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A Cross-Country Study of Household Financial Risk

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This paper reports the results of a six-country (US, France, Germany, UK, Canada and Italy) study of 7240 households conducted in summer 2009 regarding their risk exposures, risk-bearing capacity, and coping mechanisms. The risk studied is a small financial shock requiring an outlay of US$2000 within 30 days. Households perceive the likelihood of encountering a small financial shock as being rather remote; but risk exposure perceptions are higher for older adults, families with children, people who have lost greater wealth in the economic crisis, and for people who engage in risk measurement or planning activities. The financial capacity to deal with such a shock varies dramatically across the sample. For example, in the US, 46% of all surveyed felt that they were unlikely to access $2000 in 30 days in the event of an emergency. Risk-bearing capacity is lowest for people with lower income and wealth, women, young people, families with children, people who are less risk literate, and those who do not engage in planning activities. These cross sectional differences are large in magnitude. Finally, people employ a wide range of coping strategies to deal with financial shocks. While precautionary savings is the top planned coping mechanism, informal networks, increasing work, formal credit, and selling items are all used substantially, and in some populations, are more important than savings.

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1. Introduction

Despite the long-standing appreciation of household risk in economics, sociology, and public policy, and the advances in corporate risk measurement and management, household risks are much less studied. The purpose of this study is to introduce a new measure of household risk and to use a new, recently collected multi-national database to report on (1) households' perceptions of their risk exposures; (2) households' assessments of their risk-bearing capacities; and (3) households' means of coping with these risks. Our new measure examines households' own assessments of the likelihood of, and ability to cope with, *small financial shocks*. We seek to understand their capabilities to deal with unexpected expenses such as car and house repairs or small out-of pocket medical costs, rather than large shocks such as loss of income through unemployment or layoffs, catastrophic health issues, or the loss of life. We label the inability to deal with everyday shocks that require a small amount of money as "financial fragility" and find levels of fragility to be quite high.

Working in conjunction with TNS, a global market research firm, in the late summer of 2009 we collected data from several countries, where each of the national samples was designed and weighted to be nationally representative. We asked participants to consider a small financial shock that might require coming up with an amount of $2000 (or equivalent) in the next 30 days. We have three key findings: (a) Risk Assessment: most households believe that they are unlikely to face a small financial shock; (b) Risk-bearing Capacity: households' ability to weather a small financial shock is limited. For example, in the US, almost half of Americans lack confidence in their ability to come up with $2000 in the next 30 days; and (c) Coping Mechanisms: the ways in which households plan to deal with financial shock include a combination of savings, formal credit, informal network support, and changes in life-style, with the mix varying across families and countries. We explore cross-sectional and cross-country differences in risk assessment, access to financial resources, and coping mechanisms, finding much variation in these elements across subpopulations.

We believe our study makes five contributions to the existing literatures on household finance. First, we establish a simple but concrete baseline metric of financial risk (events requiring $2000 in 30 days) which can be modified in amount and duration, but which is easily understood in a survey setting. Second, we explicitly study perceived risk exposures. Third, we examine risk-bearing capacity, which is broader than simply emergency savings, but includes

access to emergency funds from credit, informal networks, increased labor income, and sales of material possessions. Fourth, we establish cross sectional differences in risk bearing capacity and coping mechanism. Finally, we carry out this work in a cross-country, and in future versions of this work, hopefully will be able to explain these national patterns.

In section 2, we review economic theories of household precautionary savings and sociological work on social support. These bodies of research provide testable hypotheses about those groups most likely to be at risk and the coping strategies they might draw upon. In section 3, we describe our new survey and database. In section 4, we report households' assessments of their likelihood of encountering a small economic shock, and describe the cross sectional determinants of those assessments. In section 5, we report on households' abilities to access financial resources in an emergency. We carry out this analysis not only for the overall population, but with special attention to the people who judge themselves most at risk—but are least able to access funds to address the immediate problem at hand. In section 6, we report on the coping mechanisms identified by households. In Section 7, we review our findings and lay out our ongoing research agenda using this new dataset.

2. Risk Exposure, Risk-bearing Capacity, and Coping Mechanisms

There has been extensive research on risk. Some of the work deals with probabilities, or risk *exposures*, e.g., the variance and skewnesss of portfolio returns. Other work deals with the *consequences* of risk, for example, the conditional costs of financial distress or the sizes of losses to a portfolio under certain circumstances. In this paper we jointly examine households' perceived *risk exposures*, *capacity* to cope with risks, and the specific *coping mechanisms* they use to deal with risk. Some of these topics have been studied by economists, sociologists, and policy scholars. Below, we briefly review the extensive literatures on which we draw in this work.

Risk exposure

There are a host of studies that examine exposures of households and individuals to individual risks. For example, there is extensive work that examines individual exposures to the risk of unemployment and job loss (for example, see Abowd and Card (1989)). Similarly, there is

an extensive literature in public health examining exposures to various health risks, and the factors that increase these exposures. Actuaries study the exposures (or probabilities) of risk of disability or death. Our study examines the exposure of households to shocks, whatever their source, that might give rise to relatively "small" financial needs (US$20000) in a short time frame (30 days). In that sense, our measure is similar to at-risk measures used in business settings which combine various exposures together to understand the distribution of ultimate financial consequences. Unlike the work that examines the incidence of specific risks (health, disability, death, job loss), there is far less work in economics or sociology that studies the likelihood of small financial shocks.

Just as exposures to health risks or death vary among groups, there is good reason to think that households' exposure to everyday financial risks may vary both by household-level characteristics and by national contexts. At the household level, larger families, especially families with many children, or families with older cars, appliances, and homes that might demand emergency repairs would be at greater risk of experiencing such a financial shock. At the national level, greater employment instability and fewer regulations on hiring and firing might be associated with a greater perceived likelihood of experiencing a shock based on unexpected unemployment. The provision of universal health insurance and the share of medical costs borne by out of pocket expenditures might also be related to the possibility of an economic shock. Holding constant the unobserved but actual risk of a financial shock, there might also be differences in individual *perceptions* of the likelihood of such an event occurring. People who are pessimistic might believe themselves more at risk. Various behavioral research suggests that people tend to grossly mis-estimate the probability of rare events; if the uniformed would tend to underestimate risk, then the more informed would perceive higher exposures.

Risk-bearing Capacity and Coping Mechanisms

There is substantial research in economics, sociology, and public policy on how households cope with risk, and these concerns are important in current policy making. The current US health care debate is partially framed about the lack of risk-bearing capacity of part of the population to deal with health care emergencies. Policy debates around the dearth of retirement savings can be recast about the incapacity of households to deal with longevity risk.

At a more macro level, concerns surrounding the unfunded nature of the Social Security program can be framed around the inability of the system to deal with ever-increasing longevity risk.

Household risk bearing capacity is also core to academic research. Often this work combines risk bearing capacity and coping strategies. For instance, discussing informal support, Biggs (1998) notes that social networks of friends and families may provide both "social leverage" and "social support," with the latter helping "one 'get by' or cope. This might include being able to get a ride, confide in someone, or obtain a small cash loan in an emergency. Writing on asset poverty, Caner and Wolff (2004), note that assets provide liquidity in times of economic hardship and they highlight the relative dearth of assets held by households. Both of these examples typify a common research trait: the tendency to 1) assume a level of risk and 2) then examine risk-bearing by studying a *single* coping mechanism in isolation, rather than the full range of coping strategies. Some work by economists implicitly assumes that private savings, i.e., precautionary savings, is the main or only way in which households insure against risks. This orientation is reflected in the literature on asset poverty – households' general inability to cope with emergency by drawing on private savings. Some work by sociologists implicitly assumes that households cope with financial emergencies mostly by turning to family and friends for help. Yet another strand of literature in public policy emphasizes the role that high cost credit plays as a coping strategy.

Precautionary Saving: According to economic theory, households deal with un-insurable risk by accumulating precautionary savings. If households are sensitive to risk (e.g., their preferences are not quadratric), if it is not possible to rely on insurance markets, or if other financial market imperfections prevent borrowing, then households insure themselves by holding a buffer stock of savings (see reviews by Deaton (1992) and Browning and Lusardi (1996)). In several theoretical specifications, the higher the risk, the higher the stock of precautionary savings.

It has been difficult to estimate the size of the precautionary saving motive. Estimates so far range from very large values, such as 50 percent of wealth (Carroll and Samwick (1997, 1998), to moderate values of less than 10 percent of wealth (Hurst, Lusardi, Kennickell and Torralba (2010)) to even smaller values (Skinner, 1988)). One of the difficulties of the empirical estimates has been the measure of risk used by researchers. Many researchers have focused exclusively on income risk from labor studies. However, there are many shortcomings in using

that measure. First, in many countries unemployment insurance exists and it is difficult to distinguish between insurable and un-insurable components of income risk. Second, because the variance of income or earnings is often used in the empirical estimates, it is hard to disentangle true risk from measurement error. Third, there may be insurance provided within the family. For example, if family members work in different sectors, the risk of total household labor income may be smaller than the risk faced by each individual earner.

Most importantly, while many of the estimates have focused on income risk, as emphasized by Lusardi and Kennickell (2004), there are other types of risk that can affect households, such as emergencies such as broken cars or heating systems or large health care deductibles. For persons with stable employment, this type of everyday risk is probably the most salient risk. So-called emergency or "rainy day" saving is one of the most common motives to save, cited by close to half of the population in the United States.

