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Quasi-experimental Evidence from Russia

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Fear, Soft Propaganda, and the Demand for Government Intervention: Quasi-experimental Evidence from Russia*

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Abstract

We explore the impact of fear on demand for government intervention. Our empirical strategy takes advantage of a unique quasi-experiment: During our survey in Russia, a very popular television program misreported the riskiness of the Covid-19 virus, thereby providing short-term exogenous variation in the fear of infection. Using a shift-share instrument based on this media intervention, we estimate a *causally* positive effect of fear on popular approval of a variety of government interventions. The magnitudes of this effect are remarkable, with a one-standard-deviation change in fear explaining as much as 77-103 percent of a standard deviation in our aggregate measure of demand for regulation, and 99-167 percent and 85-96 percent of a standard deviation in obligatory mask wearing and stay-home orders, respectively. However, fear had little impact on demand for interventions unrelated to the virus, such as censorship and housing policy. We explore potential mechanisms and establish that fear heightens perceptions of noncompliance with safe behavior by others — a mechanism in line with a neoclassical view that free-riding concerns increase calls for government intervention. Our study informs debates on the demand for regulation, the role of emotions in shaping policy preferences, and the impact of media on political attitudes.

Keywords: Demand for state intervention, soft propaganda, fear, Russia, Covid-19

JEL: D72, D91, H12, I12, I18

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1. Introduction

In recent years, scholars have devoted increasing attention to the role of emotions in shaping political life. They have explored how fear, anger, and disgust move preferences over a range of policies, including immigration, policing, terrorism, and national defense (e.g., Huddy et al., 2005; Bove et al., 2019; Gadarian and Brader, 2023; Young, 2019). This line of research has brought new insights to the study of public policy, but progress is often impeded by the difficulty of finding exogenous sources of variation in emotions, particularly outside of an experimental setting. In many instances, policy preferences shape emotions just as emotions shape policy preferences.

We focus on the role of fear in shaping demand for government regulation in the lives of citizens to stem the spread of Covid-19 using a large survey of 23,000 respondents that we conducted in Russia in 2020 and a natural experiment based on misreporting about the risks associated with the virus. We find that fear of catching the virus *causally* increases demand for a range of regulatory measures – from lockdowns to mask-wearing. The magnitudes of this effect are remarkable: for example, a one-standard-deviation change in fear explains as much as 77-103 percent of a standard deviation in our aggregate measure of demand for regulation, and 99-167 percent and 85-96 percent of a standard deviation in obligatory mask wearing and stay-home orders, respectively. At the same time, fear does not heighten demand for government regulation in areas unrelated to Covid-19, such as censorship or housing policy. These results demonstrate the importance of fear in policy preferences toward government intervention – but only in the areas that are related to the type of fear.

To identify one mechanism by which fear shapes demand for government intervention in the lives of citizens, we demonstrate that fear reduces expectations that others will comply with anti-Covid regulations. This result is in line with the neoclassical view that predicts higher demand for government regulation due to free-riding concerns (Weimer and Vining, 2017; Braithwaite and Levi, 1998).

Moreover, the richness of our data allows us to establish novel results regarding the

financing of government regulation. We show that people in Russia with heightened fear of the virus prefer increased spending on healthcare, more unemployment support, and, to a lesser extent, assistance for businesses recovering from the pandemic. Yet preferences for spending on policies unrelated to alleviating the consequences of the pandemic, like housing improvements, remain unaffected by fear.

An important concern of our study is the potential endogeneity of variation in the fear of catching Covid-19 to many omitted factors. To address this issue, we take inspiration from previous studies on how informational cues shape individual perceptions of the virus (e.g., Vally 2020; Quadros et al. 2021; Haan et al. 2022) and propose a novel instrument based on media misreporting of Covid-19 risks. Our instrument comes from a quasi-natural experiment. While our survey was in the field, a well-known Russian TV show on personal health and medicine ("Living Well") aired an episode greatly understating the lethality of Covid-19. Importantly, the episode did not reflect on any anti-pandemic measures pursued by the government as doing so risked violating a new law, but instead focused exclusively on a general message that one should not fear the disease. Because the broadcast discussed fear rather than government policy, it should only affect demand for regulation through fear and not via preferences over government policy. Following a shift-share approach, also known as the Bartik instrument, we use the exact timing of the episode interacted with the pre-pandemic regional popularity of the TV show to identify an exogenous (quasi-experimental) reduction in fear among the respondents several days after the broadcast. We employ this variation in our first stage in the instrumental variable approach (IV) to estimate a causal relationship between fear and the demand for regulation and find results similar to the baseline OLS estimations with somewhat larger magnitudes.

Our results make several contributions. First, we advance the literature by exploring how fear shapes demand for government intervention. Scholars have examined the impact of various forms of trust on popular demand for regulation but have largely neglected the role of fear (Loewenstein, 2000). This is problematic because emotions, like fear, anger, and disgust

are central to preferences over a range of policies, including immigration, policing, terrorism, and national defense (Gadarian and Brader, 2023). This is also unfortunate because fear can be a far more powerful driver of behavior than is government policy (Goolsbee and Syverson, 2021; Alsan and Yang, 2024) and because fear plays a central role in classic political theories of government intervention going back to Thomas Hobbes. More generally, we contribute to the growing literature on the role of emotions in shaping preferences over policy by employing an exogenous source of fear in our identification (Greene and Robertson, 2017; Young, 2019).

Second, we add to the literature on the role of traditional mass media and misinformation in shaping public attitudes and behavior. Scholars have examined the impact of traditional mass media on public attitudes toward policy, but much of this work has been conducted in the United States (Ananyev et al., 2021; Ash et al., 2023). We present evidence for a country that vastly differs from the US on multiple dimensions, such as income, media landscape, and political freedom. We find that popular television is very capable of convincing its viewers not to fear the Covid-19 infection; yet, in contrast to previous literature on this topic, we are also able to trace the longevity of the effect. Our analysis suggests only a temporary decline in fear, with fear returning to its pre-shock levels after three days. The relatively short-lived nature of the effect suggests some optimism about the somewhat limited scale of harm from similar misinformation.

More broadly, we add to this literature by studying the impact of soft propaganda via a popular television show on policy attitudes (Rosenfeld and Wallace, 2024). Rozenas and Stukal (2019), Syunyaev (2022), Enikolopov et al. (2025), Shirikov (2024) and others have explored the influence of hard news programs on political beliefs, but popular entertainment as a form of propaganda has received much less attention (but see Pan et al., 2022; Mattingly and Yao, 2022; Kim, 2023; Kim and Patterson, 2024; Ang, 2023; Esposito et al., 2023; Jensen and Oster, 2009). By demonstrating the impact of a popular television program on public health, we expand the study of the media under autocracy.

Third, by establishing scope conditions on the impact of fear on demand for government

intervention, we show that the public does not blindly approve of growing state intervention in response to health emergencies. The Russian public is willing to accept greater intervention on Covid-related policies like mask-wearing and lockdowns as well as economic support for those affected by the virus, but does not support government intervention on housing policy or censorship. This indicates that, although Covid-19-induced censorship was quite common in countries such as China (Chang et al., 2022), the public does not broadly back increased government intervention in their daily lives in areas unrelated to the pandemic.

The paper is organized as follows. In section 2, we discuss theories of preferences for intervention and explain our hypotheses. In section 3, we provide background information on the pandemic in Russia. In section 4, we present the data, and in section 5, we explain the empirical strategy – the naive OLS approach and the causal identification strategy using the TV show episode that misreported pandemic risks. In section 6, we show the main results linking fear and demand for government intervention and for censorship. We also report results on the impact of fear on preferences for government spending. In section 7, we conclude.

2. Theory and hypotheses

Emotions, such as fear, anger, and disgust, are central to political life and frequently shape preferences over government policy. For example, Bove et al. (2019) find that increased immigration and fear of crime is associated with greater demand for police protection (Bove et al., 2019; Kriesberg and Klein, 1980). Huddy et al. (2005) show that fear of terrorism is associated with less support for military intervention abroad. Young (2019) induces fear in respondents and then demonstrates that fearful respondents are less likely to engage in political dissent in the autocratic setting of Zimbabwe.

Fear is a "high arousal emotion" that influences risk aversion, worsens cognitive functioning, and heightens sensitivity to threats. It is especially important when the source of fear is personally relevant and people have some control over the threat (Gadarian and Brader,

2023). Whereas anger is often thought to promote confrontation, fear is thought to promote avoidance and a search for less risky options even if these actions are costly (Huddy et al., 2005). For example, Davis and Silver (2004) find that a perceived fear of terrorism increases support for stronger national security policies at the expense of civil liberties, especially among those who trust the government. Wagner and Morisi (2019) review the literature and argue that anxiety/fear affects decision-making by increasing information seeking and risk aversion while having mixed effects on political participation.

We explore the role of fear on preferences over state policy toward Covid-19. We expect that fear of catching the virus may heighten demand for regulation to address this social bad (Renström and Bäck, 2021). This argument rests on the simple claim that those who fear catching the virus may be willing to support greater restrictions on individual liberty in the form of increased regulations than those who do not fear catching the virus. This argument is in line with existing research that fear of Covid-19 positively affects compliance with pandemic-related regulations (Harper et al., 2020; Brouard et al., 2020; Bundorf et al., 2025).

We also study several mechanisms linking fear and demand for government intervention. For example, fear may shape demand for government intervention by increasing expectations that others will free-ride and not comply with anti-Covid measures. Preventing the spread of the Covid-19 virus is a classic public good that relies on collective action for production in the absence of government intervention Campos-Mercade et al. (2021). If one expects others to comply with anti-Covid measures, then demand for state intervention will be low, but fear may heighten this demand. For example, Young (2019) randomly induces mild states of fear in opposition supporters in Zimbabwe and finds that the "fear treatments caused significant... decreases in the perceived likelihood that other opposition supporters would also participate in dissent" adding that "mediation analysis suggests that pessimism about the proportion of other opposition supporters who will also engage in dissent may be the

most important psychological channel through which fear reduces dissent."[1] Similar free-riding concerns are central to neoclassical theories of government regulation. To identify whether this mechanism is at work in our research, we test whether more fearful respondents were less likely to expect others to comply with Covid-19 regulations.

We also explore whether fear increases trust in government and boosts risk aversion as alternative mechanisms by which fear may shape demand for government. Some argue that fear may generate a rally around the flag effect and heighten trust in government — a mechanism that might lead to greater demand for government intervention. See Erhardt et al. (2021) and van der Meer et al. (2023) for such an argument in relation to fear of Covid-19. Petrocchi et al. (2022) find that in Italy risk-aversion was positively correlated with health-related information seeking and the perceived utility of the lockdown to contain the spread of the virus, and Pullano et al. (2020) argues that risk aversion led to a stronger mobility response to lockdown among the senior population in France.

One less explored question is whether the impact of fear on demand for government intervention is limited to the direct source of fear or extends to other policy domains, such as civil liberties. A study in the US following the September 11 terrorist attacks found increased support for government intervention across a wide range of policies from military intervention to immigration to restrictions in civil liberties (Kim, 2016). In a review of the related literature, Wagner and Morisi (2019) state that fear/anxiety "can affect choices and decisions even if they are not directly related to what caused anxiety to emerge, that is, if anxiety is incidental rather than integral." Popular commentators have argued that health crises make the public more willing to support government intervention and cede civil liberties.[2] At the same time, survey experiments from the US and the UK early in the Covid crisis found that party leaders could induce their followers to cede some civil liberties,

[1] To be sure, poltitical dissent and compliance with regulations differ in many dimensions, but are both public goods that rely on collective action for production.

[2] For example, see `https://www.economist.com/leaders/2020/03/26/the-state-in-the-time-of-covid-19`

but that fear of catching the virus did not increase support for illiberal policies (Arceneaux et al., 2020). A study conducted in a more illiberal setting of Romania and Hungary in 2021 similarly found that fear did not increase support for curbing civil liberties (Anghel and Schulte-Cloos, 2023). This leads us to expect that while fear may increase demand for government intervention on policies directly related to Covid-19, it will not influence policies not directly related to Covid-19, such as government censorship.

These arguments are related to several strands of the literature. Most closely related to our work is Renström and Bäck (2021), who conducted survey experiments in Sweden to explore the impact of fear, anger, and anxiety on support for policies to restrict the spread and economic fallout of Covid-19. They induce these emotions by having their respondents read news reports emphasizing different aspects of the Covid-19 crisis, and find that reports inducing anger and fear heightened support for more restrictive policies, while reports inducing anxiety led to greater support for economic compensation. Similarly, Brader et al. (2010) find that in response to a deadly viral outbreak, angry subjects were more likely to engage in political action, whereas fearful subjects were more likely to take protective measures, such as wearing a mask. Whereas these works rely on survey experiments to study the impact of fear on political attitudes, we use observational data and exogenous variation in exposure to a fear-reducing television program.

Our work differs from much research on Covid-19. In particular, we draw a distinction between the demand for regulation and compliance with the regulation. The literature features many excellent studies of compliance with Covid-related regulation, and some that even focus on the impact of fear on compliance, but provides far fewer studies of the demand for Covid-related regulation. Compliance with regulation and the demand for regulation are related but distinct. One can imagine citizens complying with regulations even as they would prefer much lower levels of regulation and citizens violating regulations they support. Distinguishing between these two phenomena is important for our research. Additionally, we go beyond the demand for Covid-19 regulation by exploring preferences over policies that

are not directly related to Covid-19 such as censorship and housing policy.

Our paper is also related to research on demand for governmental intervention but is more narrowly focused. Much cross-national research on demand for regulation relies on rather abstract measures that are often removed from the experience of respondents. Pitlik and Kouba (2015) use data from the World Values Survey and European Values Study that measure regulation using three questions: "Private ownership of businesses should be increased; People should take more responsibility for themselves; Competition is good." In a similar vein, Aghion et al. (2010) use cross-national data from the World Values Survey and the Life in Transition survey and measure regulation by responses to questions about preferences for a planned versus a market economy and for state control of wages and prices. These questions are all pitched at high levels of abstraction and may capture general attitudes toward the state rather than toward any particular intervention by government.

In addition, we recognize that Covid-related measures are a specific form of government intervention in the lives of citizens. Leaving aside its great human costs, the Covid-19 pandemic offers some advantages for studying the demand for government intervention at the individual level. Although many regulatory issues take place beyond public scrutiny or are presented to individuals at a high level of abstraction, governmental responses to the global pandemic are widely covered by the media, and given the stakes involved in regulating Covid-19, individuals are highly motivated to gather information and develop clear preferences over policies. Our work is closer in spirit to studies of the impact of fear on government interventions in high-information issues, such as responses to terrorism and notorious criminal cases, than in more opaque and arcane settings, such as financial market regulations. Our research also speaks better to research on demand for government intervention on issues that depend heavily on the behavior of others, such as environmental disasters and public health.

3. The Russian context

Russia provides an excellent setting to examine the effects of fear on the demand for government intervention. Most importantly, Russia was severely hit by the Covid-19 pandemic, giving Russian citizens clear incentives to fear infection and seek ways to protect themselves. Covid-19 was confirmed to have spread to Russia already by the end of January 2020. Russia quickly resorted to non-pharmaceutical measures to contain the pandemic, including a set of restrictions similar to those introduced in other countries, such as mask-wearing, social distancing, stay-at-home orders, border restrictions, cancellations of events, school closures, and lockdowns, which were euphemistically called "non-working periods." Russia was among the first countries to announce the development of a Covid-19 vaccine and started vaccinating medical personnel in December 2020, before extending their efforts to the general population on January 1, 2021.

