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Pandemic Policy and Life Satisfaction in Europe

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JEL Codes: H51, I18, I31.

Keywords: COVID-19, Life Satisfaction, Policy Stringency, Economic Support.



Pandemic Policy and Life Satisfaction in Europe*

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Abstract

We use data from the COME-HERE longitudinal survey collected by the University of Luxembourg to assess the effects of the policy responses to the COVID-19 pandemic on life satisfaction in France, Germany, Italy, Spain and Sweden over the course of 2020. Policy responses are measured by the Stringency Index and the Economic Support Index from the Blavatnik School of Government. Stringency is systematically associated with lower life satisfaction, controlling for the intensity of the pandemic itself. This stringency effect is larger for women, those with weak ties to the labour market, and in richer households. The effect of the Economic Support is never statistically different from zero.

Keywords: COVID-19, Life Satisfaction, Policy Stringency, Economic Support.

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1. Introduction

The COVID-19 pandemic has drastically changed our lives. These have for example become much more sedentary (with less physical activity and more screen time) everywhere in the world (Hu *et al.*, 2020, Kumari *et al.*, 2020, Medrano *et al.*, 2020, and Giuntella *et al.*, 2021). On the labour market, unemployment and job insecurity have been on the rise while working time has fallen (Adams-Prassl *et al.*, 2020a, Beland *et al.*, 2020, Bottan *et al.*, 2020, and Guven *et al.*, 2020). Brewer and Gardiner (2020) use the Resolution Foundation’s Coronavirus Survey, a cross-section dataset of 6,000 UK adults in early May 2020, to show that the probability of reporting lower household income has risen. Belot *et al.* (2020) use cross-section data from China, Japan, South Korea, Italy, the UK and the US in April 2020 (around 1,000 respondents per country) to show that the youngest were more likely to experience drops in household income.

Aknin *et al.* (2021) review the growing literature on the consequences of living through the COVID-19 pandemic on mental health and subjective wellbeing. They conclude that the pandemic has triggered a rise in mental-health issues, while the evidence on cognitive wellbeing measures is more nuanced. Although overall 2020 wellbeing trends certainly partly reflect the spread of COVID-19 itself, we here focus on the well-being consequences of governmental policy responses. Using the Gross National Happiness Index derived from Twitter, Greyling *et al.* (2021) reveal a negative and significant well-being effect of lockdown measures in New Zealand, Australia and South Africa. Using a combination of difference-in-differences regressions and regression-discontinuity designs, Brodeur *et al.* (2021) show that the lockdown measures in Western Europe had a negative impact on a number of aspects of wellbeing, as measured by topic searches in Google Trends. The effect in the US, however, is positive. The difference between Western Europe and the US is argued to reflect timing of the measures, with the US locking down later (and the well-being effect of lockdown also being positive in the “later-lockdown” countries in Europe: Ireland, Portugal and the UK).

Some work has appealed to individual-level data. Fancourt *et al.* (2020) consider lockdown and mental health in the UK, using a longitudinal observational study (the UCL COVID-19 Social Study). They find that depression and anxiety levels fell during the weeks following the

lockdown introduction. Based on the high-frequency USC Understanding Coronavirus in America Study, Banks *et al.* (2021) show a reduction in the prevalence of anxiety, depression and in other mental-health measures such as self-perceived stress following the lockdown of April 2020. On the contrary, Sibley *et al.* (2020) find worse mental health after the introduction of lockdown in panel data from New Zealand. Combining the German Job Search Panel (a longitudinal survey of employed job seekers registered at the Federal Employment Agency) and an event-study design, Schmidtke *et al.* (2021) find that the first federal lockdown in Germany during March and April 2020 reduced life satisfaction, affective wellbeing and mental health. To our knowledge, there has not been work explicitly relating subjective wellbeing to the changing government pandemic policy responses within different countries using panel data throughout 2020. This is what we do here, exploiting the changes in governments' pandemic policy responses over time across five European countries. We consider both the stringency of lockdown measures and the economic support provided by governments, which we match to life-satisfaction scores in France, Germany, Italy, Spain, and Sweden from a large panel survey covering over 8,000 individuals.

Controlling for the evolution of the pandemic itself (via the 4-week average number of daily deaths), our panel analysis reveals that more-stringent policies significantly reduce life satisfaction. In line with the literature suggesting rising gender inequality during the pandemic, this lower life satisfaction from confinement is larger for women. It is also larger for respondents with the weakest ties to the labour market, and for those with relatively high income. The former is consistent with greater feelings of job insecurity caused by the labour-market disruption from lockdown, while the latter may reflect the restrictions on certain types of leisure consumption that are more prevalent among the better-off (for example, international tourism, restaurants and theatre).