Another problem of the theory of precautionary savings is that it can hardly rationalize why those who are likely to face many shocks, such as low income households, tend to hold little or no wealth. Some have argued that means-tested welfare programs effectively discourage wealth accumulation among prospective welfare recipients (Hubbard, Skinner and Zeldes (1995)). However, as will be discussed later, it could also be that families rely not only on wealth but also on other sources of support to shield themselves against shocks.

Precautionary Saving and Asset Poverty: A similar focus on wealth as the primary means of coping with emergencies in apparent in the literature on asset poverty. Though poverty measures are typically based on income, some scholars have suggested that measures of income poverty fail to capture the important role that assets can play as a mechanism to cope with emergency or to fund households expenses over a period of weeks or even months of income loss (McKernan and Ratcliffe (2008); Schneider and Tufano (2007)). However, this literature reveals the extent to which households often lack sufficient precautionary savings to effectively respond to an emergency. For example, examining household wealth between 1988 to 2001, Havemann and Wolff (2004) find asset poverty rates between 22 and 25% (when defining assets as net worth) and as high as 33% and 44% (when defining assets as liquid assets). Drawing on more recent data from the 2007 Survey of Consumer Finances, Ratcliffe and Vinopal (2009) place the asset poverty rate at 16% for net worth and 31% for liquid assets. High levels of asset poverty suggest that many households do not have sufficient funds to cope with an emergency.

Asset-poor households appear to be more likely to be less educated, renters, lower income, and younger as compared with non-asset poor households (Caner and Wolff (2002); Havemann and Wolff (2004); Ratcliffe and Vinopal (2009)). Thus, we might expect that households with such characteristics might be less likely to draw on private savings to cope with financial shocks.

Assistance from Family and Friends: The large sociological literature on social support offers further insights into the strategies that households employ to cope with shocks. This literature highlights the importance of informal assistance from family and friends. Scholars have studied this kind of support in two ways. Early work generally examined *realized* support, asking respondents if they had received assistance from their social network (Wellman and Wortley (1989); Sarkasian and Gerstel 2004; Haider and McGarry, 2005). These measures have been critiqued for potentially confounding the experiences of the most needy (who may have many needs but very resource-poor networks) and the most advantaged (who may have few needs but resource-rich networks) (Henley et al, 2005; Harknett and Knab, 2007). More recent scholarship has instead examined *perceived* support, asking respondents if they could access informal support from members of their social networks in the event of an emergency (Henley et al, 2005; Harknett, 2006; Harknett and Knab, 2007; Ryan et al, 2009). This approach avoids the problem discussed above. However, it does not distinguish between respondents who could access support but likely have little need of it and respondents who could access support and will likely need to. This problem is partially avoided by the focus in the literature on low-income populations who presumably are more likely to actually need to activate such support (Henley et al, 2005; Harknett, 2006; Harknett and Knab, 2007; Ryan et al, 2009).

While it does not focus on the risk of financial shock to households, this literature does provide valuable insight into the widespread use of social support from informal networks as a coping mechanism. First, recent studies on perceived receipt of informal financial support suggest that between 80% and 88% of disadvantaged populations expects that they would be able to draw on such assistance (Henley et al, 2005; Harknett and Knab, 2007). However, these relatively high rates of perceived access apply to questions about relatively small amounts of money, from $10 to $200. Received informal financial support is rare relative to received emotional and in-kind social support (Wellman and Wortley, 1989; Hogan and Eggeheen, 1995).

Second, work in sociology on the inter-generational exchange of social support reveals that support, particularly financial support, generally flows from older generations to younger, suggesting a negative relationship between age and the receipt of informal financial support (Henley et al, 2005; Eggebeen and Hogan, 1990). Additionally, it appears that more highly educated respondents are less likely to report receiving informal support (Henley et al, 2005; Eggebeen and Hogan, 1990).

Finally, a related strand of literature examines how the provision of social support may vary by national context. In particular, this work examines whether the provision of formal support via the welfare state might crowd out more traditional coping mechanisms rooted in social networks. Thus, not just individual, but also country characteristics may play a role in determining the support that people receive from their network of family and friends.

Consumer Credit: While corporations may hold excess cash as a buffer against emergencies, another common strategy is to establish backup credit facilities (See Lins, Servaes and Tufano (2009). Similarly, in response to an emergency, households without savings or a support network might turn to formal credit. While much of household credit serves to fund long-term assets (homes, education, automobiles), a segment of household credit is partially designed to substitute for precautionary savings. The long history of pawn shops demonstrates the long-standing use of secured short-term borrowing for emergencies. Caskey (1994) details the history and economic role of these short-term lenders, as well as payday lenders. Morse (2009) studies foreclosures in the wake of natural disasters in California and finds that the existence of payday lenders, which can provide short term buffer funding, materially reduces the incidence of foreclosure. Elliehausen and Lawrence (2001) find that 66% of payday loan users surveyed claim to use payday loans to deal with an emergency. More generally, some financial planners have argued that households with access to borrowing should forgo emergency savings altogether. (For an example of this arguments, see Hatcher (2000)).[1] Zinman (2007) examines the substitutability between cash holdings and borrowing, finding that they are imperfect substitutes.

Work Effort: Finally, households can cope with small emergencies by changing their work efforts, either by working additional hours, getting an additional job, or by having an

[1] http://6aa7f5c4a9901a3e1a1682793cd11f5a6b732d29.gripelements.com/pdf/vol1125.pdf

unemployed family member join the workforce. For example, the shock we study (raising US$2000 in 30 days) might require someone to work an additional 276 hours at minimum wage (pre-tax) over the next 30 days, or 9.2 hours a day, which would probably not be realistic. However, it is less unrealistic to think that an unemployed family member, especially one at a higher wage rate, might be able to raise this sort of funds, or a portion of them. Warren and Tyagi (2003) note that this additional flexibility might be severely compromised in two-wage-earner families whose full time salaries are already committed to pay for expensive housing in communities with excellent public schools. The testable implication of this work is to suggest that certain family structures (married with children) may be less able to tap additional labor force income to deal with emergencies.

Summary. There are voluminous literatures on savings, support networks, borrowing and labor force participation dealing, in part, with how these activities can be used to cope with emergencies. Our survey will allow us to test how these methods are used by families to cope with emergencies, and how differences in their utilization relate to demographic and national factors.

3. Data and Methods

Data:

We analyze a new data source, the Global Economic Crisis survey, fielded between June and September 2009 in thirteen countries: the United States, the United Kingdom, Canada, France, Germany, Italy, the Netherlands, Portugal, Luxembourg, Singapore, Hong Kong, Argentina, and Mexico. The survey was administered by the survey research firm TNS Global under the direction of two of the authors, Lusardi and Tufano. The country samples were designed to be nationally representative and were subsequently weighted to reflect each nation's population. In total, 13,853 respondents were interviewed in the thirteen countries.

The survey included question modules on a number of topics with two primary purposes: (1) to measure changes in economic, health, and demographic behavior since the economic crisis and to (2) to measure individuals' knowledge of financial risk and individuals' risk management behaviors. We draw on the second portion of the data for this analysis.

Though many of the same questions were asked in each of the thirteen countries, data was not collected in such a way as to be fully comparable for a number of important covariates

for this study. For that reason, we restrict our sample to six countries: the United States, the United Kingdom, Canada, France, Germany, and Italy, yielding an analysis sample of 7,420 cases. Each of these countries used the same type of survey procedure. The data are weighted to adjust for country-size.

Measures of Household Risk, Capacity, and Coping Mechanisms

Risk typically is measured relative to a probability-weighted set of consequences consisting of two elements: the probability of outcomes (or weights) and the contingent consequences of outcome. Risk measures, like Value@Risk or VAR, gauge "how bad" outcomes might things be for certain percentiles.

Analogously, we constructed a three-part nested question to measure household risk and coping, the first designed to measure the perceived likelihood of a shock (risk assessment), the second measuring respondents' confidence in being able to cope with such a shock (capacity), and the third, the specific coping strategies that respondents would employ (conditional on having some confidence in ability to cope). In this way we unbundled the three elements of risk.

Risk exposure. There are, certainly, many ways that one might measure risk. As an analogy, consider the field of corporate risk management. There are many different measures of risk in investment management and in corporate settings such as volatility, beta, value-at-risk, and cash flow at risk, among others. In studying households, we sought to capture a base level of risk. Specifically, we asked households, "*Thinking about your life and the kinds of things that could happen, how likely is it that you might need to come up with [USA $2,000 equivalent] for an unexpected expense in the next month*," and then asked households to rate the likelihood on a scale of 1 (very unlikely) to 10 (very likely). In constructing this question we adopted a somewhat more costly economic shock than has been used in the social support literature, which, as mentioned before, generally asks about shocks of a few hundred dollars or less, but somewhat less than the level of savings for emergency used in the asset poverty literature. Instead, we sought to gauge exposure to an "everyday" shock, the kind that might result from a major car repair, heating system repair, or meeting a health care deductible and would give rise to

"relatively small" financial requirements.[2] Further, since unlike in many studies of social support, our sample is not confined to a low-income population, a somewhat higher level of financial cost is warranted.

