals about 45% of the pie, and the median offer is 48,8% and 42,5% in the United States and Russia, respectively. Corresponding figures for male subjects are 31,5% in the United States and 35,3% in Russia, while the median offer is 30% in both countries.

The differences in behavior across genders are further illustrated in Tables 3 and 4. The tables present the distribution of bargaining offers by deciles for each gender/income group in the United States and in Russia, respectively.

(TABLE 3 ABOUT HERE)

As can be gleaned from Table 3, there is a unique modal offer range at 41%-50% for female subjects from the United States, and a modal offer range at 11%-20% for their

male counterparts. In Russia, we observe two modal offer ranges at 31%-40% and 41%-50% for female subjects, and a unique modal offer range at 11%-20% for male subjects.

(TABLE 4 ABOUT HERE)

In summary, proposer behavior seems to be fairly similar across the two countries. In contrast, there appears to be substantial differences in behavior across genders. These impressions are supported by the non-parametric Wilcoxon-Mann-Whitney test.[8] Table 5 shows the results of this test for the null hypothesis that observed offers in the United States and Russia have the same distribution. The test adopted is two-tailed with no prediction as to whether one sample is stochastically larger or smaller than the other. After correcting for tied observations, the Wilcoxon-Mann-Whitney test statistic for all gender/income groups is $|z|=.410$ ($p=.6821$). Thus, the data do not give evidence which justify rejecting the null hypothesis at conventional significance levels.

Applying this test to the offers from each stratum separately yields the same conclusion.[9]

(TABLE 5 ABOUT HERE)

[8] See Siegel and Castellan (1998) for a description of this test. The Windows 98/95/NT 6.0 version of the Intercooled Stata program is employed for all the computations.

[9] Unless stated otherwise, all of the conclusions based on the Wilcoxon-Mann-Whitney test are similarly supported by the non-parametric Kolmogorov-Smirnov test for two independent samples.

Table 6 reports the results of the two-tailed Wilcoxon-Mann-Whitney test for the null hypothesis that the distribution of offers is the same across genders. The test was applied to the data from each country separately, as well as to the pooled data across countries. The results support our earlier impression that men behaved significantly different from women in the United States sample. Moreover, statistically significant differences between men's and women's offers in the United States stand out even stratifying the offers by the subjects' income levels.

(TABLE 6 ABOUT HERE)

In Russia, however, gender effects are found only for the subgroup of subjects who reported the highest income level. Thus, although the hypothesis of no gender effects could be rejected at the conventional 0.1 significance level for the entire Russian sample (i.e. without any sample weights), it is only this subgroup of subjects that contributes to this finding. This suggests that interaction is present. One may therefore conjecture that had the Russian sample been comprised, purely by chance, by a disproportionate number of low-income subjects and no account of this had been taken in the statistical analysis, no gender effects would have been found, even if the sample were split evenly across genders.

As seen above, the same remarks apply generally to the broader proposition of this paper, that failure to account for different compositions of subject pools, namely with respect to gender, may produce biased inferences in multinational experiments. Had, to take a contrived example, the United States subject pool been comprised predominantly

by high-income women, and the Russian sample essentially by low-income men, unconditional statistical analysis would show significant behavioral differences between the two nations, and yet the causes of such differences could not be interpreted as being "cultural" in the sense of Roth *et al*. (1991).

4.1. Responder Behavior

The gender/income composition of the responder subject pool is detailed in Table 7. The figures show that women had the highest representation among the Russian subjects who played the role of responders, whereas the responder subject pool in the United States was split evenly across genders.

(TABLE 7 ABOUT HERE)

Tables 8 and 9 provide a detailed perspective on responder's behavior in the United States and Russia, respectively. The tables contain the distribution of rejection rates (i.e. the fraction of offers that are rejected) with and without conditioning on the offer, and on the demographic characteristics of the responder.

(TABLE 8 ABOUT HERE)

The results in Table 8 show that, irrespective of the offer range, female subjects in the United States exhibit substantially higher rejection rates than male subjects. The

results also indicate that high-income subjects tend to reject offers more often than low-income subjects.