By the end of 2020, the first and second waves of the pandemic reached all Russian regions, but to varying degrees. Big cities were hit especially hard. Although Russia's official casualty rate was not exceptionally high by world standards, Russia had the world's highest rate of excess mortality, showing a rather grim picture of Russia's true pandemic experience. Kobak (2021) computes excess mortality in Russia from April to November 2020, and concludes there were 264,100 excess deaths during this period, compared to the 40,500 official Russian Covid-19 deaths in international dashboards during the same period. Official statistics in all Russian regions under study massively understate the pandemic's mortality. Russia's 6.5 to 1 ratio of excess deaths over official deaths was, at the time of the study, the largest across all countries for which data were available, implying that the official Russian Covid-19 death count was utterly unreliable and uninformative for Russian citizens. In December 2020, after we concluded our survey, the Russian government admitted that the true death toll of Covid-19 was much higher than the official one,[3] while continuing to

[3] https://www.theguardian.com/world/2020/dec/28/russia-admits-to-world-third-worst-covid-19-death-toll-underreported

understate the true mortality rate and refraining from adjusting official statistics.

Timonin et al. (2022) analyze Russia's excess mortality in more detail. They find that the virus started to spread quickly in late spring in Moscow and Saint-Petersburg, by far the largest cities, and from there spread to all Russian regions by the end of 2020 with particularly high excess mortality in the fourth quarter of 2020, the period of our survey. They find underrecording to be a large problem in some regions.[4] Despite the all too real human costs of Covid-19, there was, on average, still great variation in popular attitudes toward government measures to address the crisis. We take advantage of this variation to explore the demand for Covid-19 regulation.

Finally, Russia presents an interesting puzzle for understanding demand for Covid-19 regulation: despite exceptionally high levels of excess mortality, a factor which should in theory increase demand for regulation, we still observe comparatively low levels of demand for regulation and significant resistance to measures to contain the virus. In our logic this conundrum is largely explained by the artificially and unrealistically low levels of fear in Russia, driving people to demand less regulation than they would have in the presence of perfect information.

4. Data

We employ unique data from "Research on Covid-19 in Russia's Regions (RoCiRR)," an international collaborative project that included an online survey to measure attitudes and behavior during the Covid-19 pandemic.[5] The authors took part in the design of the questionnaire and the sampling strategy, and the survey was conducted from November 4 to December 11, 2020. Data from the survey was used in a cross-country study of vaccination

[4]Against this background of deliberate misreporting, Russian citizens had reasons to attach little value to the overly optimistic government statistics and fear of catching the virus. Kofanov et al. (2023) show that under-reporting of Covid-19 mortality in Russia has led to lower trust in governmental pandemic statistics.

[5]The survey was approved by Columbia IRB Protocol IRB-AAAT4453, and funded and administered by the International Center for the Study of Institutions and Development (ICSID) at National Research University Higher School of Economics (Moscow, Russia) in collaboration with Ghent University (Belgium) and Columbia University (New York, US).

preferences and published in Arce et al. (2021). All technical parameters of the survey are presented in Appendix C. OMI (Online Market Intelligence) – a reputable online polling company that conducts surveys through its panels in Russia, Kazakhstan, and Belarus, recruited the respondents for the survey.

OMI largely draws its panel from the adult population of cities with more than 100,000 inhabitants. We use this group as our primary data source. Additionally, we made a subsample of respondents in smaller cities and rural areas. We surveyed respondents in the majority of Russian regions, i.e., in 61 federal subjects (regions). In each subnational unit we sought to reach at least 150 respondents and imposed quotas on specific age groups, gender, and education levels to make the sample more representative of the Russian population (see Appendix C with the survey parameters for every region). The remaining federal subjects of Russia did not allow us to meet the requirements of the sample size and quotas on age, gender, and education. Our final sample includes 23,064 respondents of age 18 and older residing in 1,621 localities in 61 regions of Russia (Figure C1 in the Appendix). To ensure the quality of the data, OMI verifies respondent profiles and regularly cleans the panel. In addition, we included three attention checks and distributed them across the survey. Respondents received notifications when they failed attention checks. For those who failed all three attention checks, we required OMI to replace them with new respondents.

To assess the demand for **government intervention**, we first asked the respondents about their attitudes towards a battery of Covid-related regulations like mask-wearing, restrictions on cafes, shops, and services, restrictions on entertainment and religious events, business lockdowns, and stay-at-home orders: *"How justifiable you think are the following temporary measures aimed to contain the spread of Covid-19?"* The scale is from 0 to 10, where 0 corresponds to absolutely non-justifiable and 10 to absolutely justifiable. Additionally, we use the following question about the stringency of measures: *"In general, how stringent should the measures imposed by the state be to contain the spread of the coronavirus infection?"* The scale is from 0 to 10, where 0 means minimum stringency of measures or

no restrictions at all, while 10 means maximum stringency. We take the first principal component of these two measures to capture general demand for **Covid-19 regulation** (Figure A2 shows the loadings of the survey questions, while Table A5 reports respective principal component scores).

In addition, we asked our respondents about their demand for **censorship**, a form of regulation not directly related to Covid-19: *"To what extent do you agree with the following statement: In modern conditions, the authorities must strictly control the content of publications in the media to prevent the dissemination of unconfirmed information, even if this restricts citizens' access to independent sources of information."* It is on a scale from 1 to 7, from totally disagree to totally agree correspondingly.

To measure **fear**, we use the following perception-based question: *"Are you afraid of becoming infected with the coronavirus?"* with the answers on a scale from 1 to 4 corresponding to having no fear at all to being very afraid, respectively.

To probe the mechanisms behind the link between fear and demand for regulation, we employ the following three questions. First, to test the mechanism regarding the free-riding concerns, we use a question about the *relative* non-compliance by others. The scarier the virus is, the more likely it is to heighten concerns of *relative* non-compliance. The free rider problem can then be solved by state regulation. We asked: *"In your opinion, to what extent did people around you comply with the self-isolation regime?"* with the options "complied less than me," "just like me," and "more than me" available. The variable **free-riding concerns** equals 1 when the respondent reports that others "complied less than me" and 0 otherwise, thus indicating a *perceived* collective deficit in adherence to Covid-19 safety measures.

The second question is a standard survey item for **trust in government**: *"How much do you trust the government?"* with a scale from 1 to 5, where 5 indicates the highest possible trust. Third, to measure **risk aversion**, we employed the question analogous to the one used in Falk et al. (2018): *"How much are you generally willing to risk?"* with answers ranging

from 0 (not willing to risk at all) to 10 (very willing to take risks).

Finally, to capture preferences regarding **government spending** we employ the following question: *"In your opinion, how should public spending on the social sphere be changed? Keep in mind that increasing funding often requires increasing tax burdens or reallocating funds from other items of expenditure."* The options included healthcare provision, housing improvements, small and medium business support, and support for the unemployed. Respondents had to choose on a scale from 1, (reduce spending significantly) to 5 (increase spending significantly).

Full details for the variables can be found in Appendix A.

5. Empirical strategy

5.1. Baseline estimates

Our baseline OLS model for the demand for intervention is the following:

$$GovIntervention_{ij} = +\alpha_1 Fear_{ij} + X'_{ij}\Gamma + \epsilon_{ij}, \tag{1}$$

$GovIntervention_{ij}$ is either a first principal component of the demand for Covid-19 regulation measures presented earlier, a particular measure of the demand for Covid-19 regulation or a demand for censorship. X'_{ij} is a vector of controls including basic socio-demographic characteristics of the respondent i (age, gender, education, income, employment), date of the interview, settlement type, and region j's fixed effects. Standard errors ϵ_{ij} are clustered at the region level. $Fear_{ij}$ is our proxy for fear. We expect that demand for Covid-19 regulation will be positively related to $Fear_{ij}$ ($\alpha_1 > 0$) and that demand for censorship will be unaffected by $Fear_{ij}$.

In the next step of our analysis, we deal with the potential endogeneity of fear of catching the virus. In particular, omitted variables and measurement errors could bias our estimates. We address these concerns by employing an instrumental variables strategy. We instrument

the fear of catching Covid-19 with a shift-share instrument based on the relative interest in a health-related TV program around the date of an episode that incorrectly depicted Covid-19 as relatively harmless. We expect this television program to have negatively impacted the perceived threat of Covid-19 and thus reduce fear. We describe this instrument in more detail below.

5.2. Instrumental variable approach using quasi-experimental shift-share design

In this section, we address our concerns about the potential endogeneity of fear. Ideally, such concerns can be overcome in an experimental setting, such as a framing experiment that would over- or underplay risks associated with the virus to a random set of respondents to manipulate their emotion of fear. While such an experiment may have been unethical during the coronavirus pandemic, traditional mass media worldwide have, on many occasions, provided very similar framing treatments to their audiences. Perhaps the most convincing evidence in this regard comes from Fox News, a conservative US channel that downplayed the effects of the pandemic and thus influenced the self-isolation behavior of its viewers via framing of the Covid-related messages (Ananyev et al., 2021; Ash et al., 2023).[6] While the US case was most frequently studied, television reporting on coronavirus was not so different in other parts of the world. Russia was no exception to this rule and allowed various (sometimes contradictory) opinions to be expressed on air. What makes Russia a special, yet ideal, case for our study on demand of regulation is that TV presenters (or studio guests) could not criticize or even comment on anti-Covid regulations imposed by the government due to a newly introduced censorship law. This law, also known as Covid-19 Fake News Law, was signed by President Putin in April 2020 and established administrative and criminal punishment for so-called disinformation about the pandemic.[7] Hence, the Russian media

[6]Interestingly, many experimental studies have documented the persuasiveness of Covid-related informational treatments in different populations (e.g., see Breza et al., 2021; Banerjee et al., 2024; Siddique et al., 2024).

[7]For more information on administrative penalty, see Federal Law No.99-FZ; for criminal penalty see Federal Law No.100-FZ.

sphere provides an ideal quasi-experimental setting for utilizing an informational treatment to induce fear exogenously without directly influencing policy preferences.

In this study, we take advantage of the popular health-related TV program on Russian federal television – Living Well (*Жить Здорово*) – hosted by Elena Malysheva, a medical professional and Russian media celebrity. It has aired weekdays at 10:00 AM since August 16, 2010, and is arguably one of Russian TV's most popular health and lifestyle shows. Elena Malysheva herself has become largely synonymous with the show, especially after some of its episodes became a source for internet memes.

We exploit the episode from November 11, 2020, in which Elena Malysheva claimed that the dangers associated with getting infected with Covid-19 are minimal.[8] While the whole episode is 50 minutes long, its first and main part, titled *Good news about Covid-19*, takes only 13 minutes; it is loaded with statistics and numbers. It opens with Elena Malysheva proclaiming that the spring season, when Covid-19 was a new disease and "no one knew anything", came to an end, and now "we know exactly how dangerous it is" and "hence, today there is good news about Coronavirus." The episode transitions to a presentation with the very first slide stating the risk of dying from a lightning strike (being 1 in 180,746 as in the slides), then followed by a second slide presenting the risk of dying from Covid-19 in the age category of 0-24 years (1 in 3,579,551). The relatively higher mortality from Covid-19 for the age group of 25-64 (1 in 34,354) is then compared to the risk of death by choking on food (1 in 2,618 as in the slide), and mortality in the older cohort of 65+ (1 in 887) is compared to the risks of dying from the heart attack and cancer (1 in 6). The slideshow and the discussion of risks were then followed by four related themes: 1) children do not suffer from Covid-19 and do not actively spread the virus; 2) there is a well-known medicine against Covid-19, listing medications commonly used in Russian hospitals, even mentioning aspirin; 3) immunity after recovering from the illness exists and is long-lasting;

[8]The full episode is available online on a Russian streaming platform at `https://tv-show.live/pervyi-kanal/zhit-zdorovo/32792-zhit-zdorovo-11-11-2020.html`

4) vaccination will be effective in the near future. However, the episode remained silent about the state-imposed regulations such as mask-wearing, lockdowns, or banning public gatherings. Thus, we argue that viewing the episode exclusively affected fear of Covid-19 and did not influence preferences on government policy.

Arguably, *Living Well* is one of the few health-related shows with a nationwide reach. For the episode of November 11, 2020, according to estimates provided by a media research and advertising monitoring company, Mediascope, about 1.7 million people watched the episode in its entirety (about 1.6% of the adult population), and over 4 million Russians (or almost 4%) watched it partially during its airing time on federal TV channel. These estimates represent only a lower bound, as they do not include the subsequent audience on social media or streaming platforms. It is also reasonable to expect spillover effects from people discussing this episode among their inner circle and sharing the news online.[9] Based on average viewership statistics during the same week, the audience of the Living Well episode was about 30% larger than that of non-prime-time news programs and about half as large as that of the main evening news – *Vesti at 20:00*, – then the most popular program.

The episode was aired during the survey, creating a temporal discontinuity among the respondents interviewed before and after November 11. Importantly, in addition to time variation, we also leverage a spatial variation in episode consumption stemming from noticeable heterogeneity in Elena Malysheva's popularity across Russian regions, which we gauge using data from online searches of the word *Malysheva* by regional population in 2019 either from Google Trends or Yandex Wordstat services.[10] Thus, we construct two Malysheva-popularity measures: 1) for Google data: the logarithm of the Google Trend index representing the relative volume of queries with the word *Malysheva* that users enter into Google for the whole

[9]Recent research demonstrates that information dissemination about Covid was extremely widespread through peer-networks (e.g., Bailey et al., 2024).

[10]Fortunately for our research design, the surname *Malysheva* is both rare in the population and among famous people. We use the search data on the keyword *Malysheva* and not *Living Well* for two reasons: 1) the name of the program *Living Well* is made up of frequent words, severely reducing the precision of our method; 2) Elena Malysheva's popularity stems exclusively from her leading role in the TV show where she is not only the anchor, but also the director.

year of 2019; 2) for Yandex Wordstat data: the logarithm of the number of queries with the word *Malysheva* per 100,000 of total queries for the year 2019.[11] The regional data from both search engines exhibit a strong correlation of 0.86 across regions, and we use both proxies simultaneously for robustness.

Such variation across time and space presents a classic setting for a shift-share approach where time-fixed but geographically variable exposure weights are interacted with a time-variant shock to produce a shift-share instrument, also known as a Bartik instrument. This approach is commonly used in economics and political science (e.g., Hummels et al., 2014; Peri, 2016; Jaravel, 2019; Xu, 2022; Dipoppa, 2023) as a causal identification strategy.

To test the negative effect of the Living Well episode about the risk of Covid-19 on individual fear, we regress fear on the interaction between the regional Malysheva-popularity measure for each region and the dummy for every day of the interview. We estimate the following model:

$$Fear_{ij} = \sum_{\tau \in \{-5,5\}} \lambda_\tau Day_i \times Malysheva_{i,2019} + X'_{ij}\Gamma + \epsilon_{ij}, \tag{2}$$

where i indicates individual respondent, j indicates the region and t indicates the day of the interview; $Malysheva_{i,2019}$ is one of the two regional Malysheva-popularity measures (as a proxy for the propensity of consuming the TV program Living Well) – either based on Google Trends or Yandex Wordstat from the pre-Covid year (2019); Day_i is a time dummy for the day of the interview; X'_{ij} are the control variables and fixed effects; ε_{ijt} is an error term.