Risk-bearing Capacity. To assess respondents' confidence in their ability to cope with a small financial shock of this kind, we asked respondents, "*How confident are you that you could come up with [USA $2,000 equivalent] if an unexpected need arose within the next month?*" Respondents could reply, "*I am certain I could come up with the full [USA $2,000 equivalent*]," "*I could probably come up with [USA $2,000 equivalent]*," "*I could probably not come up with [USA $2,000 equivalent*," or "*I am certain I could not raise [USA $2,000 equivalent]*." Respondents could also refuse or could state that they did not know.

Coping Strategies. We sought to determine how respondents who had at least some confidence in their ability to cope with financial shock planned to do so. We asked respondents, "*If you were to face a [USA $2,000 equivalent] unexpected expense in the next month, how would you get the funds you need?*" Respondents were presented with a list of 14 options (plus "other" and "don't know") and were instructed that "*if there is one source that you would use, select it. If you would use multiple sources, please select up to three*." The list of 14 options was randomized onscreen to avoid response-order bias. The list included several different ways in which respondents might respond, including drawing from private savings ((1) *draw from savings*, (2) *liquidate or sell investments*, (3) *liquidate some retirement investments even if it required me to pay a penalty*), utilizing social networks ((4) *borrow or ask for help from my family*, (5) *borrow or ask for help from my friends (not members of my family*), accessing credit ((6) *use credit cards*, (7) *open or use a home equity line of credit or take out a second mortgage*, (8) *take out an unsecured loan*, (9) *get a short term payday or payroll advance loan*, (10) *borrow against my retirement savings at my employer*), increasing work effort ((11) *work overtime, get a second job, or another member of my household would work longer or go to work*), or selling assets ((12) *pawn an asset I owned*, (13) *sell things I owned, except my home*, (14) *sell my home*). This question was asked of all respondents except those who reported that they were certain that

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[2] While the figure is admittedly *ad hoc*, it is grounded in real world data. Brobeck (2008) reports that low-income families claim to need about $1500 in savings. Edmunds.com, the auto advice web site, suggests that the replacement of an auto transmission can cost $2000.
http://www.edmunds.com/ownership/techcenter/articles/43836/article.html

they would be unable to raise the amount of money to cope with an unexpected expense as described in the second question in the sequence.

Each of these questions is subject to the same sort of issues that any survey might face, but nevertheless serve as the best way to ascertain forward looking predictions of risk exposures, capabilities, and coping mechanisms. We provide descriptive statistics and univariate results before examining the determinants of each risk element.

4. Risk Exposure: Perceptions of the Likelihood of a Financial Shock

Risk exposures might arise from an unexpected loss of income or an unexpected expense, but the question asked in the survey framed the risk around the latter: unexpected expenses. An unexpected expense could come from an unplanned need to replace an item that broke (car, heating system, refrigerator, etc) or to remedy a person's problems (medical bill, legal bill, etc.). The person could be the survey taker, or a member of her close network of family and friends. The incidence of risk exposures should increase with the size and structure of the family, as well with the possessions by the individual. Risk exposures should decline in countries where social safety nets, in particular health care expenses, are more fully covered by government programs.

Figure 1 presents the distribution of respondent's assessments of the likelihood that they might face an unexpected expense costing the equivalent of USD $2,000 in the next thirty days. The top panel of the figure pools responses across all six countries. By far the most common response, listed by 25% of respondents, is that such an emergency is very unlikely (ranking one on our ten point scale) and nearly 70% of respondents rate the likelihood of such an expense as five or less on the ten-point scale. In short, most participants felt they were unlikely to suffer a shock of this size in the short term. However, a sizable minority of respondents perceived a higher likelihood. Overall, approximately 31% of respondents rate the risk of a financial shock to lie in the upper half of the risk scale and 15% perceive the risk to be quite high (8, 9, or 10 on the 10 point scale).

The distribution of perceived risk differs by country (Panel B). Perceived risk appears to be particularly high in the United States, lower in France, Italy, and Canada, and least in Great Britain and Germany. In Great Britain and Germany, more than a third of respondents perceive the risk to be very low (rating it a 1 out of 10) as compared to 25% of Canadian and 30% of French respondents, and to just 20% and 19% of respondents in Italy and the United States,

respectively. Respondents in Great Britain and Germany are also less likely to perceive a high risk of financial shock, just 10% and 7% (respectively) rated the risk as being between 8 and 10. Perceived risk was higher in Canada (16%), France (18%), and the United States (18%). Examining the distribution of perceived risk as a whole, it appears to decline fairly monotonically in Germany and Great Britain and to be significantly flatter in the United States.

Table 1 shows the correlates of perceived risk. We first estimated a simple linear regression including only dichotomous indicators for respondents' country of residence (Model 1). The coefficients show the association between country and perceived risk, relative to the United States. Looking at means, the same ranking of countries described before appears in Table 1. Respondents in Great Britain and Germany perceive lower levels of risk than those in the United States. So do respondents in France, Canada, and Italy, but here the gap from the United States is smaller.

In model (2), we include a number of household-level covariates in addition to the country dummies to examine how individual and household characteristics are associated with perceived risks (risk factors). In particular, we include a control for gender (1=female, 0= male) and age dummies (1 = 16-24; 2 = 25-34; and 3 = 35 to 65). We also control for education (1 = high school or less; 2 = some college or technical school; and 3 = college or more). We control for two additional measures of affluence: income (coded into quartiles) and financial wealth (coded into four percentile groups: 0 – 30 percentile; 30 – 60 percentile; 60-90 percentile; and 90 – 100 percentile). In addition, we include a control designed to gauge respondents' financial planning behavior. We constructed an additive scale variable (alpha = 0.6973) based on questions about whether respondents had engaged in seven activities in the past as follows: (1) wrote down a plan for your income and expenses for the coming year, (2) reviewed your retirement statements and accounts, (3) tried to figure out how much you and your family need to save for retirement, (4) calculated the value of what you own and what you owe, (5) tried to determine what type and how much insurance coverage you need, (6) considered you much your financial holdings might change depending on the performance of the financial markets, and (7) actively learned about financial matters. We also constructed a second measure designed to capture risk literacy. Respondents were asked three questions about the calculation of risk (one valuing a business investment, another a lottery, and a third a financial investment) and were coded as 1 if they answered all three correctly and 0 otherwise. Finally, we include a measure of

respondents' financial losses since the onset of the global economic crisis. Respondents were asked if their wealth had increased (> 10% or 1% - 10%), stayed the same, or decreased (1% - 10%; 10% - 29%; 30% - 50%; or > 50%).

We eliminate cases with missing data on education, age, children, gender, financial planning, likelihood of an emergency, and confidence in ability to cope with an emergency. We use dummy variable indicators for cases in which there is missing data on wealth, change in wealth, or income. These procedures yield a final sample of 6,215 observations. The results of the model, with standard errors adjusted for clustering at the country-level, are presented in Model 2 of Table 1.

First, while controlling for individual and household-level characteristics generally diminishes the country-level differences in perceived risk, these differences are not eliminated. Respondents in Great Britain and Germany still perceive lower likelihood of a financial shock, and, to a lesser extent, so do residents of France, Canada, and Italy, all relative to the United States.

Second, there are few strong associations between perceived risk and the demographic and economic characteristics of individuals and households. Perceptions of small shocks apparently are similar across many groups. We find no significant links between gender, education, income, or wealth and perceived likelihood of a financial shock. We do, however, find that respondents in households with children perceive themselves to be at higher risk for an emergency (beta = 0.503, $p < 0.001$) and that older respondents (relative to those age 16-24) also perceive themselves to be at higher risk. Both of these groups are likely ones with greater "responsibilities."

We also find a positive association between financial planning behavior and perceived risk, although it is impossible to disentangle the causality. Planners may be more aware of the emergencies of everyday life, people more at-risk might be more motivated to plan, or planning and risk perceptions may capture the latent common factor, such as pessimism – these respondents may just be more prone to seeing a worrisome future.

We find a negative relationship with risk literacy. Most importantly, we find that households who have lost wealth since the financial crisis perceive a higher likelihood of experiencing a financial shock. This relationship is statistically significant and increases with the extent of wealth loss. It may be that wealth losses have left these households at greater risk of

emergency by reducing the level of investment income, or that households who have experienced one type of loss feel themselves at greater risk of another.

5. Risk-Bearing Capacity: Confidence in Ability to Cope

We turn next to analysis of respondents' confidence in their ability to cope with an unexpected expense. We begin with some descriptive univariate statistics. Figure 2 presents the distribution of responses by country. Respondents in the United States, Great Britain, and Germany are less confident in their ability to cope with a financial shock than the other three countries. A third of British respondents state that they are "certain" that they *could not* raise USD $2,000 equivalent in the event of an unexpected expense as are 28% of Americans and Germans. Further, just a quarter of Britons and Americans and a third of Germans are "certain" that they *could* raise the funds. This stands in contrast to the reports of respondents in Canada and Italy where 17% and 8% respectively report being certain that they *could not* raise the funds and 45% and 49% report they certainly *could*. Collapsing the categories, just 29% of Canadians and 19% of Italians report that they would be certainly or probably unable to raise the funds as compared with 52% of Britons, 50% of Americans and 50% of Germans. Against the results presented in Section 4, we can discern a rough division of countries. In Great Britain and Germany, ability to cope is fairly low, but so is perceived risk. In France, Canada, and Italy, perceived risk is fairly high, but so is the ability to cope. In the United States however, perceived risk is quite high and ability to cope is fairly low. Americans, it appears, perceive themselves to be both exposed and vulnerable.

