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Containment Measures and Business Confidence in COVID Times: A Global Study

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ABSTRACT In this article, we take a global perspective to assess the impact of the exogenous COVID pandemic shock on business confidence. Through a quantitative analysis of 31 advanced and 12 emerging economies over the period from January 2018 to December 2020, we provide a novel investigation of a unique worldwide event, in contrast to the most frequent exogenous shocks, which typically have a more limited local or regional scope. We proxy business expectations with the business confidence indicator or BCI. First, we find that the containment measures for the COVID pandemic have negatively affected business confidence, with the compulsory policies having a greater negative effect on BCI than the voluntary ones. Second, we find positive spillover effects on the local BCIs from the containment measures implemented in neighboring countries. This suggests that business people are not against compulsory measures *per se*, but rather that they are less inclined to assume the costs of these. Third, we find that while the severity of containment measures has been greater in emerging countries, the negative impact on BCI of these containment measures has been larger in advanced economies.

KEYWORDS business confidence, containment measures, spillover effects

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INTRODUCTION

The COVID pandemic has shaken the global environment around the world. For instance, in 2020, foreign direct investment or FDI decreased by 42% from the previous year (UNCTAD, 2018). In this article, we examine how this exogenous worldwide COVID shock, as well as the social and public policies to contain the pandemic, have affected business confidence. The Business Confidence Index (BCI) captures business people's expectations about the near future (in relation to future production, order book levels, and stocks of finished goods). Also, it provides a dynamic view of the economy and it is a good indicator to anticipate

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changes in the business cycle (Dasgupta & Lahiri, 1993; Ha, 2020; Hansson, Jansson, & Löf, 2005; Khan & Upadhayaya, 2020; Lehmann, 2020; Taylor & McNabb, 2007; Vanhaelen, Dresse, & DeMulder, 2000). Therefore, investigating the effects of the COVID shock on business confidence enables us to shed some light on how corporations are likely to behave in regards to their future investments and business management decisions (including financial choices).

Previous studies have analyzed the relationship between business confidence and several key economic variables, such as fiscal and monetary policy or economic stability (Alesina, Favero, & Giavazzi, 2015; Beetsma, Cimadomo, Fortuna, & Giuliodori, 2015; Dajčman, 2020; Konstantinou & Tagkalakis, 2011; Leduc & Sill, 2013; Lewis, Makridis, & Mertens, 2019; Pranesh, Balasubramanian, & Mohan, 2017). By the same token, there is growing literature studying the effects of the COVID pandemic on the economy, financial markets, households' and business confidence (Ambrocio, 2021; Baek, McCrory, Messer, & Mui, 2020; Buckman, Shapiro, Sudhof, & Wilson, 2020; Chen, Igan, Pierri, & Presbitero, 2020; Chronopoulos, Lukas, & Wilson, 2020; Deb, Furceri, Ostry, & Tawk, 2020; Fetzer, Hensel, Hermle, & Roth, 2020; Goolsbee & Syverson, 2021; Kanapickiene, Teresiene, Budriene, Keliuotytė-Staniulėnienė, & Kartasova, 2020; Kok, 2020; König & Winkler, 2020, 2021; Lee, 2020; van der Wielen & Barrios, 2020; Vasiljeva et al., 2020; Verma, Dukma, Bhardwaj, Ashok, Kestwal, & Kumar, 2021). Yet, most of this expanding literature on COVID has focused on advanced economies or China. In contrast, in this research, we take a global perspective to study the connection between business confidence and the COVID pandemic. Importantly, we pay attention to some key aspects that have not been properly examined in the literature before: On the one hand, we investigate the effects of containment measures on business confidence distinguishing between emerging and advanced economies. On the other hand, we study the spillover effects produced by the containment measures taken by neighboring countries. To our best knowledge, this is the first global study that investigates the direct as well as the spillover effects of COVID shock on BCI.

Our main research question is the following: How has COVID shock affected business confidence in different latitudes of the globe? From this question, we open several hypotheses. First, we investigate the impact on business confidence of the various kinds of (compulsory and voluntary) policies that governments and citizens have applied to contain the COVID pandemic. Importantly, we also account for possible dynamic changes in the intensity of these policies across time. The reaction of governments to this pandemic has varied significantly. Some countries like the United States, Brazil, and Sweden have not implemented quarantine measures and mobility restrictions (to goods and to people). In contrast, some other countries like Italy, France, Argentina, and China took compulsory containment policies to control the spread of the disease.

On the one hand, investors and business people could view containment measures as positive, as these measures help mitigate the spread of the COVID disease

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in the medium and long term. These measures may hence create a more auspicious future perspective for businesses and encourage investors to undertake expanding business strategies. On the other hand, the economic impact in the short term is presumably negative as the containment measures imply a sharp reduction of economic activity (Deb et al., 2020). Given the opposing directions that containment measures might have (in the short versus the medium term), it is an empirical question to determine which of these two competing forces affecting BCI prevail. Furthermore, in this article, we do not aim at explaining the reasons behind each country's decision to apply stricter or more lenient policies nor which policy is better.[1] Our objective is to assess the overall effect on business confidence of the voluntary and the compulsory containment measures.

The second main aspect that we study is the different reactions to the COVID shock of business people in emerging economies compared to advanced economies. Precisely, we focus on two main dimensions: (1) whether the severity of the containment measures has been stronger in emerging or in advanced economies and (2) whether these measures have had a differential impact on business expectations in emerging economies, relative to advanced ones. Regarding the first dimension (namely, the severity of the containment measures in emerging economies compared to advanced economies), the reasons behind each country's approach to the management of the COVID pandemic can be quite diverse. The ideological standpoint of each country may be one key factor. The political orientation of the party in power and/or the political regime may become additional important variables. The cultural values that each society has regarding individual freedom versus collective responsibility can also be a decisive point. As shown by Adler et al. (2022), even the cultural influence of leaders could be a variable to consider.[2] However, there is considerable heterogeneity among countries belonging to the emerging- and advanced-economy categories, which prevents us from making clear predictions regarding the influence of these ideological, cultural, and political features characterizing the countries. From an economic standpoint, the larger material capabilities and resources that advanced economies have, in comparison with emerging ones, may be an additional distinctive factor: advanced economies may have larger technological, research, and development capabilities (for example, to develop the vaccine), better infrastructure, better health care systems, and more developed social programs to contain the effects of such an exogenous shock. According to this view, one would expect that emerging economies might have needed to (or might have had incentives to) implement stricter containment measures to mitigate the COVID shock, relative to advanced economies, to compensate for the fewer material resources and capabilities (to develop vaccines and build hospitals, for example).

On the other extreme, there are also reasons to expect that emerging economies would avoid implementing strict containment measures. To begin with, implementing strict containment measures presumably results in smaller tax collection (due to the lower economic activity), thus further damaging the fiscal positions

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of these countries (emerging economies usually have weaker fiscal balances). A second factor that could discourage emerging economies from applying strict containment measures is related to their institutional characteristics. Implementing strict containment measures implies the need to control the application of these policies; it also requires a large group of qualified bureaucrats to design these measures and to enforce them. Third, some emerging economies' past experiences to deal with previous pandemics, such as Cholera, SARS, or Ebola (mainly in Southeast Asia and West Africa), may have provided them with experience to deal with the COVID pandemic, thus allowing them to avoid applying strict containment measures. Fourth, there are some emerging economies that have had the ability and resources to implement effective social health care and vaccine programs (e.g., Chile). Nevertheless, in comparison to advanced economies, emerging economies tend to have, on average, weaker institutions (Acemoglu, Johnson, Robinson, & Thaicharoen, 2003; Brinks, Levitsky, & Murillo, 2019) and bureaucracies (Rauch & Evans, 2000), and poor enforcement controls (Spiller & Tommasi, 2008). Hence, when these countries assess the feasibility of executing strict containment measures, they could realize that – even if they want to – they might be unable to implement these strict containment measures due to the fewer resources and capabilities they have. As a result, they may reject this option. Summing up, determining which of these opposing forces prevail (resulting in stricter or more lenient containment measures) is an empirical question that we will address in this paper.

Concerning the second dimension in the emerging/advanced economies' analysis (that is, whether the containment measures have had a larger impact on business expectations in emerging economies relative to advanced ones), one could argue that business people operating in emerging economies are typically more used to a greater level of instability, uncertainty, and drastic public policy changes (Aguilera, Ciravegna, Cuervo-Cazurra, & Gonzalez-Perez, 2017; Finchelstein, 2017; Friel, 2021; Garcia-Sanchez, Mesquita, & Vassolo, 2014). As a result, corporations in these economies may learn to have more flexibility and adaptability skills to handle instability and uncertainty, and therefore, they may be better prepared to deal with such a large negative shock. If this is the case, then the containment measures taken in emerging economies should have a smaller impact on business confidence relative to the effect of the containment measures taken in advanced economies. We will determine whether this hypothesis is consistent with the data or not.

The third important aspect that we study refers to the spillover (or indirect) effects of compulsory containment measures taken by 'neighboring' countries.[3] We rely on Ghemawat (2001, September)'s framework of distances to conceptualize the identification of neighboring countries. This conceptualization implies considering the geographic and cultural ties between countries, as well as their economic and administrative linkages (Ghemawat, 2001, September). Studying these spillover effects is important because they enlighten

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us on whether business people are reluctant to the overall idea of more compulsory containment measures beyond the ones that are specifically directed to them. One possible interpretation of the spillover effects is that business people may become less confident about the future when the containment measures are implemented in their *own* countries, as they have to pay the costs of these measures (the negative impact on economic activity), but they cannot fully appropriate the total world benefits (which are larger than the benefits to the country implementing the measure). In contrast, when the containment measures are taken *elsewhere*, business people can profit from the total world benefits of these measures, without paying the costs; they may hence become more confident about the future when containment measures are implemented *elsewehere*.

Through a quantitative analysis of 43 emerging and advanced economies (12 of which are emerging economies), we quantify the impact of the COVID pandemic shock on business confidence. We rely on a panel data estimation over the period January 2018–December 2020, with monthly frequency. For the empirical analysis, we also control for standard country-specific macroeconomic factors (as the monetary and fiscal policy), global factors, and political, institutional, and economic features characterizing the various countries in our sample. Given the nature of this quantitative study, we cannot fully account for the multiplicity of factors characterizing each country. Nevertheless, our research allows us to identify some interesting patterns regarding the effects of the COVID pandemic on business expectations and investments by exploiting the differences between advanced and emerging markets and by distinguishing between the direct and spillover effects.

Our research provides a diverse set of contributions. First, it contributes to the study of the impact of the exogenous COVID pandemic on corporations (Baek et al., 2020; Caligiuri, De Cieri, Minbaeva, Verbeke, & Zimmermann, 2020; Chakravorti, Bhalla, & Chaturvedi, 2020; Fetzer et al., 2020; Hasija, Padmanabhan, & Rampal, 2020, June 1; Kanapickiene et al., 2020; Schor, 2020; van der Wielen & Barrios, 2020). These effects could be analyzed from a micro/industrial perspective (focusing, for example, on the various organizational and strategic approaches) but also from a broader macro perspective. Our study relates to the second sub-group of studies. In particular, this macro empirical literature tends to show that COVID shock and the crisis-induced constraints drastically affected economic activity, performance of financial markets, households' economic sentiment, and business confidence. However, the majority of the studies mainly focus on one or a few countries or regions, namely, the United States, Europe, and some studies also on China. We contribute to this literature by being the first to study both the direct and spillover effects of COVID shock on business confidence, relying on a global sample of advanced and emerging economies over a recent period of time.

Second, this study contributes to the field of development economics, as we assess the differential effect that the COVID pandemic has had on emerging

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economies with respect to advanced ones (Acemoglu, Johnson, & Robinson, 2002; Addison, Sen, & Tarp, 2020; Culpepper, 2005; Dingel & Neiman, 2020; Kok, 2020; König & Winkler, 2020; Mahoney, 2000, 2010; Maloney & Taskin, 2020).[4] To our knowledge, there is no previous research studying the heterogeneous reactions of business confidence distinguishing between these two groups of economies. Most importantly, our findings can help to have a better understanding of how business confidence varies differently depending on the developmental stage of each country.

Third, our study could also be complementary to research on the impact of recessions in firms' competitive advantages (Latham & Braun, 2011; Mascarenhas & Aaker, 1989; Vassolo, Garcia-Sanchez, & Mesquita,, 2017). In these studies, preferential access to resources has been studied to predict which firms are more likely to perform better during a recession. The pandemic has resulted in a significant and widespread economic recession. Our comparison between emerging and advanced economics, which have differential access to material resources, hence provides some useful conceptual and empirical insights that contribute to this area of study.

Finally, we contribute to the area of institutionalism, a phenomenon that has been studied by several disciplines, such as economics (Acemoglu et al., 2003; North, 1990), political science (Hall & Soskice, 2001; Schneider, 2013; Thelen, 2004), and management (Finchelstein, 2017; Khanna & Palepu, 2006; Kumar, Mudambi, & Gray, 2013). We add to this literature by exploring whether and to what extent stronger institutions and greater resources have allowed countries to apply lighter compulsory containment measures. This reinforces the idea that institutional settings shape the behavior of all political actors (including businesses, Hall & Soskice, 2001). We also offer some interesting findings for the international relations and international business sub-fields, as we investigate whether stronger political decisions to contain COVID in neighboring countries have any effect on business confidence. Ultimately, the heterogeneity of states' responses to the COVID pandemic, mediated by the just-described institutional differences, may explain the variability found in the business confidence index (BCI) across the globe.

THEORETICAL BACKGROUND AND HYPOTHESES DEVELOPMENT

The COVID pandemic has shaken global business: from industries that have seen their sources of revenue dramatically shrunk to the emergence of new ways of doing business (Caligiuri et al., 2020; Chakravorti et al., 2020; Hasija et al., 2020, June 1; McKinsey, 2020). The effect of the pandemic on corporations is being studied from a wide variety of perspectives. For instance, some studies have focused on the effects in some particular industries (Gavet, 2020, September 30), some other works explore new challenges for firms given the

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geopolitical reorientation and new position of several states with respect to the free movement of people (Ankel, 2020; Chakravorti et al., 2020; Contractor, 2020), while others have examined how corporations have adapted their organizational and management strategies to this new context (McKinsey, 2020; Tognini, 2020). In addition, some researchers are investigating how the COVID shock has affected labor relations, the use of new forms of communication and working tools, as well as the emergence of new types of jobs such as gig works (Dingel & Neiman, 2020; Hasija et al., 2020; Schor, 2020).

