Emerging market sovereign spreads:

COVID-19 Dominance during March-June 2020

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# Abstract

This case study compares the importance of prevailing market factors against that of COVID-19 dynamics and policy responses in explain the evolution of emerging market sovereign CDS spreads during the first half of 2020…

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# Introduction

## Overview

(Explains what question of paper is and why it is important)

The 2007-2008 global financial crisis (GFC) was a shock of unusual severity and global reach and numerous countries around the world suffered massive falls in economic output and employment. Nevertheless, the GFC did not affect all countries to the same extent. The large emerging markets of the world economy—the likes of Brazil, Argentina, India, Thailand, and Malaysia—did relatively well. More importantly, China was comparatively invulnerable and escaped the GFC relatively unscathed. In fact, China was able to put in place staggeringly big economic stimuli for its domestic economy. Because of China’s new importance not only as an exporter but also as a buyer on global markets, these stimuli helped the global economy back on its feet.

Despite the severity and breadth of the GFC, that crisis took more than 12 months to spread from the overbuilt suburbs of the US and the Iberian peninsula to the financial centers of the world. In contrast, the coronavirus pandemic has taken just three months to engulf first China, then Europe and North America and ultimately South America, India, and other regions. As it has swept away from China’s shores, it has triggered an economic crisis whose violence is exceeding anything we have previously witnessed. Regional shutdowns led to interruptions of global value chains and stay-at-home orders compressed consumer demand and thereby company and personal incomes. This in turn caused prices of global commodities, especially oil, to fall and become negative at times. As such, many of the commodity-dependent emerging markets (EMs) are going through a particularly challenging first half of 2020.

With their populations at risk, their public finances stretched, financial and commodity markets in turmoil, many emerging market sovereigns are challenged. But the pandemic is not the first shock that emerging markets have recently faced. In recent decades, the increased flow of cross-border investment and trade in a more and more intertwined world economy has been subject to repeated interruption. For example, in 2015 there was a relatively contained crisis in China when the stock market tumbled, the Yuan slid, and a lot of foreign investment quickly left the country. A year before that, dropping prices of oil and other commodities sent a shock wave through a number of commodity-exporting emerging markets. More importantly still, a general slowdown in EM growth began in 2013 with the Federal Reserve’s (FED) taper tantrum: indications of less accommodating monetary policy caused instability in EMs since investors tried to funnel money back into higher yielding US assets. In view of the past fragility of EMs, it interesting to see what the long-term political, societal, and economic effects of the global COVID-19 shock are.

In this paper, we focus on the economic dimension of the challenges posed by this shock. Specifically, the paper compares the importance of prevailing market factors against that of COVID-19 dynamics and policy responses in explaining the evolution of 30 emerging market sovereign CDS spreads during the first half of 2020. In doing so, we contribute to the study of emerging market fragility and try to disentangle the effects of global economic and financial turmoil from the effects of commodity price decays for emerging markets. Focusing on daily EM sovereign CDS spreads, we adopt a multi-stage econometric approach. First, we estimate/train a heterogenous multi-factor model for changes in CDS spreads over the pre-COVID-19. Next, we use the estimated coefficients from this model to apply a synthetic control-type procedure to extrapolate model-implied changes in the CDS spreads from July 2019 through June 2020. We find that…

There are a number of studies that look at emerging markets…

EZ-paper

This paper differs from previous work in that...

Our findings clearly indicate “COVID-19 dominance”: The widening spreads during the pandemic induced by COVID-specific risks and fiscal responses has led to unconventional monetary and fiscal policie that primarily aimed to mitigate the fear of the worst economic outcomes such as collapsing household and corporate incomes, and temporarily pushed away concerns over fiscal risk.