We attempt to estimate the relative size of this vulnerable population in each country in Table 2. In the United States, 19% of respondents are at high risk of a shock and report low capacity to deal with it. In contrast, just 10% of respondents in Great Britain and 8% of respondents in Germany find themselves in that situation. Occupying a middle ground, 17% of respondents in France and Canada and 13% in Italy find themselves exposed to risk in this way.

In Figure 3, we plot the confidence in the ability to cope with a shock (re-coded into a dichotomous measure of confident/probably able to cope = 1 vs. not confident/probably not able to cope = 0) by country, age, education, income, wealth, and change in wealth (red bars). We also plot the mean value of respondents' perceived likelihood of experiencing a financial shock (rescaled from 0 to 10 to 0 to 1.0) by those same covariates (blue bars). The contrast between the variation in perceived risk and the variation in confidence by these characteristics is striking.

In each case a similar pattern emerges: there is little variation across the SES gradient in response to the first question. Respondents with more or less education, income, or wealth perceive similar levels of risk of an unexpected event with the average around 0.43 out of 1.0 (blue bars). However, there are strong gradients in terms of respondents' assessments of their ability to respond to such an unexpected expense (red bars). For instance, 67% of respondents with at least a college degree report that they could probably or certainly come up with USD $2,000 equivalent in the event of an unexpected expense compared with just 46% of respondents with a high school degree or less. In short, both some of the rich and some of the poor think an unexpected expense could befall them, but, the poor have much less ability to respond to such an event.

The story is somewhat different when we examine variation in these two measures by changes in wealth since the economic crisis. There appears to be a positive relationship between wealth loss and perceived likelihood of a financial shock (a relationship that appeared to be robust and statistically significant in Model 2 of Table 1). Moreover, respondents' confidence in ability to respond to such a shock decreases with wealth loss. In the extreme, for respondents who have lost at least half of their wealth, respondents rate the risk of a financial shock a 5.4 out of 10 and only 23% are at least somewhat confident in being able to respond.

These univariate results obviously fail to capture the many interactions in the variables. Model 4 of Table 1 presents marginal effects from a probit regression model of ability to cope. Here, confidence in ability to cope is recoded as a dichotomous measure and the only predictor variables are dichotomous measures of country. The differences between the countries are statistically significant with Britons actually somewhat less likely to report confidence in ability to cope than Americans and with Italians, French, Germans, and Canadians all more likely to be confidence in their ability to cope than Americans.

Model 5 introduces the same set of controls as described for Model 2. As one might anticipate from the descriptive results presented in Figure 3, there are many more significant associations between confidence in the capacity to cope with risk and economic and demographic characteristics than there were with likelihood of a financial shock. The estimates in Model 5 indicate a relatively steep socio-economic status gradient to risk-bearing capacity.

One would expect households with fewer familial financial resources (income or wealth) to be less able to deal with a small financial shock. People who experienced a recent shock to

wealth might feel even more exposed than other with similar ex post wealth. Beyond this, one might expect certain households that are typically considered more financially vulnerable (young, poorly educated, female-headed households) to be less able to deal with small financial shocks, although less so when one controls for income and wealth. Indeed, we find all of these factors to predict households' perceived risk-bearing capacity.

Respondents who have lost more wealth, who are female, who are younger, who have children, who have less education, with lower relative incomes, and with lower relative wealth are all less likely to report that it is certain or probable that they could raise the equivalent of USD $2,000 in the event of an unexpected expense. Many of these differences are quite large. For instance, as compared with households who have wealth in the top decile, those households with wealth in the bottom three deciles are 46% points less likely to be able to raise such emergency funds. Households in the bottom quartiles of income are 24.5% points less likely to be able to raise such funds than households in the top income quartile.

Furthermore, we find that "planners" as defined above are more confident of their capacity to bear a small financial shock. We also find that persons who are the most "risk literate" as defined by correctly answering three questions about probabilities regarding lotteries, project risk, and the relative risk of diversified versus undiversified portfolios, are more confident of their ability to weather a small financial shock.

Overall, we believe that these results show a fairly high level of financial fragility: large fractions of national populations seem unable to cope with fairly small everyday financial shocks. Especially in the United States, almost half of Americans cannot raise $2000 within 30 days, from any means. While we cannot directly measure the consequences of this situation, it suggests that broken cars, broken heating systems, as well as unexpected medical expenses, legal bills, and funeral expenses may have serious ramifications for many families.

6. Coping Mechanisms

How specifically do respondents plan to cope with a financial shock? As discussed in section 2, economists tend to focus on precautionary savings and sociologists on social support. In reality, both of these—along with formal credit, changing labor patterns, and selling what one owns—are ways in which households plan to cope with small financial shocks. Figure 4 presents data on the percentage of respondents listing each of 16 possible responses to the

question of how they would raise the equivalent of US$2,000 in the event of an unexpected expense. All respondents were asked this question, except for those whose stated response to the preceding question was that they were certain that they could not raise $2,000 in the event of an emergency. Respondents were instructed, "*If there is one source that you would use, select it. If you would use multiple sources, please select up to three*." Many respondents list multiple coping mechanisms and so, for that reason, the percentages in the figure do not sum to 100%.

The most common coping mechanism by far is to draw on savings, a strategy listed by 52% of respondents, a rate nearly twice that of the next most frequent response, borrowing or asking for funds from family (27%). The third and fourth most common responses, listed by 18% and 17% of respondents, were increasing work effort and using credit cards. Fourteen percent of respondents reported that they would cope by selling possessions other than a primary residence (Figure 4, Panel A). These five specific coping mechanisms also capture the five functional coping strategies – savings, social networks, work, credit, and sales of possessions - into which we can group the remaining response categories.

Panel B of Figure 4 presents these grouped responses, by country. There is some general conformity in the pattern of coping responses across countries. Savings is the most common in each of the six countries (though relatively more common in Italy) while either working more or selling possessions are the least commonly mentioned (though relatively more common in the United States than anywhere else). Seeking help from family or friends is listed by about a third of respondents in Great Britain, the United States, Germany, and France, but only by about a quarter of respondents in Canada and Italy. Consumer credit is a more commonly cited strategy in Canada and the United States than in the European countries.

At least some of this heterogeneity in responses may be explained by between-country differences in the number of coping strategies listed by respondents. Figure 5 displays the share of respondents listing zero, one, two, or three coping strategies by country.[3] Italy stands out for having the lowest share of respondents who lack a coping strategy (13%) and the largest share listing just one coping strategy (58%). In contrast, relatively large shares of respondents in Canada and the United States listed two or three coping strategies, 40% and 36% respectively,

[3] Where respondents who reported that they could certainly not raise $2000 to cope with an unexpected expense are coded as having zero coping strategies.

while large shares of respondents in the United States, Germany, and Great Britain had no ways of coping. These two dimensions – no coping mechanisms and multiple coping mechanisms – may each point to a kind of financial fragility. Just as the lack of an ability to cope with an expense leaves a household exposed to financial risk, the need to draw on multiple sources in order to raise $2,000 may also suggest shallowness in household resources whether in terms of credit, savings, or family support.

Table 3 divides respondents into three groups based on the number of coping strategies that they list and then presents the share of respondents in each group listing each coping response. The table shows a clear divide between drawing from savings and all of the other coping strategies. More than 60% of respondents who list only one coping strategy list savings. However, the share listing savings declines with the number of coping strategies listed. It is listed by 56% of respondents with two strategies and by 50% of respondents with three. In contrast, the share listing almost every other strategy increases with the number of listed coping strategies. For example, just 12% of respondents listed borrowing or asking from help from family as their only coping strategy. However, 37% of respondents who listed two coping strategies listed drawing on family as one of them and 57% of respondents who listed three coping strategies listed family. This pattern reappears for every other commonly cited coping strategy including help from friends, using credit cards, working more, and selling possessions. While savings, it appears, can often be used as the sole means of raising $2,000, for most respondents the amount of resources available through other means is not sufficient to allow the use of those strategies in isolation.

Given the important and unique role played by savings as a coping strategy, we investigated how the 42% of respondents who did not list drawing on any kind of savings as one of their coping mechanisms thought that they would cope with an unexpected expense (Table 3). In this group, kin support was relatively more common (42% vs. 27% for all respondents) as was increased work effort (24% vs. 18%) and the sale of possessions (22% vs. 14%). We also examined the coping strategies listed by respondents not drawing on social support and not drawing on consumer credit. Sixty-eight percent of respondents listed neither kin support nor support from friends among their coping strategies. Savings was a relatively more common coping strategy among these respondents (63% vs. 53% of all respondents), but other copings strategies were generally equally cited by this group as by all respondents, perhaps pointing to

less reliance on multiple coping mechanisms among this group.

Tables 4 and 5 present the results of regression analysis of the association between economic and demographic characteristics of respondents and reports of coping mechanisms. Table 4 presents marginal effects from probit regressions where the outcome variables are the four most commonly cited coping mechanisms. Table 5 presents similar analyses, but uses the functional groups of coping mechanisms as the outcome variables.

Table 4 shows a number of significant associations between coping mechanisms and many individual and household characteristics. Households that have lost wealth since the crisis are less likely to list savings as a coping mechanism while households who have gained wealth are less likely to list family as a coping mechanism, relative to those whose wealth was unchanged. Similarly, relative to those in the top decile of wealth, less wealthy households were less likely to list savings as a coping mechanism, and more likely to list family, credit cards, and increased work. Controlling for wealth, there were no differences in the likelihood of listing savings by income, but lower-income households were more likely to list family as a coping mechanism and less likely to draw on credit cards. Less educated respondents were less likely to draw on savings or credit cards but somewhat more likely to list family and increased work as coping mechanisms. Across these indicators of socio-economic status, less advantaged respondents were generally less likely to use savings or credit and more likely to list family or increased work effort as coping strategies.

