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Coronavirus: Testing and Freezing - A Survival Strategy for the Swiss Economy

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1 Introduction

The coronavirus has the world in its grip. The number of human lives the pandemic will cost is as unpredictable as its economic and social consequences.

However, it is certain that the measures to contain the virus have already caused a major global economic crisis. In many countries, applications for unemployment and short-time work programs are currently increasing at an unprecedented rate that far exceeds the peaks of the “Great Recession” of 2009. At that time, the proportion of short-time work in Switzerland increased to two percent of all employees within six months. This pales in comparison to the current crisis, in which the number of short-time work requests skyrocketed by two percent of the workforce in a single day. Short-time work now affects eight percent of all employees and is growing rapidly. It is becoming apparent that all of the world's major economies will see a substantial fall in economic activity this year. Various economic research institutes predict that Switzerland's economic output will decline by 2 to 3 percent this year. The actual extent of the economic loss will largely depend on the future course of the epidemic and the measures taken to counter it.

The dilemma in this situation is that the most effective medical and epidemiological measures - from “social distancing” to extensive curfews - also have the greatest negative impact on the economy by massively restricting the demand for goods and services and bringing supply chains to a standstill. There seems to be a painful trade-off: The more we “flatten” the pandemic curve, the steeper the economic curve points downwards.

The authors of this policy paper - all medical laypersons - expressly support the current epidemic measures. These are necessary and appropriate in the short term in order to prevent our health systems from overloading and to keep the number of victims as small as possible.

The aim of this policy paper is to lay out our view of the consensus that is emerging in the economics profession after thorough debates on how to deal with the crisis. This consensus essentially boils down to two conclusions.

First, the dilemma between medical necessity and economic costs is short-term. A considerable restriction of economic activity is currently required in order to prevent the virus from spreading exponentially. In the medium term, however, what is necessary from a medical standpoint is also desirable economically. The most important measure, both from a medical and economic point of view, is a large investment in the capacity to test for the virus and track the contacts of infected people (“contact tracing”). This will create room to maneuver and gradually lift the current restrictions on the economy.

Second, the total economic costs of the crisis largely depend on the nature of the economic policy response. Financial emergencies should be prevented and the economic structures “frozen” for the duration of the crisis. This requires that the state both compensate the loss of

earnings of workers and support companies that experience significant drops in sales. Switzerland's healthy public finances provide the necessary fiscal room to maneuver. The economic policy measures implemented by the Federal Council so far point in an encouraging direction.

2 Expansion of medical testing capacities as a top priority

A key request from epidemiologists in the current environment is a massive expansion of testing capacities. By testing as large a share of the population as possible for the virus, we can gain a better understanding of its spread. In combination with extensive contact tracing, i.e. the targeted search and quarantine of people who were in contact with an infected person, further containment of the disease is possible. This, in turn, creates an important prerequisite for reviving our economy. If it is possible to clearly distinguish the people who are healthy from those who are infected even after weeks of closing shops and leisure facilities ("lockdown"), many of the social distancing measures can be gradually reduced. The faster these restrictions can be eliminated, the faster the economy can pick up speed again.

In Switzerland, there are currently up to 8,000 tests carried out per day, which implies a relatively favorable comparison on a per-capita basis. However, due to the high number of daily new infections, contact tracing hardly takes place anymore. From an economic point of view, nationwide testing and systematic contact tracing are among the most worthwhile investments. The cost-benefit ratio can be illustrated using a simple calculation. Various estimates put the purely economic costs of an additional week of lockdown in Switzerland at CHF 4 billion at a minimum. At the same time, health insurance companies currently charge CHF 180 per virus test. Around 20 percent of the first 50,000 tests were positive. If one estimates the necessary effort for the subsequent contact tracing of each positive case at two working days at the median wage, the expected costs per test including subsequent contact tracing amount to a little over CHF 300. The actual costs could even be lower because the expansion of testing can be expected to lead to a lower rate of positive tests, and a correspondingly lower need for further contact tracing.

Based on these calculations, it would be worthwhile to run 13 million tests to prevent just one additional week of lockdown. This number would be even higher if the social and psychological consequences of the lockdown were taken into account, in addition to the purely economic costs.

Of course, the capacities for testing and contact tracing cannot be dramatically increased overnight. But our calculation shows why this should be a top priority over the coming weeks. The rapid advances in the development of faster tests that are available in large numbers are reason for hope, both for the identification of the acutely ill and of those who are already immunized. It is important that the cost of testing does not have to be covered by individuals though their health insurance deductible. As soon as a sufficient number of tests are available, the greatest possible incentive should be created for people to get tested. In addition, capacity

constraints for contact tracing should not be taken as fixed. Given the enormous benefits, capacity should be expanded by recruiting and briefly training enough workers to undertake the necessary inquiries and telephone calls. For this purpose, members of the civil defense (“Zivilschutz”) or the military, volunteers or short-time workers could be recruited at short notice.