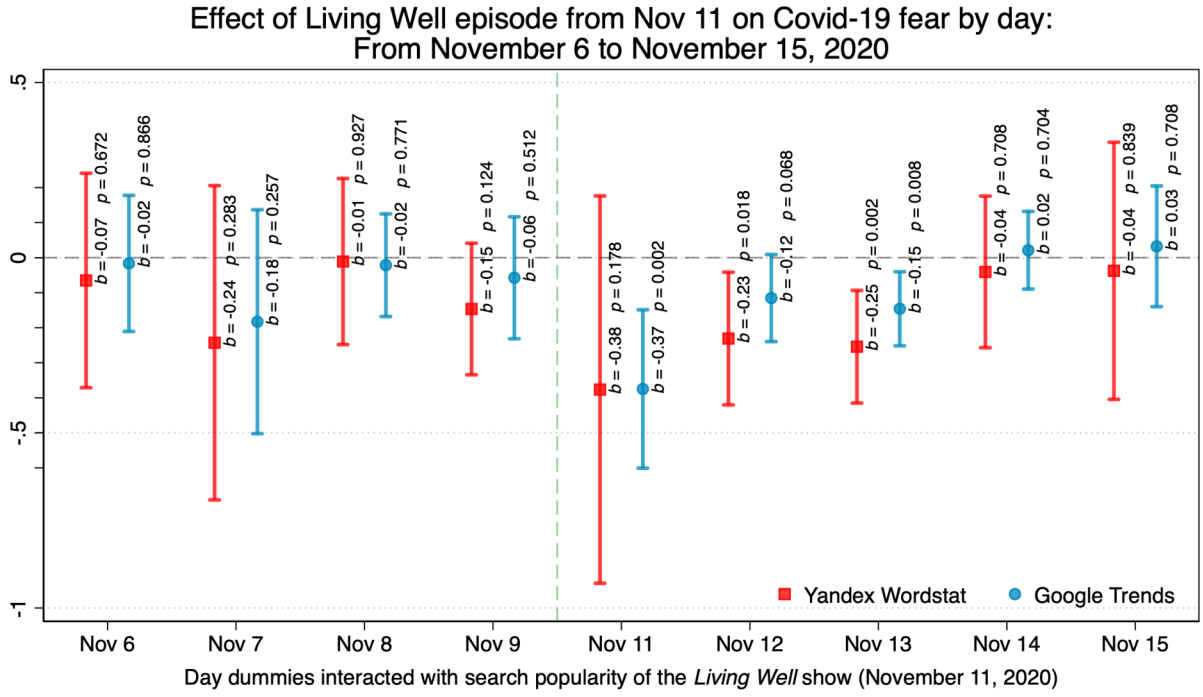
We expect the effect to be only noticeable for several days after November 11, as the salience of the framing treatment is likely to wane. We estimate a linear OLS regression of the shift-share instrument on fear using the five days before and after the episode. Results

[11] Most literature transforms the Google Trends index into a logarithm for interpretation purposes (e.g., Bacher-Hicks et al., 2021). The log transformation also ensures comparability of the two regional popularity measures despite them being either an index or a ratio of relevant queries.

are reported in Figure 1. We observe that the first 4 days (with November 10 being the reference day) do not exhibit any statistically significant difference in fear regarding the previous popularity of the Living Well program, confirming the absence of pre-trends.

After that date, we observe a steep decrease in reported fear by the respondents in areas where the pre-pandemic popularity of the show was high. These results are robust to using either Google Trends or Yandex Wordstat as a measure of the local popularity of the channel. The findings suggest that the TV episode downplayed the mortality risks of Covid-19, rendering it a good predictor of a temporary reduction in fear.

Figure 1. The effect of the *Living Well* TV show episode from November 11, 2020, on Covid-19 fear around the date



Note: Dependent variable: Fear of getting infected with Covid-19. Explanatory variable: Shift-share, the *Living Well* TV show search popularity in Yandex Wordstat (red squares) and Google Trends (blue circles) interacted with day dummies. Points report the OLS coefficients. Vertical bars report the 95% confidence intervals.

6. Results

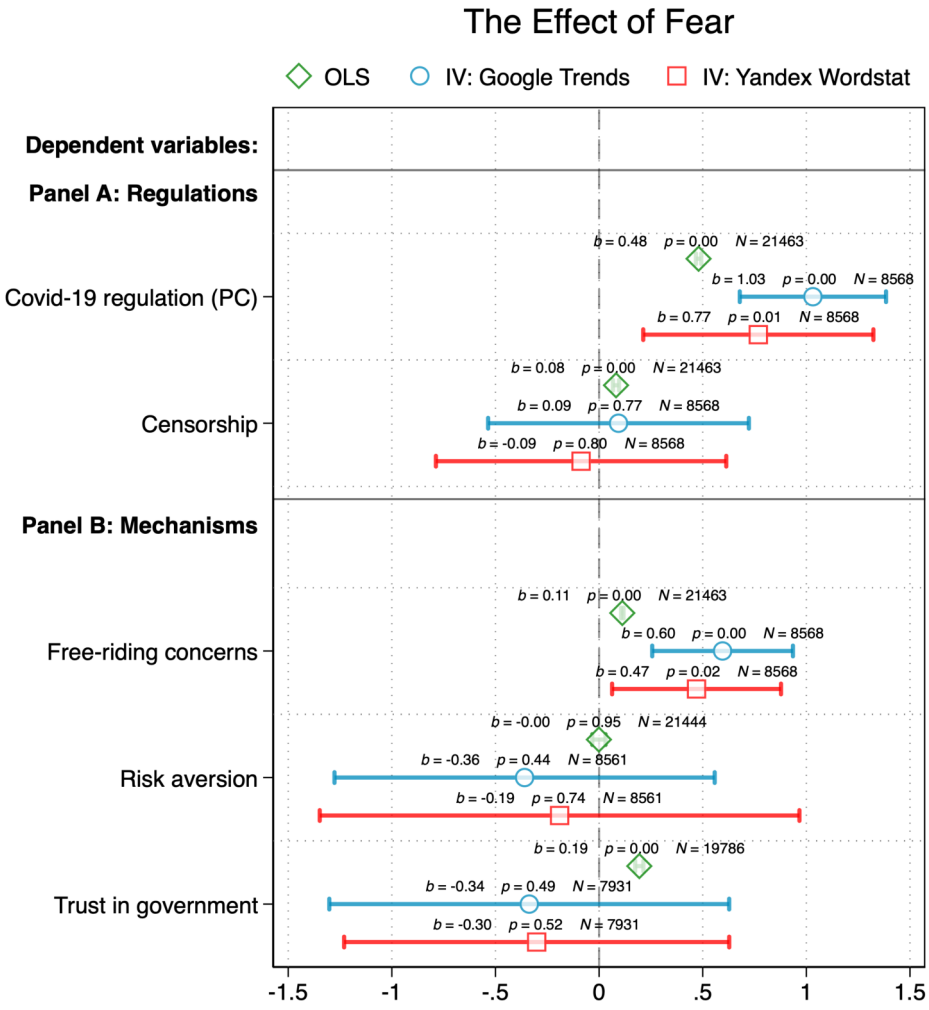
6.1. Main results

Figure 2 reports the results for the effect of fear on demand for regulation (Panel A) and the underlying mechanisms (Panel B). The plot reports the coefficients for the naive OLS approach as well as the 2SLS estimates. In the IV specification, we instrument fear with an instrument based on the exogenous shock from a TV-show episode downplaying the risks of the infection, using regional variation in the popularity of the show based on either Google Trends or Yandex Wordstat. First stage results are presented in Figure 1.

The main finding is that fear substantially increases demand for regulations directly related to Covid-19 as captured by the first principal component. The effect is statistically significant and its magnitude is remarkable. A one standard deviation in fear explains almost half of the variation in demand for Covid-19 regulation in the OLS, and about 77-103% in the IV specification. At the same time, the effect of fear on demand for censorship is negligible and the result becomes statistically insignificant once we address the endogeneity of fear with our IV strategy. This suggests that fear may drive demand for regulation in sofar that that this extra regulation effectively engages with the object of fear and is perceived to address the threat, but does not affect demand for more general unrelated types of regulation.

Fear may increase demand for state intervention via several mechanisms. First, it may boost trust in government via a rally around the flag sentiment (Erhardt et al., 2021; van der Meer et al., 2023). Second, fear has also been shown to heighten risk aversion, which thereby may increase demand for government intervention to reduce risk (Lerner and Keltner, 2001; Lerner et al., 2003; Petrocchi et al., 2022). Third, fear may heighten concerns that others may fail to contribute to collective benefits by adhering to protocols for safe behavior (Aldama et al., 2019; Young, 2019). In particular, when individuals perceive the virus as dangerous and adjust their behavior accordingly, they provide a public good, whereas the suspected unsafe behavior of others would constitute a free-riding problem. We test these three mechanisms by estimating the effect of fear on self-reported trust in the government, risk aversion, and

Figure 2. Main Results



Note: Points report the standardized coefficients. Horizontal bars report the 95% confidence intervals. The dependent variable is specified at the vertical axis. Independent variable: Fear of getting infected with Covid-19. Instrument: Shift-share with Yandex-based weights (red squares) and Google-based weights (blue circles). Green diamonds report the OLS results. SEs are clustered at the region level. All regressions include day and region fixed effects, and controls for gender, age, education level, income level, and type of employment. Detailed regression results are in Appendix B. Full survey questions are in Tables A1 and A2.

perception of relative adherence to anti-Covid rules by other members of society.

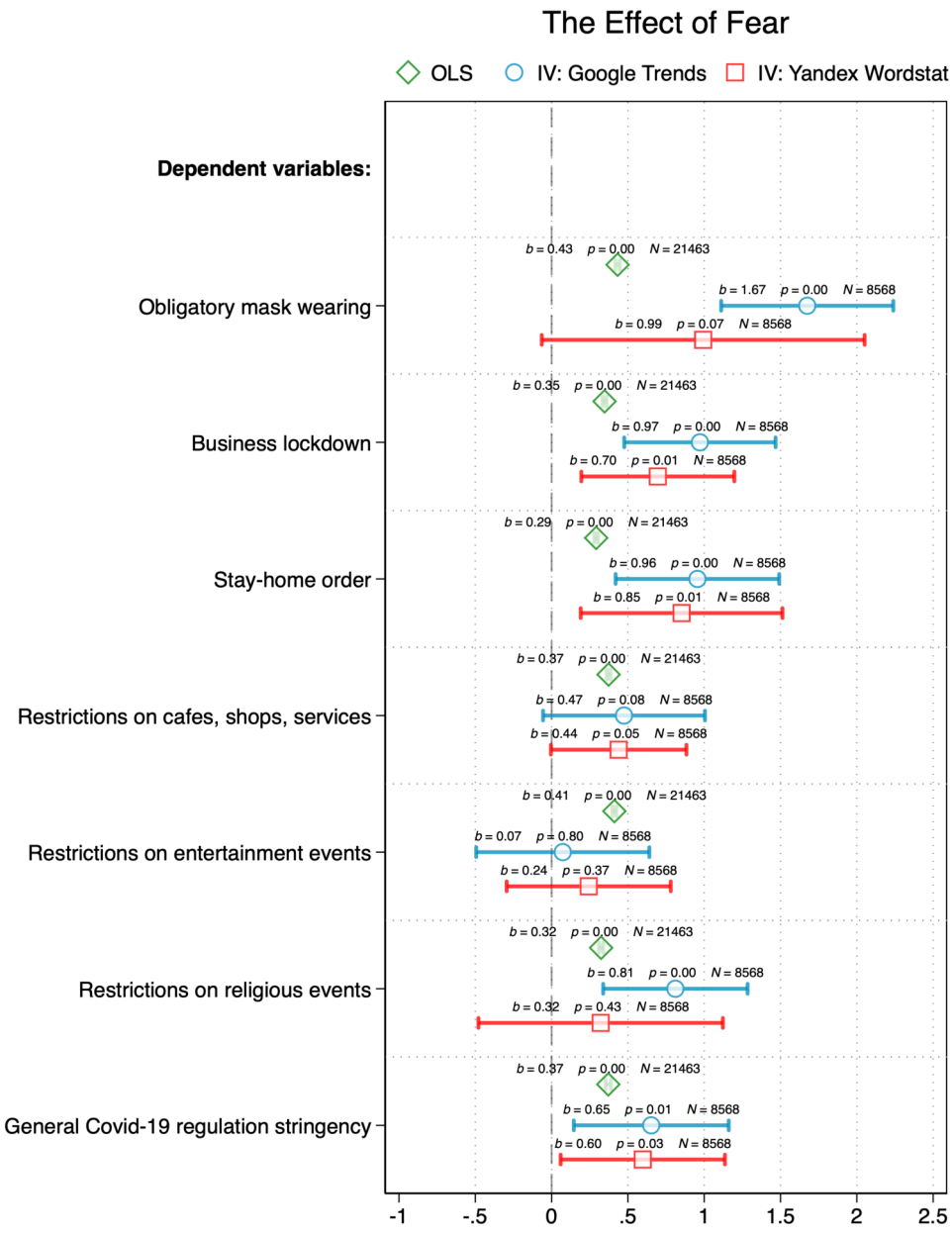
Results in Figure 2, Panel B, demonstrate that fear makes respondents see the rest of society as less likely to comply with self-isolation mandates, thus inciting concerns about free-riding. These results are in line with neoclassical theories of regulation that emphasize

government intervention may be needed when collective action problems inhibit the production of public goods. We find little evidence, in contrast, that fear increases trust in government or heightens risk aversion. While the OLS coefficient is statistically significant and points towards a small positive association between fear and trust in the government, the IV estimations produce coefficients with the opposite sign and confidence intervals far too large to reject the null hypothesis. For the risk aversion, the OLS results are indiscernible from zero, and both the OLS and the IV estimates are not statistically significant.

6.2. Disaggregating Demand for Government Intervention

To explore the impact of fear in more detail, we disaggregate demand for government regulation into discrete components. In Figure 3, we report the results of an estimation of the effect of fear on demand for a variety of Covid-19 regulations that range from more restrictive rules that affect life on a daily basis, such as stay at home orders, business lockdowns, and mask mandates to less restrictive forms, such as limits on religious gatherings, entertainment events, and attending cafes and shops. The OLS results are relatively stable across all Covid-19 regulations, with coefficients ranging from 0.29 to 0.41. The IV results, however, suggest that fear is especially effective in rasing demand for the most intrusive regulatory interventions while its effect on demand for restrictions on public gatherings and services appears less powerful. These results indicate that no particular component of the index drives our results and that fear especially boosts demand for the more intrusive forms of regulation.

Figure 3. Disaggregating demand for Covid-19 regulation



Note: Points report the standardized coefficients. Horizontal bars report the 95% confidence intervals. The dependent variable is demand for a Covid-19 regulation (specified at the vertical axis). Independent variable: Fear of getting infected with Covid-19. Instrument: Shift-share with Yandex-based weights (red squares) and Google-based weights (blue circles). Green diamonds report the OLS results. SEs are clustered at the region level. All regressions include day and region fixed effects, and controls for gender, age, education level, income level, and type of employment. Detailed regression results are in Appendix B. Full survey questions are in Tables A1 and A2.