A similar pattern is apparent in the results from Table 5. Less wealthy, less educated, and respondents whose wealth has been more impacted by the financial crisis are all less likely to use any kind of savings as a coping strategy. Here, parsing credit into “mainstream” (credit cards, home equity loans, borrowing against retirement savings, and unsecured loans) and “alternative financial services” (AFS) (payday or payroll loans and pawnshops) sources of credit shows that less advantaged respondents are less likely to use mainstream credit but more likely to use alternative sources of credit. Less advantaged respondents are more likely though to list social networks (family or friends), increased work effort, or the sale of possessions as coping strategies.

In terms of demographics, respondents differ in significant ways by age. Younger respondents (age 16-24) were more likely to list family as a coping mechanism and more likely to list increased work effort (Table 4). Examining the grouped coping mechanisms (Table 5)

reveals that younger respondents were less likely to draw on mainstream credit but somewhat more likely to use alternative sources of credit and to sell possessions. Households with children were less likely to draw on savings, but more likely to list each other type of coping mechanism, perhaps suggestive of their reliance on multiple forms of coping support. Women were more likely to list savings, networks, and increased work, but less likely to draw on alternative sources of credit or to sell possessions.

7. Preliminary Conclusions

This paper reports the results of a multi-country study of households' perceptions of their risk exposures, risk-bearing capacity, and coping mechanisms. The risk studied here is a small financial shock requiring an outlay of US$2000 within 30 days, which might arise from the need to repair an automobile, replace a broken heating system or large appliance, or to take care of unexpected legal bills, medical copayments, or other unplanned expenses. The survey covered residents of six developed countries (US, France, Germany, UK, Canada and Italy).

In general, we find that households perceive the likelihood of a small financial shock as being rather remote; but risk exposure perceptions increase for older adults, families with children, people who have lost greater wealth in the economic crisis, and for people who engage in risk measurement or planning activities. The financial capability to deal with such a shock varies dramatically across the sample, but is lowest for people with lower income, lower wealth, women, young people, families with children, people who are less risk literate, and those who do not engage in planning activities. Finally, people anticipate using a wide range of coping strategies to deal with a financial shock. While drawing upon savings is the top planned coping mechanism, large fractions—and in some cases, even larger fractions—plan to rely on informal networks, increasing work, formal credit, and other means, to deal with emergencies.

This preliminary paper is the first step in a work plan that will result in what we hope is a larger project. Specific analyses to be completed in the future include the following:

- Addition of additional country data, if they can be sufficiently harmonized with the current sample.
- Additional detailed analyses of US data, where we have additional information on individuals, e.g., family structure, race.
- Incorporation of national level data in lieu of country fixed effects to try to isolate

which element of national policies or practices relate to risk exposures, risk bearing capacity or risk coping strategies.

- More explicit study of and incorporation of planning and risk literacy analyses.
- Alternative econometric specifications to test for robustness.

As the field of household finance (see Campbell (2006)) develops, it will be critical to expand our research beyond studying single functions (savings or borrowing) as well as to broaden out beyond studies of behavioral foibles. We believe that a greater understanding of household risk is central to deeper inquiry into household savings decisions, borrowing decisions, and insurance decisions. Furthermore, while studies of larger and more consequential risks (health, unemployment, death, and longevity) are critical, it is important to document and understand more quotidian risks. Families which are financially fragile and unable to deal with these smaller shocks will almost surely be unable to cope with more substantial risks.

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Table 1. Associations between (1) likelihood of needing $2,000 for an unexpected expense in next month (coefficients from Linear Regression) (2) confidence in ability to raise $2,000 for unexpected expense in next month and Individual Economic and Demographic Characteristics (marginal effects from Probit Regressions). US, UK, Canada, France, Germany, and Italy (TNS, 2009)

Explanatory Variables	Likelihood of needing $2,000 for unexpected expense in next month		Certain or Probable that could raise $2,000 in event of unexpcted expense in next month	
	[1]	[2]	[3]	[4]
Country-Level Fixed Effects				
Great Britain	-1.339 ***	-1.069 ***	-0.020 ***	-0.050 ***
Canada	-0.431 ***	-0.273 ***	0.206 ***	0.198 ***
France	-0.556 ***	-0.212 ***	0.140 ***	0.180 ***
Germany	-1.473 ***	-1.078 ***	0.011 ***	0.042 ***
Italy	-0.171 ***	-0.040	0.307 ***	0.332 ***
United States (reference)	--	--	--	--
Change in Wealth Since Crisis				
Increase wealth > 10%	--	0.311	--	0.013
Increase wealth < 10%	--	0.240	--	0.030
Decrease wealth < 10%	--	0.362 *	--	-0.027
Decrease wealth 10% to 29%	--	0.579 **	--	-0.072 **
Decrease wealth 30% to 50%	--	0.813 **	--	-0.142 ***
Decrease wealth > 50%	--	1.297 ***	--	-0.283 ***
Same (reference)	--	--	--	--
Female	--	0.041	--	-0.028 *
Children Present in Household	--	0.503 ***	--	-0.075 ***
Age				
16 to 24 (reference)	--	--	--	--
25 to 34	--	0.255 ***	--	0.073 ***
35 to 65	--	0.393 **	--	0.154 ***
Education				
High School or Less	--	0.039	--	-0.117 ***
Some College	--	0.080	--	-0.066 *
College or More (reference)	--	--	--	--
Income				
~ 0 to 25th percentile	--	-0.160	--	-0.245 ***
~25th - 50th percentile	--	-0.089	--	-0.163 ***
~50th - 75th percentile	--	-0.145	--	-0.105 *
~75th to 100th percentile (reference)	--	--	--	--
Financial Wealth				
~ 0 to 30th percentile	--	0.026	--	-0.462 ***
~30th - 60th percentile	--	0.093	--	-0.248 ***
~60th - 90th pecentile	--	-0.020	--	-0.047
~90th - 100th percentile (reference)	--	--	--	--
Financial Planning Behavior Scale	--	1.133 **	--	0.044 *
Risk Literacy	--	-0.113 *	--	0.086 ***
Indicators for Missing Values				
DK/REF Income Question	--	-0.562	--	-0.081
DK/REF Financial Wealth Question	--	-0.145	--	-0.127 ***
DK/REF Change in Wealth Question	--	0.115	--	-0.129 ***
Constant	4.669 ***	3.570 ***		
N	6215	6215	6215	6215

* p<0.05, ** p<0.01, ** p<0.001

Notes:

1. Models [1] and [2] estimates are derived from a linear regression model.
2. Models [3] and [4] presents marginal effects from a probit regression
3. analyses are weighted
4. Standard errors are adjusted to account for clustering by country

Table 2. Likelihood of Financial Shock and Confidence in Ability to Cope by Country (Percent of Respondents) US, UK, Canada, France, Germany, and Italy (TNS, 2009)

		United States	Great Britain	Germany	France	Italy	Canada
Low Risk	Low Confidence	20.0	32.6	32.8	13.3	9.6	14.8
	High Confidence	19.4	30.6	29.6	37.2	31.8	32.6
Moderate Risk	Low Confidence	20.2	14.8	12.8	13.1	6.8	8.1
	High Confidence	21.9	12.2	17.3	19.3	38.8	27.8
High Risk	Low Confidence	10.4	5.2	3.9	9.8	2.5	6.2
	High Confidence	8.1	4.6	3.7	7.2	10.6	10.6

Table 3. Coping Mechanisms for All Respondents, by Number of Coping Strategies, and for Respondents Not Reliant on Savings, Networks, or Credit (Percent of Respondents) US, UK, Canada, France, Germany, and Italy (TNS, 2009)

	All	Coping Strategies for Respondents by Number of Strategies[1]			Coping Strategies for Respondents NOT Using		
		One	Two	Three	Savings	Network	Credit
Share of Respondents	100.0	48.9	16.9	26.9	41.6	68.2	70.5
Draw from Savings	52.5	60.9	55.7	49.3	--	62.8	58.8
Liquidate or Sell Investments	4.9	2.2	5.0	11.0	--	5.6	4.5
Liquidate Some Retirement Investments, Even If Required to Pay a Penalty	3.3	1.6	3.8	7.1	--	3.6	3.0
Borrow or Ask for Help from My Family	27.4	12.1	36.8	56.7	41.5	--	27.3
Borrow or Ask for Help from My Friends	7.6	2.7	9.1	17.7	13.5	--	7.8
Use Credit Cards	16.9	7.3	29.0	31.4	19.6	17.8	--
Open or Use a Home Equity Line of Credit or Take Out a Second Mortgage	5.0	2.6	6.2	10.2	7.2	5.6	--
Take Out an Unsecured Loan	5.7	2.3	7.2	12.3	9.8	5.2	--
Get a Short Term Payday or Payroll Advance Loan	3.6	1.0	3.0	9.5	5.9	2.8	--
Borrow Against my Retirement Savings at My Employer[2]	5.0	3.3	16.4	0.0	0.0	5.9	--
Work Overtime, Get a Second Job, or Another Member of My Household Would Work Longer or Go to Work	17.7	4.0	21.0	45.2	24.2	14.0	17.2
Pawn an Asset I Owned	4.9	0.6	5.2	13.9	9.6	3.4	5.6
Sell Things I Owned, Except My Home	13.6	2.5	17.3	35.2	22.1	10.2	14.0
Sell My Home	0.4	0.2	0.8	0.6	0.4	0.5	0.4
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Don't Know	4.7	1.3	5.6	0.0	9.9	6.0	5.9