In this article, we contribute to the study of this phenomenon by examining how the exogenous COVID shock as well as the social and public policies to contain the pandemic have affected business confidence. The BCI captures investors' expectations about the near future. Therefore, it is strongly related to corporations' investments and business management decisions. Also, the BCI provides a dynamic view of the economy (relative to FDI which shows a more static picture in a particular moment of time). By exploring the effects of COVID shock and the social and public policies to contain the pandemic on business confidence, we hence aim at offering a good measure of the impact of the COVID shock on corporations' activity and business cycle. As a matter of fact, business confidence has been vastly reviewed in relation to its effects on economic stability (Leduc & Sill, 2013; Pranesh et al., 2017), and its link to fiscal and monetary policy (Alesina et al., 2015; Beetsma et al., 2015; Dajčman, 2020; Konstantinou & Tagkalakis, 2011; Lewis et al., 2019; among others). As an illustration of the latter, recent evidence about the effect of the current global COVID shock on FDI suggests that the economic downturn created by the pandemic has – at least monetarily – decreased the disposition of investors to provide more capital into global markets (UNCTAD, 2018).

From a macro perspective, there is a vast literature on how and why corporations make their investment decisions (Asiedu, 2002; Globerman & Shapiro, 2003; Henisz, 2000). Some scholars put emphasis on the institutional voids that define the modes of entry and the ways of organizing businesses (Doh, Rodrigues, Saka-Helmhout, & Makhija, 2017; Henisz & Williamson, 1999; Khanna & Palepu, 2006; Stal & Cuervo-Cazurra, 2011), whereas some other scholars have studied how exogenous shocks have an impact on investment and business activity. The most common of these exogenous shocks are terrorism (Barth, Li, McCarthy, Phumiwasana, & Yago, 2006; Duque, Andonova, & Correa, 2021; Oetzel & Oh, 2014), domestic or international political conflicts and wars (Barbieri & Levy, 1999; Henisz, 2000), and environmental crises and natural catastrophes (Chung, 2014; Mithani, 2017; Yoon & Heshmati, 2017). Most of these exogenous shocks bring challenges to businesses, such as trade contraction, supply chain interruption, and the overall increase in transaction costs (Aggarwal, 2006; Blomberg & Hess, 2006; Czinkota, Knight, Liesch, & Steen, 2010; Henisz, Mansfield, & Von Glinow, 2010; Mithani, 2017). In relation to investments, there are several studies documenting that investments tend to decline following a

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negative exogenous shock of the type mentioned above (Bandyopadhyay, Sandler, & Younas, 2014; Lutz & Lutz, 2006; Polyxeni Theodore, 2019). However, due to the nature of these shocks (which were typically local or regional), most of the prior literature studying them has focused on a reduced number of regions or countries.

In contrast, the COVID shock has shaken the world, affecting all countries. It hence requires a global perspective when studying its impact. On top of that, compared to previous pandemics (e.g., the 1918 Spanish flu pandemic and the HIV/AIDS pandemic), the world is now more connected, with better communication and greater trade; also, new data is available to develop significant and novel analyses. The empirical macro literature studying the economic consequences of the COVID pandemic continues to grow (Adler et al., 2022; Ambrocio, 2021; Andersen, Hansen, Johannesen, & Sheridan, 2020; Baek et al., 2020; Baker, Bloom, Davis, & Terry, 2020; Barro, Ursúa, & Weng, 2020; Buckman et al., 2020; Chen et al., 2020; Chronopoulos et al., 2020; Coibion, Gorodnichenko, & Weber, 2020; Deb, Furceri, Ostry, & Tawk, 2020; Fernández-Villaverde & Jones, 2020; Fetzer, Hensel, Hermle, & Roth, 2020; Goolsbee & Syverson, 2021; Kanapickiene, 2020; Kok, 2020; König & Winkler, 2020, 2021; Lee, 2020; Maloney & Taskin, 2020; Pavlyshenko, 2020; van der Wielen & Barrios, 2020; Vasiljeva et al., 2020; Verma et al., 2021; among others). Overall, this literature shows that COVID shock and the crisis-induced constraints drastically affected economic activity, performance of financial markets, households' economic sentiment, and business confidence. However, most of these studies concentrate on a few countries (or regions, namely, the United States and Europe and some studies also on China), hence lacking a global view. Therefore, there is still a need for international analyses. We contribute to this literature by (i) being the first to analyze both the direct and spillover effects of the COVID shock on business confidence; (ii) taking a global perspective.

We now detail the specific hypotheses we test in this article. Specifically, the hypotheses will build on three aspects: the overall direct impact of the containment measures to mitigate the COVID pandemic on business confidence; the heterogeneous direct impact of the containment measures distinguishing between emerging and advanced economies; and the spillover effects of the containment measures, accounting for geographic, economic and administrative, and cultural linkages among countries.

Overall Impact of the COVID Pandemic on BCI

While the pandemic has had a widespread effect in all countries, the response to this problem that each State has chosen differs: Some countries have had mandatory containment regulations from the beginning of the pandemic, others have implemented fewer compulsory containment measures leaving space for self-regulation of their citizens. Also, each society has reacted differently to these diverse

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policies. Yet, how these measures have impacted business confidence is still not completely clear. We aim at contributing to this literature by testing the extent to which more or less interventionist containment measures in the economy and in society have affected the disposition of executives to increase or decrease their investments and activities, as reflected in their expectations about the future.

More generally, there is a long-standing debate about the role of the State and how it affects the overall performance of firms. While some scholars emphasize the negative effects of State intervention (as it distorts market rules and/or provides wrong incentives and signals to firms; Dharwadkar, George, & Brandes, 2000; Kornai, 1990; Megginson & Netter, 2001), several studies also illustrate how State intervention can help firms and complement their investments (Cui & Jiang, 2012; Finchelstein, 2017; Heugens, Sauerwald, Turturea, & van Essen, 2020; Lazzarini & Musacchio, 2018). Usually, the role of the government and its effect on business decisions is assessed by examining a specific set of policies. In contrast, the uniqueness of the COVID pandemic allows us to test a broad set of containment policies, which have had a considerable impact on business activities.

On the one hand, investors and business people could view the containment measures as positive. This is because these measures help mitigate the spread of the COVID disease in the medium and long term, thus creating a more auspicious future perspective for businesses. On the other hand, the economic impact in the short term is negative as these containment measures imply a sharp reduction of business activity. Which one has a stronger effect? We hypothesize that under a widespread crisis such as the COVID pandemic, business people might be inclined to pay more attention to the intrinsic negative factors affecting them in the short term. Several empirical studies show that under unstable scenarios, the intertemporal horizon of investments decreases (Gulen & Ion, 2015; Julio & Yook, 2012; Kosacoff & Ramos, 2006). Thus, we make the hypothesis that the negative short-term effects of the containment measures on BCI may be greater than the positive medium-term (and long-term) factors. Therefore, our first hypothesis is the following:

Hypothesis 1: The (compulsory and voluntary) containment measures to mitigate the COVID pandemic have decreased the overall confidence of investors.

If Hypothesis 1 is corroborated, a second important question relates to the effect on BCI of the compulsory containment policies relative to the voluntary ones. Have compulsory containment measures had a greater negative effect on BCI than voluntary ones? There are two elements to take into consideration to hypothesize an answer to this question. First, there is evidence showing that the compulsory containment measures have had larger short-term negative effects on economic activity (relative to the voluntary ones, Ambrocio, 2021). Second, investors may face greater uncertainty about how long the compulsory containment measures are going to last (compared to the voluntary measures that

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people in a decentralized way decide to take or not). Given the elements above, our second hypothesis is:

Hypothesis 2: The direct negative effect on BCI of the compulsory containment measures has been larger than the impact of the voluntary containment measures.

Note that, while the voluntary and compulsory containment measures should both have a negative effect on economic activity and business confidence, if Hypothesis 1 is confirmed, Hypothesis 2 is arguing that the direct impact on BCI of the compulsory containment measures is expected to be larger than the effects of the voluntary ones.

Advanced *versus* Emerging Economies

When we think about the impact of previous exogenous shocks (e.g., terrorism, natural disasters, among others), in most of the cases, the effects were regional; thus, comparisons between countries were limited by this regional scope. In contrast, the COVID exogenous shock has a widespread effect all over the globe. It hence allows us to compare its effects between different sets of countries. In particular, we are interested in the distinct effect that the COVID pandemic has in emerging economies with respect to advanced ones. Scholars in the field of development economics, sociology, and political science have proposed various explanations for how and why countries grow and develop. Within this wide group of studies, there are institutionally based explanations (North, 1990; Pierson & Skocpol, 2002; Thelen, 2004), some based on countries' legal origins (La Porta, Lopez-de Silanes, Shleifer, & Vishny, 1997), or geography (Acemoglu et al., 2002; Acemoglu & Robinson, 2012; Gallup, Sachs, & Mellinger, 1999). There are also studies that highlight certain key variables of countries' social structure and their past (Culpepper, 2005; Han & Paik, 2017; Mahoney, 2010; Zorn, Dobbin, Dierkes, & Kwok, 2005), such as the role of managers in society, origins of the colonial structure, and ethnic diversity, among others. Most of these studies agree that there is a path dependence (Mahoney, 2000; Pierson, 1997) that reinforces and consolidates the key features of this development path. Yet, exogenous shocks can alter this tendency, generate new conditions and might even create a new route. It is still to be seen what will be the actual long-term effects of the COVID shock on countries' development. In this article, we aim at contributing to this area of research by examining the following two dimensions: (i) whether the containment measures have been stricter in emerging economies relative to advanced economies; (ii) whether the short- and medium-term impact on BCI of these containment measures has been different in emerging economies relative to advanced ones.

To hypothesize an answer to the first of these dimensions of study, there are several elements to consider. First, it is important to acknowledge that there is considerable variation within emerging and advanced economies. For instance, Brazil

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and Argentina are two emerging economies that have followed very different public policies to contain the spread of COVID. By the same token, governments in two advanced economies such as France and Sweden have taken very different measures to deal with the COVID pandemic. Second, the ideological standpoint of each country, the cultural values that each society has (e.g., regarding individual freedom versus collective responsibility), and the political orientation of the party in power may be additional important factors explaining the differences in the intensity of the voluntary and compulsory containment measures taken in the various emerging and advanced countries. However, from the previous two elements, it is not possible to hypothesize whether the compulsory containment measures have been more or less severe in emerging economies, relative to advanced economies.

Third, from an economic standpoint, advanced economies may be better prepared to handle the COVID pandemic, in comparison to emerging economies: better infrastructure, larger fiscal budgets, more financial resources to make counter-cyclical policies to deal with the economic fall, and more developed health care systems and social programs to contain the COVID disease, should provide advanced economies with better material capabilities to face the challenging times created by the COVID pandemic. Additionally, their greater technological capabilities should work in their favor. A clear example of the latter refers to their capabilities to produce the COVID vaccine. According to this interpretation, one could expect that the containment measures that advanced economies needed to implement to mitigate the effects of the COVID pandemic may have been less severe, relative to the measures taken in emerging economies. On the other extreme, emerging economies might also have reasons to avoid implementing strict containment measures. To begin with, implementing strict containment measures might lead to lower tax collection. As governments in emerging economies usually have weaker fiscal balances, measures reducing their fiscal resources might be disregarded. Second, the institutional characteristics of emerging economies may be an additional factor that could discourage them from applying strict containment measures. Precisely, applying strict containment measures requires having a group of qualified bureaucrats being able to design these containment measures and to enforce them. Third, some emerging economies have experience handling previous pandemics in the past (i.e., Ghana and Rwanda), such as Ebola or SARS. This past experience may have encouraged these countries to deal with the COVID pandemic without the need to implement strict containment measures. Nevertheless, in comparison to advanced economies, emerging ones have weaker institutions (Acemoglu et al., 2003; Brinks et al., 2019) and bureaucracies (Rauch & Evans, 2000), and poor enforcement controls (Spiller & Tommasi, 2008). Hence, when these countries assess the feasibility of implementing strict containment measures, they may realize that (even if they want to) they are unable to execute them.

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In this article, we hypothesize that the economic factors (namely fewer material capabilities of emerging economies, relative to advanced economies) are the strongest ones. As a result, our third hypothesis reads as follows:

Hypothesis 3: The containment measures that advanced economies have implemented to mitigate the effects of COVID pandemic have been less severe, relative to the measures taken in emerging economies.

Concerning the second dimension of study (namely, the differential effect on BCI of the containment measures taken in emerging and advanced economies), we hypothesize that there are reasons to expect a better response of business people in emerging economies, relative to advanced economies. To begin with, economic growth rates are usually more volatile in emerging economies (with higher ups and downs), thus allowing for a potential faster recovery. Second, emerging economies typically exhibit a greater level of instability and uncertainty. As an illustration of this, Henisz et al. (2010) show that several studies could not find a significant statistical relation between higher country risk or uncertainty and investment levels. Third, business people operating in emerging economies are more used to uncertainty, fluctuations, and sudden and drastic changes in public policies (Aguilera et al., 2017; Aulakh, 2007; Casanova, Miroux, & Finchelstein 2021; Cuervo-Cazurra & Ramamurti, 2014; Cuervo-Cazurra et al., 2019; Guillén & García-Canal, 2012). As a result of the above, one could argue that business people in emerging markets may have developed a different set of skills and a distinct mindset. Supporting this idea, Casanova et al. (2021) show that e-commerce companies in emerging markets have relied on their flexibility and adaptation skills to succeed in business. Finchelstein (2017) assesses how the different public policies and a more constrained access to capital markets condition the type of international strategy chosen by Latin American firms. By the same token, Cuervo-Cazurra et al. (2019) examine specific international strategies (i.e., tropicalized innovation) and distinguish the autonomous strategies of emerging markets companies. In short, several studies argue that emerging markets' conditions shape business people's strategies. Hence, it is reasonable to expect that their reaction to a political, economic, or social shock can be different from the one experienced by business people in advanced economies.

