COVID-19 social distancing measures and economic growth:
Distinguishing short- and long-term effects

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Abstract

Social distancing policies have been criticized for their adverse effect on economies. However, we evidence that while they have a short-run adverse effect, they also have a long-run recovery effect on economic growth. Utilizing quarterly gross domestic product (GDP) growth rate data from OECD member states, we find that the medium-term recovery effect of stringent social distancing policies on economic growth is three times higher the short-term adverse effect. We additionally investigate social distancing measures with sub-components of GDP, as well as the conditioning roles of institutional factors.

Keywords: Covid-19; pandemic; social distancing polices; GDP growth

1.   Introduction

Since the onset of the Covid-19 outbreak in early 2020, government policies to ensure social distancing to slow down the spread of the highly contagious disease have been the topic of heated debate. Social distancing policies have been widely criticized for their adverse effect on economic activity. In this paper, we utilize quarterly actual Gross Domestic Product (GDP) growth data to examine the short- and medium-term impact of social distancing policies on GDP growth rates.

Intuitively, social distancing measures aimed to reduce social contact would be expected to not only adversely affect the economic sectors involving extensive social interactions, but also other less socially networked sectors through input-output linkages. Reduced mobility leads to economic downturn due to reductions in labor supply and individual consumption (Eichenbaum et al. 2020). Covid-19 driven economic shock, including shutdowns, layoffs and firm exits, engender supply shocks that trigger changes in aggregate demand which are potentially larger than initial shocks themselves (Guerrieri et al. 2020).

Economic activity particularly suffered in sectors that rely heavily on human interaction in product or service production such as hotels, restaurants, retail, schools and arts and entertainment (Baek *et al.* 2020; Goodell & Huynh 2020; Koren & Pető 2020). Though initial shocks of stringent social distancing measures have uneven adverse impacts on different sectors, shock spillovers occur from more affected sectors to those less affected through input-output linkages where unaffected sectors depend on intermediate inputs and demand for products from affected sectors (Laeven 2020). Thus, in the short run, adverse effects of social distancing policies on economic growth are expected.

Whether social distancing restrictions impede economies in the long run (rather than the short run) is a more nuanced question. As severe, rather than lenient, social distancing measures are more effective in controlling the intensity of pandemic outbreaks (Lai et al. 2020), such severe restrictions may facilitate reopening economic activity relatively earlier, with resulting more rapid economic recovery. In support of this, Correia *et al.* (2020) find that during the 1918 Flu pandemic, those US states which adopted strict social distancing measures had better economic outcomes in the medium-term. Likewise, Ashraf (2020a) examines the expected economic impact of social distancing measures, finding that such measures have a

direct negative expected economic impact concomitant with an indirect positive impact by reducing the severity of Covid-19 outbreaks. Therefore, we consider that stringency in public policy regarding social distancing during the Covid-19 may positively affect long-term GDP growth rate.

Social distancing policies target wide swathes of populations that generally include most individuals of a country. Since any policy targeting such a high proportion of a respective population is difficult to perfectly enforce with scarce government resources, there remains opportunity for differences in institutional environments to determine individual tendencies to follow social distancing measures. We consider three aspects of institutional environments: levels of democratic values, levels of trust in government, and cultural tightness.

In this regard, pro-social ideologies and values and beliefs might promote collective public good during pandemics by overcoming the free rider problem (Bavel et al. 2020). For instance, political ideology is found to be a major determinant of compliance with social distancing policies (Painter & Qiu 2020; Pedersen & Favero 2020). Individuals living in liberal democracies, where individual freedom is emphasized, appear more reluctant to follow stringent social distancing policies. Correspondingly, more democratic societies report comparatively higher Covid-19 cases (Karabulut et al. 2021).

Likewise, societies rich on social values may more effectively act to achieve socially valuable activities (Putnam et al. 1994; Herrmann et al. 2008). Recent studies find that compliance with government stay-at-home orders and social distancing policies was significantly higher in areas with higher trust and social values (Barrios et al. 2021; Brodeur et al. 2021; Durante et al. 2021)[1].