Notes:

1. 7.3% of respondents listed no ways of coping
2. Asked of US respondents only

Table 4. Top Four Coping Mechanisms: Associations between Sources of Funds for Unexpected Expenses and Individual Economic and Demographic Characteristics, US, UK, France, Germany, Italy, and Canada. Marginal Effects from Probit Regressions (TNS, 2009)

Explanatory Variables	Source of $2,000 if Faced Unexpected Expense in Next Month			
	Savings	Family	Credit Cards	Increase Work
	[5]	[6]	[7]	[8]
Country-Level Fixed Effects				
Great Britain	0.006	0.042 ***	0.012	-0.036 ***
France	0.106 ***	0.014	-0.078 ***	-0.019 *
Germany	0.081 ***	0.059 ***	-0.075 ***	-0.051 ***
Italy	0.247 ***	-0.056 ***	-0.064 ***	-0.087 ***
Canada	0.050 ***	-0.025 ***	0.100	-0.044 ***
United States (reference)	--	--	--	--
Change in Wealth Since Crisis				
Increase wealth > 10%	0.027	-0.097 ***	-0.036 *	-0.024
Increase wealth < 10%	0.075 **	-0.095 **	-0.029 *	0.018
Decrease wealth < 10%	0.028	-0.054	0.023	-0.007
Decrease wealth 10% to 29%	-0.036	-0.015	-0.026	0.017 **
Decrease wealth 30% to 50%	-0.063 **	-0.016	0.021	0.004
Decrease wealth > 50%	-0.170 **	-0.007	-0.001	-0.015
Same (reference)	--	--	--	--
Female	0.074 ***	0.054 ***	-0.025 *	0.042 ***
Children Present in Household	-0.090 ***	0.057 ***	0.020 **	0.036 *
Age				
16 to 24 (reference)	--	--	--	--
25 to 34	-0.049	-0.110 ***	-0.008	-0.053 ***
35 to 65	-0.004	-0.249 ***	-0.010	-0.168 ***
Education				
High School or Less	-0.123 ***	0.027 *	-0.053 ***	0.029 ***
Some College	-0.082 **	0.023	-0.017	0.037 ***
College or More (reference)	--	--	--	--
Income				
~ 0 to 25th percentile	-0.084	0.079 ***	-0.068 *	-0.001
~25th - 50th percentile	-0.072	0.062 ***	-0.062 ***	0.030
~50th - 75th percentile	-0.047	0.022	-0.046 **	0.026 *
~75th to 100th percentile (reference)	--	--	--	--
Financial Wealth				
~ 0 to 30th percentile	-0.462 ***	0.309 ***	0.086	0.162 ***
~30th - 60th percentile	-0.177 **	0.231 ***	0.082 ***	0.122 ***
~60th - 90th pecentile	0.044 *	0.096 ***	0.040 **	0.023
~90th - 100th percentile (reference)	--	--	--	--
Financial Planning Behavior Scale	0.067 **	0.004	0.041 *	0.147 ***
Risk Literacy	0.077 ***	0.018 *	0.036 ***	-0.017
Indicators for Missing Values				
DK/REF Income Question	-0.009	0.011	-0.033	0.012
DK/REF Financial Wealth Question	-0.072	0.151 ***	0.040	0.066 **
DK/REF Change in Wealth Question	-0.101 ***	-0.012	-0.025	0.016
N	4762	4762	4762	4762

* p<0.05, ** p<0.01, ** p<0.001

Notes:

1. Models [5] - [8] present marginal effects from probit regressions.
2. Models [1] - [4] exclude repondents who reported that the certainly could not raise $2,000 for an unexpected expense in the next month
3. Standard errors are adjusted to account for clustering by country

Table 5. Grouped Coping Mechanisms: Associations between Sources of Funds for Unexpected Expenses and Individual Economic and Demographic Characteristics, US, UK, France, Germany, Italy, and Canada. Marginal Effects from Probit Regressions (TNS, 2009)

Explanatory Variables	Source of $2,000 if Faced Unexpected Expense in Next Month					
	Savings	Networks	Credit		Increase Work	Sell Possessions
			Mainstream	AFS		
	[9]	[10]	[11]	[12]	[13]	[14]
Country-Level Fixed Effects						
Great Britain	-0.001	0.038 ***	-0.027 ***	-0.032 ***	-0.036 ***	-0.003
France	0.085 ***	0.009	-0.125 ***	-0.035 ***	-0.019 *	-0.031 ***
Germany	0.065 ***	0.056 ***	-0.051 ***	-0.010 ***	-0.051 ***	-0.048 ***
Italy	0.242 ***	-0.071 ***	-0.141 ***	-0.028 ***	-0.087 ***	-0.114 ***
Canada	0.068 ***	-0.033 ***	0.108 ***	-0.018 ***	-0.044 ***	-0.050 ***
United States (reference)	--	--	--	--	--	--
Change in Wealth Since Crisis						
Increase wealth > 10%	0.046	-0.079 ***	-0.063 ***	-0.013	-0.024	0.006
Increase wealth < 10%	0.095 ***	-0.083 **	-0.044 *	0.031 ***	0.018	-0.008
Decrease wealth < 10%	0.064 ***	-0.032	0.035 *	-0.008	-0.007	0.022 **
Decrease wealth 10% to 29%	0.012	-0.003	-0.031	0.047 ***	0.017 **	0.035 ***
Decrease wealth 30% to 50%	0.007	-0.009	0.004	0.042 ***	0.004	0.032 ***
Decrease wealth > 50%	-0.136 **	0.022	0.003	0.049 **	-0.015	0.048
Same (reference)	--	--	--	--	--	--
Female	0.073 ***	0.021 *	0.000	-0.014 **	0.042 ***	-0.025 *
Children Present in Household	-0.100 ***	0.066 ***	0.036 ***	0.039 ***	0.036 *	0.010
Age						
16 to 24 (reference)	--	--	--	--	--	--
25 to 34	-0.043	-0.112 ***	0.012	0.007	-0.053 ***	0.001
35 to 65	0.016	-0.256 ***	0.021 *	-0.014 **	-0.168 ***	-0.049 ***
Education						
High School or Less	-0.145 ***	0.040 ***	-0.052 **	0.053 ***	0.029 ***	0.051 ***
Some College	-0.090 ***	0.033 **	-0.014	0.042 ***	0.037 ***	0.027
College or More (reference)	--	--	--	--	--	--
Income						
~ 0 to 25th percentile	-0.065	0.103 ***	-0.090 **	0.049 ***	-0.001	0.061 **
~25th - 50th percentile	-0.071	0.084 *	-0.060 ***	0.049 ***	0.030	0.051 **
~50th - 75th percentile	-0.041	0.022	-0.056 *	0.009	0.026 *	0.030 *
~75th to 100th percentile (reference)	--	--	--	--	--	--
Financial Wealth						
~ 0 to 30th percentile	-0.487 ***	0.360 ***	0.148 *	0.089 ***	0.162 ***	0.146 ***
~30th - 60th percentile	-0.203 **	0.245 ***	0.153 ***	0.050 *	0.122 ***	0.078 ***
~60th - 90th pecentile	0.029	0.096 ***	0.071 ***	0.009	0.023	0.021
~90th - 100th percentile (reference)	--	--	--	--	--	--
Financial Planning Behavior Scale	0.144 ***	0.038	0.098 ***	0.045 *	0.147 ***	0.087 ***
Risk Literacy	0.065 **	0.015	0.045 ***	0.002	-0.017	-0.032
Indicators for Missing Values						
DK/REF Income Question	-0.021	0.019	-0.087 *	0.002	0.012	0.026
DK/REF Financial Wealth Question	-0.087	0.158 ***	0.060	0.001	0.066 **	0.019
DK/REF Change in Wealth Question	-0.090 **	0.000	-0.020	-0.001	0.016	0.017
N	4762	4726	4726	4726	4726	4726

* p<0.05, ** p<0.01, ** p<0.001

Notes:

1. Models [1] - [4] present marginal effects from probit regressions.
2. Models [1] - [4] exclude repondents who reported that the certainly could not raise $2,000 for an unexpected expense in the next month
3. Standard errors are adjusted to account for clustering by country