From the elements above, we expect that the COVID pandemic would have had a smaller effect on the expectations and willingness to invest of business people in emerging markets. Consequently, we propose the following fourth hypothesis:

Hypothesis 4: The containment measures to mitigate the COVID pandemic have had a smaller direct impact on the BCI of emerging economies than that of advanced ones.

Spillover Effects

We now focus on the compulsory containment measures. In addition to investors' direct reaction to the compulsory containment measures taken by their domestic

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governments, we take a novel approach and examine how investors and business people react to the compulsory containment policies taken by neighboring countries. We consider a broad conceptualization of neighboring countries that implies considering the geographic and cultural ties between countries, as well as their economic and administrative proximity.

Intuitively, in the case of geographic proximity, we aim at capturing that people in a given country are more likely to be sensitive to the containment measures taken in nearby countries (in terms of distance), for example, because of tourism and migration linkages, which should be stronger between neighboring countries. In turn, the economic and administrative proximity refers to the linkages between countries (due to, for instance, free trade agreements or sharing the currencies) that encourage them to trade and that foster corporations in these 'similar' countries to work together (through trade or transfer of technology). Lastly, cultural proximity aims at capturing similarities between countries regarding religious beliefs, race, ethnicity, language, and social norms and values. These collections of beliefs, values, and social norms shape the behavior of individuals and organizations (Ghemawat, 2001, September); hence, it is more likely that organizations in a given country *i* might be more sensitive to the containment measures taken by a country to which country *i* is culturally linked.

Studying the spillover effects of the containment measures is important because it enlightens us on whether business people are reluctant to the overall idea of compulsory containment measures beyond the ones that are specifically directed to them. One first hypothesis is that investors are not against these measures *per se* but rather that they become more pessimistic about the future (and hence, hesitant on investing) when these restrictive measures directly apply to them. What is more, given the positive effects on public health and on the smaller global propagation of the disease when stricter compulsory containment measures are applied *somewhere*, one should expect that investors would be more optimistic about the future (and hence, be more inclined to invest) if neighboring countries (as defined above) do implement these measures. This would be because these decisions indirectly benefit them.

A second alternative possible interpretation would be that business people's expectations become more pessimistic when neighboring countries implement stricter containment measures. This is because the measures taken in other neighboring countries would indicate that the COVID pandemic has expanded, thus making them realize that the consequences of the COVID crisis are larger than what was initially expected by them. In the end, it is an empirical question to determine which of these two forces prevail. Since we consider that the first interpretation is the most likely to be true, our fifth hypothesis reads as follows:

Hypothesis 5: Compulsory containment measures taken by neighboring countries have a positive effect on the BCI.

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Intuitively, what Hypotheses 1, 2, and 5 together are reflecting (if confirmed) is the well-known concept in economics of a positive externality, which occurs when taking an action benefits third parties. In our words, business people and investors in a country do not have the incentives to fully pay the costs of the measure (the measure being the containment measure and costs, the negative impact on economic activity). Hence, they become less optimistic about the future when these policies are implemented in their *own* countries. This is because business people cannot fully profit from the total world benefits of the measure (e.g., in terms of public health), which are larger than the benefits for the country implementing it. In contrast, when the compulsory measures are taken *elsewhere*, investors can profit from the total world benefits of these policies, without paying the costs. Therefore, investors would become more optimistic.

METHODS

We now describe the methodology and data we use to study the impact of the COVID shock on business confidence. We first present the baseline model specification, together with the data. Then, we describe how we measure the spillover effects on business confidence of the containment measures taken in the countries that are geographically, economically and administratively, and culturally linked to a given country i (Hypothesis 5). For the latter, we define and quantify the three sources of proximity between countries, namely, geographic, economic and administrative, and cultural proximity.

Consider N countries over T periods. Denote by $\mathbf{y}_t$ the vector of business confidence indicators at period $t \in T$. The benchmark model specification writes as:

$$\mathbf{y}_t = \alpha + \mathbf{X}_{t-1}\beta + \mu + \mathbf{v}_t \tag{1}$$

where α is the intercept, $\mathbf{X}_{t-1}$ denotes a matrix of k lagged country-specific macro-economic and pandemic variables and β the vector of their k parameters. In addition, μ is a vector of country-fixed effects. We assume that the error terms $v_{i,t} \in \mathbf{v}_t$ are identically and independently distributed with mean 0 and variance σ_i^2.

To proxy for business confidence (vector $\mathbf{y}_t$ in equation (1)), we rely on the monthly standardized business confidence indicator, which source is OECD (2021a).[5] This choice is built on the literature showing that BCI provides a dynamic view of the economy and that it is a good indicator to anticipate changes in the business cycles (Dajčman, 2020; Khan & Upadhayaya, 2020; Konstantinou & Tagkalakis, 2011; Taylor & McNabb, 2007). We consider the standardized version of the BCI for comparison across countries and through time. The period of analysis is January 2018–December 2020. We have a sample of 43[6] countries, 12 of which are emerging economies.

Regarding the country-specific macro-economic and pandemic variables in $\mathbf{X}_{t-1}$, we follow the literature on business confidence (Alesina et al., 2015;

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Dajčman, 2020; Khan & Upadhayaya, 2020; Konstantinou & Tagkalakis, 2011; Pranesh et al., 2017; Taylor McNabb, 2007) and recent studies on the impact of the COVID shock on economic activity (Ambrocio, 2021; Baek et al., 2020; Deb et al., 2020; Fernández-Villaverde & Jones, 2020; Goolsbee & Syverson, 2021; König & Winkler, 2021; Maloney & Taskin, 2020). As macroeconomic factors, we consider variables capturing the stance of fiscal and monetary policy, with the proxies being the quarterly general government final consumption as a proportion of GDP (source: OECD) and the monthly Central Bank policy interest rate (end of period, percent per year, in real terms, source: Bank for International Settlements), respectively. The pandemic variables include the following: Containment measures taken by national governments, with this being a proxy for the severity of the compulsory government policies aimed at restricting activities during the pandemic (source: Oxford COVID government response tracker); the number of deaths per million of inhabitants, which is a proxy for the voluntary containment measures that the population has chosen to take (Goolsbee & Syverson, 2021; Kok, 2020; König & Winkler, 2021, 2020; Maloney & Taskin, 2020; Yan, Malik, Bayham, Fenichel, Couzens, & Omer, 2021, source: Our World in Data);[7],[8] a trend variable capturing the number of days since the 100th COVID case in a country (Sorci, Faivre, & Morand, 2020; Yilmazkuday, 2021; source: Our World in Data); an interaction term between deaths per million of inhabitants and the trend variable, this is to capture any non-linearities possibly present in the data. In addition, in some model specifications, we include a (country-specific) dummy variable for the pandemic period, which takes the value of one since the 100th coronavirus case was registered. We rely on this indicator variable to allow for specific coefficients of certain variables (e.g., when analyzing the impact on BCI of the stance of the fiscal and monetary policy). It is important to add that by allowing for time varying containment measures, we are able to account for dynamic changes in the COVID situation of the countries and the public policies to contain the pandemic.

To conduct some robustness checks, we include the following additional pieces of information. First, we include health expenditure as a proportion of GDP. Health expenditure measures the final consumption of health care goods and services (i.e., current health expenditure) including personal health care and collective services (prevention and public health services as well as health administration), but excluding health investments (OECD, 2021b). Second, we incorporate the information on trust in government. This variable measures the percentage of people who respond having confidence in the national government (OECD, 2021c). Third, we include the country-specific Pandemic Uncertainty Index, which is constructed by counting the number of times uncertainty is mentioned within a proximity to a word related to pandemics in the Economist Intelligence Unit country reports (Ahir, Bloom, & Furceri, 2018). Fourth, to capture the role of institutional and political arrangements observed in the different countries in

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our sample, we include, as controls, a categorical variable for whether the country has a presidential or parliamentary system (Cruz, Keefer, & Scartascini, 2021); a categorical variable to indicate if the political party in power has a right, center, or left orientation (Cruz et al., 2021); the first principal component of the World Governance Indicators (with the indicators being government effectiveness, political stability, rule of law, control of corruption; World Bank) and the first principal component of some of the dimensions forming the economic freedom index (namely, judicial effectiveness, business freedom, monetary freedom, trade freedom, investment freedom, and financial freedom; source: Heritage).

Fifth, following the related literature (Ambrocio, 2021; Chen et al., 2021; Deb et al., 2020; Kok, 2020), we add additional expenditures and forgone revenue in response to the COVID-19 pandemic, as a proportion of total GDP (*Fiscal monitor database of country fiscal measures in response to the COVID-19 pandemic*, n.d.). The additional spending variable measures the level of economic assistance provided by the government to lessen the economic damage during the COVID pandemic. Last, to account for global factors, in unreported results, we include the US Federal Reserve target rate (mid-point) (Bank for International Settlements), lagged one month, as a proxy for the world stance of monetary policy. Note that in the case of variables that have a daily frequency (namely, the containment measure, the number of deaths per million of inhabitants, the country-specific COVID trend, and the indicator variable for the pandemic), for the estimations, we consider the values of each variable on day 15 of each month. The complete dataset supporting this study's analysis is available in Open Science Framework (OSF) at https://osf.io/dpja6/?view˙only=228175c8afb54114a76c351974b0b39c

To mitigate any endogeneity bias due to simultaneity, all country-specific macroeconomic variables and the institutional and political controls are lagged by one period, which corresponds to one month or one quarter, depending on the frequency of the variable. Table 1 describes in more detail the macroeconomic and pandemic variables, together with the institutional and political controls. It also provides the frequencies and sources of each factor. Table 2 exhibits the descriptive statistics of the dependent and explanatory variables. Table 3, in turn, reports the correlation matrix between all the previously mentioned variables.

To examine the spillover effects of the compulsory containment measures taken in different countries, we build three proximity or spatial weight matrices, to proxy for the three sources of proximity between countries that we consider in this article, namely, the geographic, economic and administrative, and cultural proximity. These three sources of proximity are inspired by the work of Ghemawat (2001, September), who developed the CAGE distance framework to identify and prioritize the differences between countries that companies must address when developing cross-border strategies. The dimensions that the author considers are precisely the geographic, economic, administrative, and cultural proximity.

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Table 1. Variables' description

Variable	*Description*	*Frequency*	*Source*
BCI	Standardized business confidence indicator. The OECD fixes to 100 the mean of the standardized BCIs. Therefore, 100 represents the long-term average, or normal situation, not attached to any specific base year. Numbers above 100 suggest increased confidence in the near future, and numbers below 100 indicate pessimism towards future performance.	Monthly	OECD
Pandemic variables			
Pandemic	Binary variable that takes the value of one since the 100th COVID case is registered.	Daily	Our World in Data[1]
Trend	Number of days since the 100th COVID case is registered.	Daily	Our World in Data[1]
Deaths/ Million	15-day moving average of reported deaths per million of inhabitants.	Daily	Our World in Data[1]
Comp Containment	It indicates the severity of the National Government containment measures. This index is calculated based on aspects covered by the Oxford COVID-19 Government Response Tracker. These aspects are school closing, workplace closing, cancel of public events, restrictions on gatherings, close of public transport; stay at home requirements, restrictions on internal movement, and international travel movements. For details on the index construction, see Online Appendix A.2.	Daily	Oxford COVID-19 Government Response Tracker
Macroeconomic variables			
Mon Policy Rate	Domestic monetary policy interest rate, expressed as percent per year and in real terms.	Monthly	BIS for monetary policy interest rate, and IMF for inflation database
Gov Consumption	General government final consumption as a proportion of GDP.	Quarterly	OECD National Accounts Statistics
Variables to capture linkages between countries			
Trade Intensity	Ratio between the sum of nominal (in current USD) bilateral exports and imports and the sum of nominal GDP of the two countries involved.	Yearly	IMF's Direction of Trade Statistics
GDP	Gross Domestic Product in current USD.	Yearly	World Bank's Development Indicators
Area	Country's area in km^2.	Invariant	CEPII's *GeoDist* Database
Landlocked	Binary variable that takes the value of one if both countries of the pair do not have their own access to the ocean.	Invariant	CEPII's *GeoDist* Database
Contiguity	Binary variable that takes the value of one if countries *i* and *j* in a pair are contiguous.	Invariant	CEPII's *GeoDist* Database

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Table 1. Continued

Variable	*Description*	*Frequency*	*Source*
Distance	Distance between the most populated cities of two given countries in a pair (in km).	Invariant	CEPII's *GeoDist* Database
Com Lang	Binary variable that takes the value of one if countries *i* and *j* in a pair share a common official or primary language.	Invariant	CEPII's *GeoDist* Database
Com Currency	Binary variable that takes the value of one if countries *i* and *j* in a pair share a common official currency.	Yearly	de Sousa (2020)
Colonial Ties	Binary variable that takes the value of one if countries *i* and *j* in a pair have had a colonial relationship.	Invariant	Head et al. (2010) & CEPII Gravity Database
Variables for the robustness checks			
Gov System	Categorical variable that takes the value of zero for presidential system, and one for parliamentary system. The data are not a replica of the source.	Invariant	Cruz et al. (2021)
Pol Orientation	Categorical variable that indicates the political orientation of the Chief Executive. It takes the value of one (Right) for conservative, Christian, or right-wing parties; two (Center) for parties that are defined or can be described as centrist; and three (Left) for parties defined as or related to communists, socialists, social democrats, or left-wing. The data are not a replica of the source. Yearly data were converted to monthly frequency, completed and edited by the Authors.	Monthly	Cruz et al. (2021)
FPC Govce Ind	First principal component based on the world governance indicators, namely, government effectiveness, political stability, rule of law, and control of corruption.	Yearly	World Bank
FPC Eco Freedom	First principal component based on some dimensions of economic freedom index, namely, judicial effectiveness, business freedom, monetary freedom, trade freedom, investment freedom, and financial freedom.	Yearly	Heritage
Trust in Gov	Share of people reporting confidence in the national government.	Yearly	OECD
PUI	It indicates the level of uncertainty related to pandemics. This index is the percentage of the word 'uncertain', and its variants, that appear near the pandemic terms in EIU country reports, multiplied by 1,000.	Quarterly	Ahir et al. (2018)

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Table 1. Continued

Variable	*Description*	*Frequency*	*Source*
Add Exp	Additional expenditure and forgone revenue in response to the COVID-19 pandemic, as a proportion of total GDP.	Yearly	IMF
Health Exp	Final consumption of health care goods and services (i.e., current health expenditure) including personal health care and collective services (prevention and public health services as well as health administration), but excluding health investments.	Yearly	OECD

Notes: We lag and standardize the following variables: Comp Containment, Economic Support, Mon Policy Rate, and Gov Consumption; the time lag is a period of one month or one quarter, depending on the variable's frequency. Additionally, we standardize Deaths/Million. BCI stands for business confidence index; Comp Containment stands for the compulsory containment measure; Gov Consumption and Gov System refers to government consumption and government system; Pol Orientation stands for political orientation. Mon Policy Rate means monetary policy interest rate; Com is the abbreviation for common and Lang is the abbreviation for language; FPC stands for first principal component; Govce Ind stands for governance indicators and Eco Freedom refers to economic freedom. Trust in Gov stands for trust in government; PUI is the acronym of the pandemic uncertainty index; Add Exp stands for additional expenditure; Health Exp means health expenditure. We lag FPC Govce Ind and FPC Eco Freedom one period. (1) Our World in Data is a project of the Global Change Data Lab, a non-profit organization. It is sponsored by the University of Oxford, whose research team is affiliated to the Oxford Martin Programme on Global Development. CEPII refers to 'The Centre d'Études Prospectives et d'Informations Internationales', in English, Center of Prospective Studies and of International Information. OECD is the abbreviation for organization for Economic Co-operation and Development. IMF is the International Monetary Fund. IDB stands for Inter-American Development Bank. BIS refers to the Bank for International Settlements.