For a small open economy like Switzerland, the long-term maintenance of a rigorous testing system is particularly important. As an international hub with lots of business travel, extensive tourism and many cross-border commuters, once an initial wave of infections in the country has subsided, imported infections can be expected to continue to occur regularly. A reliable infrastructure for systematic testing and contact tracing is therefore essential to prevent impending new outbreaks until an effective vaccine against the virus is available.

Additionally, in light of the enormous cost of the lockdown, all other investments that expand our healthcare system’s capacity to deal with the virus are also worthwhile, in order to speed up the time until we can relax the current social distancing measures. This includes, for example, the production of protective clothing and protective masks - the latter also for use by the general public - or the rental of hotels for quarantine measures. Any investments that make it possible to treat more sick people in hospitals and in intensive care units - such as increased procurement of ventilators – are of course not only an economic but also an ethical necessity. Any such health care expenditures have an immediate positive and multiplicative impact on the economy.

The pharmaceutical industry is of particular economic importance for Switzerland. The crisis also gives rise to opportunities for this industry in terms of the production of diagnostics, medicines and vaccines. Regulatory adjustments to accelerate their development, approval and production can not only save lives, but can also pay off for Switzerland economically.

Large countries can respond to local outbreaks by relocating extensive resources within the country's borders, such as China did by sending doctors, medical equipment and entire hospitals to the Hubei province. Switzerland, as a small country, is at a disadvantage in this regard, since an outbreak quickly affects a significant part of the country. This makes it all the more important now to undertake courageous investments, so that we can compensate for this shortcoming by funding the health care system to react strongly to this crisis.

3 Economic policy measures in a frozen economy

In economic crises, government measures are often used to stimulate consumption and to bring the economy back onto a growth path. Such measures include government investment programs, interest rate cuts, or monetary transfers to the population.

Unlike in previous crises, however, it is currently not possible for the economy to meet additional demand, since entire branches of the economy, including most stores, are closed. In this situation, it is necessary for the state to largely compensate households and companies

for their lost incomes, at least in the short run, without demanding something in return, in order to enable them to cover payments for fixed costs such as rents and loan installments.

The goal must be to “freeze” the economy in its pre-crisis state for the duration of the business closings, so that Switzerland's well-established economic structures can be preserved and quickly put back into operation after the current restrictions will be lifted. The above-mentioned prioritization of nationwide testing is a prerequisite to be able to end this freezing of the economy as soon as possible.

One could object to the strategy of “freezing” of the economic structures that this slows down a desirable structural change, in which companies with outdated business models go out of business and are replaced by more productive companies with better prospects. However, the circumstances of the current situation are different from regular recessions. Due to government-mandated business closures, in many sectors of the economy all companies are affected by the crisis. There is therefore little concern that structure-preserving measures will keep mainly weaker companies with poor prospects alive.

3.1 Support for households

Short-time work is the most important governmental program for the survival of the economy in Switzerland. In this program, unemployment insurance pays up to 80 percent of the wage costs of employees who are no longer able to work or can only do so to a limited extent. This supports employees of shops, restaurants and leisure facilities, which are currently closed at the behest of the Federal Council and whose work cannot simply be transferred to “home office”. In addition, employees of suppliers who are no longer able to sell their products to the now closed companies will be increasingly affected as well.

Short-time work ensures that employees continue to receive an income with which they can finance their ongoing living expenses such as rent, food and medicine. The State Secretariat for Economic Affairs has rightly extended the program to include apprentices and employees with fixed-term contracts as an emergency measure. In addition to short-time work, the financial safety net includes unemployment benefits for those who lose their jobs as well as new compensations for the self-employed, artists, people in quarantine, and parents who are no longer able to work due to their childcare obligations. It is important to create a finely meshed safety net, particularly in order to prevent those with incomes and low savings from falling into financial distress.

The current federal strategy is more effective than indiscriminately sending checks to all households. Government support should be targeted to those who actually experience a loss of income, and at the same time pay them more than just a small amount. The main goal of income replacement is to avoid financial hardship and not to stimulate consumption beyond that. As long as most shops are closed, many consumer expenditures cannot be made, even if all consumers had more money at their disposal.

Another important function of short-time work is the financial relief for companies. Due to the massive drop in sales, many are finding it increasingly difficult to pay wages. In principle, companies could cut wage costs by laying off workers, and those who are laid off could then receive unemployment benefits. However, short-time work has the benefit of reducing wage costs without layoffs. This is important, because once the employment relationships are severed, it will be much more difficult to get the engine of the economy back up and running again after the lockdown has been lifted. In this case, companies would have to look for and train new employees, since some of their former employees will have likely already found other jobs.