On the contrary, there is no evidence of a link between the generosity of economic support and life satisfaction. This insignificance could indeed be read as showing that government economic support did not make any mark on subjective wellbeing. However, the income-support schemes implemented throughout 2020 did not evolve at random. In particular, they were designed to increase household incomes (Clark *et al.*, 2021) relative to no intervention.

By compensating for the income losses caused by lockdown stringency, economic support helped keep individuals' economic resources at their non-lockdown level. Our regressions then compare "normal" income to lockdown income plus compensation; with these two being fairly similar by design we may not expect to uncover a significant relationship with life satisfaction.

The remainder of the paper is structured as follows. Section 2 describes the data and the empirical strategy. Section 3 estimates the effects of governmental policy responses to COVID-19 on life satisfaction, and identifies those who have been more-strongly affected. Last, Section 4 concludes.

2. Data and empirical strategy

2.1. Data

The data we use here comes from the ongoing COME-HERE (COVID-19, MEntal HEalth, REsilience and Self-regulation) survey collected by the University of Luxembourg. The survey was conducted with Qualtrics to produce representative samples of adults (aged 18 or over) in France, Germany, Italy, Spain and Sweden.¹ Respondents were asked to complete an on-line questionnaire that took approximately 20 minutes. The survey collects information at both the individual and household levels, and is longitudinal. The first four waves of the COME-HERE survey were conducted around late April, early June, early August, and late November 2020. At least four more waves are planned to take place in 2021.

More than 8,000 individuals responded to the first survey wave, and were then invited to take part in the subsequent waves. Over 80% of Wave One respondents participated in at least one other survey wave, with 45% participating in all four. The survey collects detailed information on individuals' living conditions and mental health during the pandemic, as well as identifying recent changes and events in individuals' lives. The survey also includes standard sociodemographic characteristics such as age, gender, education, labour-force status, and country and region of residence.

¹ Stratification ensured that the data is representative in terms of gender, region, and age. Ethics approval was granted by the Ethics Review Panel of the University of Luxembourg.

In each survey round, respondents replied to the following life-satisfaction question “Overall, in the past week, how satisfied have you been with your life?” using a standard 11-point Likert scale. Life satisfaction is one of the most common cognitive measures of wellbeing. An extensive empirical literature has suggested that life satisfaction, and wellbeing questions more generally, constitutes a valid measure of individual utility (see Clark, 2016, for a detailed review of this literature). Life satisfaction questions allow each individual to put their own weights on each dimension of their lives that they consider as relevant to produce an overall summary score. While wellbeing questions are subjective, their validity has been addressed by showing that their responses are correlated with physiological expressions of emotions and brain activity (Urry *et al.*, 2004) as well as with future behaviours, such as marital break-up (Güven *et al.*, 2012), job quits (Clark, 2001), productivity (Oswald *et al.*, 2015) and voting (Liberini *et al.*, 2017; Ward, 2020). Subjective wellbeing measures then contain useful information, in that one person who says that they are less satisfied with their job (for example) is more likely to quit it than another with a higher satisfaction score. This cross-section correlation between well-being and behaviour underscores that the former is informative about individuals’ unobserved real quality of life: at least to some extent, people mean what they say. Were subjective scores to be incomparable across individuals, no such relationship would be found.

The distribution of life satisfaction in the estimation sample that we will use below appears in Figure 1. There is left-skew, as is often found in subjective variables. The mean level of life satisfaction is 6.3 on the 0-10 scale, and the modal response is 7.

2.2. Empirical Strategy

We estimate the following equation via OLS with individual fixed-effects:

$$LS_{ijt} = \alpha SI_{jt} + \beta ESI_{jt} + \gamma COVID_{jt} + \delta X_{ijt} + \mu_i + \lambda_t + \epsilon_{ijt}. \quad (1)$$

LS_{ijt} is the life satisfaction of respondent i living in country j at time t . SI_{jt} and ESI_{jt} are, respectively, the Stringency Index and the Economic Support Index in country j at time t , which form part of the Oxford COVID-19 Government Response Tracker produced by the Blavatnik School of Government at the University of Oxford. Over one hundred students and

staff members of the University of Oxford from every part of the world collect data from public sources to produce indices measuring policy responses to COVID-19 at the national level that are updated on a daily basis.²

Both SI and ESI are rescaled so that they range from 0 to 100. A higher value of SI corresponds to a more-stringent country lockdown-style policy response to COVID-19. Equally, higher values of ESI reflect the country replacing a higher percentage of lost earnings and/or providing greater debt/contract relief in attempting to counterbalance the adverse economic effects of COVID-19 on individuals. As explained by the data producers (Hale *et al.*, 2020), these Indices do not measure the effectiveness of a government's response in terms of outcomes, but rather synthetic measures of the intensity of government policy that can be compared cross-country and over time. In our main regressions, SI_{jt} and ESI_{jt} are the average index values over the two weeks prior to the interview date, and are standardised to have means of zero and standard deviations of one. Our results, available upon request, are similar when we use either the average values of the indices over the month prior to the interview date or the values of the indices at the exact day of interview.

