# The COVID-19 Pandemic And The Economy: We Are Fighting A New War

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#### **Italian Summary**

La pandemia di COVID-19 del 2020 puo' essere paragonata per molti versi ad un conflitto. Nel caso attuale il nemico e' particolarmente pericoloso in quanto invisibile ed altamente contagioso, e pur colpendo con piu' frequenza la popolazione giovane uccide soprattutto gli anziani. Il tasso di mortalita' puo' variare di molto tra paesi, per esempio e' molto piu' elevato in Italia rispetto alla Germania, presumibilmente a causa della presenza di una percentuale piu' alta di anziani e dei loro maggiori contatti con i giovani. Secondo i virologi ci vorranno almeno 18 mesi per sviluppare un vaccino e 24 per produrlo in quantita' sufficienti, e nel frattempo sara' quindi necessario convivere con il virus. Per raggiungere questo obiettivo, proponiamo in questa nota una strategia di risposta alla pandemia che comprende tre elementi: investimenti nel settore sanitario (in particolare per aumentare il numero di posti letto nei reparti di terapia intensiva), l'uso mirato e non generale di test virali e degli anticorpi oltre che a quello di sistemi tecnologici per tracciare i positivi, ed infine lockdown limitati a zone specifiche e per periodi definiti. Soltanto cosi' sara' possibile tornare in tempi ragionevoli ad una qualche forma di normalita' facendo riprendere le attivita' produttive ed evitando costi economici insostenibili.

Il Fondo Monetario Internazionale (FMI) prevede una recessione globale, ed e' di conseguenza necessario che i vari governi intervengano prontamente ed in modo decisivo per mitigarla ed evitare una crisi anche del sistema bancario e finanziario. L'Italia ha gia' sospeso le proprie regole fiscali, e la BCE e' intervenuta in modo massiccio acquistando titoli governativi italiani, rimuovendo il tetto massimo del 33%, oltre a rivedere i collaterali che le banche possono dare in garanzia per accedere alla liquidita'. Si e'anche discusso della possibilita' di creare un nuovo strumento finanziario battezzato "Corona-bond", e cioe' obbligazioni emesse dalla UE; tuttavia cio' non e' stato possibile a causa della opposizione di alcuni paesi come la Germania e i Paesi Bassi che sono contrari a qualsiasi forma di mutualizzazione del debito in quanto il Trattato di Maastricht non lo prevede e che sarebbero a favore dell'uso di questi nuovi strumenti soltanto in presenza di uno piu' stretto coordinamento delle politiche fiscali all' interno dell' UE (lo "European Safe Bond"

recentemente proposto da alcuni economisti potrebbe essere un' alternativa utile allo stato attuale). Si' e' invece concordata a livello europeo la creazione di un fondo straordinario di 500 miliardi di euro per aiutare i paesi piu' colpiti dal Coronavirus. Anche il Regno Unito ha introdotto un notevole stimolo fiscale dal quale risultera' una significativa espansione del deficit pubblico; inoltre, la Banca d' Inghilterra ha ridotto il tasso di sconto a 0.1%, il suo minimo storico.

La pandemia del Coronavirus rappresenta uno shock di offerta date le sue conseguenze per le catene di distribuzione e per la politica sanitaria, ma si traduce anche in uno shock di domanda risultante dall' incertezza che genera con i suoi effetti sul consumo e sugli investimenti. Ha colpito le economie in un momento nel quale erano gia' vulnerabili a causa del livello eccessivo di indebitamento sia delle famiglie che delle imprese. Sono quindi state annunciate varie misure di politica economica per incentivare le banche a fornire prestiti. La loro efficacia richiede una piena garanzia governativa alle banche. Si tratta di scelte necessarie, nonostante i problema di "moral hazard" che esse inevitabilmente creano, per evitare che la crisi economica si diffonda anche al settore bancario e finanziario.

Riassumendo, l' impatto potenziale del Coronavirus, inizialmente sull' economia reale e successivamente su banche ed istituzioni finanziarie, potrebbe essere devastante. E' ancora possibile, tuttavia, ridurne le conseguenze se i) i governi adotteranno in maniera coordinata misure mirate per gestire il problema della diffusione del COVID-19; ii) ci sara' una risposta decisiva, coordinata e pronta delle autorita' monetarie e finanziarie che segua la strategia delineata in questa nota ed eviti in cosi' gravi danni economici futuri.