More specifically, each value in any of the three proximity matrices corresponds to a pair of countries and indicates whether the two countries in a given pair relate to each other in geographic, economic and administrative, or cultural terms. We then use these three matrices to compute the average compulsory containment measures taken in the countries related to a given country i in geographic, economic (and administrative), or cultural terms. Precisely, we compute the average compulsory containment measures implemented in the countries being in the geographic neighborhood of a given country i (geographic proximity), the mean compulsory containment measures of countries that are economically and administratively related to country i (in short, economic proximity), and the average compulsory containment measures implemented in the countries which are culturally linked to country i (cultural proximity). The use of spatial econometric methods to 'spatially lag the containment measures' is appealing since it enables us to analyze the spillover mechanisms stemming from multiple sources of transmission of shocks across countries in a single model, with multiple proximity matrices accounting for these various sources of economic propagation of the COVID shock. The model specification accounting for the spillover effects of the

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Table 2. Descriptive statistics of the dependent and explanatory variables

Variables	*Mean*	*Std. Dev*	*Median*	P_{25}	P_{75}
BCI	99.757	2.123	100.039	98.586	101.281
Pandemic	0.271	0.444	0.000	0.000	1.000
Deaths/Million	0.503	1.891	0.000	0.000	0.001
Trend	39.726	79.170	0.000	0.000	24.000
Comp Containment	13.517	25.235	0.000	0.000	9.375
Mon Policy Rate	−0.434	1.837	−0.704	−1.527	0.200
Gov Consumption	0.183	0.054	0.191	0.165	0.217
Development	0.721	0.449	1.000	0.000	1.000
Gov System	1.395	0.867	2.000	0.000	2.000
Pol orientation	1.847	0.895	2.000	1.000	3.000
Trust in Gov	46.233	15.785	44.418	36.229	56.846
FPC Govce Ind	0.000	1.900	0.259	−1.223	1.614
FPC Eco Freedom	−0.000	1.916	0.347	−0.939	1.342
PUI	5.894	14.145	0.000	0.000	2.062

Notes: All descriptive statistics correspond to the period 2018–2020. Std. Dev, P_{25}, and P_{75} are the standard deviation, the first and third quartile of the empirical distribution of the corresponding variable, respectively. We lag the following variables: Comp Containment, Mon Policy Rate, and Gov Consumption; the time lag is a period of one month or one quarter, depending on the variable's frequency. BCI stands for business confidence index. Pandemic is a (country-specific) dummy variable that takes the value of one since the 100th coronavirus case is registered. Deaths/Million corresponds to the deaths per million of inhabitants and Trend, to the trend pandemic variable after the 100th COVID case is registered. Comp Containment stands for the compulsory containment measure. Mon Policy Rate corresponds to the real monetary policy interest rate. Gov Consumption refers to general government final consumption as a proportion of GDP. Development is a binary variable that takes the value of one for advanced economies, and zero (base category) for emerging countries. Gov System describes the government system (presidential or parliamentary system). Trust in Gov stands for trust in government. The first principal component (FPC) of the governance indicators and economic freedom variables are named FPC Govce Ind and FPC Eco Freedom, respectively. We lag FPC Govce Ind and FPC Eco Freedom one period. PUI is the acronym of pandemic uncertainty index.

containment measures is:

$$\mathbf{y}_t = \alpha + \mathbf{X}_{t-1}\beta + \sum_{p\in\mathcal{P}} \rho_p \mathbf{W}_p(\mathbf{C}_{t-1} - \bar{\mathbf{C}}_{t-1}) + \mu + \mathbf{v}_t \tag{2}$$

where $\mathbf{C}_{t-1}$ contains the lagged vector of containment measures taken in different countries at period t; $\bar{\mathbf{C}}_{t-1}$ is the cross-sectional average of the lagged containment measures taken in different countries at period t; $\mathbf{W}_p$ represents a proximity matrix of size $\mathcal{N}\times\mathcal{N}$, p is the sub-index for the three sources of proximity, namely, the geographic (sub-index $p = G$), the economic and the administrative (in short, $p = E$), and the cultural ($p = C$) channels; hence, $p \in \mathcal{P}$ and $\mathcal{P} = \{G; E; C\}$. Thus, an element of $\mathbf{W}_p$, which we denote by $w_{p,i:j}$, represents the extent of the corresponding proximity between two given countries i and j. Also, we impose that $w_{p,i:i} = 0$, or equivalently, that each diagonal element in each $\mathbf{W}_p$ is zero. This is important since by construction, countries cannot be connected with *themselves*. Note that the 'domestic' compulsory containment measure appears in $\mathbf{X}_{t-1}$. Conversely, if two *different* countries i and j are linked in geographic, economic and administrative,

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Table 3. Correlation matrix of the dependent and explanatory variables

Variables	*Deaths/Million*	*Trend*	*Comp Containment*	*Mon Policy Rate*	*Gov Consumption*	*Trust in Gov*	*FPC Govce Ind*	*FPC Eco Freedom*	*PUI*
Deaths/Million	1								
Trend	0.488	1							
Comp Containment	0.458	0.774	1						
Mon Policy Rate	−0.039	−0.031	−0.009	1					
Gov Consumption	0.084	0.145	0.112	−0.356	1				
Trust in Gov	−0.027	0.081	0.041	−0.053	0.114	1			
FPC Govce Ind	−0.004	0.009	−0.059	−0.544	0.427	0.537	1		
FPC Eco Freedom	−0.004	−0.042	−0.090	−0.563	0.347	0.370	0.857	1	
PUI	0.179	0.256	0.292	0.035	0.043	0.163	0.068	0.035	1

Notes: We lag and standardize the following variables: Comp Containment, Mon Policy Rate, and Gov Consumption; the time lag is a period of one month or one quarter, depending on the variable's frequency. Additionally, we standardize Deaths/Million. We lag FPC Govce Ind and FPC Eco Freedom one year. Deaths/Million corresponds to the deaths per million of inhabitants and Trend, to the trend pandemic variable after the 100th COVID case is registered. Comp Containment stands for the compulsory containment measure. Mon Policy Rate corresponds to the real monetary policy interest rate. Gov Consumption refers to general government final consumption as a proportion of GDP. Trust in Gov stands for trust in government. The first principal component (FPC) of the governance indicators and economic freedom variables are named FPC Govce Ind and FPC Eco Freedom, respectively. PUI is the acronym of pandemic uncertainty index.

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or cultural terms, then $w_{p,i:j} = 1$; otherwise, $w_{p,i:j} = 0$. Next, we row-normalize. The parameters ρ_p will hence capture the average intensity of the containment measures in the countries that have geographic, economic (and administrative), or cultural proximity with country i (depending on the sub-index p). Sections 'Geographic Linkages', 'Economic and Administrative Linkages', and 'Cultural Linkages' detail the construction of the matrices for geographic, economic (and administrative), and cultural proximity ($\mathbf{W}_G$, $\mathbf{W}_E$ and $\mathbf{W}_C$) respectively.

Geographic Linkages

To measure geographic proximity for each country in our sample, we first identify the five nearest neighboring countries, by computing the distances between the most populated cities in the two countries of a given pair. We then define that an element $w_{G,ij}$ in the proximity matrix $\mathbf{W}_G$ equals one if country j is one of the five nearest neighbors of country i. Last, we row-normalize the resulting adjacency matrix.

Economic and Administrative Linkages

As explained above, the economic and administrative proximity refers to the linkages between countries that result, for example, in them trading with each other. In this respect, historical associations between countries (such as free trade agreements; sharing the currency; similarities of countries regarding the levels of corruption; and the countries' size, among others) significantly affect the exchange between countries. We now detail our procedure to identify the economic and administrative linkages.

First, relying on annual bilateral export and import data for the period 2013−2017 (Direction of Trade Statistics, DOTS), we compute the trade intensity measure $z_{ij,t}$ as:

$$z_{ij,t} = \frac{EX_{ij,t} + IM_{ij,t}}{GDP_{i,t} + GDP_{j,t}} \tag{3}$$

where $EX_{ij,t}$ ($IM_{ij,t}$) refers to exports (imports) from country i to country j in year t, and $GDP_{i,t}$ stands for the Gross Domestic Product of country i in year t.[9]

Second, we instrument the trade intensity measure, relying on standard variables used in the trade literature (Cavallo & Frankel, 2008; Frankel & Romer, 1999; Frankel & Rose, 2002; Rose, Lockwood, & Quah, 2000). We instrument bilateral trade to account for the possibility of trade being endogenous.[10] Specifically, as instrument variables, we consider the log of the product of the land areas of the two countries in a given pair, the log of the product of the population of the two countries, indicator variables for whether the two countries in a pair are landlocked, whether they share the currency, whether they have at least one contiguous border, whether they are part of a free trade agreement, and a similarity measure between countries regarding corruption. We measure similarity between countries in terms of their exposure to corruption

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(Ghemawat, 2001, September), $Simil^{r}_{i:j}$ as follows:

$$Simil^{r}_{i:j} = \frac{1}{T}\sum_{t=1}^{T}\frac{1}{|r_{i,t} - r_{j,t}| - 1}, \tag{4}$$

where $r_{i,t}$ and $r_{j,t}$ are the values at time t of the corruption index (ICRG) for countries i and j, respectively.

Specifically, to instrument the trade intensity measure, we estimate the following gravity equation:

$$z_{ij,t} = \alpha + \mathbf{H}_{ij,t}\boldsymbol{\phi} + \delta_t + \varepsilon_{i,t}, \tag{5}$$

where $\mathbf{H}_{ij,t}$ denotes the vector of the previously listed variables used to instrument the trade intensity measure corresponding to the country pair i, j, $\boldsymbol{\phi}$ is a vector of parameters, $\boldsymbol{\delta}_t$ refers to time (year) effects, and $\boldsymbol{\varepsilon}_{i,t}$ are the residuals. We then predict trade intensity based on equation (5), that is, $\widehat{z}_{ij,t} = \mathbf{H}_{ij,t}\widehat{\boldsymbol{\phi}}$. Gravity estimates should provide good instrumental variables because they are based on spatial, social, and economic variables, which are plausibly exogenous (for exporters and importers) and yet, when aggregated across all bilateral trading partners, are highly correlated with a country's overall trade (Cavallo & Frankel, 2008).

Third, we average across periods:

$$\bar{\widehat{z}}_{ij} = \frac{1}{T}\sum_{t=1}^{T}\widehat{z}_{ij,t}. \tag{6}$$

Finally, to compute the non-zero elements of $\mathbf{W}_E$, we identify the five largest trade partners of each country i in our sample, based on $\bar{\widehat{z}}_{ij}$. An element $w_{E,ij}$ equals one when country j is one of the five largest trade partners of country i. We then row-normalize.

Cultural Linkages

To measure cultural proximity, we focus on countries that share the same language or had colonial relations in the past. Precisely, an element $w_{C,ij}$ of the weight matrix $\mathbf{W}_C$ equals one if countries i and j share the same language or if they have had colonial relations in the past; otherwise, $w_{C,ij} = 0$. As before, we then row-normalize. Table 1 also describes the variables used for the identification of the economic and administrative, and cultural linkages.

