Page 1

The ongoing pandemic of coronavirus disease 2019-2020 (COVID-19), caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). A pathogenic virus SARS-CoV-2 is able to spread asymptotically during its incubation stage through a vulnerable population. The ongoing pandemic of coronavirus disease 2019-2020 (COVID-19), caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). A pathogenic virus SARS-CoV-2 is able to spread asymptotically during its incubation stage through a vulnerable population.

-> The ongoing pandemic of coronavirus disease 2019-2020 (COVID-19), caused by the pathogenic Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) is able to spread asymptotically during its incubation stage through a vulnerable population.

policymakers were urged to contain the spread of infection

issue a stay home order.

using synthetic controls to construct alternative

if a less stringent measures were to adopt. -> if less stringent measures were adopted.

analysis for the State of New York, United States, Italy and the Indian capital city Delhi

what the counterfactual scenarios would have been in comparison to the current state of affairs.

We show that in New York the number of deaths

Page 2

Line 1 - In December 2019, an outbreak occurred in Wuhan, China involving a zoonotic coronavirus, similar to the SARS coronavirus and MERS coronavirus \cite{taaa021}.

Line 29 - policymakers were urged to contain the spread of the infection, and minimize stress on the health systems

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Line 20 - through the number of lives potentially saved

Page 4

Line 10 - different levels of compliance

Line 20 - They show that the spread of disease was confined if measures were brought into effect early.

Line 22 - changes in Google searches for unemployment claims

Line 23 - estimate how each stringency measure contributes

Line 31 - authors extend the SIR model to include auxiliary

Line 33- They use a system dynamics model

Line 35 - consider the possible outcome

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Line 7 - As stated above, our objective is to study the effects of government response at an aggregate level in terms of lives saved, and limiting the number of cases that require hospitalization.

Line 11 - e.g. the number of confirmed cases and deaths

Line 15 - Hence, we consider constructing synthetic control method -> Hence, we consider constructing a synthetic control or Hence, we consider using the synthetic control method

Line 19 - In the following, we provide a brief overview

Line 34 - In the following, we make two assumptions:

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Line 10 - namely, it must be approximately low-rank and boundedness of | M ijk| -> namely, it must approximately be low-rank and have the boundedness of | M ijk|

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Since there was a degree of stringency (measures) and adherence to such measures at different levels - remove measures