We do not have a strong prior about the sign of α . Containment policies aim to limit the spread of the virus, with public-health benefits that likely contribute to wellbeing. However, at the same time they impose more sedentary lifestyles, restrict social interaction, and disrupt the economy. The net effect of β is also ambiguous. If the economic support provided by governments compensates the income losses produced by the pandemic, β will reflect the net effect of lower income that is then (partly) compensated. If income-support schemes fully compensate for losses, the net effect of β will depend on the relative importance of income

² The Stringency Index is composed of the nine following sub-indices, measuring various aspects of containment policies: “school closing”, “workplace closing”, “cancellation of public events”, “restriction on gathering”, “public transport closing”, “stay-at-home requirements”, “restriction on internal movement”, “restriction on international travel” and “public information campaign”. The Economic Support Index has instead only two components: “income support” and “debt relief”. The first measures the extent to which governments provide their citizens with direct cash payments, universal basic income, or income support for people who lost their job or cannot work; the second pertains to governmental decisions to freeze financial obligations of households (such as loan repayments). For more details, see www.bsg.ox.ac.uk/research/research-projects/coronavirus-government-response-tracker#data).

losses and gains on wellbeing: if these are equal, β would then be zero. If on the contrary losses weigh more than gains (as in Boyce *et al.*, 2013, and De Neve *et al.*, 2018), β will be negative.

The SI_{jt} and ESI_{jt} policy variables are of course not random, and reflect the spread of COVID-19. With no other controls, the estimated coefficients on SI_{jt} and ESI_{jt} would be confounded by the omitted variable of the evolution of COVID-19 itself. We attenuate this bias by controlling for the extent of the pandemic, $COVID_{jt}$. Plausible candidates for $COVID_{jt}$ are the total and daily number of COVID-19 cases and deaths (averaged over two or four weeks). It is difficult to include all of these variables at the same time as they are very strongly correlated, and we control for only one measure in our main empirical model. The best $COVID_{jt}$ measure is identified in Tables A1 and A2 as that which best fits SI_{jt} and ESI_{jt} respectively, over the interview dates of the COME-HERE survey in 2020. In Table A1, for SI_{jt} , this is the average number of daily deaths over four weeks ($R^2 = 0.686$); for ESI_{jt} in Table A2 it is the four-week average total number of deaths ($R^2 = 0.320$). We will use four-week average daily deaths as our $COVID_{jt}$ measure due to the better quality of the fit. The results are qualitatively similar when we use any of the other COVID-19 measures.

The vector X_{it} includes standard individual characteristics (age and its square, the log of equivalised monthly household disposable PPP-adjusted income in January 2020, and dummies for gender, partnership status, education, labour-force status, and country of residence). We control for macro-trends and individual time-invariant heterogeneity by introducing respectively wave fixed-effects λ_t and individual fixed-effects μ_i . Standard errors are clustered at the $SI_{jt} * ESI_{jt}$ level. We will also present a number of robustness checks to show that our conclusions hold with different versions of our main specification.

We consider the sample of COME-HERE respondents who were present in at least two out of the four current survey waves, and who provided valid information on life satisfaction and the socio-demographic variables. This sample covers 20,337 observations (6,039 individuals); the associated descriptive statistics appear in Table 1. French, German, Italian and Spanish respondents make up a little over 20% of the sample each, while 12% of the observations come from Swedish respondents. In terms of the wave structure, 30% of the

observations come from Wave One, and the remainder are fairly equally distributed across the three remaining waves. Just under half of the sample observations come from women and the high-educated (i.e. those with a diploma from post-Secondary education). As with all panel surveys, there is some attrition. Although we do not use weights in our main specification, we do obtain similar results (available upon request) when we address non-random attrition via Inverse-Probability Weights.

Figure 2 depicts the evolution of the Stringency and Economic Support Indices across the five COME-HERE countries over April to November 2020. At each of the four waves, the dots refer to the average values of the indices across the various interview dates at that wave (where the value taken by the indices on any day is itself an average over the two weeks prior to that day). Stringency is U-shaped in almost every country: the index fell after the first COVID-19 wave and the release of the first lockdowns in Europe (from April to August) but then rose with the second COVID-19 wave and the new series of lockdowns (from August to November). The only country with a different pattern is Sweden, where no lockdowns were introduced: here the Stringency Index is on the contrary fairly flat over 2020, taking on the lowest average figure among the COME-HERE countries.