Similarly, cultural tightness, which captures the strength of social norms and the punishment for deviance, may encourage individuals to follow social distancing, as others are doing. Covid-19 cases and deaths were significantly lower in countries with higher cultural tightness (Gelfand et al. 2021). Based on

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[1] Recent literature reports that the Covid-19 pandemic not only adversely affected the financial markets (Ashraf 2020b; Goodell 2020) but the adverse effect varied depending upon countries' social and cultural context (Ashraf 2021; Engelhardt *et al.* 2021).

above discussion, we expect that adverse effects of social distancing on economic growth will be stronger in more democratic societies and weaker in countries with higher trust and higher cultural tightness.

For our empirical analysis, we use quarterly GDP growth rate data starting from the first quarter of 2020 and ending at the second quarter of 2021 for 46 countries from the Organization of Economic Co-operation and Development (OECD) database. Measuring the extent of government social distancing policies with the Stringency Index from Oxford Covid-19 Government Response Tracker data (Hale et al. 2020), we find that stringent social distancing policies adopted in a respective quarter decrease the GDP growth rate of that quarter. However, it contrastingly also results in significantly higher GDP growth in the next quarter. We also find that democracy and trust moderate the economic impact of social distancing. Particularly, social distancing has a more strongly negative effect on GDP growth in democratic countries, while having a weaker negative effect in countries with higher trust-level.

2. Data

Data of quarterly GDP growth rate is collected from the OECD database. This data is available for 46 countries including OECD member states and observer emerging countries. We choose the sample period January 2020 to June 2021 with available data of six quarters. Daily data of the Stringency Index, measuring the stringency of government social distancing policies, is obtained from Oxford Covid-19 Government Response Tracker database (Hale et al. 2020). Data of daily new Covid-19 confirmed cases is from the John Hopkins University-Coronavirus Resource Center. To link with quarterly GDP growth data, we use the quarterly mean values of the Stringency Index and the quarterly total new confirmed Covid-19 cases for each country.

Data of country level control variables is collected from the World Development Indicators and World Governance Indicators databases. Finally, we link country-level data with quarterly data. Our final sample consists of 214 quarterly observations for 46 countries over the period Quarter 1, 2020 to Quarter 2, 2021.

3. Methodology

To analyze the relationship between social distancing measures and economic growth, we estimate following pooled panel ordinary least squares model.

$Gross\ Domestic\ Product\ growth\ rate_{c,t}$

$$= \alpha_{c,t} + \beta_1(Stringency\ Index_{c,t}) + \beta_2(Covid - 19\ confirmed\ cases_{c,t}) + \sum_{k=1}^{k} \beta_k X_c^k$$

$$+ \varepsilon_{c,t}\ (1)$$

Here, t and c subscripts represent quarter and country, respectively. Gross Domestic Product growth rate is the dependent variable, measured at quarterly frequency. α is a constant term. Stringency Index stands for government social distancing policies. Covid-19 confirmed cases equals the total new confirmed Covid-19 cases in a quarter for a country. To control for other factors that potentially may determine the Gross Domestic Product growth rate in addition to social distancing measures, our model incorporates several control variables represented with X_c^k. Detailed definitions of all main variables are given in Appendix A.

Following the seminal paper of Barro (1996), which suggests that higher education levels, lower fertility rates, longer life expectancies, better rules of law, and lower inflation rates lead to higher GDP growth, we include these as control variables. We also include GDP per capita as control because Barro (1996) shows that a higher initial GDP per capita results in lower later GDP growth. We also include pre-pandemic GDP growth rate, measured as the average of GDP growth rates of 2018 and 2019, as control variable. This variable arguably controls for all factors that have historically influenced the cross-country differences in economic growth of countries. $\varepsilon_{c,t}$ is an error term. We use Heteroskedastic-robust standard errors which are clustered at country-level in estimations of p-values in all regressions.

