

## IFAMD Market Commentary 03/2020

- How a shadow stock exchange can address two problems created by the corona crisis -

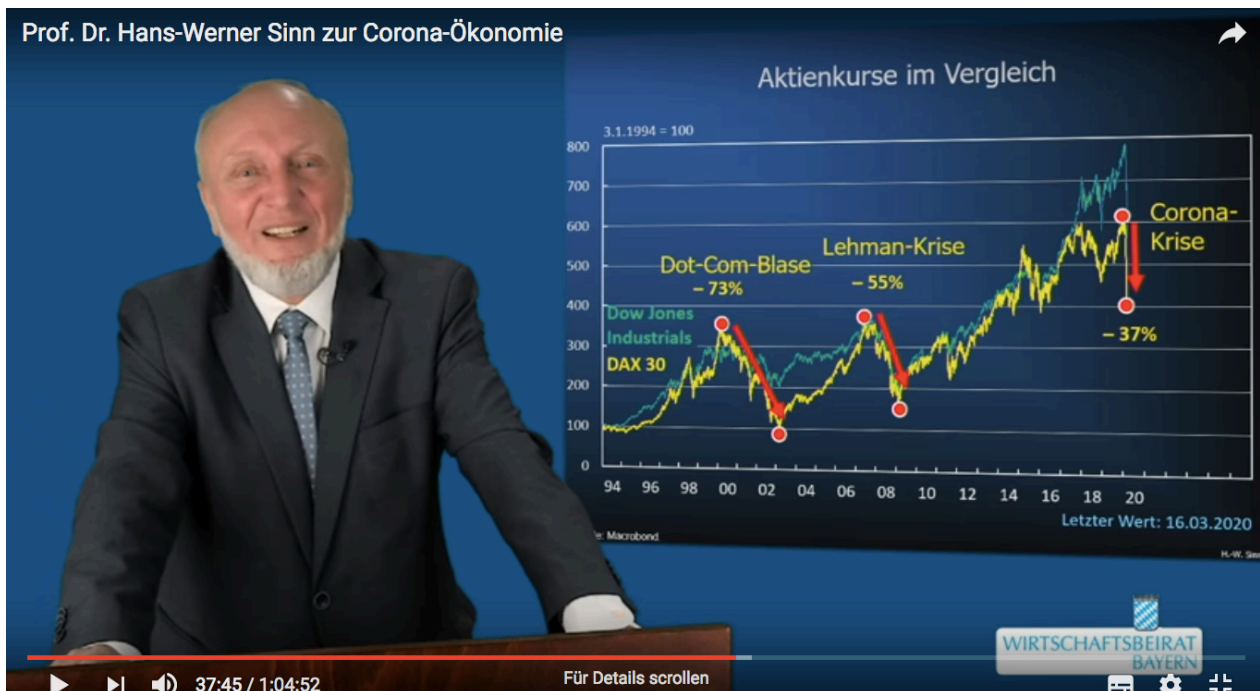
**In the first quarter of 2020, the virus SARS-CoV-2 has triggered a global pandemic of the flu-like but more dangerous disease COVID-19. In an attempt to contain the further spreading of the virus, like most countries across Europe and around the world, Germany has imposed considerable restraints on the freedom of movement and business, which had brought much of social and economic life to a standstill. Governments are preparing rescue packages of unprecedented dimensions to help businesses struggling to maintain their liquidity with credit and guarantees, which of course pushes up sovereign debt. At the same time, the stock markets remain open – these two developments do not go together well. Stock prices are in free fall, making perfectly healthy companies suddenly look like takeover targets. And yet there is a logical connection between the adequate allocation of the federal aid and the crisis-driven stock prices.**

However long the pandemic may last – it will be over at some point. What we will be left with, besides much human suffering, is a weakened economic that will take a long time to fully recover – but even that will be achieved eventually. Many a past crisis was overcome sooner than one dared to hope for. One of the longest-lasting effects of the coronavirus crisis will be the redistribution of the ownership structure in the economy that is currently underway at the stock markets. These shifts have nothing to do with real trade, as the strength or weakness of the companies being traded cannot be assessed on the basis of the current situation amid the crisis. This redistribution may for example entail the gradual nationalisation of individual companies, or their potentially hostile takeover by faceless hedge funds. The former will raise hackles with cosmopolitan economists, and the latter with concerned citizens. Incidentally, my hair stands on end on both accounts.

None of the arguments for keeping the stock markets open – e.g. that the markets remained open even in times of war or during the 2008 financial crisis – are applicable to the current special case of a national, self-imposed lockdown of the economy. In a presentation held on March 18, 2020, which is available online ([www.youtube.com/watch?v=Qac5Kk1dKqU](http://www.youtube.com/watch?v=Qac5Kk1dKqU)) in German, Professor Sinn has called the lockdown an “economic transaction ban” and made the fine distinction between “liquidity crises” of the type we have already encountered several times and the current coronavirus crisis, which in his opinion constitutes the first true “solvency crisis”. We hold that such a solvency crisis probably applies in times of war – yet not at the time of the declaration, but indeed after the bombing.