On the right-hand side of Figure 2 the pattern for the Economic Support Index across countries is more nuanced. This Index remained high and stable in Spain throughout the sample period, while it rose over time in Italy and Sweden but fell in France and Germany. This reflects the key economic responses summarised by the International Monetary Fund's policy tracker (see www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19). The first economic support measures in Spain appeared as early as the beginning of March, with an overall budget of 47 Billion Euros (4.2% of Spanish GDP) being agreed by the government over the course of 2020. These measures included easier access to unemployment benefits, higher sick pay for COVID-19 infected workers, support for the self-employed who lost work, a new means-tested minimum-income scheme, and subsidising new rental programs for vulnerable renters. The governments in the other COME-HERE countries implemented somewhat-similar economic support schemes, but these either appeared later on (Italy and Sweden), or became more targeted over time (France and Germany).

3. Pandemic Policy and Life Satisfaction

3.1. Main Results

Table 2 lists the regression results for Equation (1). Columns (1) and (2) introduce the Stringency Index and Economic Support Index separately in an equation with no other controls: the former attracts a negative and very-significant estimate but there is no significant correlation with the latter.³ We then introduce both at the same time in column (3): although the two indices are positively correlated, with a Pearson's correlation coefficient of 0.18, this produces only very little change in the estimated Index coefficients.⁴ Column (4) then addresses any confounding effect from the spread of COVID-19 itself by controlling for the 4-week average number of daily deaths. This turns out to have only a slight attenuation effect on the estimate for the Stringency Index, which remains significant; there continues to be no evidence of a relationship between the Economic Support Index and life satisfaction in our five countries over the course of 2020. The 4-week average number of daily deaths attracts a negative, but insignificant, estimated coefficient.

Column (5) introduces controls for individual heterogeneity, via the variables in the X_{it} vector. The estimates for the Stringency Index and Economic Support Index are unsurprisingly unaffected, as there is little reason to believe that changes in individual characteristics within a country over a short time period would be correlated with the government's COVID-19 policy responses. We last include individual fixed-effects in column (6), which will reflect, for example, differences in the use of the life satisfaction scale. In these regressions, we do not include sex, education, marital status, or income in January 2020, as these do not change over the seven-month period. The introduction of individual fixed effects does not affect our

³ The negative relationship between the Stringency Index and life satisfaction in COME-HERE data is also found in Schifano *et al.* (2021). Their focus is rather on the correlation between subjective well-being and working from home, and they control for the Stringency Index as a confounder of this correlation. They consider not only life satisfaction, but also a worthwhile life, loneliness, depression and anxiety. They do not examine the role of the Economic Support Index.

⁴ We also investigated a possible interaction between *SI* and *ESI* in the life satisfaction regressions. We found no evidence of this, either introducing the values of the indices in continuous form or as dummy variables for above/below their median values (by country).

estimates either: a one standard-deviation higher Stringency Index is estimated to reduce life satisfaction by 0.05 of a standard deviation, while there continues to be no relationship with the Economic Support Index. The negative relationship between life satisfaction and the Stringency Index is in line with Brodeur *et al.* (2021). The effect of a one-standard deviation increase in the Stringency Index in our data is sizeable, and equivalent in the cross-section results of column (5) to one-third of the coefficient on partnership, and not much less than the coefficient on Tertiary education. The effect size is similar to that found by Adams-Prassl *et al.* (2020b) in their analysis of US data in March-May 2020, where lockdown in the State of residence reduce the WHO-5 mental-health measure by 0.048 of a standard deviation.

The finding of no significant relationship between life satisfaction and the Economic Support Index is striking: Does this reflect the inadequacy of economic support programmes? This may seem unlikely, as we know that this governmental economic support reduced inequality and poverty (Clark *et al.*, 2020; Menta, 2021) and increased household incomes (Clark *et al.*, 2021) in the COME-HERE survey countries. We believe that a more-convincing explanation is that of an omitted variable. The Economic Support Index is higher exactly when (unobserved) economic needs due to reduced incomes were greater. With these needs reducing life satisfaction and causing higher values of the Support Index, our estimated coefficient on the latter in a life-satisfaction equation is biased downwards. As such, economic support programmes did very likely work, but we cannot see this in our data as we would need to compare different Index values while holding (unobserved) needs constant.

3.2. Heterogeneity

Table 2 revealed the *average* effects of the COVID-19 policy responses on life satisfaction. We may however believe that these are stronger for certain types of respondents. Table 3 thus shows the estimates from an augmented version of Equation (1) including interaction terms. To avoid endogeneity issues, this heterogeneity analysis appeals only to time-invariant or pre-COVID 19 characteristics. All of the regressions in Table 3 are panel, including individual fixed effects.