(TABLE 9 ABOUT HERE)

An inspection of the results presented in Table 9 reveals that female subjects in Russia also reject offers more often than their male counterparts. Similarly, Russian subjects in the higher income group display higher rejection rates than subjects in the lower income group.

Finally, the results reported in Tables 8 and 9 are in line with the results from other ultimatum game experiments in that rejection rates tend to decrease with the offer. A cross-country comparison of the rejection rates indicates that Russian subjects tend to exhibit lower rejection rates than subjects in the United States, irrespective of offer ranges and characteristics of the responder.

In sum, there appear to be substantial differences in responder's behavior across countries, as well as across gender/income groups within each country. The non-parametric Fisher's Exact test was conducted to determine the statistical significance of these apparent differences in responders' behavior. Due to the structural zeros observed for some offer ranges, Fisher's Exact test could not be conducted, or yielded inaccurate results, when offers were grouped in deciles. Offer ranges were, therefore, grouped in the 0%-30% and 31%-60% intervals for the purpose of conducting Fisher's Exact test conditional on the offer.

Table 10 reports the hypergeometric probability of differences in responder behavior across countries occurring by chance alone. As can be gleaned from the table,

conditional on the offer range and on the gender/income characteristics of the responders, the data do not give evidence which justify rejecting, at conventional levels of significance, the hypothesis that the observed differences represent nothing other than the vagaries of chance.

(TABLE 10 ABOUT HERE)

The hypergeometric probabilities of differences in responder behavior across genders are reported in Table 11. The results indicate the presence of gender effects conditional on lower offers. The statistical significance of any differences in responder behavior across genders, however, disappears for higher offer ranges.

(TABLE 11 ABOUT HERE)

5. Concluding Remarks

This research joins the recent body of experimental work examining the effect of culture on economic and strategic behavior. We report the experimental results of a cross-country comparison between the United States and Russia in a simple ultimatum game. The findings generally concur with the results from other ultimatum game experiments in that subjects do not play the theoretically predicted equilibrium. The purpose of this study, however, is not to test whether either of the sample groups' behavior differs from the theoretically predicted outcome, but whether they are different from each other, while

raising, at the same time, a number of methodological issues that experimental economists need to confront when testing for the effects of culture on economic behavior.

The results presented here are in contrast with those of Roth *et al*. (1991), who tested for cultural influences correlated with nationality in the ultimatum game setting. In spite of the apparently different cultures of Russia and the United States, we could not detect any significant behavioral differences between subjects in the two countries. Similarly, the results do not fully concur with those of Solnick (1998) and Eckel and Grossman (1998b), who tested for cultural differences correlated with gender using the ultimatum game. In view of the gender-related differences in behavior found in this study, we cannot rule out the possibility that observed differences in behavior across countries may stem from the different characteristics of the samples rather than any direct correlation with their nationalities.

To a degree, the results presented here add some weight to the argument that the conflicting results reported in the experimental literature concerning the impact of gender and nationality on individuals' behavior may be a consequence of ignoring the composition of the subject pools with respect to factors suspected to influence economic and strategic behavior. And, to top the argument, there is the possibility that different factors may interact, and either boost or inhibit each other's effects.

The latter consideration also raises a further methodological concern, one that relates to the use of regression analyses when assessing the impact of nationality or gender on economic behavior. The lack of a coherent theory concerning these effects makes it difficult for the proper interactions to be specified in a regression context, or more generally, for the correct functional form to be chosen. This suggests that gender or

nationality differentials (or similarities) observed in studies using these statistical procedures may be an artifact of having incorrect specifications. As a result, cohort analyses, in which hypotheses are tested based on comparable cases with respect to the subjects' characteristics thought to influence economic behavior, might be a better alternative. For researchers wishing to use regression techniques, it would be good procedure to report a number of alternative model specifications along with a number of tests illustrating how robust their results are.