### The Enemy: COVID-19

The COVID-19 pandemic is a crisis that, in many respects, is comparable to a war, but in the present case the enemy is more dangerous because it is invisible. It generally enters the body through the mouth, nose or eyes, it initially affects the vocal chords and then makes its way to the lungs. It is a highly transmissible virus (its reproduction number, i.e. how many people each individual with the virus is likely to infect, is estimated to be 2.4) and its fatality rate is close to 70% for people in their 70s and much lower for other age groups, even though the latter are more widely affected as can be seen from Figure 1; this shows the age distribution of Coronavirus in South Korea, a country whose figures are more informative because it has tested a significant share of the population randomly, unlike others, such as Italy, which only carried out tests for people with significant symptoms. It is apparent that Coronavirus infects the young more but kills the old more.





The number of casualties related to COVID-19 varies considerably across countries; for instance, the death toll to date has been much higher in Italy than in Germany. It would be interesting to understand why. Figure 2 shows the share of the population aged 65 years and older in a number of Europeans countries in 2019, and suggests that differences in the age profile of the population might explain, at least to some extent, the different mortality rates. The higher degree of interaction between the young and the old in Italy compared to Germany may also have helped to spread the virus amongst the latter category (Mossonget et al., 2008, "Social Contacts and Mixing Patterns Relevant to the Spread of Infectious Diseases", PLOS Medicine, March 25). More thorough empirical evidence is needed to support these claims.







Virologists are warning that we may have to live with Coronavirus for a long period of time, namely until a vaccine is developed; this can be expected to take at least 18 months, as mentioned in a recent article in the Guardian (When will a coronavirus vaccine be ready? 6 April, 2020). Therefore a vaccine should be available to the population at large only in about 24 months from now and it is very likely that over this period of time other virus outbreaks will occur. Trade-offs are therefore unavoidable and difficult choices will have to be made between containing the spread of the virus and allowing economic activity to continue. Our suggestion is to adopt a three-pronged approach to deal with the current pandemic: expanding intensive care units, using technology effectively for testing and tracing purposes, and planning for dynamic lockdowns, as explained below.

The capacity of a health system is limited and therefore managing a pandemic represents a huge challenge. It differs across countries: for instance, the UK and Italy lag behind Germany. It is crucial for countries with a lower capacity to invest significantly to enhance it, increase critical supplies (of ventilators etc.), train additional doctors and nurses (resorting to international co-operation in the presence of short-term constraints), and participate in international efforts to develop new treatments.

Concerning testing, Italy and the UK have been heavily criticised for carrying out a relatively low number of tests in response to the initial virus outbreak, though it should be noted that Coronavirus spread very quickly and test kits were only available in limited supply. Germany has been one of the countries conducting most tests in the early stages of the COVID-19 pandemic but is now reviewing its strategy given the limited supply of test kits and reagents and considering a move towards a more selective approach where instead of testing ten people, for example, who have a limited risk of contracting the virus, only one test is performed from their pooled sample, thereby saving nine tests; if the test is positive, then additional individual tests are carried out. A combination of viral tests and antibody tests would enable the healthcare personnel to identify, respectively, individuals who are positive and those who have developed an immunity.

Tracing is also crucial. South Korea initially used credit card transactions, smartphone location data and CCTV videos as well as interviews for tracing people who had contracted COVID-19. On the basis of this information a map was created which was then released to the public to make individuals aware of any contacts with infected people. More recently a new tool has been developed which is similar to the TraceTogether system used in Singapore and exploits Bluetooth signals to check if a person with COVID-19 has been in contact with other people. Figure 3 shows a UK survey on the benefit of digitalisation to fight Coronavirus: it is clear that people think that it is most useful to reduce the risk of catching and passing the virus to others.



#### Figure 3

An effective use of the appropriate technology and of the testing and tracing results could be the key to a return to a more normal life in the near future. Of course, there are legal and privacy issues that governments will have to address but people might be less reluctant to information being made public if this means resuming economic activity (even with some remaining form of social distancing): as Figure 4 shows, the level of concern about COVID-19 is still very high in countries such as the UK, being equal to 7.6 on a scale from 1 (not worried at all) to 10 (extremely worried); Figure 5 provides a similar picture for Italy.