In column (1) of Table 3, the Stringency Index coefficient is 50% larger for women, consistent with lockdowns having increased the burden on women in terms of household chores (Alon *et al.*, 2020; Farré *et al.*, 2020) and that a household time-allocation perceived by women as unfair reduces their subjective wellbeing (Flèche *et al.*, 2018, 2020). This is also in line with Pierce *et al.* (2020), where the prevalence of clinical levels of mental distress, as measured by the GHQ-12, in the UK during 2020 rose faster for women than for men, and Adams-Prassl *et al.* (2020b), where the entire effect of lockdown on mental health in the US is driven by women. Using UK Understanding Society data, Etheridge and Spantig (2020) conclude that the reduced social capital caused by social distancing explains an important part of the gender gap in mental health observed in 2020. We find on the contrary no significant gender difference for the correlation with the Economic Support Index.

In columns (2) and (3) we uncover no heterogeneity with respect to education or partnership status. However, in column (4) both retirement and employment have a protective role against the negative consequences of stringency.⁵ This may reflect that over two-thirds of individuals in the reference category here are women. All of these interactions are insignificant for the Economic Support Index in the bottom panel of Table 3.

Last, we check in column (5) whether the effects of pandemic policy differed across the household income distribution, as reflected by a dummy variable for the household having above-median equivalised household income in January 2020. Our prior was that richer respondents probably had better resources to cope with stringent policies (via better housing and greater financial security, among others); however, the interaction term in column (5) is negative and significant. The richer half of our sample have rather suffered more from greater stringency than did the poorer half. This may show that stringency had a disproportionate effect on the types of leisure activities in which well-off households are more likely to engage. Using semi-nonparametric IV estimation of shape-invariant Engel curves, Blundell *et al.* (2007) show that income increases food-out expenditures. Income also has a positive correlation with the

⁵ The reference category in column (4) is individuals of working age who are without a job: the unemployed, homemakers and students. We do not find significant interaction terms when we consider these categories separately. Key-sector employees are self-identified from a question in the COME-HERE survey asking whether the respondent worked in one of a list of “key sectors” as defined by many governments.

demand for tourism (Alegre and Pou, 2004) and cultural activities such as theatre (Ateca-Amestoy, 2008), the access to both of which was sharply restricted or removed entirely by more stringent travel restriction and lockdowns.

4. Conclusion

We have used a unique high-frequency panel survey over 2020, covering France, Germany, Italy, Spain and Sweden, to show that more-stringent policies significantly reduce life satisfaction. This correlation is found conditional on the spread of the pandemic itself. This fall in life satisfaction is larger for women, respondents with weak ties to the labour market, and those with relatively-high household income. On the contrary, we find no life-satisfaction effect of the economic support provided by governments, suggesting that this latter has served to compensate for the lower income that would have pertained in its absence.

Our results have a number of policy implications. They first underline that lockdowns have had significant well-being costs, which should enter the welfare calculus when determining pandemic policy. These costs are also not distributed equally: in particular, women's well-being has been more strongly affected. As well-being is known to predict a number of behaviours, pandemic policy may not only have transient effects but also be reflected in future economic, social and political outcomes.