6.3. Government spending preferences

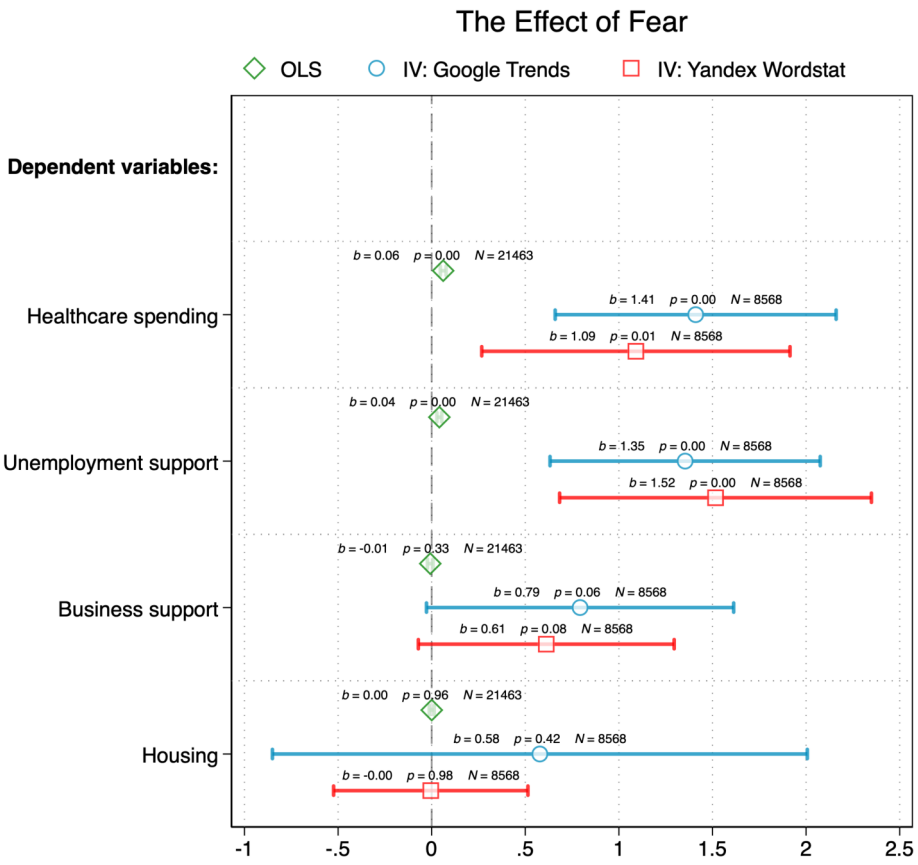
To extend our findings by exploring possible scope conditions for our results, we conducted additional analyses using the OLS and instrumental variables regressions depicted in equations 1 and 2, respectively.[12] First, we examine the impact of fear on public support for measures to alleviate the consequences of Covid-19. In response to the global pandemic, governments not only introduced new regulatory measures to prevent the spread of the virus but also spent vast sums aiming to reduce the suffering related to Covid-19. To this end, we explore the impact of fear of catching the virus on support for various forms of spending directly related to alleviating the impact of Covid-19. In Figure 4, we find that fear raises support for spending on health care, unemployment benefits, and support for businesses (not for OLS estimates in the latter case). However, our findings show that fear is not related to support for increased spending on improving housing conditions – a policy not directly related to the virus. Together, these results mirror our previous findings and indicate that fear of catching the virus heightens support for policies designed to address the object of fear by alleviating the consequences of Covid-19 but falls short of boosting support for increased state spending across the board.

By looking beyond the impact of fear on preferences for regulation, we provide additional evidence in support of our argument and identify the necessary scope conditions for our findings. We document that fear of catching the virus raises the demand for policies related to the pandemic in a major way. However, this effect of fear does not translate into a higher preference for state intervention in a more general sense, as many predicted or feared.[13]

[12]Full survey questions are available in Table A1, summary statistics for these additional variables is in Table A4.

[13]`https://www.economist.com/leaders/2020/03/26/the-state-in-the-time-of-covid-19`

Figure 4. Government spending preferences



Note: Points report the standardized coefficients. Horizontal bars report the 95% confidence intervals. The dependent variable is a government spending preference (specified at the vertical axis). Independent variable: Fear of getting infected with Covid-19. Instrument: Shift-share with Yandex-based weights (red squares) and Google-based weights (blue circles). Green diamonds report the OLS results. SEs are clustered at the region level. All regressions include day and region fixed effects, and controls for gender, age, education level, income level, and type of employment. Detailed regression results are in Appendix B. Full survey questions are in Tables A2 and A3.

7. Conclusion

In response to the global pandemic, governments adopted many new regulations that curtail individual freedom while also promising collective benefits. Some citizens supported these moves, while others vehemently opposed them. To better understand this variation and to evaluate theoretical arguments about the sources of demand for government intervention,

we study how fear affects demand for intervention using an online survey of more than 23,000 respondents in 61 Russian regions conducted at the end of 2020.

We contribute to several strands of literature. While prior research on demand for regulation has explored a variety of sources, we focus on the impact of fear – an emotional response that has been shown to shape preferences for other state policies to reduce social bads, such as crime and terrorism. We find that greater fear of catching the virus is associated with heightened demand for regulation. More generally, our study suggests the benefits of incorporating fear into studies of demand for state regulation (Brader et al., 2010; Renström and Bäck, 2021).

The impacts of fear of catching the virus on demand for regulation are, however, limited to Covid-19 related regulations and do not extend to other policies such as censorship, or housing improvements. This indicates that fear does not generate an across the board increased demand for government intervention, as suspected by many, but only a heightened demand for regulations that address the object of fear. Moreover, the finding that respondents differentiate between more and less invasive forms of regulation indicates a degree of sophistication over policy choices. At least for a high-stakes issue such as Covid-19, individuals appear to be able to develop coherent preferences over the related policies.

Our research also contributes to our understanding of media effects (c.f., DellaVigna and Kaplan, 2008; Enikolopov et al., 2011). Studies of the political impacts of media often focus on democracies, but here we examine this issue in the autocratic setting of Russia. In addition, studies of the impact of media in democracies and autocracies alike often focus on hard news programs, but we explore the impact of entertainment media on popular beliefs (Kim, 2023). This is important given the large audiences of entertainment media and the potentially persuasive, though all too often neglected, effects of "soft" propaganda (Mattingly and Yao, 2022). We find that exposure to a highly popular fear-reducing television program shapes support for a critical state policy. Unlike most studies, we also identify the temporal persistence of this effect. Exposure to the "soft" propaganda program induces lower

levels of fear for about three days, which indicates that the media effect we identify, though substantial, is not long-lasting.

Our mechanism results are broadly consistent with market failure theories of demand for regulation, as we find that those who fear catching Covid-19 expect others to be less likely to comply with Covid-19-related government regulation. This suggests that concerns about free-riding of others are an important mechanism by which fear generates higher levels of demand for related state intervention.

Finally, we contribute to our understanding of the Covid-19 pandemic and the popular response to the regulations imposed to contain the spread of the coronavirus. Our results suggest that, when a pandemic is spreading quickly, revealing the truth about the severity of the disease is crucial, as it will make people more fearful and, therefore, more accepting of government interventions in their daily lives. Transparency about the severity of a public bad could in this way save many lives and avoid more costly forms of regulation.

Our findings may be relevant to types of regulation in which individual fear is high, and outcomes depend on the behavior of others, such as potential environmental disasters, crime, and public health issues. At the same time, our findings on the impact of entertainment media on politically relevant emotions may be broadly applicable. These are topics for future research.

References

Aghion, P., Y. Algan, P. Cahuc, and A. Shleifer (2010). Regulation and distrust. *The Quarterly journal of economics 125*(3), 1015–1049.

Aldama, A., M. Vásquez-Cortés, and L. E. Young (2019). Fear and citizen coordination against dictatorship. *Journal of Theoretical Politics 31*(1), 103–125.

Alsan, M. and C. S. Yang (2024). Fear and the safety net: Evidence from secure communities. *Review of Economics and Statistics 106*(6), 1427–1441.

Ananyev, M., M. Poyker, and Y. Tian (2021). The safest time to fly: Pandemic response in the era of Fox News. *Journal of Population Economics 34*, 775–802.

Ang, D. (2023). The Birth of a Nation: Media and racial hate. *American Economic Review 113*(6), 1424–1460.

Anghel, V. and J. Schulte-Cloos (2023). Covid-19-related anxieties do not decrease support for liberal democracy. *European Journal of Political Research 62*(2), 660–673.

Arce, J. S. S., S. S. Warren, N. F. Meriggi, A. Scacco, N. McMurry, M. Voors, G. Syunyaev, A. A. Malik, S. Aboutajdine, A. Armand, et al. (2021). COVID-19 vaccine acceptance and hesitancy in low and middle-income countries, and implications for messaging. *Nature Medicine 27*, 1385–1394.

Arceneaux, K., B. N. Bakker, S. Hobolt, and C. E. De Vries (2020). Is COVID-19 a threat to liberal democracy? *PsyArXiv*.

Ash, E., S. Galletta, D. Hangartner, Y. Margalit, and M. Pinna (2023). The effect of Fox News on health behavior during COVID-19. *Political Analysis*, 1–10.

Bacher-Hicks, A., J. Goodman, and C. Mulhern (2021). Inequality in household adaptation to schooling shocks: COVID-induced online learning engagement in real time. *Journal of Public Economics 193*, 104345.

Bailey, M., D. Johnston, M. Koenen, T. Kuchler, D. Russel, and J. Stroebel (2024). Social networks shape beliefs and behavior: Evidence from social distancing during the COVID-19 pandemic. *Journal of Political Economy Microeconomics forthcoming*.

Banerjee, A., M. Alsan, E. Breza, A. G. Chandrasekhar, A. Chowdury, E. Duflo, P. Goldsmith-Pinkham, and B. A. Olken (2024). Can a trusted messenger change behavior when information is plentiful? evidence from the first months of the COVID-19 pandemic in West Bengal. *Review of Economics and Statistics*, 1–33.

Bove, V., L. Elia, M. Ferraresi, et al. (2019). Immigration, fear of crime and public spending on security. *CAGE WP 424*.

Brader, T., E. W. Groenendyk, and N. A. Valentino (2010). Fight or flight? when political threats arouse public anger and fear. In *Midwest Political Science Association Annual Meeting*.

Braithwaite, V. and M. Levi (1998). *Trust and governance*. Russell Sage Foundation.

Breza, E., F. C. Stanford, M. Alsan, B. Alsan, A. Banerjee, A. G. Chandrasekhar, S. Eichmeyer, T. Glushko, P. Goldsmith-Pinkham, K. Holland, et al. (2021). Effects of a large-scale social media advertising campaign on holiday travel and COVID-19 infections: a cluster randomized controlled trial. *Nature medicine 27*(9), 1622–1628.

Brouard, S., P. Vasilopoulos, and M. Becher (2020). Sociodemographic and psychological correlates of compliance with the COVID-19 public health measures in France. *Canadian Journal of Political Science/Revue canadienne de science politique 53*(2), 253–258.

Bundorf, M. K., J. DeMatteis, G. Miller, M. Polyakova, J. L. Streeter, and J. Wivagg (2025). Risk perceptions and private protective behaviors: Evidence from COVID-19 pandemic. *Review of Economics and Statistics*, 1–13.

Campos-Mercade, P., A. N. Meier, F. H. Schneider, and E. Wengström (2021). Prosociality predicts health behaviors during the COVID-19 pandemic. *Journal of Public Economics 195*, 104367.

Chang, K.-C., W. R. Hobbs, M. E. Roberts, and Z. C. Steinert-Threlkeld (2022). COVID-19 increased censorship circumvention and access to sensitive topics in China. *Proceedings of the National Academy of Sciences 119*(4), e2102818119.

Davis, D. W. and B. D. Silver (2004). Civil liberties vs. security: Public opinion in the context of the terrorist attacks on America. *American journal of political science 48*(1), 28–46.

DellaVigna, S. and E. Kaplan (2008). The political impact of media bias. *Information and Public Choice*, 79.

Dipoppa, G. (2023). How criminal organizations expand to strong states: Local agreements and migrant exploitation in Northern Italy.

Enikolopov, R., M. Petrova, and E. Zhuravskaya (2011). Media and political persuasion: Evidence from Russia. *American economic review 101*(7), 3253–3285.

Enikolopov, R., M. Rochlitz, K. J. Schoors, and N. Zakharov (2025). Polarize and rule: Independent media in autocracy and the role of social media. *Available at SSRN 4131355*.

Erhardt, J., M. Freitag, M. Filsinger, and S. Wamsler (2021). The emotional foundations of political support: How fear and anger affect trust in the government in times of the COVID-19 pandemic. *Swiss political science review 27*(2), 339–352.

Esposito, E., T. Rotesi, A. Saia, and M. Thoenig (2023). Reconciliation narratives: The Birth of a Nation after the US Civil war. *American Economic Review 113*(6), 1461–1504.

Falk, A., A. Becker, T. Dohmen, B. Enke, D. Huffman, and U. Sunde (2018). Global evidence on economic preferences. *The quarterly journal of economics 133*(4), 1645–1692.

Gadarian, S. K. and T. Brader (2023). Emotion and political psychology. *The Oxford Handbook of Political Psychology*, 191.

Goolsbee, A. and C. Syverson (2021). Fear, lockdown, and diversion: Comparing drivers of pandemic economic decline 2020. *Journal of Public Economics 193*, 104311.

Greene, S. and G. Robertson (2017). Agreeable authoritarians: Personality and politics in contemporary Russia. *Comparative Political Studies 50*(13), 1802–1834.

Haan, P., A. Peichl, A. Schrenker, G. Weizsäcker, and J. Winter (2022). Expectation management of policy leaders: Evidence from covid-19. *Journal of Public Economics 209*, 104659.

Harper, C. A., L. P. Satchell, D. Fido, and R. D. Latzman (2020). Functional fear predicts public health compliance in the COVID-19 pandemic. *International journal of mental health and addiction*, 1–14.

Huddy, L., S. Feldman, C. Taber, and G. Lahav (2005). Threat, anxiety, and support of antiterrorism policies. *American journal of political science 49*(3), 593–608.

Hummels, D., R. Jørgensen, J. Munch, and C. Xiang (2014). The wage effects of offshoring: Evidence from Danish matched worker-firm data. *American Economic Review 104*(6), 1597–1629.

Jaravel, X. (2019). The unequal gains from product innovations: Evidence from the US retail sector. *The Quarterly Journal of Economics 134*(2), 715–783.

Jensen, R. and E. Oster (2009). The power of tv: Cable television and women's status in India. *The Quarterly Journal of Economics 124*(3), 1057–1094.

Kim, E. (2023). Entertaining beliefs in economic mobility. *American Journal of Political Science 67*(1), 39–54.

Kim, E. and S. Patterson (2024). The American viewer: Political consequences of entertainment media. *American Political Science Review*, 1–15.

Kim, J. (2016). The effects of collective anger and fear on policy support in response to terrorist attacks. *The Journal of social psychology 156*(5), 455–468.

Kobak, D. (2021). Excess mortality reveals COVID's true toll in Russia. *Significance (Oxford, England) 18*(1), 16.

Kofanov, D., V. Kozlov, A. Libman, and N. Zakharov (2023). Encouraged to cheat? federal incentives and career concerns at the sub-national level as determinants of under-reporting of COVID-19 mortality in Russia. *British Journal of Political Science 53*(3), 835–860.

Kriesberg, L. and R. Klein (1980). Changes in public support for US military spending. *Journal of Conflict Resolution 24*(1), 79–111.

Lerner, J. S., R. M. Gonzalez, D. A. Small, and B. Fischhoff (2003). Effects of fear and anger on perceived risks of terrorism: A national field experiment. *Psychological science 14*(2), 144–150.

Lerner, J. S. and D. Keltner (2001). Fear, anger, and risk. *Journal of personality and social psychology 81*(1), 146.

Loewenstein, G. (2000). Emotions in economic theory and economic behavior. *American economic review 90*(2), 426–432.

Mattingly, D. C. and E. Yao (2022). How soft propaganda persuades. *Comparative Political Studies 55*(9), 1569–1594.