To examine the moderating effect of institutional environment, we interact the Stringency Index with polity, trust, and tightness indices one-by-one. Significant interaction terms would show that the impact of social distancing policies on economic growth depends on aspects of the institutional environment.

(Insert Table 1 about here)

4.   **Empirical results**

Table 1 and 2 present descriptive statistics and the matrix of correlations, respectively. Gross Domestic Product growth rate has mean value of -0.29 with a standard deviation of 6.91 showing wide fluctuations in quarterly GDP growth rate during the pandemic. Stringency Index has a mean value of 54.79 and standard deviation of 19.39 with minimum and maximum values of 9.26 and 89.59, respectively, showing government enforced social distancing measures varied by the large extent in sample countries.

(Insert Table 1 here)

(Insert Table 2 here)

4.2 Impact of social distancing policies on economic growth: main results

Table 3 reports the main results. In Model 1, without any control variables, the Stringency Index loads significantly negative. The Stringency Index remains significantly negative when we control for quarterly Covid-19 confirmed cases in Model 2, or include other country-level controls in Model 3. These results suggest that stringent government social distancing policies reduce current-quarter Gross Domestic Product growth rates.

To analyze the recovery effect of social distancing policies on economic recovery, we introduce the one-period lag of the Stringency Index in Equation 1. The one-period lagged Stringency Index loads significantly positive in Model 4, consistent with stricter social distancing measures in one quarter leading to higher Gross Domestic Product growth rates the next quarter.

These effects are economically significant. For example, in Model 4, a one standard deviation increase in the Stringency Index (19.39) lowers current-quarter Gross Domestic Product growth rates by -2.32% (-0.12 *19.39), when the mean value of Gross Domestic Product growth rate equals -0.29 percent. On the other hand, a one standard deviation increase in the lagged Stringency Index (21.05) increases next-quarter Gross Domestic Product growth rate by 7.03% (0.334*21.05). These levels of economic significance suggest the medium-term recovery effect of stringent social distancing policies on economic

growth is three times higher the short-term adverse effect. These findings imply that, despite short-term negative impacts, overall, social distancing policies facilitate faster medium-term economic recovery.

(Insert Table 3 here)

4.3 Impact of social distancing policies on sub-components of economic growth

As GDP mainly consists of consumption, investment, and exports sector, to examine specifically which sub-components of GDP the social distancing policies have affected, we use gross capital formation, private consumption, and exports growth rates as alternative dependent variables one-by-one and re-estimate Eq. (1). As shown in the Table 4, the Stringency Index is negatively significant with all three sub-components of GDP, confirming that stringent social distancing policies adversely affect economic growth by reducing investment, consumption, and exports. Moreover, lagged stringency enters positively significant with all three sub-components, suggesting stringent social distancing facilitating recovery of investment, consumption and exports over the medium-term.

(Insert Table 4 here)

4.4 Moderating effects of institutional environments

We examine the conditioning role of institutional environment on the impact of social distancing policies on GDP growth. To do so, we interact the Stringency Index with institutional variables one-by-one in Eq. (1).

In Table 5, the interaction term between the Stringency Index and polity is negatively significant, suggesting that the adverse impact of social distancing measures strengthens in countries with democratic values. On the other hand, the interaction term between the Stringency Index and trust in government is positively significant, consistent with the adverse effect of social distancing being weaker in countries with higher trust in government.

As robustness checks, we use alternative proxies of institutional environment. In this regard, first we replace polity with the Democracy Index as an alternative proxy of democratic values. We also replace

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trust in government with general societal trust as an alternative proxy of national levels of trust. Results for the interaction terms incorporating these alternative variables are similar to those in our main analysis.