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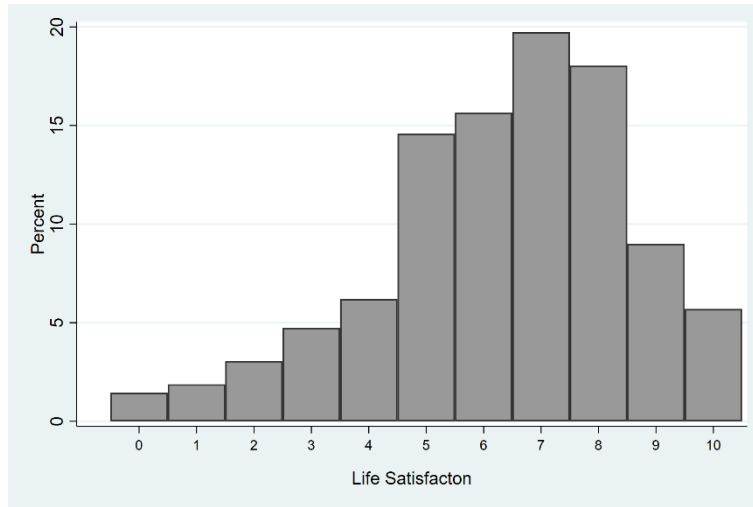
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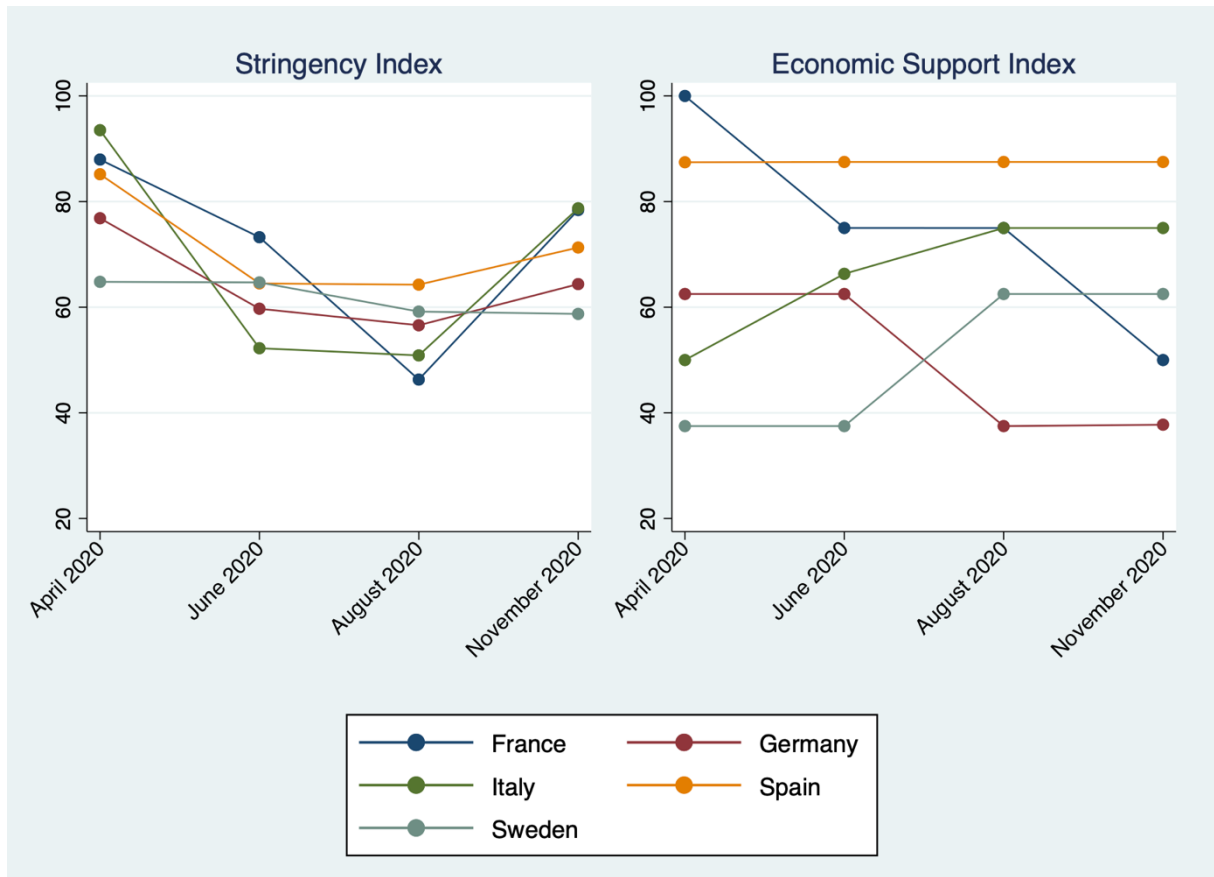
Figures and Tables:

Figure 1. The Distribution of Life Satisfaction in our Estimation Sample



Note. These data refer to the estimation sample in four waves of COME-HERE survey data.

Figure 2. The Stringency and Economic Support Indices by country and wave



Note. The dots refer to the average values of the indices across the various interview dates in each of the four waves of the COME-HERE survey, by country of residence.

Table 1. Descriptive Statistics

| | Mean | SD | Min | Max |
|--|--------|-------|------|------|
| Life Satisfaction | 6.34 | 2.20 | 0 | 10 |
| <i>OxCGRT measures:</i> | | | | |
| Stringency Index | 69.16 | 13.26 | 46.3 | 93.5 |
| Economic Support Index | 67.57 | 19.11 | 29.7 | 100 |
| <i>COVID Measure:</i> | | | | |
| Average Daily Deaths/100,000 inhabitants (4 weeks average) | 0.40 | 0.39 | 0 | 1.26 |
| <i>Individual Characteristics:</i> | | | | |
| Log Household Income (Jan 2020) | 8.18 | 0.68 | 6.7 | 10.1 |
| Family size | 3.07 | 1.36 | 1 | 10 |
| Age | 50.01 | 15.96 | 18 | 93 |
| Female | 0.48 | | 0 | 1 |
| Partnered | 0.61 | | 0 | 1 |
| Primary education | 0.19 | | 0 | 1 |
| Secondary education | 0.38 | | 0 | 1 |
| Tertiary education | 0.43 | | 0 | 1 |
| In full-time employment | 0.47 | | 0 | 1 |
| In part-time employment | 0.10 | | 0 | 1 |
| In marginal employment | 0.01 | | 0 | 1 |
| Not in employment | 0.43 | | 0 | 1 |
| Key-sector employee (Jan 2020) | 0.25 | | 0 | 1 |
| Other-sector employee (Jan 2020) | 0.32 | | 0 | 1 |
| <i>Wave:</i> | | | | |
| W1: April 2020 | 0.30 | | 0 | 1 |
| W2: June 2020 | 0.21 | | 0 | 1 |
| W3: August 2020 | 0.24 | | 0 | 1 |
| W4: November 2020 | 0.25 | | 0 | 1 |
| <i>Country of residence:</i> | | | | |
| France | 0.23 | | 0 | 1 |
| Germany | 0.22 | | 0 | 1 |
| Italy | 0.22 | | 0 | 1 |
| Spain | 0.22 | | 0 | 1 |
| Sweden | 0.12 | | 0 | 1 |
| <i>Observations</i> | 20,337 | | | |
| <i>Individuals</i> | 6,039 | | | |