Economic research has shown that short-time work has positive impacts. During the Great Recession in 2009, some European countries and Japan relied heavily on short-time work programs. In Switzerland, around 90,000 employees temporarily received short-time work benefits. Research colleagues from ETH compared how companies with short-time work developed compared to similar companies that could not or did not want to use this measure. Their results imply that without short-time work, there would have been more than 20,000 additional layoffs and that a third of those laid off would have fallen into long-term unemployment. Short-time work can thus reduce the risk that a temporary crisis will lead to a longer-term weakening of the economy.

3.2 Support for firms

Although short-time work relieves companies by reducing wage costs, it is not sufficient to ensure the survival of the firms. For this purpose, additional support measures are necessary, so that the companies can cover other fixed costs as well.

Liquidity support for companies is therefore a central component of the economic policy response to the crisis. If the existing structures of the economy are to be preserved using the “freezing” strategy, companies must also be able to meet their regular obligations such as interest or rent payments. It is important to avoid a wave of bankruptcies. Such bankruptcies could even pose a serious risk to financial stability, which could in turn lead to the need for further, expensive support for the banking sector.

However, liquidity support through credits are not sufficient. Similar to short-time work, it is necessary for the government to cover certain fixed costs and even partially replace the profit losses of smaller companies. For very small businesses and sole proprietorships, income replacement payments are already part of the current government programs. An expansion to other small and medium-sized companies is appropriate in order to give these companies a realistic chance of a quick recovery after the crisis. As with short-time work, it can be argued that the companies have come into the current situation unexpectedly and through no fault of their own, so that a (partial) granting of state support as a non-repayable transfer does not create a distortionary incentive.

The liquidity support currently approved by the Federal Council is interest free up to CHF 500,000 (with an interest rate of 0.5 percent for larger amounts). The federal government provides a guarantee to the banks of 100 percent of the loan up to CHF 500,000, and 85 percent above it. It is problematic, however, that this aid must be repaid as a loan over a period of no more than 7 years. Smaller companies, in particular, often have little capital stock. Liquidity support may help them in the short term, but the additional loans can lead to over-indebtedness at the end of the crisis. This in turn could prevent many companies from accepting the help offered.

One could argue that the state could still partially waive repayment of the loans. However, this argument overlooks the fact that this creates additional uncertainty for companies in the current situation, which can have a negative impact on their acceptance of liquidity support. In this situation, some fundamentally healthy companies that are at risk of over-indebtedness decide to forgo the liquidity offer, go out of business and lay off their employees.

It seems in principle a good idea that the Federal Council relies on the banking sector to grant the loans. This way, companies can use existing banking relationships to obtain the loans. This is very much in line with a “freezing” strategy. The economic literature also shows that long-term relationships between banks and their corporate customers lead to the creation of “relationship capital”, which is particularly valuable in crisis situations. Banks generally know their customers better than the state and invest in long-term successful business relationships also during times of crisis.

However, even with long-term customers, some banks may come to the conclusion that a healthy company would become overindebted in the medium term through these government-backed loans. Banks could therefore refrain from granting the loans from the outset - despite government guarantees.

The Federal Council is currently working on a set of rules that should make it more difficult for banks to do such cherry picking. But the liquidity support cannot be a substitute for – at least partial – government grants for lost income and ongoing fixed costs. The amount of such non-repayable grants could be determined based on past tax filings including reported taxable profits from recent years and reported tax-deductions for costs of loan and rent payments. This information can be found in the annual financial statements available to the tax authorities. This enables quick and unbureaucratic processing and at the same time rules out distortionary incentives: no company will have optimized its tax statements in the past few years with a view to possible state support in a pandemic.

3.3 Financing economic policy measures

Finally, the question arises of how the survival strategy presented here for the Swiss economy should be financed. As already mentioned, the Confederation's finances are in very good condition. The national debt ratio is at around 40 percent of gross domestic product, which is comfortably low in international comparison - the average debt ratio in the OECD is more

than 70 percent. We therefore advocate debt financing, i.e. financing through future tax revenues.

An alternative would be financing through tax increases today. However, this option would be counterproductive in the current situation, since it would deprive the economy of urgently needed disposable income. Proposals such as a full monetization of the crisis costs by the central banks have also been brought up. While such a step would not necessarily have an inflationary effect in the current situation of falling global demand, we still consider it risky. Monetization of sovereign debt poses a variety of legal and political problems and threatens to damage the credibility of monetary policy in the long term. Fortunately, in good times, Switzerland has developed enough fiscal room to maneuver so that debt financing is feasible and monetary funding of the government budget is not necessary.