Pan, J., Z. Shao, and Y. Xu (2022). How government-controlled media shifts policy attitudes through framing. *Political Science Research and Methods 10*(2), 317–332.

Peri, G. (2016). Immigrants, productivity, and labor markets. *Journal of Economic Perspectives 30*(4), 3–30.

Petrocchi, S., P. Iannello, G. Ongaro, A. Antonietti, and G. Pravettoni (2022). The interplay between risk and protective factors during the initial height of the COVID-19 crisis in italy: The role of risk aversion and intolerance of ambiguity on distress. *Current psychology 41*(1), 437–448.

Pitlik, H. and L. Kouba (2015). Does social distrust always lead to a stronger support for government intervention? *Public Choice 163*(3-4), 355–377.

Pullano, G., E. Valdano, N. Scarpa, S. Rubrichi, and V. Colizza (2020). Evaluating the effect of demographic factors, socioeconomic factors, and risk aversion on mobility during the COVID-19 epidemic in france under lockdown: a population-based study. *The Lancet Digital Health 2*(12), e638–e649.

Quadros, S., S. Garg, R. Ranjan, G. Vijayasarathi, and M. A. Mamun (2021). Fear of COVID-19 infection across different cohorts: A scoping review. *Frontiers in Psychiatry 12*, 708430.

Renström, E. A. and H. Bäck (2021). Emotions during the COVID-19 pandemic: Fear, anxiety, and anger as mediators between threats and policy support and political actions. *Journal of applied social psychology 51*(8), 861–877.

Rosenfeld, B. and J. Wallace (2024). Information politics and propaganda in authoritarian societies. *Annual Review of Political Science 27*.

Rozenas, A. and D. Stukal (2019). How autocrats manipulate economic news: Evidence from Russia's state-controlled television. *The Journal of Politics 81*(3), 982–996.

Shirikov, A. (2024). Why is media trust low in post-communist countries? *Problems of Post-Communism*, 1–13.

Siddique, A., T. Rahman, D. Pakrashi, A. Islam, and F. Ahmed (2024). Raising health

awareness in rural communities: A randomized experiment in bangladesh and india. *Review of Economics and Statistics 106*(3), 638–654.

Syunyaev, G. (2022). *The Media under Autocracy: Essays on Domestic Politics and Government Support in Russia*. Columbia University.

Timonin, S., I. Klimkin, V. M. Shkolnikov, E. Andreev, M. McKee, and D. A. Leon (2022). Excess mortality in Russia and its regions compared to high-income countries: An analysis of monthly series of 2020. *SSM-population health 17*, 101006.

Vally, Z. (2020). Public perceptions, anxiety and the perceived efficacy of health-protective behaviours to mitigate the spread of the sars-cov-2/covid-19 pandemic. *Public health 187*, 67–73.

van der Meer, T., E. Steenvoorden, and E. Ouattara (2023). Fear and the COVID-19 rally round the flag: a panel study on political trust. *West European Politics 46*(6), 1089–1105.

Wagner, M. and D. Morisi (2019). Anxiety, fear, and political decision making. *Oxford research encyclopedia of politics*, 1–22.

Weimer, D. L. and A. R. Vining (2017). *Policy analysis: Concepts and practice*. Routledge.

Xu, C. (2022). Reshaping global trade: The immediate and long-run effects of bank failures. *The Quarterly Journal of Economics 137*(4), 2107–2161.

Young, L. E. (2019). The psychology of state repression: Fear and dissent decisions in Zimbabwe. *American Political Science Review 113*(1), 140–155.

Supporting information for "Fear, Soft Propaganda, and the Demand for Government Intervention: Quasi-experimental Evidence from Russia"

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Appendix A. Descriptives

Table A1. Demand for government intervention

Variable	Survey question	Coding
General Covid-19 regulation stringency	*In general, how stringent should the measures imposed by the state be to contain the spread of the coronavirus infection?*	On a scale from 0 to 10, where 0 means minimum stringency of measures or no restrictions at all, while 10 means maximum stringency of measures
	How justifiable you think are the following temporary measures aimed to contain the spread of Covid-19?	On a scale from 0 to 10, where 0 corresponds to absolutely non-justifiable, while 10 to absolutely justifiable
Obligatory mask wearing	Mandatory wearing of masks in public places	
Business lockdown	Restrictions on the work of ALL enterprises and organizations, except for the vital	
Stay-home order	Ban on leaving the house without special permission	
Restrictions on:		
Cafes, shops and services	Restriction on the work of hairdressers, cafes, non-grocery stores	
Entertainment events	Ban on holding sport and entertainment events	
Religious events	Ban on the attendance of religious events	
Censorship	*To what extent do you agree with the following statement: "In the modern world, authorities should strictly control the content of publications in the media in order to prevent disinformation, even if this restricts citizens' access to independent sources of information"*	On a scale from 1 to 7, where 1 means completely disagree, while 7 means completely agree

Table A2. Fear and mechanisms

Variable	Survey question	Coding
Fear	*Are you afraid to get infected with the coronavirus?*	1. Definitely not 2. Rather not 3. Rather afraid 4. Definitely afraid
Trust in government	*How much do you trust the government of Russia?*	On a scale from 1 to 5, where 1 means don't trust at all, while 5 means trust completely
Free-riding concerns	*In your opinion, to what extent did the people around you comply with the regime of self-isolation?*	1. Complied less 0. Just like me or more
Risk aversion	*Are you generally a person who is willing to take risks or do you try to avoid taking risks?*	On a scale from 0 to 10, where 0 means that you are completely not willing to take risks, while 10 means that you take risks willingly

Table A3. Government spending

Variable	Survey question	Coding
	In your opinion, how should public spending on the social sphere change? Remember that increasing funding often requires increasing tax burdens or reallocating funds from other items of expenditure	On a scale from 1 to 5, where 1 means that spending should be significantly reduced, while 5 means that spending should be significantly increased
Healthcare spending	Fund healthcare	
Unemployment support	Support unemployed	
Business upport	Support for small and medium-sized businesses	
Housing	Improvement of living conditions of citizens	

Table A4. Summary statistics for the main variables

	Sum	Mean	SD	Min	Max	N
Demand for Covid-19 regulation						
General Covid-19 regulation stringency	142,385	6.17	2.63	0	10	23,064
Obligatory mask wearing	158,341	6.87	3.49	0	10	23,064
Business lockdown	113,823	4.94	3.45	0	10	23,064
Stay-home order	76,162	3.30	3.35	0	10	23,064
Restrictions on:						
Cafes, shops and services	121,250	5.26	3.32	0	10	23,064
Entertainment events	158,850	6.89	3.23	0	10	23,064
Religious events	158,545	6.87	3.30	0	10	23,064
Mechanisms						
Trust in government	53,453	2.53	1.33	1	5	21,102
Free-riding concerns	9,010	0.39	0.49	0	1	23,064
Risk aversion	119,220	5.17	2.48	0	10	23,044
Covid-19 fear						
Fear	62,979	2.93	0.89	1	4	21,463
Government spending						
Fund healthcare	98,769	4.28	0.90	1	5	23,064
Housing improvements	88,697	3.85	1.01	1	5	23,064
Support business	77,502	3.36	1.04	1	5	23,064
Support unemployed	78,681	3.41	1.07	1	5	23,064
Censorship						
Support censorship	97,969	4.25	2.00	1	7	23,064

Figure A1. Pairwise correlation coefficients for the main variables

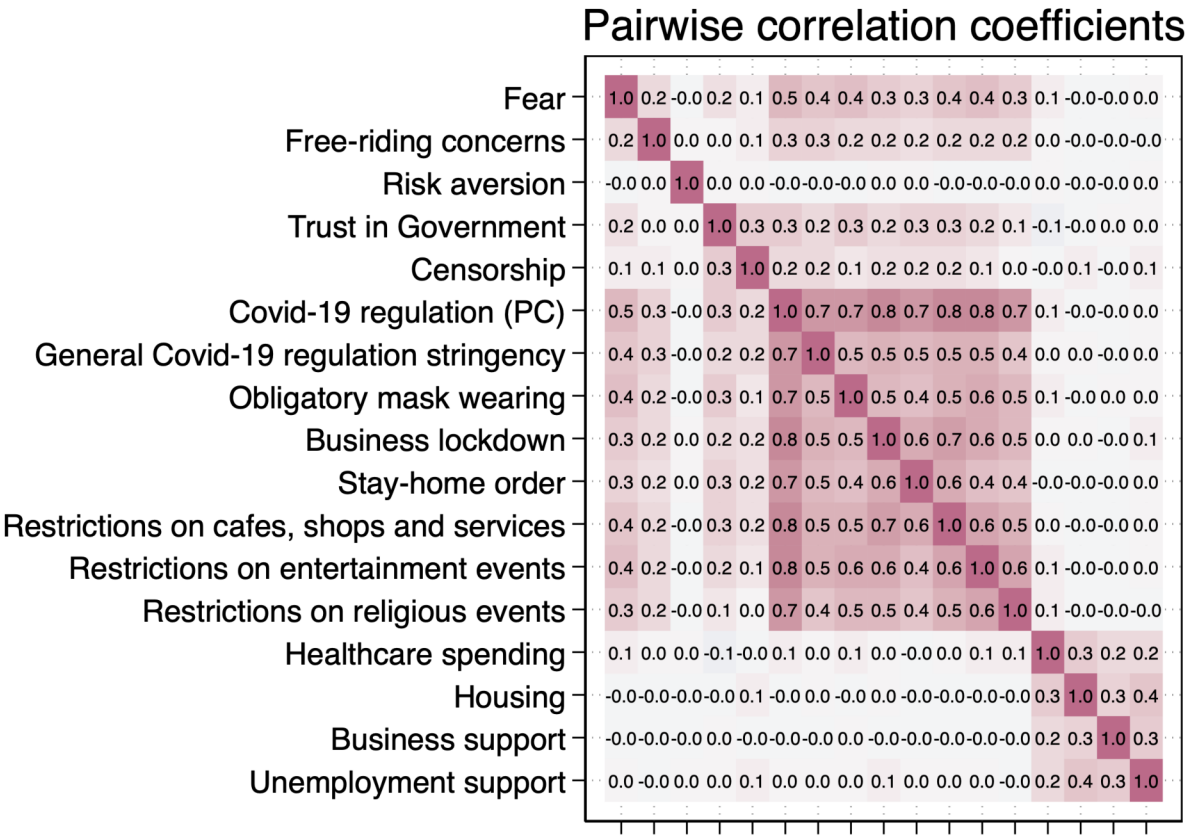
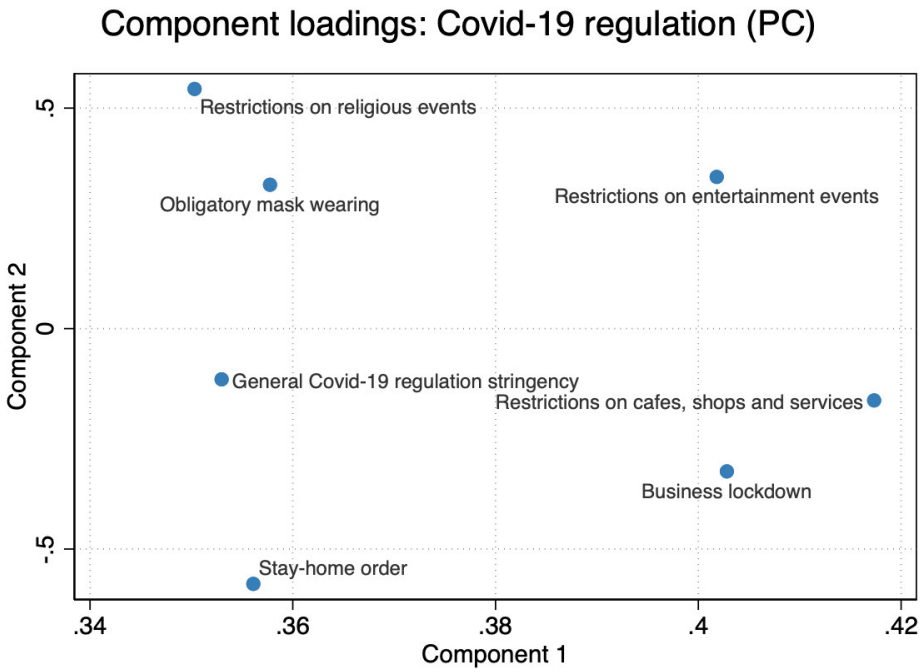


Table A5. Covid-19 regulation (PC): Principal component scores

	Covid-19 regulation (PC)
General Covid-19 regulation stringency	.3529807
Obligatory mask wearing	.3577536
Business lockdown	.4028127
Stay-home order	.3561053
Restrictions on:	
Cafes, shops and services	.4173391
Entertainment events	.401815
Religious events	.3503152

Note: First principal component scores. Variables included: obligatory mask-wearing, stay-home order, restrictions on cafes, shops and services, business lockdown, restrictions on religious services, restrictions on entertainment events, general Covid-19 regulation stringency. Full survey questions presented in Table A1.

Figure A2. Covid-19 regulation (PC): Principal component loadings



Note: Component loadings of the first two principal components of the demand for Covid-19 regulation variables. Variables included: obligatory mask-wearing, stay-home order, restrictions on cafes, shops and services, business lockdown, restrictions on religious services, restrictions on entertainment events, general Covid-19 regulation stringency. Full survey questions presented in Table A1.

Appendix B. Additional Results

Table B1. The effect of fear on attitudes toward Covid-19 regulation, censorship, free-riding concerns, trust in government, and risk aversion: OLS

Dependent variable:	(1) Covid-19 regulation (PC)	(2) Censorship	(3) Free-riding concerns	(4) Trust in government	(5) Risk aversion
Fear	0.480***	0.082***	0.112***	0.194***	-0.001
	(0.006)	(0.007)	(0.003)	(0.010)	(0.016)
Gender: Male	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)
Gender: Female	0.024	0.218***	0.036***	0.122***	-0.038
	(0.015)	(0.016)	(0.008)	(0.021)	(0.036)
Age	-0.002**	0.005***	-0.003***	0.006***	-0.001
	(0.001)	(0.001)	(0.000)	(0.001)	(0.002)
Settlement: City	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)
Settlement: Village	0.095*	0.089	-0.024	0.132*	0.131
	(0.045)	(0.052)	(0.023)	(0.056)	(0.114)
Settlement: Urban-type settlement	-0.027	0.083	-0.034	0.118*	-0.004
	(0.037)	(0.044)	(0.024)	(0.048)	(0.088)
Settlement: Other	0.085	0.257**	-0.027	0.310*	-0.077
	(0.094)	(0.076)	(0.052)	(0.152)	(0.218)
Employment: Permanent contract	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)
Employment: Temporary contract	0.033	-0.022	0.025*	0.083*	0.031
	(0.023)	(0.027)	(0.010)	(0.037)	(0.075)
Employment: Maternity leave	0.076***	0.185***	0.041**	0.284***	0.054
	(0.021)	(0.023)	(0.013)	(0.032)	(0.068)
Employment: Unpaid leave	-0.054	-0.017	0.031	-0.107	0.068
	(0.063)	(0.084)	(0.040)	(0.106)	(0.205)
Employment: Out of labor force	0.150***	-0.073*	0.072***	0.168***	-0.062
	(0.026)	(0.029)	(0.013)	(0.044)	(0.079)
Employment: Unemployed	0.069***	-0.044	0.031**	0.105**	0.006
	(0.016)	(0.025)	(0.009)	(0.033)	(0.061)
Education: Elementary or incomplete secondary	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)
Education: Secondary school	-0.065	-0.228***	0.039	-0.107	-0.173
	(0.062)	(0.057)	(0.025)	(0.073)	(0.138)
Education: Vocational school	-0.108	-0.209***	0.013	-0.132	-0.201
	(0.055)	(0.048)	(0.022)	(0.070)	(0.130)
Education: University degree (not completed)	-0.092	-0.388***	0.061*	-0.201*	-0.260
	(0.060)	(0.055)	(0.028)	(0.085)	(0.152)
Education: University degree	-0.098	-0.457***	0.065**	-0.170*	-0.197
	(0.059)	(0.049)	(0.023)	(0.071)	(0.121)
Income: Cannot afford food	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)
Income: Cannot afford clothing	0.149**	-0.024	-0.016	0.318***	0.339*
	(0.054)	(0.056)	(0.031)	(0.080)	(0.163)
Income: Cannot afford long-term goods	0.225***	0.016	-0.039	0.553***	0.345*
	(0.050)	(0.053)	(0.030)	(0.079)	(0.156)
Income: Cannot afford a car	0.292***	0.023	-0.033	0.719***	0.349*
	(0.049)	(0.050)	(0.029)	(0.083)	(0.157)
Income: Can afford a car but constrained in funds	0.372***	0.016	-0.017	0.797***	0.378*
	(0.056)	(0.057)	(0.031)	(0.086)	(0.165)
Income: Can afford anything we need	0.378***	0.139	0.004	0.993***	0.480
	(0.088)	(0.094)	(0.048)	(0.147)	(0.286)
N	21,463	21,463	21,463	19,786	21,444
R2	0.248	0.044	0.070	0.051	0.006

Note: Region-level cluster-robust standard errors; *p<0.1, **p<0.05, ***p<0.01. Dependent variable: Demand for various Covid-19 regulations (specified at the top of each column). Independent variable: Fear of Covid-19. Controls: age, gender, settlement type, education, employment status, income level. Empty rows indicate reference categories for the control variables based on individual characteristics. Fixed effects: region and date of the interview.