(Insert Table 5 here)

5.   Conclusions

Utilizing quarterly GDP growth data from 46 countries over the period first quarter 2020 to second quarter 2021, we find that stringent social distancing policies result in sharp declines in GDP growth rate in the same quarter, while facilitating GDP-growth recovery the next quarter and this recovery effect is three times larger than the initial decline. We also observe that social distancing measures induce similar pairings of adverse and recovery effects on sub-components of GDP, including fixed capital formation, private consumption and exports. We also observe that institutional factors moderate the short-term adverse effect of social distancing on economic growth. Specifically, our observed adverse effect is stronger in democracies while weaker in countries with higher trust in government.

Despite public perceptions of adverse effects to GDP growth of social distancing restrictions, our results suggest that stringent social distancing policies provide medium-term improvements to GDP growth rates. Extending either the analysis to broader international samples or how the economies of individual countries responded to the government social distancing policies are potential venues for future research.

Appendix 1. Variable definitions

Variable	Definition	Data Source
Dependent variables		
Gross Domestic Product growth rate	Gross domestic product growth rate defined as the growth rate of gross domestic product based on seasonally adjusted volume data, percentage change from previous quarter.	OECD database
Main independent variable		
Stringency Index	Stringency Index measures the extent of government social distancing policies. The index incorporates information from eight indictors including closure of workplace, closure of educational institutions, cancellation of public events, restrictions on gathering size, closure of public transport, stay at home requirements, restrictions on internal movement and restrictions on international travel. Stringency Index is calculated by adding these indicators and rescaling so that it varies from 0 to 100. The original Stringency Index is available at daily frequency and we average the daily values of each quarter to calculate the quarterly Stringency Index. For brevity, we name it Stringency Index.	Oxford COVID-19 Government Response Tracker (OxCGRT) database (Hale *et al.* 2020)
Control variables		
Covid-19 confirmed cases	The total new COVID-19 confirmed cases for a country in a quarter. JHU-CRC reports daily new confirmed cases and we calculate this variable by summing the daily new confirmed cases over a quarter.	John Hopkins University, Coronavirus Resource Centre (JHU-CRC) website
Gross Domestic Product per capita	Equals the natural logarithm of annual per capita gross domestic product (GDP) of each country for the year 2019.	World Development Indicators (WDI) database, World Bank
Trend of GDP growth	Equals the average of GDP growth rates of years 2018 and 2019.	
Inflation	Equals the annual change in prices of consumer goods in each country for the year 2019.	
Population	Equals the natural logarithm of total population (latest available figures) of each country.	
Births per woman	Equals the average births per woman in a country.	
Expected life in years	Represents the life expectancy and equals the expected life in years at birth.	
Education	Education equal the total new admissions in primary-level educational institutions in a country.	
Rule of law	Measures the extent of rule following and the chances of crime and violence in a country.	World Governance Indicators, World Bank WDI, World Bank
Sub-components of Gross Domestic Product		
Fixed capital formation growth rate	Measures quarterly growth in net investment or the net amount of fixed capital accumulation, based on seasonally adjusted volume data, percentage change from previous quarter.	OECD database
Private consumption growth rate	Measures quarterly growth in consumer spending on goods and services, based on seasonally adjusted volume data, percentage change from previous quarter.	
Exports growth rate	Measures quarterly growth in exports of goods and services by country of origin, based on seasonally adjusted volume data, percentage change from previous quarter.	
Moderating institutional variables		
Trust in government	Captures the share of respondents with 'yes' answer to the question "In this country, do you have confidence in national government?" Other potential answers are 'no' and 'don't know'. Higher values of the variable represent higher trust in government.	World Values Surveys
Polity	The index measures the democracy and autocracy. The index spans from higher values representing institutionalized democracy, through mixed regimes to lower values institutionalized autocracy.	Polity V project
Tightness	Tightness-looseness cultural dimension. Higher values represent the cultural tightness where individuals are more likely to follow social norms.	(Gelfand *et al.* 2021)
Trust	Calculated from the answer to the question "Generally speaking, would you say that most people can be trusted or that you cannot be too careful in dealing with people?" in World Values Surveys. Higher values represent higher trust.	World Values Surveys
Democracy	Measures political institutions from full democracy, to flawed democracy, to hybrid regime, and to authoritarian regime.	Economist Intelligence Unit (EIU)

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Table 1: descriptive statistics

This table reports the numbers of countries and observations, and summary statistics of main variables.