RESULTS

Table 4 presents the model estimates for the baseline specification in equation (1), which includes the macroeconomic and pandemic variables: Column one of results in Table 4 includes the continuous pandemic variables, that is, the proxies for the

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Table 4. Fixed effects, panel regression estimations of BCI: Baseline model estimates and Hypotheses 1 and 2

Variables	*(1)*	*(2)*	*(3)*	*(4)*
Deaths/Million	−0.453***	−0.416***	−0.391**	−0.401**
	(0.149)	(0.150)	(0.147)	(0.150)
Trend	0.004***	0.005***	0.006***	0.006***
	(0.002)	(0.001)	(0.002)	(0.002)
Deaths/Million#Trend	0.002***	0.002***	0.002***	0.002***
	(0.001)	(0.001)	(0.001)	(0.001)
Comp Containment	−1.162***	−1.222***	−1.150***	−1.148***
	(0.128)	(0.124)	(0.120)	(0.121)
Mon Policy Rate		−0.646***	−0.613***	
		(0.206)	(0.200)	
Gov Consumption			−1.146***	
			(0.408)	
Pre-Pandemic#Mon Policy Rate				−0.663***
				(0.213)
Pandemic#Mon Policy Rate				−0.327
				(0.454)
Pre-Pandemic#Gov Consumption				−1.270***
				(0.387)
Pandemic#Gov Consumption				−1.077**
				(0.428)
Observations	1,541	1,541	1,532	1,532
R^2	0.307	0.357	0.382	0.385
Number of countries	43	43	43	43

Notes: Standard errors are in parentheses. Errors are clustered at country level and all specifications include country-fixed effects. Intercept is not reported. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Deaths/Million corresponds to the deaths per million of inhabitants, and Trend, to the trend pandemic variable after the 100th COVID case is registered. Comp Containment stands for the compulsory containment measure. Mon Policy Rate corresponds to the real monetary policy interest rate. Gov Consumption refers to general government final consumption as a proportion of GDP.#denotes an interaction term. Pre-Pandemic and Pandemic indicator variables refer to the pre-COVID and COVID periods, respectively, with the latter starting when a given country registers its 100th COVID case. The R^2 that the table reports is the within R^2.

voluntary and compulsory containment measures (that is, deaths per million and the compulsory containment measure, respectively), the trend pandemic variable and the interaction term between deaths per million, and the trend. Regarding the macroeconomic determinants of BCI, we first add the monthly Central Bank policy interest rate (column two); then, we augment column two with the quarterly general government final consumption as a proportion of GDP (column three). Results are invariant to the order of entry of the macroeconomic determinants (the fiscal and monetary policy proxies). In the last column of results (column four) in Table 4, we interact the macroeconomic variables with the indicator variable for the COVID pandemic, the aim being to capture any non-linearities in the variables measuring the stance of fiscal and monetary policy, before and after the COVID shock. All estimates include country-fixed effects.

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Table 4 provides strong support to Hypotheses 1 and 2. This is because it shows, first, that both (continuous) proxies for the severity of the government policies to contain the pandemic (Comp. Containment and Deaths/Million, which proxy for the compulsory and the voluntary containment measures, respectively) are statistically significant and negative, as expected. These results indicate that they have both negatively affected business confidence; they hence confirm Hypothesis 1. The way we read this finding is that when investors and business people are exposed to containment measures in their own countries, the negative short-term impact of these measures on economic activity is the most important factor (relative to the longer-term positive effects of containing the spread of the disease), thus resulting in business people being less optimistic about the future. Second, Table 4 shows that the compulsory containment measures have had a stronger negative effect on BCI, relative to the voluntary measures. Hence, it supports Hypothesis 2. This may be because of (i) the stronger negative impact that these compulsory measures have on economic activity in the short run, relative to the voluntary measures of social distance and less mobility that citizens might have decided to self-impose (Ambrocio, 2021); (ii) the uncertainty surrounding the compulsory containment measures, as people cannot anticipate when they are going to finish.

Furthermore, the coefficient estimates for the country-specific trend variable (capturing the number of days since the 100th COVID case in a country) and for the interaction term between deaths per million of inhabitants and the trend variable are both positive and significant. The way to interpret these results is that while the containment measures have a strongly negative impact on business confidence, with time, these measures may be perceived as less negative by investors. This is consistent with the interpretation that corporations get used to the COVID pandemic and learn how to deal with it when operating their businesses. This learning effect is an interesting implication of our findings.

In relation to the possible non-linearities in the variables measuring the stance of fiscal and monetary policy, before and during the COVID shock, we confirm that these variables tend to be significantly negative in both sub-periods (with the exception of the monetary policy rate over the pandemic period). Also, results show that their impacts may be stronger in the pre-COVID time. One way to interpret this finding is that investors are less sensitive to the stance of fiscal and monetary policy during the COVID period, because they know that governments do need to make expansionary economic policies to mitigate the negative impact of COVID on economic activity and social health. Therefore, business people become less worried about excessive expansionary fiscal and monetary policies that governments may undertake during COVID times. It is worth adding that results in Table 4 are robust to including a time trend and/or the US monetary policy rate as a global factor. Also important, our findings are robust to including as additional control variables: (i) a dummy variable for whether the country has a presidential system (if the country has a parliamentary system, the indicator

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Table 5. Descriptive statistics of some explanatory variables: Hypothesis 3

Variables	*Advanced*	*Emerging*	*Sign*	*Signif*
Deaths/Million	2.015	1.436	(+)	*
Comp Containment	46.197	59.529	(−)	***
Health Exp	10.006	8.055	(+)	***
Govce Ind	1.180	−0.022	(+)	***
Add Exp	8.969	4.126	(+)	***
Trust in Gov	51.206	40.405	(+)	***
PUI	16.372	11.816	(+)	*

Notes: All the statistics correspond to the pandemic period, defined since the 100th COVID case is registered in a given country. The column Advanced (Emerging) exhibits the mean of each variable for the group of countries classified as Advanced (Emerging). For each variable reported in the Table, Sign corresponds to the sign of the difference in mean between the group of emerging and advanced economies. For each variable reported in the Table, Signif reports the statistical significance of the mean test computed over the group of emerging and advanced economies. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Deaths/Million corresponds to the deaths per million of inhabitants. Comp Containment stands for the compulsory containment measure. Govce Ind corresponds to the mean over the world governance indicators used for the construction of FPC Govce Ind. Trust in Gov stands for trust in government, PUI, for pandemic uncertainty index. Add Exp means additional expenditure, and Health Exp is the abbreviation for health expenditure.

variable takes a value of 0); (ii) a categorical variable measuring the political orientation of the party in power (right, center, left); (iii) the trust in government indicator; (iv) the first principal component of the World Governance Indicators; (v) the first principal component of the economic freedom indices; (vi) the World Pandemic Uncertainty Index. Table A3 in the Online Appendix exhibits the model estimates including these additional control variables, one at a time.

We now examine the evidence for Hypotheses 3 and 4. To begin with, in order to examine Hypothesis 3, Table 5 reports the mean voluntary and compulsory containment measures distinguishing between emerging and advanced economies. Furthermore, Table 5 exhibits the mean differences for emerging and advanced economies of some additional variables characterizing the countries in the two groups. Specifically, Table 5 reports the mean health expenditure (as a proportion of GDP), the average governance indicators, the mean additional expenditure (as a proportion of GDP) due to the COVID shock, the average trust in government, and the mean World Uncertainty Pandemic Index (PUI), in all cases distinguishing between the two groups of countries. In turn, Table 6 focuses on Hypothesis 4: First, it exhibits, for comparison, the model estimates in column four of Table 4, which is our baseline model specification. It then adds interaction terms between the dummy variable for advanced economies and the compulsory and voluntary containment measures, the aim being to have specific coefficients for the compulsory and the voluntary containment measures for these two groups of economies. Column three, in turn, reports specific coefficients for those countries with containment measures above and below the median containment measures.

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Table 6. Fixed effects, panel regression estimations of BCI: Hypothesis 4

Variables	*(1)*	*(2)*	*(3)*
Deaths/Million	−0.391**		
	(0.147)		
Trend	0.006***	0.006***	0.008***
	(0.002)	(0.002)	(0.002)
Deaths/Million#Trend	0.002***	0.002***	0.001**
	(0.001)	(0.001)	(0.001)
Comp Containment	−1.150***		
	(0.120)		
Mon Policy Rate	−0.613***	−0.457**	−0.563***
	(0.200)	(0.187)	(0.185)
Gov Consumption	−1.146***	−0.994***	−1.195***
	(0.408)	(0.365)	(0.402)
Emerging#Deaths/Million		−0.581	
		(0.387)	
Advanced#Deaths/Million		−0.363**	
		(0.155)	
Emerging#Comp Containment		−0.718***	
		(0.130)	
Advanced#Comp Containment		−1.402***	
		(0.158)	
Above median#Deaths/Million			−0.342**
			(0.128)
Below median#Deaths/Million			−0.960
			(0.586)
Above median#Comp Containment			−0.867***
			(0.148)
Below median#Comp Containment			−1.685***
			(0.173)
Observations	1,532	1,532	1,532
R^2	0.382	0.402	0.412
Number of countries	43	43	43

Notes: Standard errors are in parentheses. Errors are clustered at country level and all specifications include country-fixed effects. Intercept is not reported. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Deaths/Million corresponds to the deaths per million of inhabitants and Trend, to the trend pandemic variable after the 100th COVID case is registered. Comp Containment stands for the compulsory containment measure. Mon Policy Rate corresponds to the real monetary policy interest rate. Gov Consumption refers to general government final consumption as a proportion of GDP.#denotes an interaction term. Emerging or Advanced#the containment measure refer to the interaction terms between the dummy variable for emerging or advanced economies, respectively, and the compulsory or voluntary containment measure, when corresponding. Above median or Below median#the containment measure correspond to the interaction between the indicator variable for above or below the median of the given containment measure, respectively, and the containment measure itself. The R^2 that the table reports is the within R^2.

In relation to Hypothesis 3, Table 5 shows that the mean compulsory containment measures are larger in emerging economies (it is equal to 59.53) than in advanced economies (46.20) over the period of reference. Therefore, we confirm Hypothesis 3, at least in relation to the compulsory containment measures. Table 5 provides additional pieces of evidence that are consistent with our intuition

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that advanced economies may not have needed to implement containment measures as severe as the ones taken in emerging economies to contain the COVID pandemic. Supporting this, Table 5 shows that advanced economies have (i) larger health expenditures (as a proportion of GDP) and therefore, better health systems; (ii) better governance indicators, and hence, stronger political institutions; (iii) spent a larger fraction of GDP to implement palliative and focused measures for those sectors more exposed to the COVID pandemic. Moreover, Table 5 shows that, on average, people in advanced economies exhibit more trust in their governments. This is interesting because it suggests that, presumably, governments in advanced economies may be more effective at communicating the need to take measures to contain the pandemic. Following this reasoning, one would then expect that governments in advanced economies may have needed to implement less strict containment measures to achieve the same result in their populations than policy makers in emerging economies, as citizens in emerging countries may be less sensitive to the communications and policies carried out their governments. Therefore, this trust in government argument goes in the same direction as the interpretation that advanced economies have better and larger material capabilities, relative to emerging economies, and therefore, that they need to implement less strict containment measures (relative to emerging economies).

In turn, Table 6 provides support to Hypothesis 4, as it shows that, indeed, the impact of the compulsory containment measures on BCI in advanced economies has been stronger than in emerging economies. The latter may possibly be because business people in emerging countries are more used to macroeconomic instability and volatility. Therefore, they may have been able to better cope with the uncertainty due to the COVID pandemic. As robustness checks, Tables A4 and A5 in the Online Appendix exhibit some additional interesting findings. Specifically, Tables A4 and A5 show that the impact of the compulsory containment measures on BCI is larger in countries with parliamentary systems, in countries whose political party in power has a center orientation, in countries with above median trust in their governments (these are mainly advanced economies, as Table 5 shows), in economies with better governance and more economic freedom. However, the differences between the coefficient estimates for the various levels of the compulsory containment measures (for example, the compulsory containment measures of the countries with above median and below median trust in government) are not statistically significant, with the exception of the interaction between the compulsory containment measure and the parliamentary-presidential regime. Regarding the interactions between the voluntary containment measures and the various political, institutional, and uncertainty factors described above, the findings are less conclusive.

Furthermore, Table A5 in the Online Appendix indicates that the effect on BCI of the compulsory and voluntary containment measures taken in periods of low pandemic uncertainty is larger than in periods of high pandemic uncertainty. Knowing that the periods of low pandemic uncertainty correspond to

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the beginning of the COVID shock, the way we interpret this finding is that business people were more sensitive to the COVID shock when the pandemic just started. With time, people in general, and business people in particular, got used to this COVID crisis and hence, investors became less sensitive to containment measures when the uncertainty due to the COVID shock increased (which correspond to the high pandemic uncertainty periods). Regarding the differences between advanced and emerging economies, Table 5 indicates that pandemic uncertainty is larger in advanced than in emerging economies. To dig into the differences between advanced and emerging economies, we run the same model specification as Table A5, column 4, but we include a triple interaction between the compulsory containment measures, the low pandemic uncertainty dummy variable, and the indicator variable for advanced economies. Table A6, in the Online Appendix, exhibits the model estimates. Interestingly, results show that the largest reaction of business people to the containment measures implemented in periods of low pandemic uncertainty are mainly due to the reaction of investors in advanced economies. Recall that Table 6 has already shown that investors in these economies appear to be more sensitive to the containment measures. What Tables A5 and A6 are adding is that they show that business people in advanced economies have been more sensitive to the containment measures in the initial stages of the COVID pandemic.

In turn, Table A7, in the Online Appendix, examines the robustness of our results when accounting for the regional heterogeneities of the containment measures implemented in different latitudes of the globe. Specifically, in Table A7, we interact the compulsory and the voluntary containment measures with the indicator variable for the region to which each country in our sample belongs. There are two main conclusions to extract from Table A7. First, results show that the reactions of business people to the compulsory containment measures have been stronger in North America and Europe. Second, Table A7 indicates that, in the case of the voluntary containment measures, business people in China have been the most sensitive. Regarding this last point, it is worth adding that the number of deaths in China has been considerably smaller compared to the other emerging economies (0.008 deaths per million of inhabitants in China, well below the average number of 1.58 deaths per million of inhabitants in emerging economies excluding China). This could in turn explain why the coefficient for the interaction between the voluntary containment measure and China is that large.

Summing up, while we are aware that it is not possible to account for all the factors distinguishing emerging and advanced economies and that our interpretations should be taken with caution due to the problem of methodological ambivalence (Smelser, 1998), our results and the above-mentioned robustness checks offer some interesting heterogeneities between business people in emerging and advanced economies and their reactions to the COVID pandemic, which we believe are worth highlighting.