Table B2. The effect of fear on attitudes toward Covid-19 regulation, censorship, free-riding concerns, trust in government, and risk aversion: IV (Yandex)

Dependent variable:	(1) Covid-19 regulation (PC)	(2) Censorship	(3) Free-riding concerns	(4) Trust in government	(5) Risk aversion
Fear	0.768**	-0.087	0.470*	-0.301	-0.191
	(0.278)	(0.350)	(0.204)	(0.464)	(0.579)
Gender: Male	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)
Gender: Female	-0.068	0.223**	-0.059	0.222	0.053
	(0.058)	(0.082)	(0.045)	(0.112)	(0.142)
Age	-0.005*	0.005*	-0.005**	0.009*	0.000
	(0.002)	(0.002)	(0.002)	(0.004)	(0.004)
Settlement: City	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)
Settlement: Village	0.079	0.159**	-0.022	0.320***	0.193
	(0.068)	(0.059)	(0.049)	(0.089)	(0.157)
Settlement: Urban-type settlement	0.030	0.058	-0.012	0.146	0.090
	(0.055)	(0.064)	(0.041)	(0.090)	(0.152)
Settlement: Other	0.325*	0.300**	-0.023	0.315	-0.376
	(0.155)	(0.111)	(0.109)	(0.239)	(0.297)
Employment: Permanent contract	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)
Employment: Temporary contract	0.125**	0.068	0.045	0.145*	-0.033
	(0.040)	(0.041)	(0.025)	(0.069)	(0.111)
Employment: Maternity leave	0.034	0.262***	-0.008	0.348***	-0.091
	(0.053)	(0.061)	(0.042)	(0.075)	(0.137)
Employment: Unpaid leave	-0.104	-0.178	0.061	-0.196	0.318
	(0.109)	(0.117)	(0.068)	(0.155)	(0.270)
Employment: Out of labor force	0.170***	-0.014	0.055	0.178*	0.014
	(0.043)	(0.048)	(0.029)	(0.079)	(0.102)
Employment: Unemployed	0.109***	0.016	0.018	0.186**	-0.067
	(0.031)	(0.036)	(0.017)	(0.059)	(0.092)
Education: Elementary or incomplete secondary	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)
Education: Secondary school	-0.112	-0.224*	0.013	-0.054	-0.017
	(0.096)	(0.087)	(0.052)	(0.115)	(0.223)
Education: Vocational school	-0.158	-0.162*	0.009	-0.098	-0.205
	(0.084)	(0.067)	(0.048)	(0.109)	(0.222)
Education: University degree (not completed)	-0.146	-0.364***	0.076	-0.254*	-0.257
	(0.098)	(0.080)	(0.046)	(0.113)	(0.239)
Education: University degree	-0.167	-0.396***	0.035	-0.114	-0.193
	(0.113)	(0.086)	(0.055)	(0.120)	(0.226)
Income: Cannot afford food	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)
Income: Cannot afford clothing	0.155*	-0.021	-0.048	0.395**	0.224
	(0.072)	(0.094)	(0.073)	(0.145)	(0.206)
Income: Cannot afford long-term goods	0.215**	0.002	-0.085	0.601***	0.212
	(0.066)	(0.090)	(0.068)	(0.136)	(0.185)
Income: Cannot afford a car	0.286***	0.034	-0.090	0.778***	0.250
	(0.072)	(0.085)	(0.071)	(0.142)	(0.193)
Income: Can afford a car but constrained in funds	0.336***	0.036	-0.089	0.987***	0.338
	(0.081)	(0.099)	(0.074)	(0.155)	(0.206)
Income: Can afford anything we need	0.506**	-0.047	0.048	0.821**	0.071
	(0.172)	(0.209)	(0.106)	(0.264)	(0.438)
N	8,568	8,568	8,568	7,931	8,561
R2	0.147	0.011	-0.473	-0.087	-0.006
F-stat	18.153	18.153	18.153	16.171	17.836

Note: Region-level cluster-robust standard errors; *p<0.1, **p<0.05, ***p<0.01. Dependent variable: Demand for various Covid-19 regulations (specified at the top of each column). Independent variable: Fear of Covid-19. Controls: age, gender, settlement type, education, employment status, income level. Empty rows indicate reference categories for the control variables based on individual characteristics. Fixed effects: region and date of the interview.

Table B3. The effect of fear on attitudes toward Covid-19 regulation, censorship, free-riding concerns, trust in government, and risk aversion: IV (Google)

Dependent variable:	(1) Covid-19 regulation (PC)	(2) Censorship	(3) Free-riding concerns	(4) Trust in government	(5) Risk aversion
Fear	1.032***	0.094	0.596***	-0.337	-0.360
	(0.176)	(0.315)	(0.170)	(0.482)	(0.459)
Gender: Male	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)
Gender: Female	-0.128**	0.181*	-0.088*	0.230	0.092
	(0.047)	(0.074)	(0.038)	(0.120)	(0.115)
Age	-0.006***	0.004	-0.006***	0.009*	0.001
	(0.002)	(0.002)	(0.001)	(0.004)	(0.004)
Settlement: City	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)
Settlement: Village	0.079	0.159**	-0.022	0.320***	0.193
	(0.079)	(0.057)	(0.056)	(0.090)	(0.153)
Settlement: Urban-type settlement	0.028	0.056	-0.013	0.146	0.092
	(0.065)	(0.061)	(0.048)	(0.091)	(0.156)
Settlement: Other	0.339	0.310**	-0.016	0.313	-0.386
	(0.175)	(0.103)	(0.119)	(0.236)	(0.292)
Employment: Permanent contract	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)
Employment: Temporary contract	0.119*	0.064	0.042	0.146*	-0.030
	(0.046)	(0.040)	(0.028)	(0.066)	(0.113)
Employment: Maternity leave	-0.003	0.237***	-0.026	0.353***	-0.068
	(0.044)	(0.064)	(0.037)	(0.078)	(0.139)
Employment: Unpaid leave	-0.108	-0.181	0.059	-0.197	0.320
	(0.117)	(0.116)	(0.073)	(0.155)	(0.271)
Employment: Out of labor force	0.163***	-0.018	0.052	0.179*	0.019
	(0.046)	(0.044)	(0.033)	(0.082)	(0.101)
Employment: Unemployed	0.100**	0.010	0.014	0.189**	-0.061
	(0.033)	(0.036)	(0.020)	(0.064)	(0.085)
Education: Elementary or incomplete secondary	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)
Education: Secondary school	-0.136	-0.240**	0.002	-0.051	-0.001
	(0.101)	(0.082)	(0.057)	(0.119)	(0.223)
Education: Vocational school	-0.172	-0.171*	0.003	-0.096	-0.196
	(0.089)	(0.067)	(0.055)	(0.112)	(0.219)
Education: University degree (not completed)	-0.152	-0.368***	0.074	-0.253*	-0.253
	(0.107)	(0.080)	(0.053)	(0.114)	(0.236)
Education: University degree	-0.208	-0.424***	0.016	-0.109	-0.166
	(0.109)	(0.082)	(0.059)	(0.134)	(0.217)
Income: Cannot afford food	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)
Income: Cannot afford clothing	0.136	-0.034	-0.057	0.398**	0.236
	(0.072)	(0.091)	(0.079)	(0.147)	(0.217)
Income: Cannot afford long-term goods	0.200**	-0.008	-0.092	0.604***	0.221
	(0.068)	(0.085)	(0.075)	(0.138)	(0.193)
Income: Cannot afford a car	0.262***	0.018	-0.101	0.783***	0.265
	(0.070)	(0.080)	(0.077)	(0.145)	(0.202)
Income: Can afford a car but constrained in funds	0.308***	0.016	-0.103	0.992***	0.356
	(0.074)	(0.094)	(0.079)	(0.158)	(0.216)
Income: Can afford anything we need	0.590***	0.010	0.088	0.810**	0.017
	(0.170)	(0.195)	(0.105)	(0.271)	(0.435)
N	8,568	8,568	8,568	7,931	8,561
R2	-0.085	0.040	-0.915	-0.108	-0.022
F-stat	25.343	25.343	25.343	15.494	24.937

Note: Region-level cluster-robust standard errors; *p<0.1, **p<0.05, ***p<0.01. Dependent variable: Demand for various Covid-19 regulations (specified at the top of each column). Independent variable: Fear of Covid-19. Controls: age, gender, settlement type, education, employment status, income level. Empty rows indicate reference categories for the control variables based on individual characteristics. Fixed effects: region and date of the interview.

Table B4. The effect of fear on the demand for Covid-19 regulation across all measures: OLS

Dependent variable:	(1) General Covid-19 regulations stringency	(2) Mask wearing	(3) Business lockdown	(4) Stay-home order	(5) Restrictions on: cafes, shops and services	(6) Entertainment events	(7) Religious events
Fear	0.372***	0.433***	0.347***	0.292***	0.373***	0.411***	0.324***
	(0.009)	(0.007)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)
Gender: Male	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)	(.)
Gender: Female	0.033*	0.050**	0.004	0.041**	-0.015	0.056***	-0.037*
	(0.016)	(0.014)	(0.014)	(0.014)	(0.017)	(0.015)	(0.015)
Age	-0.001*	0.004***	-0.006***	-0.004***	-0.003***	-0.001	0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Settlement: City	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)	(.)
Settlement: Village	0.098*	0.004	0.067	0.122*	0.104*	0.062	0.047
	(0.041)	(0.039)	(0.045)	(0.057)	(0.043)	(0.052)	(0.054)
Settlement: Urban-type settlement	0.068	0.007	0.035	-0.041	-0.043	-0.056	-0.111*
	(0.041)	(0.037)	(0.037)	(0.043)	(0.035)	(0.041)	(0.042)
Settlement: Other	0.120	-0.009	0.111	0.107	0.029	0.034	0.066
	(0.097)	(0.093)	(0.124)	(0.074)	(0.094)	(0.095)	(0.083)
Employment: Permanent contract	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)	(.)
Employment: Temporary contract	-0.026	0.043	0.066**	0.018	0.074**	-0.004	-0.005
	(0.029)	(0.024)	(0.024)	(0.025)	(0.025)	(0.022)	(0.026)
Employment: Maternity leave	0.012	0.075***	0.093***	-0.030	0.135***	0.085***	0.014
	(0.027)	(0.021)	(0.023)	(0.025)	(0.023)	(0.020)	(0.021)
Employment: Unpaid leave	-0.113	-0.047	-0.001	-0.105	-0.068	0.061	-0.030
	(0.075)	(0.063)	(0.081)	(0.075)	(0.070)	(0.060)	(0.093)
Employment: Out of labor force	0.049	0.099***	0.151***	0.073**	0.177***	0.142***	0.089**
	(0.028)	(0.026)	(0.026)	(0.024)	(0.025)	(0.028)	(0.026)
Employment: Unemployed	0.002	0.047**	0.084***	0.035	0.107***	0.046*	0.032
	(0.017)	(0.017)	(0.018)	(0.022)	(0.018)	(0.018)	(0.017)
Education: Elementary or incomplete secondary	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)	(.)
Education: Secondary school	0.064	-0.034	-0.125	-0.096	-0.155*	0.032	-0.012
	(0.065)	(0.055)	(0.069)	(0.058)	(0.069)	(0.067)	(0.061)
Education: Vocational school	0.013	-0.054	-0.141*	-0.154**	-0.168**	-0.045	-0.007
	(0.057)	(0.049)	(0.056)	(0.050)	(0.057)	(0.062)	(0.062)
Education: University degree (not completed)	0.048	-0.060	-0.176**	-0.153*	-0.158*	-0.020	0.056
	(0.062)	(0.057)	(0.061)	(0.059)	(0.066)	(0.062)	(0.065)
Education: University degree	0.013	-0.028	-0.188**	-0.156**	-0.165**	-0.027	0.057
	(0.059)	(0.050)	(0.060)	(0.052)	(0.060)	(0.064)	(0.066)
Income: Cannot afford food	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)	(.)
Income: Cannot afford clothing	0.039	0.174**	0.078	-0.008	0.116*	0.187***	0.205**
	(0.058)	(0.057)	(0.057)	(0.056)	(0.056)	(0.052)	(0.061)

Income: Cannot afford long-term goods	0.086	0.262***	0.116*	0.052	0.160**	0.260***	0.263***
	(0.059)	(0.058)	(0.050)	(0.051)	(0.051)	(0.053)	(0.058)
Income: Cannot afford a car	0.119*	0.332***	0.157**	0.100*	0.214***	0.311***	0.318***
	(0.056)	(0.057)	(0.046)	(0.049)	(0.047)	(0.056)	(0.057)
Income: Can afford a car but constrained in funds	0.202**	0.382***	0.224***	0.163**	0.272***	0.375***	0.362***
	(0.063)	(0.063)	(0.057)	(0.059)	(0.056)	(0.061)	(0.060)
Income: Can afford anything we need	0.183	0.391***	0.398***	0.251**	0.289***	0.320***	0.161
	(0.110)	(0.096)	(0.102)	(0.083)	(0.082)	(0.075)	(0.104)
N	21,463	21,463	21,463	21,463	21,463	21,463	21,463
R2	0.149	0.208	0.135	0.095	0.155	0.192	0.120

Note: Region-level cluster-robust standard errors; *p<0.1, **p<0.05, ***p<0.01. Dependent variable: Demand for various Covid-19 regulations (specified at the top of each column). Independent variable: Fear of Covid-19. Controls: age, gender, settlement type, education, employment status, income level. Empty rows indicate reference categories for the control variables based on individual characteristics. Fixed effects: region and date of the interview.