## Figure 5.

Finally, planning for dynamic lockdowns should play an essential role in the forthcoming period; this is the ability to quickly restrict access to and movement throughout an area (which could be, for example, a city or parts of it), for a limited time span, in response to a virus outbreak, while monitoring other areas. This could be the key to a successful exit strategy: total lockdowns of the type imposed so far clearly cannot be the answer to the COVID-19 pandemic in the future because of their unsustainable economic costs, whilst dynamic lockdowns allow to save lives without bringing the economy to a standstill.

### The Economic Costs of COVID-19

COVID-19 is likely to push the world economy into a recession (IMF, 6 April, 2020). In Italy first, and the UK subsequently, governments have imposed national lockdowns. In the former country this has led to a sharp decline in attendance at public places and electricity use (see Figure 6). The rate of growth of real GDP has fallen sharply in all European countries (see Figure 7), for instance by 0.4 percent in Italy and 0.2 percent in the UK. Given the rapidly evolving Coronavirus scenario it is very difficult to make forecasts for 2021. A future recovery will depend crucially on designing appropriate policies to live with the virus without compromising significantly economic growth.

Policy makers will need to respond quickly and to adopt unconventional measures as it is done in the case of a war in order to guarantee the functioning of key sectors (which might require partial nationalisation or reconversion of some to help fighting the virus), provide sufficient economic resources to households (through cash transfer, unemployment benefits etc.) and businesses (through emergency loans fully guaranteed by the government, and wage support schemes to keep people in their jobs).

# Swift response

After Italy imposed a lockdown on March 9, attendance at public places and electricity use have declined sharply.



Source: Map data ©2020 Google and Italy's Department of Civil Protection of the Presidency of the Council of Ministers.

Note: Attendance is measured at railway stations, airports, shopping malls, grocery stores, and highway restaurants in each city in the sample over the period March 19-30, 2020. Values for Center-North are obtained as the average of the values for Bologna, Florence, Milan, and Turin; values for Center-South are obtained as the average of the values for Naples and Rome.



(total electricity load by region; March 9, 2020 = 100)

Source: Terna Italy.

Note: The chart reports the 7-day moving average of total electricity load. The series are normalized to 100 on March 9, 2020 when a national lockdown was imposed.

#### INTERNATIONAL MONETARY FUND

Figure 6.



### Figure 7.

What has been the policy response to the Coronavirus crisis in Italy and the UK so far? In the case of Italy fiscal rules have been suspended and the European Central bank (ECB) has also taken action by purchasing assets and removing the 33% limit for the purchase of a country's bonds; moreover, "the Governing Council decided on a set of collateral measures to facilitate an increase in bank funding against loans to corporates and households. This will be achieved by expanding the use of credit claims as collateral, in particular through the potential expansion of the additional credit claims (ACCs) frameworks. The ACC framework provides the possibility to National Central Banks to enlarge the scope of eligible credit claims for counterparties in their jurisdictions. This includes the possibility to accept loans with lower credit quality, loans to other types of debtors, not accepted in the ECB's general framework, and foreign-currency loans" (ECB, 7 April, 2020).

Given the large drop in Italian GDP and the country's high public debt, finding additional resources to support the economy is very challenging. The Italian government has committed euro 30/40bn to boost economic activity, which will increase the budget deficit to approximately 3% next year. However, the country and its industry have been hit so hard by the COVID-19 pandemic that this will clearly not be sufficient. Therefore, new ideas such as the creation of new "Corona-bonds" have been mooted. The no-bailout clause in the Maastricht Treaty states that an individual country cannot be held liable for the debt of other member states. Countries such as Germany and the Netherland are opposed to any form of debt mutualisation. For EU bonds to have a triple A rating all member states would have to adopt fiscal policies consistent with it, otherwise investors would require higher yields and the cost of debt would increase also for countries with a more solid financial position; in other words. Corona-bonds would imply more integrated fiscal policies than has been the case so far. A temporary solution that could be implemented quickly might be a European Safe Bond based on joint safe assets but without joint liability (as in Brunnermeir et al, 2016. ESBies: Safety in the tranches, ECB working paper series, No. 21). This could be a reasonable compromise between northern and southern European countries. At present agreement has only been reached on a common emergency plan worth more than euro 500bn, but not on using shared debt to help the hardest-hit countries.