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Table 7. Fixed effects, panel regression of BCI accounting for the spillover effects: Hypothesis 5

Variables	*(1)*	*(2)*	*(3)*	*(4)*
Deaths/Million	−0.391**	−0.365**	−0.434**	−0.447***
	(0.147)	(0.150)	(0.161)	(0.158)
Trend	0.006***	0.007***	0.007***	0.006***
	(0.002)	(0.002)	(0.002)	(0.002)
Deaths/Million#Trend	0.002***	0.001**	0.002**	0.002***
	(0.001)	(0.001)	(0.001)	(0.001)
Comp Containment	−1.150***	−1.176***	−1.225***	−1.186***
	(0.120)	(0.116)	(0.121)	(0.124)
Mon Policy Rate	−0.613***	−0.584***	−0.579***	−0.591***
	(0.200)	(0.191)	(0.183)	(0.191)
Gov Consumption	−1.146***	−1.198***	−1.029**	−1.090**
	(0.408)	(0.397)	(0.412)	(0.414)
$W_C \times$ Comp Containment		0.138*		
		(0.079)		
$W_G \times$ Comp Containment			0.244**	
			(0.095)	
$W_E \times$ Comp Containment				0.129
				(0.093)
Observations	1,532	1,532	1,532	1,532
R^2	0.382	0.386	0.394	0.385
Number of countries	43	43	43	43

Notes: Standard errors are in parentheses. Errors are clustered at country level and all specifications include country-fixed effects. Intercept is not reported. ***$p < 0.01$, **$p < 0.05$, *$p < 0.1$. Deaths/Million corresponds to the deaths per million of inhabitants, and Trend, to the trend pandemic variable after the 100th COVID case is registered. Comp Containment stands for the compulsory containment measure. Mon Policy Rate corresponds to the real monetary policy interest rate. Gov Consumption refers to general government final consumption as a proportion of GDP. #denotes an interaction term. $W_C \times$ Comp Containment, $W_G \times$ Comp Containment, $W_E \times$ Comp Containment refer to the average compulsory containment measures of the countries which are linked in cultural, geographic, or economic and administrative terms, respectively, to a given country *i*. In each average containment measure, we only include the five closest neighbors, according to one source of proximity. The R^2 that the Table reports is the within R^2. FE (RE) stands for fixed effects (random effects).

Last, Table 7 presents the model estimates for testing Hypothesis 5 which examines the spillover effects. These effects aim at capturing the influence on business confidence of the containment measures in neighboring countries (in the sense of geographic, economic and administrative, and cultural proximity). Precisely, starting from the baseline model estimates (column four in the previous Table 4), Table 7 introduces one at a time the compulsory containment measures of neighboring countries based on the cultural proximity (column two), geographic proximity (column three), and economic and administrative proximity (column four).

Table 7 shows an insightful finding, namely, that the spillover effects of the compulsory containment measures taken in neighboring countries, according to the cultural and geographic sources of proximity, do have a significantly positive impact on business confidence.[11] These positive spillover effects sharply contrast with the negative estimates for the domestic compulsory containment measures

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exhibited in Tables 4, 6, and 7. Therefore, our results confirm Hypothesis 5 as they indicate that, when the compulsory containment measures are taken abroad, business people do recognize the positive medium- and long-term effects (on public health, for instance) from taking actions to contain the spread of the pandemic, which in turn results in these business people having better expectations about the future. The mechanism for such a reaction would be one of a positive externality: When containment measures are taken in their *own* countries, business confidence is negatively affected because they perceive that they have to pay the costs of these measures (the reduction in economic activity), but they cannot fully profit from the total world benefits of the measures. Conversely, when containment measures are implemented *elsewhere*, business people benefit from the total world benefits of the containment measures, without paying the costs (of these measures). Business people are hence better off and become more optimistic about the future.

DISCUSSION

COVID has shaken most activities on the planet. Our article offers several novel results in relation COVID's effects on business confidence. First, we show that the containment measures to mitigate the COVID pandemic (both compulsory and voluntary ones) have negatively affected business confidence. Second, we find that compulsory containment measures exhibit a stronger negative effect on business confidence, relative to the voluntary containment measures. We believe this finding may be due to the strongest negative short-term impact of compulsory containment measures on economic and business activity, which in turn results in business people being less confident about the near future in their own countries.

Third, we find that, on average, emerging economies have implemented stricter compulsory containment measures (relative to advanced economies) to mitigate the COVID shock. However, business confidence in these emerging economies has been less negatively affected, relative to advanced economies. Intuitively, the fact that emerging economies have needed to implement stricter compulsory containment measures may be because these economies have less infrastructure, social and health systems, and fiscal slackness to face the extraordinary challenges created by the COVID shock. Hence, to contain the pandemic they need to rely more on compulsory measures (at the expense of output and economic activity). The way we interpret the finding that the impact on business confidence is smaller in emerging economies is that corporations in these countries may be more used to economic uncertainty and volatility, thus being better prepared to handle such a complex situation.

Fourth, an interesting finding in relation to the spillover effects is that the containment measures implemented in neighboring countries, in the sense of cultural and geographic proximity, do have a positive impact on business confidence. This positive estimate sharply contrasts with the significantly negative estimated impact

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for domestic compulsory containment measures. The latter is thus indicating that when these containment measures are taken abroad, business people do recognize the benefits from taking actions to contain the pandemic, which in turn results in them having better expectations for the future. The mechanism for such a reaction resembles the one of a positive externality: when containment measures are taken in their own countries, business people are worse off because they have to pay the full cost of these measures (the reduction in business and economic activity), but they cannot fully profit from the total world benefits of the measures. In contrast, when the containment measures are implemented elsewhere, business people are better off and hence, they become more optimistic about the future (as they recognize the positive effects of the measures for mitigating the pandemic). They benefit from the total world benefits of the measures, without paying the costs.

The COVID pandemic is a novel phenomenon and from an academic perspective, there are multiple fields that can benefit from studies investigating it. Up to now, there are only a few research articles examining the relation between business confidence and the COVID pandemic. We contribute to this emerging literature in several dimensions. First, our global study presents a unique case to understand the effects of an exogenous shock affecting the whole world. This is particularly important because most of the previous exogenous shocks were limited by their local or regional effect (i.e., a terrorist attack, or a war, or an environmental disaster). We analyze an exogenous shock that has had a widespread effect; we include in the analysis countries from all around the globe, instead of being limited to a particular region.

Second, our study contributes to the area of public policies as it confirms that business people react differently to the degree of intervention from the States to handle the COVID crisis. We show that measures taken by the States to contain the pandemic have had a negative effect on business confidence. This is even more salient because business people do not seem to question the effectiveness of the stronger containment measures *per se*. If this were the case, then they should react similarly to the containment measures implemented by neighboring countries. Quite the contrary, the fact that the business confidence indicator reacts positively to stronger containment measures – implying more State intervention – of neighboring countries confirms that the policies are not *per se* being questioned. Instead, business people are less confident about the future when greater State intervention to contain the pandemic directly affect them.

Third, the comparison between the differential effects of the pandemic in advanced and emerging markets adds to the literature on development economics as well as to the international business literature. We document how the different institutional conditions of these two kinds of countries create different incentives for business people. Several studies confirm that business people from emerging markets are more flexible and resistant to sudden changes (Aguilera et al., 2017; Aulakh, 2007; Casanova et al., 2021; Cuervo-Cazurra & Ramamurti, 2014; Cuervo-Cazurra et al., 2019; Guillén & García-Canal, 2012). Our research

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confirms this finding under a particular extreme exogenous shock that affects both advanced and emerging economies. Namely, the willingness of business people from emerging markets to invest has been less affected than the one from advanced countries, as the smaller negative estimate for the containment measures in emerging economies (relative to advanced economies) confirms. The latter is despite the fact that emerging markets have been more prone to take more severe compulsory measures than advanced economies.

Fourth, our research can also contribute to the study of recession and its impact on the competitive advantages of firms (Ghemawat, 2009; Latham & Braun, 2011; Mascarenhas & Aaker, 1989; Navarro, Bromiley, & Sottile, 2010; Vassolo et al., 2017). The pandemic has resulted in a significant economic recession and our analysis of how investments are affected by it connects to the performance and strategies of firms during turmoil periods. For instance, several scholars argue that those firms that initially have more resources (Geroski & Gregg, 1997; Lieberman & Montgomery, 1998) are the ones with more chance of survival in a crisis. In contrast, we show that business confidence of firms in advanced economies has been more negatively affected by the containment measures, relative to firms in emerging economies. One possible explanation would be that smaller firms (on average, firms are smaller in emerging economies relative to advanced economies) are more flexible and do better under recessions (Latham, 2009). Of course, our article is a macro analysis and therefore, we need to be cautious when comparing it with studies at the firm-specific level. Still, by pointing out the behavior of investors in countries with different resources (i.e., advanced and emerging countries), we shed light on the debate about how companies react under a recession, which ultimately shapes their overall strategy and performance (Latham & Braun, 2011).

Limitations and Future Research Directions

In relation to future research that could enrich our understanding of COVID's effects on investors, we have mainly focused on the business confidence indicator, which is a significant indicator. Yet, other dimensions that define investors' decisions could also be analyzed and compared to the results obtained in this study. For instance, the effects on the intertemporal horizon of investment, if there is a differential effect on investments depending on the type of activity or – in a more general level – how strategic decisions are changed. It would also be interesting to examine if these effects remain as time progresses and the effects of the COVID pandemic continue to be present or fade away. In this regard, the results of our country-specific trend variable are compatible with the idea that investors do get used to stronger measures and accommodate their investment plans accordingly. Thus, it could be important to assess if there are changes in the behavior of investors (and the BCI) if countries decide to continue with strong compulsory contingency measures, under the potential appearance of

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new waves of this pandemic and/or since the vaccine campaigns in the majority of countries.

There are also important managerial implications of this study. First, it allows policy makers to have a greater comprehension of how investors react to public policies. Our results confirm that stricter State intervention has an overall negative effect on investors' confidence. Interestingly enough, more drastic public policy changes have less impact on emerging markets' business people, probably because they are more used to sudden changes. It also exhibits that the decisions made by neighboring countries have an effect on domestic investments' decisions. Business executives could also benefit from the findings of this research as it gives them a better picture of how the confidence of other investors (illustrated in the BCI) varies from country to country depending on the development stage and the kinds of policies implemented by both these countries and their neighbors.

SUPPLEMENTARY MATERIAL

The supplementary material for this article can be found at https://doi.org/10.1017/mor.2023.1

NOTES

[1] Stricter containment policies may have a fast, observable effect on business (Ambrocio, 2021). In turn, lenient policies might be considered as irresponsible and more damaging in the middle term as they might increase the spread of the disease.

[2] Regarding the role of culture, Galperin, Punnett, Ford, and Lituchy (2022) propose an emic-etic-emic approach to disaggregate contextual issues in organizational and management research. Interestingly, accounting for this emic perspective can provide a deeper explanation for an individual country, which goes beyond the scope of our article.

[3] More generally, reflecting the importance of the spillover effects of the COVID shock, studies have begun to quantify their impacts on domestic economic activity and systemic risk (Abuzayed, Bouri, Al-Fayoumi, & Jalkh, 2021; Akhtaruzzaman, Boubaker, & Sensoy, 2021; Bernales, Margaretic, & Moreno, 2021; Rizwan, Ahmad, & Ashraf, 2020).

[4] Focusing on the COVID shock, König and Winkler (2020) find that richer countries and countries with higher pre-crisis trend growth perform better than ones with a lower income per capita and lower pre-crisis growth. In turn, Kok (2020) and Maloney and Taskin (2020) focus on identifying the different results of the restrictions and the voluntary measures on the economic activity, depending on the level of countries' income.

[5] The BCI is an indicator that compiles the answers to business people in the manufacturing sector regarding the following three aspects of business: (i) production future tendency; (ii) order books levels; (iii) stocks of finished goods (inverted sign). It is computed as the arithmetic average of seasonally adjusted net balances of the previous three questions.

[6] The emerging countries that are part of the sample are Brazil, Chile, China, Colombia, Costa Rica, India, Indonesia, Mexico, Russia, South Africa, South Korea, and Turkey. The following advanced countries complete the sample: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Japan, Latvia, Lithuania, Luxembourg, New Zealand, Norway, Slovenia, Slovakia, Spain, Sweden, Switzerland, Portugal, Poland, Netherlands, United Kingdom, and the United States.

[7] Our World in Data is a project of the Global Change Data Lab, a non-profit organization. It is sponsored by the University of Oxford and the Oxford Martin Program on Global Development.

[8] Several studies have used the deaths due to the coronavirus, as well as the registered COVID cases' incidence as proxies for voluntary containment measures. This is based on the intuition that proximity to the disease triggers fear, and fear is followed by voluntary distancing. Note that this behavior has been identified not only for the COVID pandemic but also for other infectious

diseases, such as AIDS (Auld, 2006), A/H1N1 (Bayham et al., 2015), and the Spanish flu (Crosby, 2003). We use a 15-day moving average to reduce distortions due to possible sporadic errors, outliers, and weekly seasonality.

[9] To mitigate any reverse causality, we consider the non-overlapping period 2013–2017 for the trade intensity measure. Recall that the sample period for estimations is 2018–2020.

[10] One reason why trade could be endogenous is because of income, that is, richer countries might tend to reduce their trade barriers and, hence, trade more. Another possibility for trade being endogenous is that it is due to the simultaneous feedback between trade openness and economic proximity, with the two possibly being jointly determined. Alternatively, one could potentially think about reverse causality, whereby, for example, greater economic interdependence may reduce the cost of trade credit and encourage foreign direct investment, with both adjustments facilitating more commercial trade between countries (Cavallo & Frankel, 2008).

[11] Table A2, in the Online Appendix, reports the correlation coefficients between the three sources of proximity.

DATA AVAILABILITY STATEMENT

The data supporting this study's analysis are available in Open Science Framework (OSF) at: https://osf.io/dpja6/?view˙only=228175c8afb54114a76c351974b0b39c These data were derived from the sources detailed in Table 1.

REFERENCES

Abuzayed, B., Bouri, E., Al-Fayoumi, N., & Jalkh, N. 2021. Systemic risk spillover across global and country stock markets during the COVID-19 pandemic. ***Economic Analysis and Policy***, 71: 180–197.

Acemoglu, D., & Robinson, J. A. 2012. ***Why nations fail: The origins of power, prosperity and poverty***, 1st ed. New York: Crown.

Acemoglu, D., Johnson, S., & Robinson, J. A. 2002. Reversal of fortune: Geography and institutions in the making of the modern world income distribution. ***The Quarterly Journal of Economics***, 117(4): 1231–94.

Acemoglu, D., Johnson, S., Robinson, J. A., & Thaicharoen, Y. 2003. Institutional causes, macroeconomic symptoms: Volatility, crises and growth. ***Journal of Monetary Economics***, 50(1): 49–123.