Figure 1. Distribution of Likelihood of an Unexpected Expense

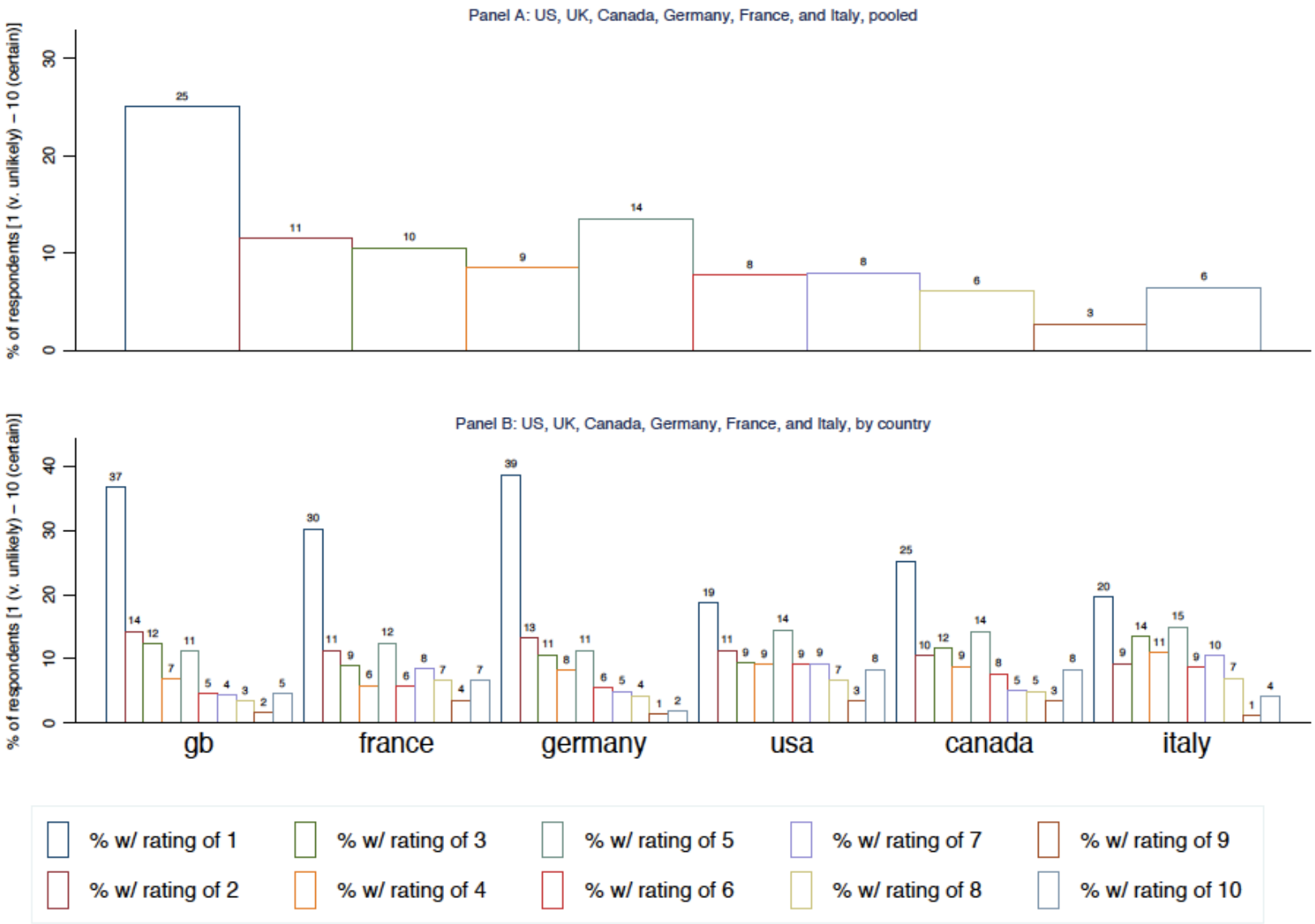

Figure 2. Distribution of Confidence in Ability to Cope with an Unexpected Expense by Country

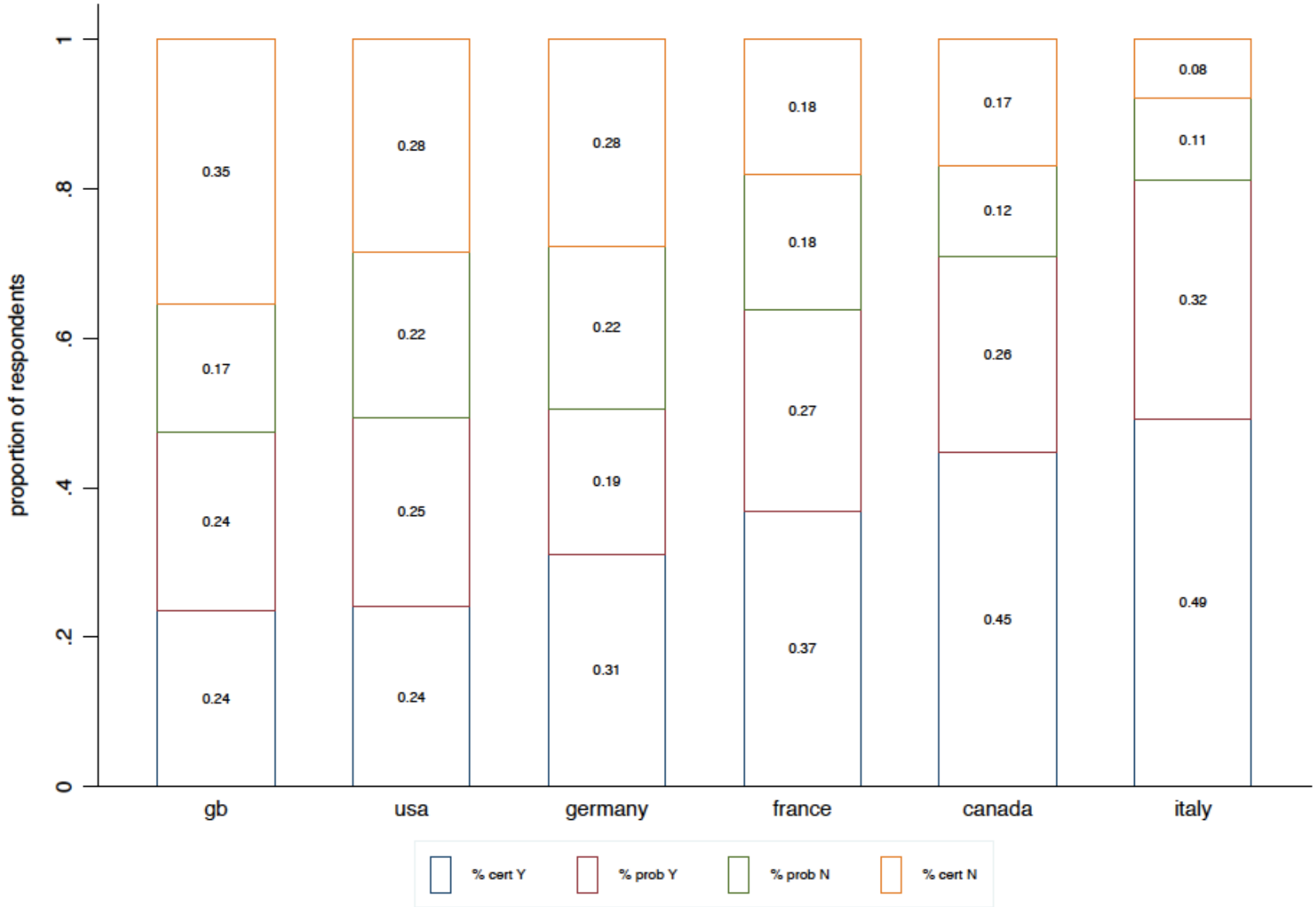

Figure 3. Likelihood of Needing to and Confidence in Ability to Cope with an Unexpected Expense