Note: These numbers refer to respondents from the first four waves of the COME-HERE survey.

Table 2. Pandemic Policy and Life Satisfaction – Pooled and Panel Results

| | Life Satisfaction (standardised) | | | | | |
|--|----------------------------------|------------------|----------------------|---------------------|---------------------|---------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Stringency Index | -0.056*** (0.019) | | -0.057*** (0.020) | -0.051** (0.021) | -0.050** (0.020) | -0.046** (0.020) |
| Economic Support Index | | 0.002 (0.021) | -0.005 (0.017) | -0.007 (0.017) | -0.008 (0.017) | -0.010 (0.015) |
| Average Daily Deaths/100,000 inhabitants (4-week average) | | | | -0.018 (0.017) | -0.026 (0.017) | -0.017 (0.014) |
| <i>Wave and Country FE</i> | Yes | Yes | Yes | Yes | Yes | Yes |
| <i>Controls</i> | No | No | No | No | Yes | Yes |
| <i>Individual FE</i> | No | No | No | No | No | Yes |

Notes: These are linear regressions. The sample here is respondents from the first four waves of the COME-HERE survey; there are 20337 observations in each column. The Stringency Index, Economic Support Index and average daily deaths variable are all standardised over the estimation sample. Standard errors in parentheses are clustered at the Stringency Index*Economic Support Index level. Controls are age and its square, gender, family size and relationship status (all measured at Wave 1), the log of household disposable income in January 2020 in PPP, and dummies for education and labour-force status. *, **, and *** respectively indicate significance levels of 10%, 5% and 1%.

Table 3. Pandemic Policy and Life Satisfaction – Individual Heterogeneity Analysis: Panel Results

| | Life Satisfaction (standardised) | | | | |
|---------------------------------------|----------------------------------|----------|----------|-----------|-----------|
| | (1) | (2) | (3) | (4) | (5) |
| Stringency Index (<i>SI</i>) | -0.038* | -0.046** | -0.048** | -0.116*** | -0.036* |
| | (0.020) | (0.020) | (0.020) | (0.010) | (0.020) |
| <i>SI interacted with:</i> | | | | | |
| Female | -0.016** | | | | |
| | (0.007) | | | | |
| Tertiary education | | 0.002 | | | |
| | | (0.008) | | | |
| Partnered | | | 0.004 | | |
| | | | (0.006) | | |
| Retired | | | | 0.017* | |
| | | | | (0.010) | |
| Key-sector employee | | | | 0.020** | |
| | | | | (0.010) | |
| Other-sector employee | | | | 0.020** | |
| | | | | (0.009) | |
| Above-median income | | | | | -0.021*** |
| | | | | | (0.008) |
| Economic Support Index (<i>ESI</i>) | -0.013 | -0.014 | -0.001 | -0.011 | -0.012 |
| | (0.017) | (0.017) | (0.018) | (0.025) | (0.015) |
| <i>ESI interacted with:</i> | | | | | |
| Female | 0.006 | | | | |
| | (0.014) | | | | |
| Tertiary education | | 0.010 | | | |
| | | (0.011) | | | |
| Partnered | | | -0.014 | | |
| | | | (0.011) | | |
| Retired | | | | 0.002 | |
| | | | | (0.018) | |
| Key-sector employee | | | | -0.005 | |
| | | | | (0.018) | |
| Other-sector employee | | | | 0.003 | |
| | | | | (0.020) | |
| Above-median income | | | | | 0.004 |
| | | | | | (0.011) |

Notes: These are fixed-effects regressions. The sample here is respondents from the first four waves of the COME-HERE survey; there are 20337 observations in each column. The Stringency Index and the Economic Support Index are standardised over the estimation sample. Standard errors in parentheses are clustered at the individual level. All regressions control for dummies for current labour-force status, and wave and individual fixed-effects. The reference category for labour-force status is respondents who are not employed at Wave One. *, **, and *** respectively indicate significance levels of 10%, 5% and 1%.