# COVID-19 crisis and emerging market sovereigns

## Mortality patterns

With COVID-19 being a global pandemic, the entirety of the emerging and developing market countries was hit. However, mortality dynamics across nations were heterogeneous. Figure 1 and Figure 2 illustrate the discrepancies in mortality per capita and deaths per million residents across emerging markets. As per the end of April 2020, Peru, Brazil, Panama, Romania and Turkey were among the emerging markets with the highest mortality rates whereas Bahrain, Qatar, Sri Lanka, China, and Thailand were at the lower end. Of course, some of this heterogeneity can be attributed to differing reporting standards across regimes. Nevertheless, [Jinjarak et al. 2020] provide evidence that the government pandemic policy interventions, i.e. their strictness, duration, etc., along with initial country characteristics such as demographics may have influenced both the mortality growth rates and the dynamic trajectory of the its development. [Jinjarak et al. 2020] explore several demographic and structural features across a large sample of both advanced and emerging economies from 1/23/2020 to 4/28/2020 and find that with a lag more stringent pandemic policies were associated with lower mortality growth rates. Additionally, the association between stricter pandemic policies and lower future

mortality growth was more pronounced in countries with a greater proportion of the elderly

population, greater democratic freedom, larger international travel flows, and further distance

from the equator. In addition, they document that the extent to which the peak mortality rates

were explained by government pandemic policies and country-specific structural features is heterogeneous.

## Fiscal policies of emerging market countries

# Analysis of COVID dominance

## Data

Our empirical analysis uses daily data for 30 emerging market sovereigns for a period of 6.5 years from January 1, 2014 to June 30, 2020. We chose 30 EMs based on their investibility and data availability of the dependent variably, whereby investibility was defined by a country’s representation in the widely regarded J.P. Morgan Emerging Markets Bond Index (laender.xlsx and . Over the course of the analysis, 10 countries were dropped from the sample because of country-specific pre-COVID events that would make them outliers (for example Argentina).[[1]](#footnote-1) We chose this specific time period because it begins after the structural break of the taper tantrum and to have enough data to calibrate and test the model in both normal and COVID-times. The following data is used, and descriptive statistics are shown in Table XXX. For more specific manipulations of the raw data, see section XXX on the estimation method. (EMcountries.xlsx

* *Sovereign Credit Default Swap spread (CDS spread).* We use the daily CDS spreads reported by Eikon Refinitiv and convert the levels into daily log changes for the first-stage regression. (CDS.xlsx file)
* *Infections.* We use the daily infections per country reported by the Johns Hopkins University Center for Systems Science and Engineering (JHU CSSE). Counts include confirmed and probably where reported. (csse\_covid\_19\_time\_series folder)
* *Deaths*. We use the daily deaths per country reported by the JHU CSSE. Counts include confirmed and probably where reported. (csse\_covid\_19\_time\_series folder)
* *Gross domestic product (GDP)*. We use GDP data in current $ reported by the World Bank (GDP.xlsx file).
* *Mobility*. We use the daily routing requests per country reported by Apple.

New Mortality Rate 0.0349 0.0483 0.2131 0.2213 0.1911

(0.0406) (0.0460) (0.1961) (0.1873) (0.1810)

New Mortality Rate Growth 0.0028 0.0029 0.0049 0.0051 0.0018

(0.0053) (0.0053) (0.0045) (0.0047) (0.0055)

Total Mortality Rate 􀀀0.0083 􀀀0.0113 􀀀0.0521 􀀀0.0558 􀀀0.0443

(0.0095) (0.0105) (0.0537) (0.0516) (0.0421)

Total Mortality Rate Growth

|  |
| --- |
| Argentina |
| Bahrain |
| Brazil |
| Chile |
| China |
| Colombia |
| Czechia |
| Dominican Republic |
| Egypt |
| Ghana |
| Hungary |
| India |
| Indonesia |
| Kazakhstan |
| Malaysia |
| Mexico |
| Panama |
| Peru |
| Philippines |
| Poland |
| Qatar |
| Romania |
| Russia |
| Saudi Arabia |
| South Africa |
| Sri Lanka |
| Thailand |
| Turkey |
| Ukraine |
| Uruguay |

# Abstract



Figure 1



Figure 2

1. For the selection criterion and the final sample of countries, see the appendix XXX. The appendix also contains the whole analysis for the full sample of 30 countries. [↑](#footnote-ref-1)