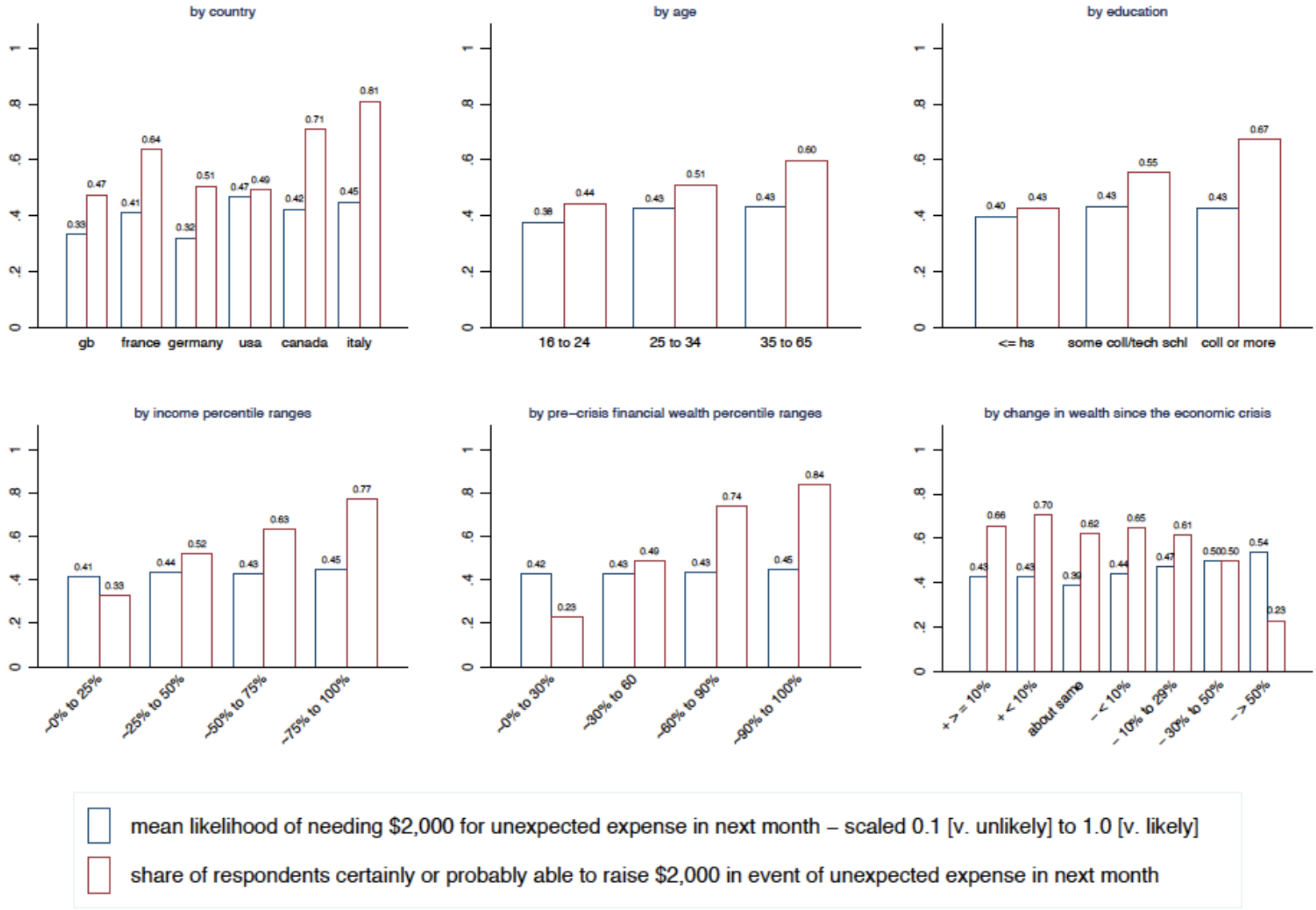

Figure 4. Methods of Coping with an Unexpected Expense

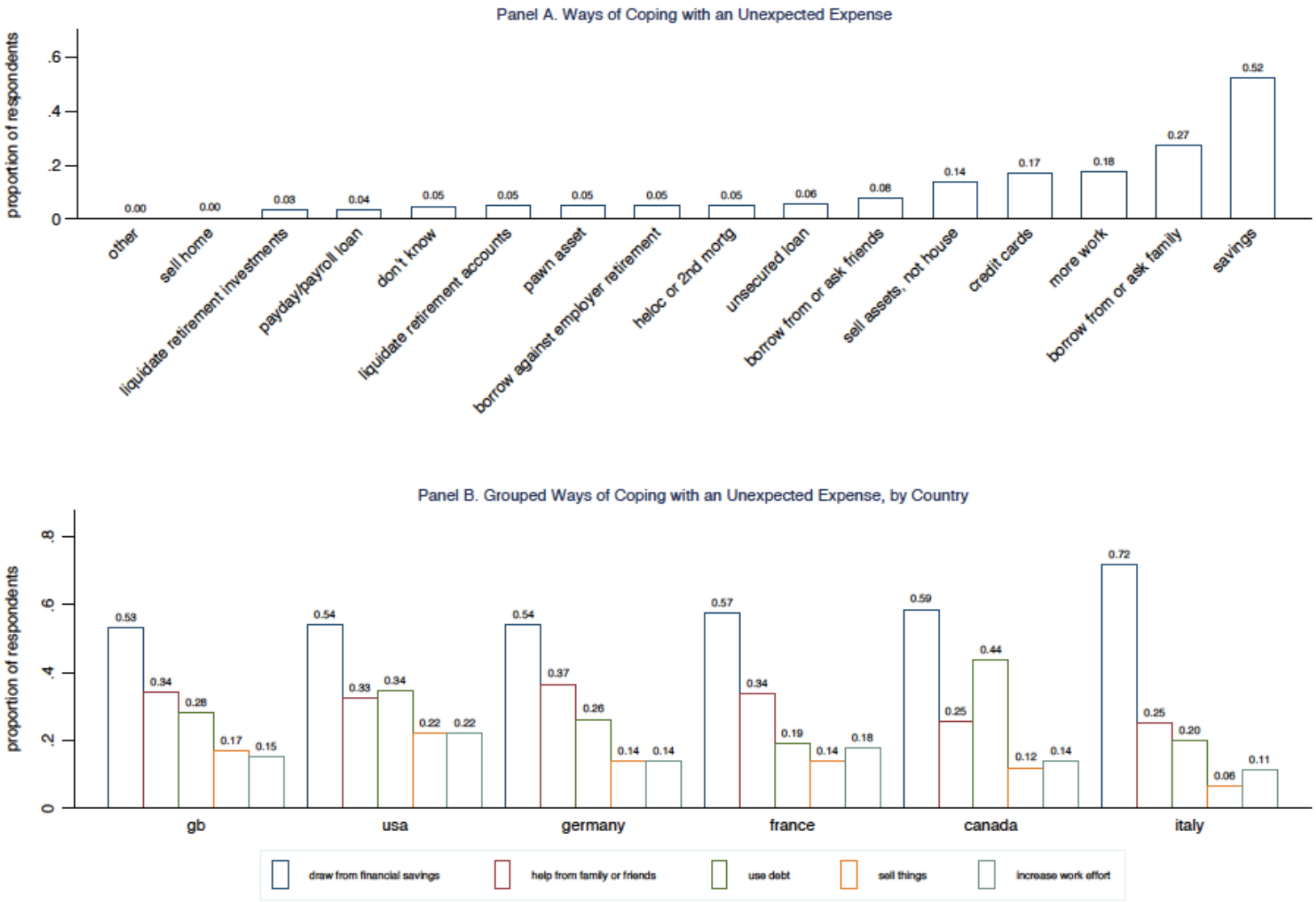
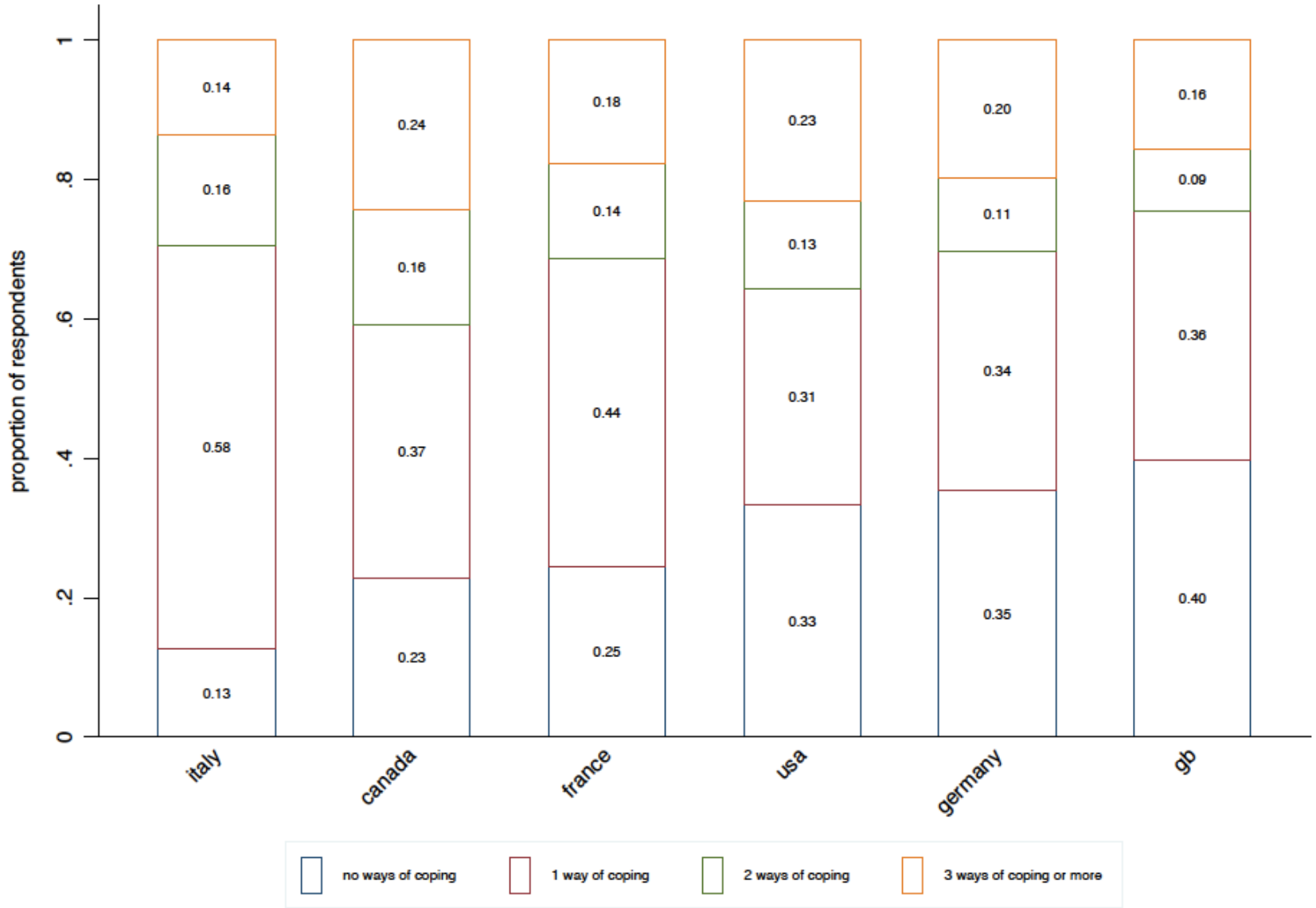
Figure 5. Distribution of Number of Ways of Coping with an Unexpected Expense by Country