Appendix A

Table A1. Predicting the Stringency Index by the Spread of COVID-19

| | Stringency Index (standardised) | | | | | | | |
|--------------------------------------|---------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Total No. Deaths (2-week average) | 0.263*** (0.057) | | | | | | | |
| Total No. Deaths (4-week average) | | 0.181*** (0.058) | | | | | | |
| Daily Deaths (2-week average) | | | 0.780*** (0.037) | | | | | |
| Daily Deaths (4-week average) | | | | 0.828*** (0.033) | | | | |
| Total No. Cases (2-week average) | | | | | 0.417*** (0.054) | | | |
| Total No. Cases (4-week average) | | | | | | 0.399*** (0.055) | | |
| Daily Cases (2-week average) | | | | | | | 0.355*** (0.056) | |
| Daily Cases (4-week average) | | | | | | | | 0.470*** (0.052) |
| R-squared | 0.069 | 0.033 | 0.608 | 0.686 | 0.174 | 0.159 | 0.126 | 0.221 |

Notes: These are OLS regressions of the value of the Stringency Index in Figure 2 on various measures of the spread of the pandemic. There are 285 observations in each column. Standard errors appear in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A2. Predicting the Economic Support Index by the Spread of COVID-19

| | Economic Support Index (standardised) | | | | | | | |
|--------------------------------------|---------------------------------------|---------------------|------------------|-------------------|--------------------|--------------------|-------------------|------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Total No. Deaths (2-week average) | 0.554*** (0.049) | | | | | | | |
| Total No. Deaths (4-week average) | | 0.565*** (0.049) | | | | | | |
| Daily Deaths (2-week average) | | | 0.040 (0.059) | | | | | |
| Daily Deaths (4-week average) | | | | 0.106* (0.059) | | | | |
| Total No. Cases (2-week average) | | | | | 0.138** (0.059) | | | |
| Total No. Cases (4-week average) | | | | | | 0.148** (0.059) | | |
| Daily Cases (2-week average) | | | | | | | -0.007 (0.059) | |
| Daily Cases (4-week average) | | | | | | | | 0.015 (0.059) |
| R-squared | 0.307 | 0.320 | 0.002 | 0.011 | 0.019 | 0.022 | 0.000 | 0.000 |

Notes: These are OLS regressions of the value of the Economic Support Index in Figure 2 on various measures of the spread of the pandemic. There are 285 observations in each column. Standard errors appear in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A3. Pandemic Policy and Life Satisfaction – Pooled and Panel Results (Full Results)

| | Life Satisfaction (standardised) | | | | | |
|--|----------------------------------|------------------|----------------------------------|---------------------------------|----------------------------------|---------------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Stringency Index | -0.056 ^{***} (0.019) | | -0.057 ^{***} (0.020) | -0.051 ^{**} (0.021) | -0.050 ^{**} (0.020) | -0.046 ^{**} (0.020) |
| Economic Support Index | | 0.002 (0.021) | -0.005 (0.017) | -0.007 (0.017) | -0.008 (0.017) | -0.010 (0.015) |
| Average Daily Deaths/100,000 inhabitants (4-week average) | | | | -0.018 (0.017) | -0.026 (0.017) | -0.017 (0.014) |
| Female | | | | | -0.015 (0.016) | |
| Age | | | | | -0.026 ^{***} (0.004) | |
| Age-squared/100 | | | | | 0.035 ^{***} (0.004) | |
| Family size | | | | | 0.000 (0.006) | |
| Partnered | | | | | 0.154 ^{***} (0.019) | |
| Secondary education | | | | | -0.002 (0.021) | |
| Tertiary education | | | | | -0.063 ^{***} (0.016) | |
| Full-time employment | | | | | 0.095 ^{***} (0.023) | 0.177 ^{***} (0.051) |
| Part-time employment | | | | | 0.002 (0.034) | 0.090 ^{**} (0.036) |
| Marginal employment | | | | | -0.202 ^{***} (0.076) | 0.071 (0.061) |
| Log household income (January 2020) | | | | | 0.150 ^{***} (0.012) | |
| <i>Wave and Country FE</i> | Yes | Yes | Yes | Yes | Yes | Yes |
| <i>Controls</i> | No | No | No | No | Yes | Yes |
| <i>Individual FE</i> | No | No | No | No | No | Yes |

Notes: These are linear regressions. The sample here is respondents from the first four waves of the COME-HERE survey; there are 20337 observations in each column. The Stringency Index, Economic Support Index and average daily deaths variable are all standardised over the estimation sample. Standard errors in parentheses are clustered at the Stringency Index*Economic Support Index level. *, **, and *** respectively indicate significance levels of 10%, 5% and 1%.