Addison, T., Sen, K., & Tarp, F. 2020. ***COVID-19: Macroeconomic dimensions in the developing world***. WIDER Working Paper Series wp-2020-74, World Institute for Development Economic Research. Available from URL: https://ideas.repec.org/p/unu/wpaper/wp-2020-74.html

Adler, N., Sackmann, S. A., Arieli, S., Akter, M., Barmeyer, C., Barzantny, C., Caprar, D. V., Lee, Y.-t., Liu, L. A., Magnani, G., Marcus, J., Miska, C., Reiche, B. S., Søderberg, A.-M., Solomons, J., & Zhang, Z.-X. 2022. The grand challenge none of us chose. Succeeding (and failing) against the global pandemic 1. In J. S. Osland, B. S. Reiche, B. Szkudlarek, & M. E. Mendenhall (Eds.), ***Advances in global leadership***, vol. 14. Bingley, UK: Emerald Publishing Limited. https://doi.org/10.1108/S1535-120320220000014002

Aggarwal, R. 2006. Terrorism and financial management. In G. G. S. Suder (Ed.), ***Corporate strategies under international terrorism and adversity***: 95–108. Cheltenham, UK: Edward Elgar Publishing Limited.

Aguilera, R. V., Ciravegna, L., Cuervo-Cazurra, A., & Gonzalez-Perez, M. A. 2017. Multilatinas and the internationalization of Latin American firms. ***Journal of World Business***, 52(4): 447–460.

Ahir, H., Bloom, N., & Furceri, D. 2018. ***World uncertainty index***. Stanford mimeo.

Akhtaruzzaman, M., Boubaker, S., & Sensoy, A. 2021. Financial contagion during COVID-19 crisis. ***Finance Research Letters***, 38: 101604. https://doi.org/10.1016/j.frl.2020.101604

Alesina, A., Favero, C., & Giavazzi, F. 2015. The output effect of fiscal consolidation plans. ***Journal of International Economics***, 96(S1): S19–S42.

Ambrocio, G. 2021. ***Euro area business confidence and Covid-19***. Research Discussion Papers No. 4/2021, Bank of Finland. Available from URL: https://ideas.repec.org/p/bof/bofrdp/2021˙004.html

https://doi.org/10.1017/mor.2023.1 Published online by Cambridge University Press

Andersen, A. L., Hansen, E. T., Johannesen, N., & Sheridan, A. 2020. ***Consumer responses to the COVID-19 crisis: Evidence from bank account transaction data***. CEPR Discussion Papers No. 14809, C.E.P.R. Discussion Papers. Available from URL: https://ideas.repec.org/p/cpr/ceprdp/14809.html

Ankel, S. 2020. At least 5 countries — including a small Caribbean island — are accusing the US of blocking or taking medical equipment they need to fight the coronavirus. ***Business Insider***. [Cited 7 April 2020].

Asiedu, E. 2002. On the determinants of foreign direct investment to developing countries: Is Africa different? ***World Development***, 30(1): 107–119. https://doi.org/10.1016/S0305-750X(01)00100-0

Aulakh, P. S. 2007. Emerging multinationals from developing economies: Motivations, paths and performance. ***Journal of International Management***, 3(13): 235–240. https://doi.org/10.1016/j.intman.2007.05.001

Auld, M. C. 2006. Estimating behavioral response to the AIDS epidemic. ***The B.E. Journal of Economic Analysis & Policy***, 5(1): 1–29. https://doi.org/10.1515/1538-0645.1235

Baek, C., McCrory, P. B., Messer, T., & Mui, P. 2020. ***Unemployment effects of stay-at-home orders: Evidence from high frequency claims data***. ***The Review of Economics and Statistics***, 1–72. Working Paper, Institute for Research on Labor and Employment. https://doi.org/10.1162/rest_a_00996

Baker, S. R., Bloom, N., Davis, S. J., & Terry, S. J. 2020. ***COVID-induced economic uncertainty***. NBER Working Papers No. 26983, National Bureau of Economic Research. https://doi.org/10.3386/w26983

Bandyopadhyay, S., Sandler, T., & Younas, J. 2014. Foreign direct investment, aid, and terrorism. ***Oxford Economic Papers***, 66(1): 25–50.

Barbieri, K., & Levy, J. S. 1999. Sleeping with the enemy: The impact of war on trade. ***Journal of Peace Research***, 36(4): 463–479.

Barro, R. J., Ursúa, J. F., & Weng, J. 2020. ***The coronavirus and the great influenza pandemic: Lessons from the 'Spanish Flu' for the coronavirus's potential effects on mortality and economic activity***. NBER Working Papers No. 26866, National Bureau of Economic Research, Inc. https://doi.org/10.3386/w26866

Barth, J., Li, T., McCarthy, D., Phumiwasana, T., & Yago, G. 2006. Economic impacts of global terrorism: From Munich to Bali. ***SSRN Electronic Journal***. https://doi.org/10.2139/ssrn.892033

Bayham, J., Kuminoff, N. V., Gunn, Q., & Fenichel, E. P. 2015. Measured voluntary avoidance behaviour during the 2009 A/H1N1 epidemic. ***Proceedings of the Royal Society B: Biological Sciences***, 282(1818): 20150814. https://doi.org/10.1098/rspb.2015.0814

Beetsma, R., Cimadomo, J., Furtuna, O., & Giuliodori, M. 2015. The confidence effects of fiscal consolidations. ***Economic Policy***, 30(83): 439–489.

Bernales, A., Margaretic, P., & Moreno, D. 2021. Disentangling empirically the informational channel of economic interdependence between countries. Mimeo.

Blomberg, S. B., & Hess, G. D. 2006. How much does violence tax trade? ***The Review of Economics and Statistics***, 88(4): 599–612.

Brinks, D. M., Levitsky, S., & Murillo, M. V. 2019. ***Understanding institutional weakness: Power and design in Latin American institutions***. Cambridge, UK: Cambridge University Press.

Buckman, S. R., Shapiro, A. H., Sudhof, M., & Wilson, D. J. 2020. News sentiment in the time of COVID-19. ***FRBSF Economic Letter***, 8: 1–05.

Caligiuri, P., De Cieri, H., Minbaeva, D., Verbeke, A., & Zimmermann, A. 2020. International HRM insights for navigating the COVID-19 pandemic: Implications for future research and practice. ***Journal of International Business Studies***, 51(5): 697–513.

Casanova, L., Miroux, A., & Finchelstein, D. 2021. Digital companies driving business model innovation in emerging markets: The cases of Alibaba, Flipkart, Jumia, and Mercado Libre. In F. Cahen, L. Casanovaand, & A. Miroux (Eds.), ***Innovation from emerging markets: From copycats to leaders***: 122–149. Cambridge: Cambridge University Press.

Cavallo, E. A., & Frankel, J. A. 2008. Does openness to trade make countries more vulnerable to sudden stops, or less? Using gravity to establish causality. ***Journal of International Money and Finance***, 27(8): 1430–1452.

Chakravorti, B., Bhalla, A., & Chaturvedi, R. S. 2020. Which economies showed the most digital progress in 2020? **Harvard Business Review Digital Articles**, December. [Cited 4

April 2021]. Available from URL: https://hbsp.harvard.edu/product/H063AN-PDF-ENG?Ntt=Which+Economies+Showed+the+Most+Digital+Progress+in+2020

Chen, C. W., Lee, S., Dong, M. C., & Taniguchi, M. 2021. What factors drive the satisfaction of citizens with governments' responses to COVID-19? ***International Journal of Infectious Diseases***, 102: 327–331.

Chen, S., Igan, D. O., Pierri, N., & Presbitero, A. F. 2020. ***Tracking the economic impact of COVID-19 and mitigation policies in Europe and the United States***. IMF Working Papers No. 2020/125, International Monetary Fund. Available from URL: https://ideas.repec.org/p/imf/imfwpa/2020-125.html

Chronopoulos, D. K., Lukas, M., & Wilson, J. O. 2020. Consumer spending responses to the COVID-19 pandemic: An assessment of Great Britain. ***Covid Economis***, (34): 145–186.

Chung, S. 2014. Environmental regulation and foreign direct investment: Evidence from South Korea. ***Journal of Development Economics***, 108: 222–236.

Coibion, O., Gorodnichenko, Y., & Weber, M. 2020. ***Labor markets during the COVID-19 crisis: A preliminary view***. Working Paper No. 27017, National Bureau of Economic Research. https://doi.org/10.3386/w27017

Contractor, F. 2020, April 14. What does flattening the curve mean? ***Academy of International Business Newsletter,*** 2. Available from URL: https://www.aib.world/news/what-does-flattening-the-curve-mean/

Crosby, A. W. 2003. ***America's forgotten pandemic: The influenza of 1918***. Cambridge: Cambridge University Press.

Cruz, C., Keefer, P., & Scartascini, C. 2021. Database of political institutions 2020 (DPI2021). Technical Report, Inter-American Development Bank. Numbers for Development. https://doi.org/10.18235/0003049

Cuervo-Cazurra, A., & Ramamurti, R. 2014. ***Understanding multinationals from emerging markets***. Cambridge: Cambridge University Press.

Cuervo-Cazurra, A., Carneiro, J., Finchelstein, D., Duran, P., Gonzalez-Perez, M. A., Montoya, M. A., & Newburry, W. 2019. Uncommoditizing strategies by emerging market firms. ***Multinational Business Review***, 27(2): 141–177.

Cui, L., & Jiang, F. 2012. State ownership effect on firms' FDI ownership decisions under institutional pressure: A study of Chinese outward-investing firms. ***Journal of International Business Studies***, 43(3): 264–284.

Culpepper, P. D. 2005. Institutional change in contemporary capitalism: Coordinated financial systems since 1990. ***World Politics***, 57(2): 173–199.

Czinkota, M. R., Knight, G., Liesch, P. W., & Steen, J. 2010. Terrorism and international business: A research agenda. ***Journal of International Business Studies***, 41(5): 826–843.

Dajčman, S. 2020. Economic policy and confidence of economic agents: A causal relationship? ***Review of Economic Perspectives***, 20(4): 471–484.

Dasgupta, S., & Lahiri, K. 1993. On the use of dispersion measures from NAPM surveys in business cycle forecasting. ***Journal of Forecasting***, 12(3–4): 239–253.

Deb, P., Furceri, D., Ostry, J. D., & Tawk, N. 2020. ***The economic effects of COVID-19 containment measures***. Working Paper Volume 2020: Issue 158, International Monetary Fund. https://doi.org/10.5089/9781513550251.001

de Sousa, J. 2020. The currency union effect on trade is decreasing over time. ***Economic Letters***, 117(3): 917–920.

Dharwadkar, B., George, G., & Brandes, P. 2000. Privatization in emerging economies: An agency theory perspective. ***Academy of Management Review***, 25(3): 650–669.

Dingel, J. I., & Neiman, B. 2020. How many jobs can be done at home? ***Journal of Public Economics***, 189: 104235.

Doh, J., Rodrigues, S., Saka-Helmhout, A., & Makhija, M. 2017. International business responses to institutional voids. ***Journal of International Business Studies***, 48(3): 293–307.

Duque, J. G., Andonova, V., & Correa, M. E. 2021. Innovation in war and peace: How Colombian conflict and postconflict triggered military and business model innovation. In F. Cahen, L. Casanovaand, & A. Miroux (Eds.), ***Innovation from emerging markets: From copycats to leaders***: 325–348. Cambridge: Cambridge University Press.

Fernández-Villaverde, J., & Jones, C. I. 2020. Macroeconomic outcomes and COVID-19: A progress report. ***Brookings Papers on Economic Activity***: 111–166. Available from URL: https://www.brookings.edu/bpeaarticles/macroeconomic-outcomes-and-covid-19-a-progress-report/

Fetzer, T., Hensel, L., Hermle, J., & Roth, C. 2020. Coronavirus perceptions and economic anxiety. ***The Review of Economics and Statistics***: 103(5): 968–978.

Finchelstein, D. 2017. The role of the State in the internationalization of Latin American firms. ***Journal of World Business***, 52(4): 578–590. https://doi.org/10.1016/j.jwb.2017.04.003

Fiscal monitor database of country fiscal measures in response to the COVID-19 pandemic. (n.d.). Available from URL: https://www.imf.org/en/Topics/imf-and-covid19/Fiscal-Policies-Database-in-Response-to-COVID-19

Frankel, J. A., & Romer, D. H. 1999. Does trade cause growth? ***American Economic Review***, 89 (3): 379–399.

Frankel, J., & Rose, A. 2002. An estimate of the effect of common currencies on trade and income. ***The Quarterly Journal of Economics***, 117(2): 437–466.

Friel, D. 2021. Breaking the looking glass: Understanding how emerging market multinationals develop unique firm-specific advantages [Enriching internationalization process theory: Insights from the study of emerging market multinationals]. ***Journal of International Management***, 27(3): 100831. https://doi.org/10.1016/j.intman.2021.100831

Gallup, J. L., Sachs, J. D., & Mellinger, A. D. 1999. Geography and economic development. ***International Regional Science Review***, 22(2): 179–232.

Galperin, B. L., Punnett, B. J., Ford, D., & Lituchy, T. R. 2022. An emic-etic-emic research cycle for understanding context in under-researched countries. ***International Journal of Cross Cultural Management***, 22(1): 7–35.

Garcia-Sanchez, J., Mesquita, L. F., & Vassolo, R. S. 2014. What doesn't kill you makes you stronger: The evolution of competition and entry-order advantages in economically turbulent contexts. ***Strategic Management Journal***, 35(13): 1972–1992.

Gavet, M. 2020, September 30. What's next for silicon valley? ***Harvard Business Review Digital Articles***. Available from URL: https://hbr.org/2020/09/whats-next-for-silicon-valley

Geroski, P. A., & Gregg, P. 1997. ***Coping with recession: UK company performance in adversity (No. 38)***. Cambridge, UK: Cambridge University Press.

Ghemawat, P. 2001, September. Distance still matters – the hard reality of global expansion. **Harvard Business Review**, 79: 137–147. Available from URL: https://hbr.org/2001/09/distance-still-matters-the-hard-reality-of-global-expansion

Ghemawat, P. 2009. The risk of not investing in a recession. ***MIT Sloan Management Review***, 50 (3): 31.