Table B5. The effect of fear on the demand for Covid-19 regulation across all measures: IV (Yandex)

Dependent variable:	(1) General Covid-19 regulations stringency	(2) Mask wearing	(3) Business lockdown	(4) Stay-home order	(5) Restrictions on: cafes, shops and services	(6) Entertainment events	(7) Religious events
Fear	0.597*	0.993	0.696**	0.852*	0.439	0.243	0.321
	(0.269)	(0.529)	(0.251)	(0.330)	(0.222)	(0.269)	(0.400)
Gender: Male	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)	(.)
Gender: Female	-0.032	-0.110	-0.102	-0.088	-0.053	0.068	-0.052
	(0.063)	(0.118)	(0.058)	(0.070)	(0.055)	(0.066)	(0.092)
Age	-0.003	-0.001	-0.009***	-0.008**	-0.004*	-0.001	0.000
	(0.002)	(0.004)	(0.002)	(0.003)	(0.002)	(0.002)	(0.003)
Settlement: City	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)	(.)
Settlement: Village	0.081	0.015	0.069	0.087	0.068	0.085	0.008
	(0.070)	(0.084)	(0.066)	(0.090)	(0.065)	(0.076)	(0.069)
Settlement: Urban-type settlement	0.133	0.040	0.066	-0.002	-0.007	-0.025	-0.038
	(0.073)	(0.073)	(0.062)	(0.078)	(0.051)	(0.059)	(0.058)
Settlement: Other	0.357*	0.069	0.367	0.338*	0.284*	0.189	0.112
	(0.175)	(0.169)	(0.220)	(0.159)	(0.128)	(0.113)	(0.115)
Employment: Permanent contract	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)	(.)
Employment: Temporary contract	0.034	0.093	0.148**	0.083	0.161***	0.054	0.078*
	(0.043)	(0.047)	(0.049)	(0.042)	(0.033)	(0.040)	(0.035)
Employment: Maternity leave	-0.033	-0.038	0.070	-0.099	0.136**	0.074	0.039
	(0.061)	(0.092)	(0.054)	(0.058)	(0.047)	(0.040)	(0.062)
Employment: Unpaid leave	-0.127	-0.160	-0.078	-0.263*	-0.165	0.198	0.019
	(0.130)	(0.119)	(0.134)	(0.129)	(0.142)	(0.106)	(0.159)
Employment: Out of labor force	0.078*	0.083	0.154***	0.072	0.215***	0.188***	0.090*
	(0.036)	(0.051)	(0.044)	(0.052)	(0.046)	(0.047)	(0.044)
Employment: Unemployed	0.032	0.066	0.114**	0.036	0.150***	0.093**	0.073
	(0.027)	(0.037)	(0.035)	(0.034)	(0.027)	(0.034)	(0.038)
Education: Elementary or incomplete secondary	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)	(.)
Education: Secondary school	-0.014	-0.141	-0.179	-0.143	-0.172	0.041	0.022
	(0.098)	(0.112)	(0.102)	(0.109)	(0.088)	(0.106)	(0.107)
Education: Vocational school	0.000	-0.119	-0.210*	-0.200	-0.208**	-0.057	-0.024
	(0.082)	(0.098)	(0.089)	(0.101)	(0.074)	(0.093)	(0.093)
Education: University degree (not completed)	0.050	-0.144	-0.259*	-0.174	-0.206*	-0.058	0.043
	(0.093)	(0.108)	(0.102)	(0.112)	(0.087)	(0.094)	(0.101)
Education: University degree	-0.033	-0.164	-0.294**	-0.256*	-0.201*	-0.009	0.092
	(0.100)	(0.127)	(0.109)	(0.123)	(0.090)	(0.107)	(0.128)
Income: Cannot afford food	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)	(.)
Income: Cannot afford clothing	0.049	0.092	0.122	-0.038	0.145	0.221*	0.215*
	(0.105)	(0.098)	(0.079)	(0.098)	(0.089)	(0.084)	(0.081)

Income: Cannot afford long-term goods	0.056	0.177	0.175*	0.013	0.179*	0.259**	0.272**
	(0.096)	(0.099)	(0.069)	(0.090)	(0.073)	(0.085)	(0.079)
Income: Cannot afford a car	0.084	0.223	0.213**	0.044	0.233**	0.349***	0.361***
	(0.101)	(0.112)	(0.073)	(0.095)	(0.076)	(0.087)	(0.083)
Income: Can afford a car but constrained in funds	0.173	0.259*	0.274**	0.077	0.255**	0.375***	0.363***
	(0.114)	(0.122)	(0.082)	(0.101)	(0.085)	(0.101)	(0.093)
Income: Can afford anything we need	0.277	0.444*	0.646***	0.458*	0.406**	0.230	0.216
	(0.194)	(0.204)	(0.161)	(0.209)	(0.150)	(0.145)	(0.203)
N	8,568	8,568	8,568	8,568	8,568	8,568	8,568
R2	0.072	-0.122	-0.003	-0.225	0.141	0.154	0.117
F-stat	18.153	18.153	18.153	18.153	18.153	18.153	18.153

Note: Region-level cluster-robust standard errors; *p<0.1, **p<0.05, ***p<0.01. Dependent variable: Demand for various Covid-19 regulations (specified at the top of each column). Independent variable: Fear of Covid-19. Controls: age, gender, settlement type, education, employment status, income level. Empty rows indicate reference categories for the control variables based on individual characteristics. Fixed effects: region and date of the interview.

Table B6. The effect of fear on the demand for Covid-19 regulation across all measures: IV (Google)

Dependent variable:	(1) General Covid-19 regulations stringency	(2) Mask wearing	(3) Business lockdown	(4) Stay-home order	(5) Restrictions on: cafes, shops and services	(6) Entertainment events	(7) Religious events
Fear	0.653*	1.675***	0.972***	0.955***	0.474	0.073	0.811**
	(0.254)	(0.282)	(0.248)	(0.268)	(0.265)	(0.284)	(0.237)
Gender: Male	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)	(.)
Gender: Female	-0.044	-0.267***	-0.165*	-0.112	-0.061	0.107	-0.164*
	(0.056)	(0.074)	(0.067)	(0.062)	(0.072)	(0.071)	(0.064)
Age	-0.003	-0.005	-0.011***	-0.009***	-0.004	0.001	-0.003
	(0.002)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Settlement: City	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)	(.)
Settlement: Village	0.081	0.016	0.069	0.087	0.068	0.085	0.009
	(0.072)	(0.122)	(0.078)	(0.094)	(0.066)	(0.081)	(0.079)
Settlement: Urban-type settlement	0.133	0.033	0.063	-0.003	-0.007	-0.024	-0.043
	(0.074)	(0.109)	(0.076)	(0.082)	(0.051)	(0.064)	(0.073)
Settlement: Other	0.360*	0.107	0.382	0.344*	0.286*	0.179	0.140
	(0.178)	(0.227)	(0.242)	(0.165)	(0.131)	(0.103)	(0.139)
Employment: Permanent contract	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)	(.)
Employment: Temporary contract	0.033	0.078	0.141*	0.081	0.160***	0.058	0.067
	(0.044)	(0.067)	(0.053)	(0.045)	(0.034)	(0.042)	(0.045)
Employment: Maternity leave	-0.040	-0.133*	0.032	-0.113*	0.131*	0.097	-0.029
	(0.062)	(0.066)	(0.054)	(0.053)	(0.053)	(0.057)	(0.054)
Employment: Unpaid leave	-0.127	-0.169	-0.082	-0.264	-0.165	0.201	0.012
	(0.133)	(0.150)	(0.140)	(0.133)	(0.143)	(0.108)	(0.156)
Employment: Out of labor force	0.076*	0.065	0.146**	0.069	0.214***	0.192***	0.077
	(0.036)	(0.072)	(0.047)	(0.053)	(0.047)	(0.051)	(0.050)
Employment: Unemployed	0.030	0.042	0.104*	0.032	0.149***	0.099*	0.056
	(0.027)	(0.044)	(0.039)	(0.035)	(0.031)	(0.038)	(0.038)
Education: Elementary or incomplete secondary	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)	(.)
Education: Secondary school	-0.019	-0.202	-0.204	-0.153	-0.175	0.056	-0.021
	(0.097)	(0.144)	(0.106)	(0.109)	(0.088)	(0.115)	(0.102)
Education: Vocational school	-0.003	-0.155	-0.225*	-0.205*	-0.210**	-0.048	-0.050
	(0.082)	(0.133)	(0.093)	(0.102)	(0.074)	(0.100)	(0.093)
Education: University degree (not completed)	0.049	-0.158	-0.265*	-0.176	-0.207*	-0.054	0.033
	(0.094)	(0.147)	(0.112)	(0.115)	(0.087)	(0.096)	(0.108)
Education: University degree	-0.042	-0.271	-0.337**	-0.272*	-0.206*	0.018	0.015
	(0.097)	(0.150)	(0.107)	(0.116)	(0.089)	(0.119)	(0.113)
Income: Cannot afford food	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)	(.)
Income: Cannot afford clothing	0.045	0.045	0.103	-0.046	0.143	0.232*	0.181*
	(0.108)	(0.124)	(0.084)	(0.099)	(0.088)	(0.094)	(0.082)

Income: Cannot afford long-term goods	0.053	0.138	0.160*	0.007	0.177*	0.269**	0.245**
	(0.098)	(0.125)	(0.077)	(0.093)	(0.072)	(0.095)	(0.078)
Income: Cannot afford a car	0.079	0.162	0.188*	0.035	0.230**	0.364***	0.317***
	(0.101)	(0.131)	(0.078)	(0.096)	(0.075)	(0.098)	(0.082)
Income: Can afford a car but constrained in funds	0.167	0.184	0.244**	0.066	0.252**	0.394**	0.309**
	(0.116)	(0.135)	(0.086)	(0.103)	(0.082)	(0.114)	(0.092)
Income: Can afford anything we need	0.294	0.661**	0.734***	0.491*	0.417*	0.176	0.372*
	(0.195)	(0.221)	(0.183)	(0.220)	(0.158)	(0.164)	(0.174)
N	8,568	8,568	8,568	8,568	8,568	8,568	8,568
R2	0.041	-1.365	-0.279	-0.352	0.135	0.069	-0.128
F-stat	25.343	25.343	25.343	25.343	25.343	25.343	25.343

Note: Region-level cluster-robust standard errors; *p<0.1, **p<0.05, ***p<0.01. Dependent variable: Demand for various Covid-19 regulations (specified at the top of each column). Independent variable: Fear of Covid-19. Controls: age, gender, settlement type, education, employment status, income level. Empty rows indicate reference categories for the control variables based on individual characteristics. Fixed effects: region and date of the interview.

Table B7. The effect of fear on preferences for government spending: OLS

Dependent variable:	(1) Healthcare spending	(2) Unemployment support	(3) Business support	(4) Housing
Fear	0.061***	0.000	-0.007	0.041***
	(0.008)	(0.006)	(0.008)	(0.006)
Gender: Male	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)
Gender: Female	0.059***	-0.028	0.035*	0.013
	(0.014)	(0.016)	(0.017)	(0.016)
Age	0.005***	-0.007***	-0.000	-0.000
	(0.001)	(0.001)	(0.001)	(0.001)
Settlement: City	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)
Settlement: Village	0.071	0.046	0.006	0.076
	(0.047)	(0.047)	(0.050)	(0.045)
Settlement: Urban-type settlement	0.015	0.068	-0.069	0.028
	(0.038)	(0.046)	(0.038)	(0.044)
Settlement: Other	0.112	0.011	0.064	-0.009
	(0.105)	(0.108)	(0.111)	(0.111)
Employment: Permanent contract	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)
Employment: Temporary contract	-0.013	-0.019	0.130***	0.218***
	(0.035)	(0.022)	(0.030)	(0.025)
Employment: Maternity leave	0.022	0.063**	-0.032	0.026
	(0.022)	(0.023)	(0.025)	(0.023)
Employment: Unpaid leave	-0.135	-0.034	0.120	0.159
	(0.070)	(0.087)	(0.083)	(0.084)
Employment: Out of labor force	0.006	-0.093***	-0.031	0.069*
	(0.026)	(0.027)	(0.028)	(0.029)
Employment: Unemployed	-0.022	-0.024	0.018	0.319***
	(0.020)	(0.025)	(0.024)	(0.024)
Education: Elementary or incomplete secondary	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)
Education: Secondary school	0.114	0.071	-0.020	-0.055
	(0.059)	(0.061)	(0.074)	(0.074)
Education: Vocational school	0.107	0.129*	-0.020	0.055
	(0.061)	(0.056)	(0.069)	(0.071)
Education: University degree (not completed)	0.176*	-0.012	0.044	-0.139
	(0.067)	(0.057)	(0.070)	(0.073)
Education: University degree	0.163*	-0.092	-0.020	-0.164*
	(0.062)	(0.052)	(0.063)	(0.071)
Income: Cannot afford food	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)
Income: Cannot afford clothing	0.123	-0.081	0.012	-0.149*
	(0.082)	(0.057)	(0.071)	(0.063)
Income: Cannot afford long-term goods	0.114	-0.214***	0.086	-0.257***
	(0.071)	(0.055)	(0.074)	(0.064)
Income: Cannot afford a car	0.125	-0.282***	0.128	-0.325***
	(0.070)	(0.058)	(0.077)	(0.066)
Income: Can afford a car but constrained in funds	0.145	-0.291***	0.137	-0.340***
	(0.074)	(0.059)	(0.083)	(0.071)
Income: Can afford anything we need	0.091	-0.172	0.327**	-0.082
	(0.129)	(0.103)	(0.112)	(0.109)
N	21,463	21,463	21,463	21,463
R^2	0.017	0.028	0.011	0.043

Note: Region-level cluster-robust standard errors; *p<0.1, **p<0.05, ***p<0.01. Dependent variable: Demand for various Covid-19 regulations (specified at the top of each column). Independent variable: Fear of Covid-19. Controls: age, gender, settlement type, education, employment status, income level. Empty rows indicate reference categories for the control variables based on individual characteristics. Fixed effects: region and date of the interview.