Institut für Angewandtes Mechanism Design (IFAMD) GmbH

Saargemünderstraße 22 • 66119 Saarbrücken • Fon: +49 (0) 681 372347 • E-Mail: [info@ifamd.de](mailto:info@ifamd.de)  
Nymphenburgerstraße 4 • 80335 München • Fon: +49 (0) 89 215554670 • Fax: +49 (0) 32 211322206 • E-Mail: [gregor.berz@ifamd.de](mailto:gregor.berz@ifamd.de)  
Geschäftsführer: Dr. Gregor Berz • Amtsgericht Saarbrücken HRB 19153 • DUNS 507056054  
VR-Bank Starnberg • BIC GENODEF1STH • IBAN DE30700932000002913488 • UID DE279251995

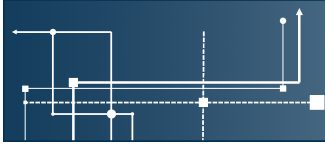


Professor Sinn speaking on the current situation on March 18, 2020

In our view, the two most substantial arguments against closing the stock markets fail to hold up in the face of the coronavirus crisis:

- 1) *The liquidity provided by the stock markets would freeze up, which would be grossly unfair to investors, who must have access to their assets.* With all due respect, the production and productivity of the companies that are to be traded have also been frozen up after all, so would it not be consistent to also put the liquidity of trading these companies on ice? In actual fact, the investors whose money is vested in the stock markets must be protected from themselves just as much as the curfews serve to protect from themselves the citizens who might catch the virus. If the capital markets are to mirror what happens in the real economy, they must likewise be put on hold if the economy is suspended.
- 2) *OCT trading is intransparent and would increase if the official markets were to be closed.* Therefore, stock markets are the preferred venue of trading especially in times like these, because at least they can be controlled. It goes without saying that OTC trade in company shares must be halted, too, in times like these. After all, we are not talking about the exchanges self-imposing a break when trade becomes too volatile but rather about temporary government measures whose effects extend much beyond the financial markets – and which must nevertheless incorporate these markets.

To merely close down the stock exchanges and to reopen them a few weeks later would be a somewhat naïve approach. The big question is, what will the starting share prices be, after much will have happened to the companies in the meantime, to some extent independently of the



virus, so that all company values will have to be reassessed from scratch. To use the last trading prices before the close of the markets would lead to utter chaos on the opening day. However, it can also be argued that chaos on a single day is still the lesser evil compared to several weeks of chaos with unrealistic price fluctuations driven only by gamblers – yet that is precisely what we are looking at these days. German stocks expert Dirk “DAX” Müller has very aptly described what is currently happening on the exchanges, which are prone to being closed for weeks in any event, in a video from March 25, 2020 (see [www.youtube.com/watch?v=eYHeE\\_hwt30](https://www.youtube.com/watch?v=eYHeE_hwt30) in German).

Speaking as a game theorist, I would like to propose a pragmatic solution, whose feasibility stock market theorists and politicians are welcome to debate: The stock markets should indeed remain open, but without processing any real trade for the time being. For as long as trade remains suspended in this fashion, all market participants will continue to be asked about their buying and selling offers every day on the basis of the currently available information, and a clearing price will be determined for every share. However, the transactions are not carried out right away but are rather accumulated over each trading day. At the end of each trading day, the government decides whether A) trading remains suspended, in which case all transactions of that day are void, or B) the markets are allowed to open in their usual form the next day. In that case, **and only in that case**, all transactions of the previous trading day are actually executed. Only this uncertainty regarding how the government will decide can ensure that real prices form during every day of the trading suspension, for each new suspended trading day may with hindsight in a sense turn out not to have been suspended after all.

Note that we must not confuse “real prices” with “realistic prices” at this point. The essential purpose of this “shadow stock exchange”, whose effect is suspended but which nevertheless operates in real terms, is to generate real prices. Due to the crisis, we may expect these prices to be very low. And it is precisely because these prices differ substantially from the companies’ value in a hypothetical world without a ban on economic transactions that we propose to also ban all transactions concerning shares in companies that are subject to transaction bans in the real economy.

The second major challenge brought forth by the coronavirus crisis that the shadow stock exchange can help to overcome is the allocation of the large government rescue package that is to benefit individual companies in the form of guarantees and credit. This allocation is currently achieved via the banking system in the form of credit commitments – with all due respect, a sufficiently chaotic and distortive procedure. This is exactly the point where the capital markets, whose transparency produces real prices, may come in handy. Every day, the shadow stock exchange in the form proposed above delivers current and real stock prices, which may be interpreted as the answer to the question, “If the markets were to open tomorrow, how much would this company be worth?” The difference between the share prices that prevailed before the onset of the crisis (or before the closing of the stock exchange, in case the onset of the crisis has already come and gone) and the daily prices on the shadow stock exchange can constitute a meaningful key by which to distribute each daily ration of the government rescue package.

Dr. Gregor Berz  
IFAMD GmbH, March 29, 2020

Institut für Angewandtes Mechanism Design (IFAMD) GmbH

Saargemünderstraße 22 • 66119 Saarbrücken • Fon: +49 (0) 681 372347 • Fax: +49 (0) 6897 766148 • E-Mail: [info@ifamd.de](mailto:info@ifamd.de)  
Nymphenburgerstraße 4 • 80335 München • Fon: +49 (0) 89 21555467 • Fax: +49 (0) 32 21132206 • E-Mail: [gregor.berz@ifamd.de](mailto:gregor.berz@ifamd.de)  
Geschäftsführer: Dr. Gregor Berz • Amtsgericht Saarbrücken HRB 19153 • UID DE279251995  
VR-Bank Starnberg • KTO 2913488 • BLZ 70093200 • BIC GENODEF1STH • IBAN DE30700932000002913488