The UK response to the economic shock represented by the COVID-19 pandemic has been massive. The Bank of England has cut interest rates from 0.75% to 0.25% and then 0.1% and has increased its holdings of UK government and corporate bonds by £200bn, which will help corporate to overcome liquidity problems and pay workers and suppliers. The UK government, on the other hand, has injected a fiscal stimulus which is quantifiable at around 3% of GDP (compared to 2% of GDP during the global financial crisis) with the aim of alleviating the recessionary effects of the Coronavirus crisis; this will raise the budget deficit from the planned £55bn to £200bn in the fiscal year starting in April as the economy shrinks.

#### The Costs for the Banking and Financial System

The COVID-19 shock has mainly affected the supply side of the economy by disrupting supply chains (whilst in a war it is typically infrastructures which are damaged or even destroyed) and requiring new health policies. Of course, there has also been a demand side shock caused by the uncertainty resulting from the current pandemic, which will lead to job losses and lower investment. Its size and persistence will depend on the response of governments (possibly a co-ordinated one) to the supply shock and the health policies put in place to contain (and live with) the virus. In the absence of either, the combination of supply and demand shocks will push the economy into a prolonged recession, which may also jeopardise the stability of the banking and financial system.

This crisis has arrived at the wrong time. Over the last ten years households and corporates have accumulated excessive debt and leverage amongst financial institutions has increased. Figure 8 shows the corporate debt ratio in the Euro area and Italy as a percentage of GDP between 2000Q1 and 2017Q4.



Corporate debt ratio, measured as a percentage of GDP

Figure 8, Source Euro Area Statistics

The corporate debt ratio has increased massively since 2000 and rose to 132% of the euro area's GDP in 2017. In Italy it has experienced a significant growth until 2009 and has declined subsequently but is still significantly high.

Figure 9 shows the corporate debt to GDP ratio in the UK between 1996 and 2018. Although it has fallen from its peak of 101% at the beginning of the global financial crisis, it was still 84% in 2018.





Figure 10 provides information about the leverage position of the banking sector. It shows the ratio between banking financial assets (currencies, deposits, debt securities and loans) and total equity (financial leverage). The banking sector includes the central bank, monetary and financial institutions, and other financial intermediaries (except insurance corporations and pension funds). Total equity is the market value of equity, excluding investment fund shares.

The majority of policies that have been announced in Europe and the UK rely on the financial sector (mainly banks) providing loans to households and firms. This will lead to more debt for both these categories and financial institutions will have to accept some poor collateral. For such schemes to work governments and Central Banks need to provide a credible full public guarantee and regulators a temporary waiver of the Basel standards for loan categorization. The commitment of ECB, BoE (Bank of England) and regulatory authorities has been significant but more can be done. The European Investment Bank could also help with a guarantee to banks offering loans to firms. Despite the moral hazard issues inevitably arising in this context, such policies are the only way to avoid a wave of bankruptcies, a spread of the crisis to the entire financial sector and a prolonged recession. This is not the time for implementing the prudential reforms for banks which were designed after the global financial crisis to deal with asymmetric shocks or to be concerned with moral hazard. The risk that the COVID-19 crisis becomes a deep economic crisis and that it feeds into the banking and financial sector is very real. Policy makers should act in a co-ordinated manner, quickly and without hesitation. The recapitalisation of some banks with taxpayer support might also be an option (and perhaps both the UK and the Euro area should give some thought to the creation a bank restructuring agency similar to the European Stability Mechanism).



Banking sector leverage Total, % of net value added, 2018 (OECD Data)

#### Conclusions

The COVID-19 crisis is affecting the supply side of the economy because of its health policies implications and the supply chain disruption. Its supply side effects are also feeding into firms and household demand with a very significant impact on the EU and UK economies. The demand side impact can be mitigated by appropriate policy responses. If policy makers do not act quickly (possibly in a co-ordinated manner) and put in place the necessary economic as well as containment measures (for living with the virus), the combination of supply and demand shocks will affect substantially the economy as well as the banking and financial system and jeopardise the wellbeing of future generations.

Figure 10.