At the moment, it is only possible to make vague estimates of how the crisis will affect public debt levels. As stated, this depends crucially on the duration of the lockdown. The specific design of economic policy measures also has a major impact. For the share of government support that is granted as loans instead of subsidies, the recipient of the liquidity support is the primary responsible party, rather than the taxpayer. Designing the liquidity support in form of a guarantee from the federal government also ensures that the government debt only increases when credit defaults actually occur. Conversely, in this crisis, short-time work should be financed from the general government budget and not, as in normal times, from unemployment insurance. It is a task for society as a whole, which should be financed from (future) tax revenue and not unilaterally by workers.

Above all, keeping the government debt ratio stable should not be the government's primary goal in this crisis. Even assuming that the measures currently approved by the Federal Council amounting to around CHF 40 billion are fully included in the federal debt level - which is unlikely given the mechanics just discussed - the government debt ratio would increase only to about 46 percent. As international comparisons show, a country like Switzerland, which has an institutionally broadly secured, credible and sustainable long-term financial policy, can bear a debt level of 60 to 90 percent of GDP without fear of disadvantages such as increased risk premiums in the financial markets - provided that after the end of the crisis it returns to a policy of budgetary discipline. However, there is no need for such high debt levels. This discussion just shows that there is enormous scope for action.

The debt brake also does not have to be overridden for the measures proposed here. The law explicitly allows new debt to avert national emergencies if this is the will of the parliamentary majority. Indeed, the economics literature shows that a massive, short-term increase in government debt is the most efficient way to deal with short-term national emergencies.

Finally, the conditions on the bond markets favor debt financing of government measures against the coronavirus. The 10-year federal bonds currently have a negative yield of -0.36%. Since investors see our country as a safe haven during these times, international investors are willing to pay to lend the government money. This extends the fiscal scope for action.

There is also no danger that the rapid placement of large volumes in the bond market could lead to difficulties. The international financial markets are currently thirsting for secure investments. The markets for government bonds with good credit ratings have rallied since the outbreak of the crisis, and Swiss federal bonds in particular have benefited from this.

In order to achieve the best possible conditions for the necessarily rapid placement of the large bond volumes, the Swiss National Bank, as the house bank of the Confederation, could potentially take the bond issues in its books in the short term and then resell them on the secondary market within a predetermined period. This would ensure that the necessary funds were immediately available. At the same time, this approach would not constitute a case of monetary financing, since the central bank would ensure that the securities were passed on to the secondary market soon, long before this expansion of the monetary base could have an inflationary effect.

4 Signatories

All professors of the Department of Economics at the University of Zurich signed this position paper.

Carlos Alós-Ferrer, NOMIS Professor for Decision and Neuroeconomic Theory | **Sandro Ambühl**, UBS Foundation Assistant Professor of Behavioral Economics of Financial Markets | **Björn Bartling**, Professor of Behavioral and Experimental Economics | **Pietro Biroli**, UBS Foundation Assistant Professor of Applied Economics | **Theodora Boneva**, Assistant Professor of Economics of Child and Youth Development, endowed by the Jacobs Center for Productive Youth Development | **Anne Brenøe**, Larsson-Rosenquist Foundation Assistant Professor of Child and Youth Development with a focus on breastfeeding | **Lorenzo Casaburi**, Swiss Re Foundation Assistant Professor of Development Economics | **Gregory Crawford**, Professor of Applied Microeconomics | **David Dorn**, UBS Foundation Professor of Globalization and Labor Markets | **Christian Ewerhart**, Professor of Information Economics and Contract Theory | **Ernst Fehr**, Professor of Microeconomics and Experimental Economic Research | **Todd Hare**, Associate Professor of Neuroeconomics and Human Development | **David Hémous**, UBS Foundation Associate Professor of Economics of Innovation and Entrepreneurship | **Mathias Hoffmann**, Professor of International Trade and Finance | **Nir Jaimovich**, Professor of Economics | **Damian Kozbur**, Assistant Professor of Econometrics | **Guilherme Lichand**, Assistant Professorship for Child Well-Being and Development, supported by UNICEF Switzerland | **Michel Maréchal**, Professor of Economics of Organizations and Behavior | **Nick Netzer**, Professor of Microeconomics | **Ralph Ossa**, Kühne Foundation Professor of International Trade | **Dina Pomeranz**, UBS Foundation Assistant Professor of Applied Economics | **Marek Pycia**, Professor of Organizational Economics | **Christian Ruff**, Professor of Neuroeconomics and Decision Neuroscience | **Florian Scheuer**, UBS Foundation Professor of Economics of Institutions | **Armin Schmutzler**, Professor of Microeconomics, Industrial Organization, and Environmental Economic | **Jakub Steiner**, Associate Professor of Microeconomic Theory, |

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