Globerman, S., & Shapiro, D. 2003. Governance infrastructure and US foreign direct investment. ***Journal of International Business Studies***, 34(1): 19–39.

Goolsbee, A., & Syverson, C. 2021. Fear, lockdown, and diversion: Comparing drivers of pandemic economic decline 2020. ***Journal of Public Economics***, 193: 104311. https://doi.org/10.1016/j.jpubeco.2020.104311

Guillén, M. F., & García-Canal, E. 2012. ***Emerging markets rule: Growth strategies of the new global giants***. New York: McGraw Hill Professional.

Gulen, H., & Ion, M. 2015. Policy uncertainty and corporate investment. ***The Review of Financial Studies***, 29(3): 523–564.

Ha, J. 2020. Global confidence, uncertainty, and business cycles. **SSRN**, December 14, 2020. https://doi.org/10.2139/ssrn.3748156

Hall, P. A., & Soskice, D. 2001. ***Varieties of capitalism: The institutional foundations of comparative advantage***. Oxford, UK: Oxford University Press.

Han, E., & Paik, C. 2017. Ethnic integration and development in China. ***World Development***, 93: 31–42.

Hansson, J., Jansson, P., & Löf, M. 2005. Business survey data: Do they help in forecasting GDP growth? ***International Journal of Forecasting***, 21(2): 377–389.

Hasija, S., Padmanabhan, V., & Rampal, P. 2020, June 1. Will the pandemic push knowledge work into the gig economy? ***Harvard Business Review Digital Articles***. Available from URL: https://hbr.org/2020/06/willthe-pandemic-push-knowledge-work-into-the-gig-economy?registration=success

Head, K., Mayer, T., & Ries, J. 2010. The erosion of colonial trade linkages after independence. ***Journal of International Economics***, 81(1): 1–14.

Henisz, W. J. 2000. The institutional environment for multinational investment. ***The Journal of Law, Economics, and Organization***, 16(2): 334–364.

Henisz, W. J., & Williamson, O. E. 1999. Comparative economic organization: Within and between countries. ***Business and Politics***, 1(3): 261–277.

Henisz, W. J., Mansfield, E. D., & Von Glinow, M. A. 2010. Conflict, security, and political risk: International business in challenging times. ***Journal of International Business Studies***, 41(5): 759–764.

Heugens, P. P., Sauerwald, S., Turturea, R., & van Essen, M. 2020. Does state ownership hurt or help minority shareholders? International evidence from control block acquisitions. ***Global Strategy Journal***, 10(4): 750–778.

Julio, B., & Yook, Y. 2012. Political uncertainty and corporate investment cycles. ***The Journal of Finance***, 67(1): 45–83.

Kanapickiene, R., Teresiene, D., Budriene, D., Keliuotytė-Staniulėnienė, G., & Kartasova, J. 2020. The impact of COVID-19 on European financial markets and economic sentiment. ***Economy & Business Journal***, 14(1): 144–163.

Khan, H., & Upadhayaya, S. 2020. Does business confidence matter for investment? ***Empirical Economics***, 59(4): 1633–1665.

Khanna, T., & Palepu, K. G. 2006. Emerging giants: Building world-class companies in developing countries. ***Harvard Business Review***, 84(10): 60–69.

Kok, J. 2020. Short-term trade-off between stringency and economic growth. ***COVID Economics***, 60: 172–189.

König, M., & Winkler, A. 2020. Monitoring in real time: Cross-country evidence on the COVID-19 impact on GDP growth in the first half of 2020. ***COVID Economics***, 57: 132–153.

König, M., & Winkler, A. 2021. COVID-19: Lockdowns, fatality rates and GDP growth. ***Intereconomics***, 56(1): 32–39.

Konstantinou, P., & Tagkalakis, A. 2011. Boosting confidence: Is there a role for fiscal policy? ***Economic Modelling***, 28(4): 1629–1641.

Kornai, J. 1990. The affinity between ownership forms and coordination mechanisms: The common experience of reform in socialist countries. ***Journal of Economic Perspectives***, 4(3): 131–147.

Kosacoff, B., & Ramos, A. 2006. Comportamientos microeconómicos en entornos de alta incertidumbre: La industria Argentina. Available from URL: https://repositorio.cepal.org/bitstream/handle/11362/3899/1/S2006013˙es.pdf

Kumar, V., Mudambi, R., & Gray, S. 2013. Internationalization, innovation and institutions: The 3 I's underpinning the competitiveness of emerging market firms. ***Journal of International Management***, 19(3): 203–206.

La Porta, R., Lopez-de Silanes, F., Shleifer, A., & Vishny, R. W. 1997. Legal determinants of external finance. ***The Journal of Finance***, 52(3): 1131–1150.

Latham, S. 2009. Contrasting strategic response to economic recession in start-up versus established software firms. ***Journal of Small Business Management***, 47(2).

Latham, S., & Braun, M. 2011. Economic recessions, strategy, and performance: A synthesis. ***Journal of Strategy and Management***, 4(2): 96–115.

Lazzarini, S. G., & Musacchio, A. 2018. State ownership reinvented? Explaining performance differences between state-owned and private firms. ***Corporate Governance: An International Review***, 26(4): 255–272.

Leduc, S., & Sill, K. 2013. Expectations and economic fluctuations: An analysis using survey data. ***The Review of Economics and Statistics***, 95(4): 1352–1367.

Lee, H. S. 2020. Exploring the initial impact of COVID-19 sentiment on US stock market using big data. ***Sustainability***, 12(16): 6648. https://doi.org/10.3390/su12166648

Lehmann, R. 2020. ***The forecasting power of the Ifo business survey***. Working Papers No. 8291, CESifo Group Munich. Available from URL: https://ssrn.com/abstract=3603848

Lewis, D. J., Makridis, C., & Mertens, K. 2019. ***Do monetary policy announcements shift household expectations?*** Working Paper No. 1906, Federal Reserve Bank of Dallas. https://doi.org/10.24149/wp1906r1

Lieberman, M. B., & Montgomery, D. B. 1998. First-mover (dis)advantages: Retrospective and link with the resource-based view. ***Strategic Management Journal***, 19(12): 1111–1125.

Lutz, J. M., & Lutz, B. J. 2006. International terrorism in Latin America: Efforts on foreign investment and tourism. ***Journal of Social, Political, and Economic Studies***, 31(3): 321–338.

Mahoney, J. 2000. Path dependence in historical sociology. ***Theory and Society***, 29(4): 507–548.

Mahoney, J. 2010. ***Colonialism and postcolonial development: Spanish America in comparative perspective***. Cambridge: Cambridge University Press.

Maloney, W. F., & Taskin, T. 2020. ***Determinants of social distancing and economic activity during COVID-19: A global view***. Policy Research Working Paper No. 9242, World Bank. Available from URL: http://hdl.handle.net/10986/33754

Mascarenhas, B., & Aaker, D. A. 1989. Strategy over the business cycle. ***Strategic Management Journal***, 10(3): 199–210.

McKinsey. 2020. COVID-19 implication for business. Briefing Note, March. McKinsey. Available from URL: https://www.mckinsey.com/business-functions/risk/our-insights/covid-19-implications-for-business

Megginson, W. L., & Netter, J. M. 2001. From state to market: A survey of empirical studies on privatization. ***Journal of Economic Literature***, 39(2): 321–389.

Mithani, M. A. 2017. Liability of foreignness, natural disasters, and corporate philanthropy. ***Journal of International Business Studies***, 48(8): 941–963.

Navarro, P., Bromiley, P., & Sottile, P. 2010. Business cycle management and firm performance: Tying the empirical knot. ***Journal of Strategy and Management***, 3(1): 50–71.

North, D. C. 1990. ***Institutions, institutional change and economic performance***. Cambridge: Cambridge University Press.

OECD. 2021a. *Business confidence index (BCI)* [Cited 15 April 2021]. Available from URL: https://data.oecd.org/leadind/business-confidence-index-bci.htm

OECD. 2021b. Health spending (indicator). Technical Report. https://doi.org/10.1787/8643de7e-en

OECD. 2021c. Trust in government (indicator). Technical Report. https://doi.org/10.1787/1de9675e-en

Oetzel, J. M., & Oh, C. H. 2014. Learning to carry the cat by the tail: Firm experience, disasters, and multinational subsidiary entry and expansion. ***Organization Science***, 25(3): 732–756.

Pavlyshenko, B. M. 2020. Regression approach for modeling COVID-19 spread and its impact on stock market. Cornell University. Available from URL: https://arxiv.org/abs/2004.01489

Pierson, P. 1997. ***Path dependence, increasing returns, and the study of politics***. Program for the Study of Germany and Europe, Working Paper Series No. 7, Center for European Studies, Harvard University.

Pierson, P., & Skocpol, T. 2002. Historical institutionalism in contemporary political science. In I. Katznelson, & H. V. Milner (Eds.), ***Political science: State of the discipline***: 693–721. New York: W.W. Norton.

Polyxeni, K., & Theodore, M. 2019. An empirical investigation of FDI inflows in developing economies: Terrorism as a determinant factor. ***The Journal of Economic Asymmetries***, 20: e00125. https://doi.org/10.1016/j.jeca.2019.e00125

Pranesh, K. K., Balasubramanian, P., & Mohan, D. 2017. ***The determinants of India's implied volatility index***. In 2017 International Conference on Data Management, Analytics and Innovation (ICDMAI): 312–315.

Rauch, J. E., & Evans, P. B. 2000. Bureaucratic structure and bureaucratic performance in less developed countries. ***Journal of Public Economics***, 75(1): 49–71.

Rizwan, M. S., Ahmad, G., & Ashraf, D. 2020. Systemic risk: The impact of COVID-19. ***Finance Research Letters***, 36: 101682. https://doi.org/10.1016/j.frl.2020.101682

Rose, A. K., Lockwood, B., & Quah, D. 2000. One money, one market: The effect of common currencies on trade. ***Economic Policy***, 15(30): 9–45.

Schneider, B. R. 2013. ***Hierarchical capitalism in Latin America: Business, labor, and the challenges of equitable development***. (Cambridge Studies in Comparative Politics). Cambridge: Cambridge University Press.

Schor, J. 2020. Reclaiming the gig economy. ***MIT Sloan Management Review***, 62(1): 1–3.

Smelser, N. J. 1998. The rational and the ambivalent in the social sciences. ***American Sociological Review***, 63: 1–16.

Sorci, G., Faivre, B., & Morand, S. 2020. Explaining among-country variation in COVID-19 case fatality rate. ***Scientific Reports***, 10(1): 1–11.

Spiller, P. T., & Tommasi, M. 2008. The institutions of regulation: An application to public utilities. In C. Ménard, & M. M. Shirley (Eds.), ***Handbook of new institutional economics***: 515–543. The Netherlands: Springer.

Stal, E., & Cuervo-Cazurra, A. 2011. The investment development path and FDI from developing countries: The role of pro-market reforms and institutional voids. ***Latin American Business Review***, 12(3): 209–231.

Taylor, K., & McNabb, R. 2007. Business cycles and the role of confidence: Evidence for Europe. ***Oxford Bulletin of Economics and Statistics***, 69(2): 185–208.

Thelen, K. 2004. ***How institutions evolve: The political economy of skills in Germany, Britain, the United States, and Japan***. Cambridge: Cambridge University Press.

Tognini, G. 2020, April 1. Coronavirus business tracker: How the private sector is fighting the COVID-19 pandemic. ***Forbes***. Available from URL: https://www.forbes.com/sites/giacomotognini/2020/04/01/coronavirus-business-tracker-how-the-private-sector-is-fighting-the-covid-19-pandemic/?sh=33cf662b5899

UNCTAD. 2018. Investment trend monitor. Report No. 38, United Nations Conference on Trade and Development.

van der Wielen, W., & Barrios, S. 2020. Economic sentiment during the COVID pandemic: Evidence from search behaviour in the EU. ***Journal of Economics and Business***, 115: 105970: https://doi.org/10.1016/j.jeconbus.2020.105970

Vanhaelen, J.-J., Dresse, L., & DeMulder, J. 2000. ***The Belgian industrial confidence indicator: Leading indicator of economic activity in the euro area?*** Working Paper Document No. 12, National Bank of Belgium. Available from URL: https://ideas.repec.org/p/nbb/docwpp/200011-12.html

Vasiljeva, M., Neskorodieva, I., Ponkratov, V., Kuznetsov, N., Ivlev, V., Ivleva, M., & Zekiy, A. 2020. A predictive model for assessing the impact of the COVID-19 pandemic on the economies of some Eastern European countries. ***Journal of Open Innovation: Technology, Market, and Complexity***, 6(3): 92.

Vassolo, R., Garcia-Sanchez, J., & Mesquita, L. 2017. Competitive dynamics and early mover advantages under economic recessions. ***Revista de Administração de Empresas***, 57: 22–36.

Verma, P., Dumka, A., Bhardwaj, A., Ashok, A., Kestwal, M. C., & Kumar, P. 2021. A statistical analysis of impact of COVID-19 on the global economy and stock index returns. ***SN Computer Science***, 2(1): 1–13.

Yan, Y., Malik, A. A., Bayham, J., Fenichel, E. P., Couzens, C., & Omer, S. B. 2021. Measuring voluntary and policy-induced social distancing behavior during the COVID-19 pandemic. ***Proceedings of the National Academy of Sciences***, 118(16): e2008814118. https://doi.org/10.1073/pnas.2008814118

Yilmazkuday, H. 2021. Stay-at-home works to fight against COVID-19: International evidence from Google mobility data. ***Journal of Human Behavior in the Social Environment***, 31(1–4): 210–220.

Yoon, H., & Heshmati, A. 2017. ***Do environmental regulations effect FDI decisions? The pollution haven hypothesis revisited***. GLO Discussion Paper Series No. 86. Global Labor Organization (GLO). https://doi.ord/10.1093/scipol/scaa060

Zorn, D., Dobbin, F., Dierkes, J., & Kwok, M. 2005. ***Cui bono: Institutional investors, securities analysts, agents, and the shareholder value myth***. Paper presented at the Conference on New Public and Private Models of Management: Sensemaking and Institutions, sponsored by the Copenhagen Business School, Denmark.

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