Variables	Countries	Observations	Mean	S.D.	Min	Max
Gross Domestic Product growth rate	46	214	-0.289	6.908	-17.787	17.053
Stringency Index	46	214	54.789	19.391	9.260	89.588
Lagged stringency index	46	138	49.905	21.05	9.26	89.588
Covid-19 confirmed cases	46	214	429.298	1287.006	0.309	12525.857
Gross Domestic Product per capita	46	214	10.080	0.856	7.591	11.584
Trend of GDP growth	46	214	2.726	1.549	-0.205	6.844
Inflation	46	214	2.200	1.765	-0.835	11.144
Population	46	214	16.875	1.748	12.747	21.060
Births per woman	46	214	1.721	0.351	1.052	3.110
Expected life in years	46	214	79.094	4.159	63.538	84.100
Education	46	214	102.445	6.354	85.151	126.575
Rule of law	46	214	0.949	0.820	-0.794	2.027

Table 2: Correlation matrix

This table reports the pairwise Pearson matrix of correlations.

	Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1)	Gross Domestic Product growth rate	1.00										
(2)	Stringency Index	-0.14	1.00									
(3)	Covid-19 confirmed cases	0.12	0.25	1.00								
(4)	Gross Domestic Product per capita	-0.04	-0.15	-0.03	1.00							
(5)	Trend of GDP growth	0.05	0.03	-0.04	-0.34	1.00						
(6)	Inflation	0.04	0.03	0.06	-0.48	0.10	1.00					
(7)	Population	0.04	0.26	0.36	-0.48	0.01	0.21	1.00				
(8)	Births per woman	0.03	0.10	0.07	-0.31	0.07	0.18	0.19	1.00			
(9)	Expected life in years	-0.03	-0.07	-0.12	0.82	-0.23	-0.47	-0.35	-0.44	1.00		
(10)	Education	0.00	0.12	0.12	-0.04	-0.23	0.01	0.14	0.17	0.03	1.00	
(11)	Rule of law	-0.02	-0.16	-0.03	0.87	-0.19	-0.47	-0.48	-0.31	0.72	0.01	1.00

Table 3: Impact of social distancing measures on Gross Domestic Product growth rates

Dependent variable is quarterly Gross Domestic Product growth rate, measured as quarter-on-quarter increase in gross domestic product, in all regressions. Stringency Index measures the stringency of government social distancing policies regarding schools and workplaces closures and bans on local and international movement. Lagged stringency index is one quarter lagged values of stringency index. Stringency Index and lagged stringency index are two main explanatory variables of interest. Covid-19 confirmed cases is new total quarterly confirmed cases of Covid-19 in each country. Gross Domestic Product per capita equals the log of per capita gross domestic product for the year 2019. Trend of GDP growth equals the average of GDP growth rates of years 2018 and 2019. Inflation equals the annual change in prices of consumer goods in each country for the year 2019. Population equals the natural logarithm of total population (latest available figures) of each country. Births per woman is measured as the national average number of births per woman. Expected life in years represents the expected life of an individual at the time of birth. Education counts the number of new enrolments in primary-level educational schools. Rule of law measures the extent of rule following and the chances of crime and violence in a nation. Estimations are made with pooled panel ordinary least squares regression model. Standard errors are clustered at country-level. P-values are given in parenthesis. ***, **,* represent statistical significance at 1%, 5%, and 10% levels, respectively.