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Table 1—Composition of Proposer's Subject Pool by Demographic Variables and Country

	Female			Male		
	Inc.<=$50000	Inc.>$50000	Total	Inc.<=$50000	Inc.>$50000	Total
United States	0.28	0.07	0.35	0.42	0.23	0.65
Russia	0.20	0.20	0.40	0.27	0.33	0.60

Table 2—Summary of Proposer Behavior by Demographic Variables and Country

	United States			Russia		
	Mean	Median	(SD)	Mean	Median	(SD)
Female	45.3	48.8	(16.8)	45.2	42.5	(17.7)
Inc.<=$50000	43.1	46.3	(16.4)	40.0	42.5	(15.2)
Inc.>$50000	53.5	50.0	(16.9)	50.4	42.5	(19.9)
Male	31.5	30.0	15.9)	35.3	30.0	(22.7)
Inc.<=$50000	32.7	34.5	(17.2)	39.3	35.0	(24.7)
Inc.>$50000	29.4	28.8	(13.5)	32.1	30.0	(21.8)
All	36.4	40.0	(17.4)	39.2	40.0	(21.1)

Notes: Data normalized in terms of the percentage offer to receiver. Standard deviations of the means are in parentheses.

Table 3—Distribution of Bargaining Offers by Deciles in the United States

Offer Range (%)	Female			Male			All
	Inc.<=$50000	Inc.>$50000	All	Inc.<=$50000	Inc.>$50000	All	
[0-10]	0.09	0.00	0.07	0.06	0.06	0.06	0.06
[11-20]	0.05	0.00	0.04	0.27	0.28	0.27	0.19
[21-30]	0.05	0.17	0.07	0.15	0.33	0.22	0.16
[31-40]	0.18	0.00	0.14	0.33	0.11	0.25	0.22
[41-50]	0.50	0.50	0.50	0.15	0.22	0.18	0.29
[51-60]	0.05	0.00	0.04	0.00	0.00	0.00	0.01
[61-70]	0.05	0.17	0.07	0.00	0.00	0.00	0.03
[71-80]	0.05	0.17	0.07	0.00	0.00	0.00	0.03
[81-90]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
[91-100]	0.00	0.00	0.00	0.03	0.00	0.02	0.01
Total	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Table 4—Distribution of Bargaining Offers by Deciles in Russia

Offer Range (%)	Female			Male			All
	Inc.<=$50000	Inc.>$50000	All	Inc.<=$50000	Inc.>$50000	All	
[0-10]	0.00	0.00	0.00	0.00	0.10	0.06	0.03
[11-20]	0.17	0.00	0.08	0.38	0.30	0.33	0.23
[21-30]	0.17	0.00	0.08	0.13	0.20	0.17	0.13
[31-40]	0.17	0.50	0.33	0.13	0.20	0.17	0.23
[41-50]	0.33	0.33	0.33	0.25	0.10	0.17	0.23
[51-60]	0.17	0.00	0.08	0.00	0.00	0.00	0.03
[61-70]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
[71-80]	0.00	0.00	0.00	0.00	0.10	0.06	0.03
[81-90]	0.00	0.17	0.08	0.13	0.00	0.06	0.07
[91-100]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Table 5—Wilcoxon-Mann-Whitney Test for Differences in Proposer Behavior between the United States and Russia

	Conditional on:						
	Female			Male			All
	Inc.<=$50000	Inc.>$50000	All	Inc.<=$50000	Inc.>$50000	All	
|z|	0.454	0.728	0.688	0.564	0.241	0.385	0.410
p-value	0.6495	0.4665	0.4914	0.5729	0.8094	0.7005	0.6821

Table 6—Wilcoxon-Mann-Whitney Test for Gender Effects on Proposer Behavior by Country

Conditional on:	United States		Russia		∅	
	|z|	p-value	|z|	p-value	|z|	p-value
Inc.<=$50000	2.955	0.0031	0.520	0.6032	2.803	0.0051
Inc.> $50000	2.687	0.0072	2.017	0.0437	3.279	0.0010
None	3.883	0.0001	1.704	0.0883	4.147	0.0000

Notes: ∅=pooled data across countries.