Table B8. The effect of fear on preferences for government spending: IV (Yandex)

Dependent variable:	(1) Healthcare spending	(2) Unemployment support	(3) Business support	(4) Housing
Fear	1.091*	-0.005	0.612	1.516***
	(0.412)	(0.260)	(0.342)	(0.416)
Gender: Male	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)
Gender: Female	-0.161	-0.018	-0.139	-0.355***
	(0.097)	(0.064)	(0.085)	(0.097)
Age	-0.002	-0.007***	-0.004	-0.011**
	(0.003)	(0.002)	(0.003)	(0.004)
Settlement: City	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)
Settlement: Village	0.007	0.002	-0.019	0.073
	(0.112)	(0.076)	(0.085)	(0.134)
Settlement: Urban-type settlement	-0.050	0.008	-0.093	-0.050
	(0.097)	(0.071)	(0.081)	(0.126)
Settlement: Other	0.236	-0.109	-0.006	0.041
	(0.149)	(0.145)	(0.190)	(0.234)
Employment: Permanent contract	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)
Employment: Temporary contract	-0.011	-0.082	0.095	0.184*
	(0.060)	(0.044)	(0.048)	(0.079)
Employment: Maternity leave	-0.121	0.043	-0.143*	-0.145
	(0.069)	(0.056)	(0.065)	(0.079)
Employment: Unpaid leave	-0.276	-0.052	0.203	0.240
	(0.183)	(0.141)	(0.122)	(0.161)
Employment: Out of labor force	-0.032	-0.159**	-0.066	0.001
	(0.057)	(0.049)	(0.051)	(0.086)
Employment: Unemployed	-0.052	-0.078*	-0.018	0.252***
	(0.051)	(0.038)	(0.036)	(0.066)
Education: Elementary or incomplete secondary	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)
Education: Secondary school	-0.117	0.042	-0.091	-0.219
	(0.153)	(0.094)	(0.126)	(0.175)
Education: Vocational school	-0.049	0.126	-0.034	-0.023
	(0.140)	(0.089)	(0.126)	(0.174)
Education: University degree (not completed)	0.088	-0.026	0.100	-0.210
	(0.131)	(0.091)	(0.125)	(0.172)
Education: University degree	-0.137	-0.151	-0.164	-0.425*
	(0.169)	(0.098)	(0.137)	(0.198)
Income: Cannot afford food	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)
Income: Cannot afford clothing	0.208	0.065	0.026	-0.355*
	(0.131)	(0.113)	(0.128)	(0.144)
Income: Cannot afford long-term goods	0.205	-0.120	0.101	-0.421**
	(0.114)	(0.101)	(0.120)	(0.145)
Income: Cannot afford a car	0.195	-0.177	0.130	-0.531***
	(0.119)	(0.095)	(0.125)	(0.150)
Income: Can afford a car but constrained in funds	0.210	-0.196*	0.076	-0.599***
	(0.121)	(0.097)	(0.131)	(0.147)
Income: Can afford anything we need	0.623*	-0.033	0.615**	0.325
	(0.282)	(0.157)	(0.212)	(0.312)
N	8,568	8,568	8,568	8,568
R^2	-1.040	0.029	-0.373	-2.207
F-stat	18.153	18.153	18.153	18.153

Note: Region-level cluster-robust standard errors; *p<0.1, **p<0.05, ***p<0.01. Dependent variable: Demand for various Covid-19 regulations (specified at the top of each column). Independent variable: Fear of Covid-19. Controls: age, gender, settlement type, education, employment status, income level. Empty rows indicate reference categories for the control variables based on individual characteristics. Fixed effects: region and date of the interview.

Table B9. The effect of fear on preferences for government spending: IV (Google)

Dependent variable:	(1) Healthcare spending	(2) Unemployment support	(3) Business support	(4) Housing
Fear	1.410***	0.578	0.793	1.354***
	(0.375)	(0.714)	(0.410)	(0.361)
Gender: Male	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)
Gender: Female	-0.235*	-0.152	-0.181	-0.318***
	(0.091)	(0.165)	(0.096)	(0.085)
Age	-0.005	-0.011*	-0.005	-0.010**
	(0.003)	(0.005)	(0.003)	(0.003)
Settlement: City	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)
Settlement: Village	0.007	0.003	-0.019	0.073
	(0.131)	(0.089)	(0.093)	(0.124)
Settlement: Urban-type settlement	-0.053	0.002	-0.095	-0.049
	(0.114)	(0.074)	(0.089)	(0.117)
Settlement: Other	0.254	-0.077	0.005	0.032
	(0.176)	(0.162)	(0.196)	(0.226)
Employment: Permanent contract	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)
Employment: Temporary contract	-0.018	-0.095	0.091	0.188*
	(0.070)	(0.054)	(0.054)	(0.072)
Employment: Maternity leave	-0.166*	-0.037	-0.168*	-0.123
	(0.078)	(0.109)	(0.077)	(0.080)
Employment: Unpaid leave	-0.281	-0.060	0.201	0.242
	(0.199)	(0.143)	(0.128)	(0.151)
Employment: Out of labor force	-0.041	-0.174**	-0.071	0.005
	(0.067)	(0.058)	(0.057)	(0.078)
Employment: Unemployed	-0.063	-0.099	-0.024	0.258***
	(0.056)	(0.058)	(0.041)	(0.062)
Education: Elementary or incomplete secondary	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)
Education: Secondary school	-0.146	-0.009	-0.107	-0.205
	(0.171)	(0.135)	(0.136)	(0.158)
Education: Vocational school	-0.066	0.095	-0.043	-0.014
	(0.155)	(0.119)	(0.132)	(0.158)
Education: University degree (not completed)	0.081	-0.038	0.096	-0.206
	(0.144)	(0.099)	(0.130)	(0.160)
Education: University degree	-0.187	-0.242	-0.192	-0.400*
	(0.179)	(0.169)	(0.146)	(0.172)
Income: Cannot afford food	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)
Income: Cannot afford clothing	0.186	0.024	0.013	-0.344*
	(0.149)	(0.131)	(0.134)	(0.137)
Income: Cannot afford long-term goods	0.187	-0.153	0.091	-0.411**
	(0.131)	(0.125)	(0.125)	(0.140)
Income: Cannot afford a car	0.167	-0.229	0.114	-0.517***
	(0.135)	(0.130)	(0.131)	(0.145)
Income: Can afford a car but constrained in funds	0.175	-0.259	0.056	-0.581***
	(0.142)	(0.141)	(0.136)	(0.145)
Income: Can afford anything we need	0.725*	0.153	0.672*	0.273
	(0.312)	(0.303)	(0.253)	(0.273)
N	8,568	8,568	8,568	8,568
R^2	-1.801	-0.322	-0.629	-1.746
F-stat	25.343	25.343	25.343	25.343

Note: Region-level cluster-robust standard errors; *p<0.1, **p<0.05, ***p<0.01. Dependent variable: Demand for various Covid-19 regulations (specified at the top of each column). Independent variable: Fear of Covid-19. Controls: age, gender, settlement type, education, employment status, income level. Empty rows indicate reference categories for the control variables based on individual characteristics. Fixed effects: region and date of the interview.

Appendix C. Parameters of the survey

OMI panel consists mostly of respondents in cities with more than 100,000 inhabitants. However, only the most populated regions allow us to have the required sample size with the required parameters in those cities. Thus, our sample breaks down into 39 regions where all our parameters could be met (Tables C1 and C2) and 22 regions where an additional survey of the population in smaller cities and rural areas is needed in order to meet the criteria (Tables C3 and C4). Finally, we provide an additional survey in cities with a population of less than 100,000 (Table C5). Figure C1 provides visual representations of regions and localities included in the survey.

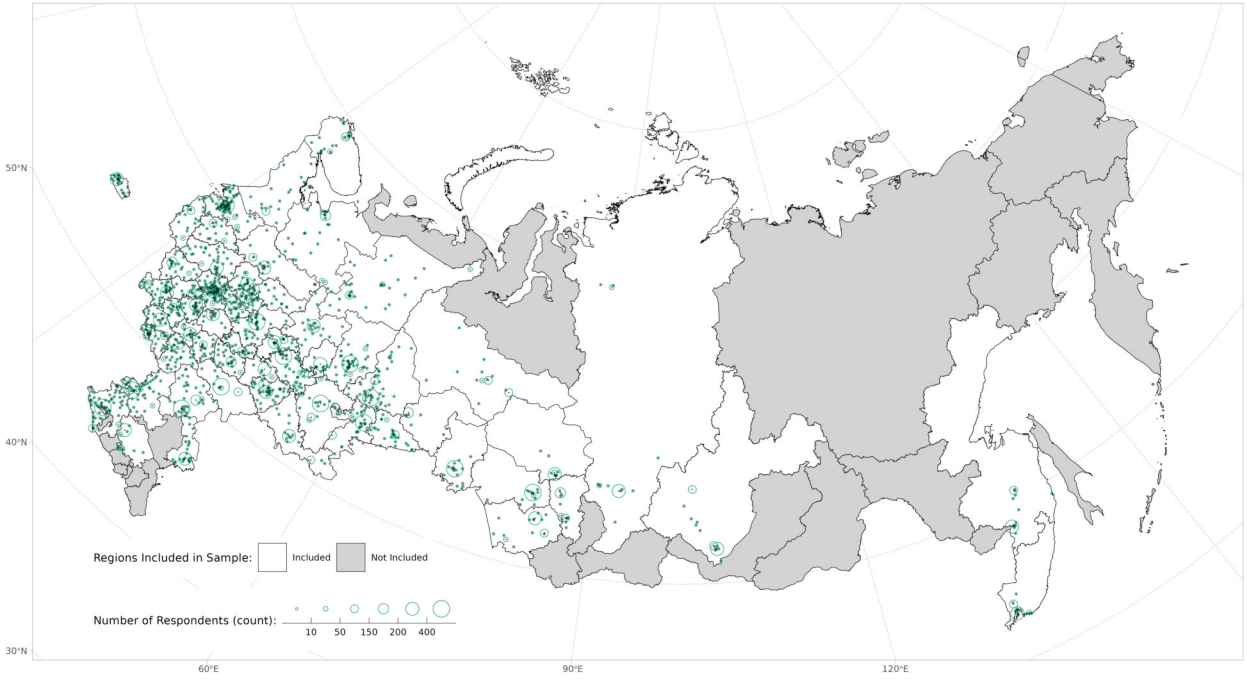


Figure C1. Regions and localities included in the sample

1. The first part includes at least 16,550 respondents in 39 regions. All respondents surveyed should live in cities with more than 100,000 inhabitants. This survey consists of two sets which differ in quotas for age, gender and education.
   (a) The first set includes 28 regions that are presented in Table C1. The following parameters should be satisfied in each of these regions:

i. At least 40 per cent men

ii. At least 40 per cent do not have a university degree

iii. At least 3 per cent over 55 years old

iv. At least 10 per cent at the age of 18-24 years old

(b) The second set includes 11 regions that are presented in Table C2. The following parameters should be satisfied in each of these regions (these parameters are less strict than in the first set due to the limitations of the OMI panel):

i. At least 30 per cent men

ii. At least 40 per cent do not have a university degree

iii. At least 3 per cent over 55 years old

iv. At least 10 per cent at the age of 18-24 years old

2. The second part includes at least 5,000 respondents in 22 regions. Respondents are surveyed mostly in cities with more than 100,000 inhabitants however they could be recruited also in smaller cities and villages (e.g. in Leningradskaya oblast there are only cities with a population of less than 1000,000 thus it's not feasible to have a survey in cities with more than 100,000 inhabitants). This part also consists of two sets which differ in quotas for age, gender and education. Overall parameters of this part are less strict than for the first part.

(a) The first set includes 3,650 respondents in 16 regions that are presented in Table C3. The following parameters should be satisfied in each of the regions:

i. At least 30 per cent men

ii. At least 40 per cent do not have a university degree

iii. At least 2 per cent over 55 years old

iv. At least 5 per cent at the age of 18-24 years old

(b) The second set includes 1,350 respondents in 6 regions that are presented in Table C4. The following parameters should be satisfied in each of the regions (again they are less strict than for the first set):

i. At least 30 per cent men

ii. At least 35 per cent do not have a university degree

iii. At least 2 per cent over 55 years old

iv. At least 5 per cent at the age of 18-24 years old

3. The additional survey in cities with less than 100,000 inhabitants includes at least 1270 respondents in 17 regions that are presented in Table C5. Additionally, at least 30 people are interviewed in those of the 17 regions indicated in Table C5 in which the number of respondents was less than 100. Moreover, the following parameters should be satisfied in each of the regions:

   (i) At least 30 per cent men

   (ii) At least 35 per cent do not have a university degree

   (iii) At least 2 per cent over 55 years old

   (iv) At least 5 per at the age of 18-24 years old

Regions	N of respondents in a region	Minimum N of respondents			
		Male	18-24 years	55+ years	W/o a university degree
Altai Krai	350	140	35	11	140
The Republic of Bashkortostan	570	228	57	17	228
Volgograd Oblast	570	228	57	17	228
Voronezh Oblast	570	228	57	17	228
Irkutsk Oblast	350	140	35	11	140
Kemerovo Oblast	350	140	35	11	140
Krasnodar Krai	570	228	57	17	228
Krasnoyarsk Krai	350	140	35	11	140
Moscow	570	228	57	17	228
Moscow Oblast	350	140	35	11	140
Nizhny Novgorod Oblast	570	228	57	17	228
Novosibirsk Oblast	570	228	57	17	228
Omsk Oblast	570	228	57	17	228
Orenburg Oblast	350	123	35	11	140
Perm Krai	570	228	57	17	228
Rostov Oblast	570	228	57	17	228
Samara Oblast	570	228	57	17	228
Saint-Petersburg	570	228	57	17	228
Saratov Oblast	570	228	57	17	228
Sverdlovsk Oblast	570	228	57	17	228
Stavropol Krai	350	140	35	11	140
The Republic of Tatarstan	570	228	57	17	228
The Udmurt Republic	350	105	35	11	140
Ulyanovsk Oblast	350	105	35	11	140
Chelyabinsk Oblast	570	228	57	17	228
Yaroslavl Oblast	350	140	35	11	140
Tyumen Oblast and Khanty-Mansi AO	350	140	35	11	140
Total number of respondents	12970	5101	1297	393	5188

Table C1. Regions and parameters for the first set of the first part

Regions	N of respondents in a region	Minimum N of respondents			
		Male	18-24 years	55+ years	W/o a university degree
Belgorod Oblast	350	105	35	11	140
Vladimir Oblast	340	102	34	10	136
Vologda Oblast	350	105	35	11	140
Kirov Oblast	325	98	33	10	130
Lipetsk Oblast	350	105	35	11	140
Primorsky Krai	350	105	35	11	140
Ryazan Oblast	330	99	33	10	132
Tomsk Oblast	315	95	32	9	126
Tula Oblast	350	105	35	11	140
Khabarovsk Krai	320	96	32	10	128
The Chuvash Republic	350	105	35	11	140
Total number of respondents	3730	1120	374	115	1492

Table C2. Regions and parameters for the second set of the first part

Regions	N of respondents in a region	Minimum N of respondents			
		Male	18-24 years	55+ years	W/o a university degree
Kurgan Oblast	200	60	10	4	80
Novgorod Oblast	150	45	8	3	60
Pskov Oblast	150	45	8	3	60
Archangelsk Oblast	300	90	15	6	120
Ivanovo Oblast	300	90	15	6	120
Leningrad Oblast	300	90	15	6	120
Tver Oblast	300	90	15	6	120
Astrakhan Oblast	250	75	13	5	100
Kaliningrad Oblast	250	75	13	5	100
Smolensk Oblast	250	75	13	5	100
Kaluga Oblast	200	60	10	4	80
The Komi Republic	200	60	10	4	80
Kostroma Oblast	200	60	10	4	80
The Republic of Karelia	150	45	8	3	60
The Mari El Republic	150	45	8	3	60
Murmansk Oblast	150	45	8	3	60
Total number of respondents	3500	1050	179	70	1400

Table C3. Regions and parameters for the first set of the second part

Regions	N of respondents in a region	Minimum N of respondents			
		Male	18-24 years	55+ years	W/o a university degree
Tambov Oblast	200	60	10	4	70
Orel Oblast	150	45	8	3	53
Bryansk Oblast	300	90	15	6	105
Kursk Oblast	250	75	13	5	88
Penza Oblast	250	75	13	5	88
The Republic of Mordovia	200	90	15	6	105
Total number of respondents	1350	435	74	29	509

Table C4. Regions and parameters for the second set of the second part

Regions	Minimum number of respondents
Moscow Oblast	100
Sverdlovsk Oblast	100
Krasnodar Krai	100
Samara Oblast	70
Nizhny Novgorod Oblast	100
Chelyabinsk Oblast	100
Volgograd Oblast	70
Yaroslavl Oblast	30
Tula Oblast	60
Kirov Oblast	50
Vladimir Oblast	60
Voronezh Oblast	80
Belgorod Oblast	50
Rostov Oblast	100
The Republic of Tatarstan	100
Perm Krai	100
Total number of respondents	1270

Table C5. Regions and parameters for the additional survey