Variables	Gross Domestic Product growth rate			
	(1)	(2)	(3)	(4)
Stringency Index	-0.049***	-0.064***	-0.070***	-0.120***
	(0.000)	(0.000)	(0.000)	(0.000)
Lagged stringency index				0.334***
				(0.000)
Covid-19 confirmed cases		0.001	0.001*	0.000
		(0.118)	(0.096)	(0.917)
Gross Domestic Product per capita			-0.681	0.477
			(0.331)	(0.330)
Trend of GDP growth			0.197	0.373***
			(0.225)	(0.000)
Inflation			0.061	0.330***
			(0.423)	(0.000)
Population			0.016	-0.276
			(0.927)	(0.180)
Births per woman			0.677**	-0.622
			(0.044)	(0.117)
Expected life in years			0.138*	-0.009
			(0.086)	(0.912)
Education			0.002	-0.018
			(0.917)	(0.405)
Rule of law			-0.074	0.747**
			(0.850)	(0.014)
Constant	2.394***	2.812***	-3.228	-8.215*
	(0.000)	(0.000)	(0.602)	(0.082)
Observations	214	214	214	138
R-squared	0.019	0.045	0.053	0.765

Table 4: Impact of social distancing measures on the growth rates of three sub-components of Gross Domestic Product

Dependent variable is quarterly Fixed capital formation growth rate in Models 1 and 4, Private consumption growth rate in Models 2 and 5, and Exports growth rate in Models 3 and 6. Stringency Index represents government social distancing policies regarding school, workplaces and public places closures and bans on local and international movement. Lagged stringency index is one quarter lagged values of stringency index. Stringency Index and lagged stringency index are two main explanatory variables of interest. Covid-19 confirmed cases is new total quarterly confirmed cases of Covid-19 in each country. Trend of GDP growth equals the average of GDP growth rates of years 2018 and 2019. Inflation equals the annual change in prices of consumer goods in each country for the year 2019. Population equals the natural logarithm of total population (latest available figures) of each country. Births per woman is measured as the national average number of births per woman. Expected life in years represents the expected life of an individual at the time of birth. Education counts the number of new enrolments in primary-level educational schools. Rule of law measures the extent of rule following and the chances of crime and violence in a nation. Estimations are made with pooled panel ordinary least squares regression model. Standard errors are clustered at country-level. P-values are given in parenthesis. ***, **,* represent statistical significance at 1%, 5%, and 10% levels, respectively.

Variables	Fixed capital formation growth rate	Private consumption growth rate	Exports growth rate	Fixed capital formation growth rate	Private consumption growth rate	Exports growth rate
	(1)	(2)	(3)	(4)	(5)	(6)
Stringency Index	-0.088***	-0.113***	-0.124***	-0.209**	-0.206***	-0.250***
	(0.006)	(0.000)	(0.000)	(0.011)	(0.000)	(0.002)
Lagged stringency index				0.416***	0.426***	0.515***
				(0.000)	(0.000)	(0.000)
Covid-19 confirmed cases	0.002	0.001	0.002*	0.002	-0.000	0.000
	(0.200)	(0.106)	(0.055)	(0.319)	(0.816)	(0.838)
Trend of GDP growth	0.047	0.078	0.556*	-0.107	0.214	0.808***
	(0.956)	(0.665)	(0.055)	(0.926)	(0.119)	(0.005)
Inflation	0.454	0.283***	0.216	0.682*	0.499***	0.711***
	(0.130)	(0.002)	(0.156)	(0.083)	(0.000)	(0.003)
Population	-0.514	-0.175	-0.319	-1.201**	-0.219	-0.324
	(0.173)	(0.314)	(0.413)	(0.034)	(0.503)	(0.404)
Births per woman	-1.017	0.777*	0.797	-1.353	-0.771	-1.579
	(0.420)	(0.054)	(0.391)	(0.432)	(0.210)	(0.285)
Expected life in years	0.103	0.137**	0.140	0.019	0.074	0.013
	(0.529)	(0.045)	(0.319)	(0.948)	(0.271)	(0.918)
Education	0.049	0.021	0.048	-0.040	-0.047	-0.070
	(0.454)	(0.483)	(0.387)	(0.643)	(0.179)	(0.473)
Rule of law	-1.033	-0.798**	-1.152	0.351	0.968**	1.337
	(0.145)	(0.049)	(0.165)	(0.710)	(0.037)	(0.215)
Constant	1.114	-6.748	-7.033	15.542	-7.329	-0.740
	(0.954)	(0.367)	(0.602)	(0.592)	(0.317)	(0.960)
Observations	204	190	204	132	132	132
R-squared	0.059	0.067	0.046	0.440	0.780	0.548

