Project 4: Predicting of the economic (real-economy and financial) effects of COVID19 and of the lockdown measures

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The lockdown of most economic activities has serious consequences and implications for the economic growth of many countries in the world which will display its negative effects during the next (hopefully) few years. The magnitude and speed of collapse in human activities that has followed the lockdown is unlike anything experienced previously. As reported by the IMF World Economic Outlook in April 2020, the global growth in 2020 will fall to -3% in 2020. This makes the lockdown the worst recession since the Great Depression, and far worse than the Global Financial Crisis of 2007-2008.

Policymakers are asked to provide unprecedented support to households, firms, and financial markets, and, while this is crucial for a strong recovery, there is considerable uncertainty about what the economic landscape will look like when we will emerge from this lockdown. The objective of this project is to assess the relevance of the economic downturn of the next years by sector of economic activity with particular focus on the Italian situation.

Objective
Because of the systemic nature of this pandemic disease the objective is to predict the most important economic variables of the European countries (focus on: Italy, France, Germany), as well as US, United Kingdom, and China.

Context
- The Client is the Italian Government
- The reference person is a member of a technical task force and s/he has a mathematical and/or statistical background (not only basic but also somehow advanced), so it is needed to explain what was done only if the models are very advanced and complex

Data
For Italy
https://github.com/pcm-dpc/COVID-19
For the entire World
https://github.com/CSSEGISandData/COVID-19

If needed, open data and other sources may be retrieved and used