Table 7—Composition of Responder's Subject Pool by Demographic Variables and Country

	Female			Male		
	Inc.<=$50000	Inc.>$50000	Total	Inc.<=$50000	Inc.>$50000	Total
United States	0.37	0.14	0.51	0.35	0.14	0.49
Russia	0.30	0.27	0.57	0.10	0.33	0.43

Table 8—Rejection Rates by Offer Range and Responder in the United States

Offer Range (%)	Female			Male			All Groups
	Inc.<=$50000	Inc.>$50000	All	Inc.<=$50000	Inc.>$50000	All	
[0-10]	1.00		1.00	1.00	1.00	1.00	1.00
[11-20]	1.00	0.00	0.83	0.50	0.33	0.44	0.60
[21-30]	1.00	1.00	1.00	0.50	0.50	0.50	0.77
[31-40]	0.50	0.33	0.43	0.00	0.25	0.10	0.24
[41-50]	0.09	0.50	0.15	0.00	0.00	0.00	0.09
[51-60]	0.00		0.00				0.00
[61-70]	1.00		1.00	0.00		0.00	0.50
[71-80]	0.00		0.00	0.00		0.00	0.00
[81-90]							
[91-100]		0.00	0.00				0.00
All Offers	0.52	0.55	0.53	0.21	0.36	0.26	0.39

Notes: Empty cells are *structural zeros*, that is, no offers were observed in the corresponding offer range to the responder.

Table 9—Rejection Rates by Offer Range and Responder in Russia

Offer Range (%)	Female			Male			All Groups
	Inc.<=$50000	Inc.>$50000	All	Inc.<=$50000	Inc.>$50000	All	
[0-10]	1.00		1.00				1.00
[11-20]	0.50	1.00	0.80		0.00	0.00	0.57
[21-30]	1.00	0.00	0.50	0.00	0.00	0.00	0.25
[31-40]	0.00		0.00		0.25	0.25	0.14
[41-50]		0.00	0.00	0.00	0.00	0.00	0.00
[51-60]	0.00		0.00				0.00
[61-70]							
[71-80]		0.00	0.00				0.00
[81-90]	0.00		0.00				0.00
[91-100]							
All Offers	0.33	0.38	0.35	0.00	0.10	0.08	0.23

Notes: Empty cells are *structural zeros*, that is, no offers were observed in the corresponding offer range to the responder.

Table 10—Fisher's Exact Test for Differences in Responder Behavior Between the United States and Russia

	Conditional on:						
Offer Range (%)	Female			Male			All
	Inc.<=$50000	Inc.>$50000	All	Inc.<=$50000	Inc.>$50000	All	
[0-30]	0.267	0.722	0.249	0.500	0.238	0.083	0.142
[31-60]	0.491	0.357	0.207	undefined	0.682	0.532	0.357
All Offers	0.282	0.395	0.184	0.512	0.185	0.165	0.090

Notes: Undefined values for Fisher's Exact test arise from the indeterminate form 0/0 when computing the test statistic.

Table 11—Fisher's Exact Test for Gender Effects on Responder Behavior by Country

Conditional on: Offer Range (%)	Income	United States	Russia	∅
[0-30]	Inc.<=$50000	0.018	-	0.016
	Inc.> $50000	0.348	-	0.077
	All	0.011	0.030	0.002
[31-60]	Inc.<=$50000	0.125	undefined	0.147
	Inc.> $50000	0.500	0.700	0.535
	All	0.103	0.562	0.197
All Offers	Inc.<=$50000	0.017	0.382	0.014
	Inc.> $50000	0.335	0.206	0.110
	All	0.013	0.089	0.004

Notes: ∅=pooled data across countries. A dash (-) in some of the cells indicates that the sum of the marginal totals in the underlying fourfold contingency table is less than 8, which means that conventional probability levels cannot be reached by construction.