Table 5: Moderating effect of institutional environment

Dependent variable is quarterly Gross Domestic Product growth rate, measured as quarter-on-quarter increase in seasonally adjusted gross domestic product, in all regressions. Stringency Index represents government social distancing policies regarding school, workplaces and public places closures and bans on local and international movement. Interaction terms, Stringency Index × Polity, Stringency Index × Trust in government, Stringency Index × Tightness, Stringency Index × Democracy, and Stringency Index × General trust, are main variables of interest. Covid-19 confirmed cases is new total quarterly confirmed cases of Covid-19 in each country. Gross Domestic Product per capita equals the log of per capita gross domestic product for the year 2019. Trend of GDP growth equals the average of GDP growth rates of years 2018 and 2019. Inflation equals the annual change in prices of consumer goods in each country for the year 2019. Population equals the natural logarithm of total population (latest available figures) of each country. Births per woman is measured as the national average number of births per woman. Expected life in years represents the expected life of an individual at the time of birth. Education counts the number of new enrolments in primary-level educational schools. Rule of law measures the extent of rule following and the chances of crime and violence in a nation. Estimations are made with pooled panel ordinary least squares regression model. Standard errors are clustered at country-level. P-values are given in parenthesis. ***, **,* represent statistical significance at 1%, 5%, and 10% levels, respectively.

Variables	Gross Domestic Product growth rate				
	(1)	(2)	(3)	(4)	(5)
Stringency Index	-0.080***	-0.060***	-0.075***	-0.084***	-0.047***
	(0.000)	(0.000)	(0.007)	(0.000)	(0.001)
Stringency Index × Trust in government	0.000*				
	(0.083)				
Stringency Index × Polity		-0.002**			
		(0.023)			
Stringency Index × Tightness			0.009		
			(0.377)		
Stringency Index × General trust				0.045*	
				(0.085)	
Stringency Index × Democracy					-0.003**
					(0.028)
Covid-19 confirmed cases	0.001**	0.001*	0.001*	0.001*	0.001*
	(0.013)	(0.092)	(0.085)	(0.086)	(0.092)
Gross Domestic Product per capita	-1.121*	-0.904	-1.449**	-1.152	-1.027
	(0.085)	(0.248)	(0.044)	(0.133)	(0.140)
Trend of GDP growth	-0.011	0.180	0.200	0.132	0.159
	(0.947)	(0.177)	(0.213)	(0.376)	(0.231)
Inflation	0.161**	0.073	0.008	0.105	0.040
	(0.015)	(0.109)	(0.923)	(0.119)	(0.386)
Population	-0.123	-0.131	-0.038	-0.119	-0.071
	(0.353)	(0.457)	(0.853)	(0.547)	(0.661)
Births per woman	0.561*	0.498	0.793*	0.705**	0.388
	(0.053)	(0.129)	(0.056)	(0.027)	(0.192)
Expected life in years	0.179***	0.143	0.300**	0.205**	0.143*
	(0.003)	(0.115)	(0.021)	(0.047)	(0.082)
Education	0.007	0.018	-0.009	-0.002	0.012
	(0.699)	(0.428)	(0.787)	(0.929)	(0.595)
Rule of law	0.070	0.156	-0.129	-0.219	0.292
	(0.867)	(0.713)	(0.790)	(0.615)	(0.417)
Constant	-0.125	-0.183	-7.004	-0.912	0.590
	(0.982)	(0.976)	(0.340)	(0.888)	(0.922)
Observations	186	201	156	210	214
R-squared	0.037	0.059	0.051	0.054	0.055