How the necessary economic support measures can cushion the corona crisis and accelerate the ecological transition (Update March 30th, 2020)

The Corona crisis is shattering our societies and is forcing governments to provide emergency aid and far-reaching economic measures of historic proportions. While we focus on health and short-term support for employees and companies, we must not repeat the mistakes of past economic crises and think of tomorrow in all our actions. The economic recovery measures can not only “restart” the economy, but also set the course for the necessary transformation. Climate protection can and must be a driver of economic recovery and is the basis for our long-term prosperity. Using a few examples, we want to illustrate how short-term economic support can be reconciled with our long-term societal priorities.

By Holger Bär und Matthias Runkel

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1 This paper is a translation of a policy brief written in German for the current debate on the German economic recovery package (Bär/Runkel 2020). While therefore most of the examples in this paper stem from the German debate, they are often similar to debates in other countries and partly are related to the debate on the European Green Deal and the EU Emissions Trading Scheme as well. The examples serve as illustrations of how to think about the design of economic recovery packages in general – they are not a “prescription what to do”. In this regard, they should work very well to readers in all countries. As we state in section 4: we explicitly invite all readers to think beyond these examples and to enrich the debate about the economic recovery packages in your respective countries!

2 The authors give thanks to Swantje Fiedler, Ann-Cathrin Beermann, Florian Zerzawy, Leonard Müller, Chris McKenna and Tobias Austrup for the many helpful comments.
The spread of the coronavirus poses enormous challenges for individuals and companies. Public life and the economy are at a standstill in some areas. In addition to the major challenges for our health care system, short-time work, redundancies, liquidity bottlenecks, insolvencies, and many other problems are looming.

The State is forced to support the affected households and companies. Under the pressure of the crisis, far-reaching decisions are being made at a rapid pace and massive public expenditures are being outlined that will have an effect for many years beyond the corona crisis.

The paper is intended to provide a first impetus to the debate on the shape of these historic stimulus measures. For even after the corona crisis, we will still have to find solutions to the climate crisis, structural change, growing inequality and other social challenges. The aid now planned for an economic relaunch can set the course for the necessary transformation to a climate-friendly economy.

1 What is needed in the short term

The focus of fiscal and monetary policy measures to date has rightly been on short-term support for those most affected and on general financial relief for citizens, the self-employed, and companies. The central focus is on bridging the temporary loss of wages and income of many people and providing short-term, temporary support to affected companies in order to minimise the economic consequences of the current exceptional situation. "First, focus on hardship, not G.D.P." (Krugman 2020). Banks are also being supported with the aim of facilitating lending to those affected and bridging liquidity bottlenecks.

Due to the great uncertainty regarding the coming weeks and months, these short-term measures represent a necessary rescue package for those whose livelihoods are threatened. Personal and business insolvencies due to the temporary economic standstill must be prevented as much as possible in order to facilitate a quick return to normal business operations.

As a matter of principle, these measures should be timely, targeted, and temporary (Bofinger et al. 2020). They must act quickly, address those affected, and be limited to the time of the crisis. Since this is not always affordable, less targeted, less efficient but quick acting, effective measures may also be necessary.

Figure 1 compares the size of the national packages of measures in relation to the national gross domestic product (GDP). With a 750 billion euro package of measures, Germany can replace around one fifth of its national GDP. In Austria this would currently be around 9%. Both countries benefit from relatively low public debt ratios (see e.g. Trading Economics 2019), which provide scope for further measures.


The existing social networks in Germany as well as the measures already initiated and announced will take care of the majority of those affected. Still, the potential advantages of an unconditional basic income seem to be apparent in such a situation. The crisis shows that the societal debate (e.g. Gkantiragas 2020) on the introduction of a basic income should be further promoted.

Depending on the duration and depth of the economic recession, further steps may be necessary. One general rule could be to reduce the composition of tax income and to reduce the tax burden on labour (relative to taxes on capi-
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In the short term, this must be financed through government expenditure with corresponding public debt; in the long term, government tax revenues should be reformed and financed more strongly through the environmental taxes (FÖS 2019). Linked to this is the question of how to design a fairer tax system that offers new answers to growing inequality.

2 Lessons from the 2008 financial crisis

Economic crises teach us that they are always both an opportunity and a risk. They often bring radical change and trend-setting decisions – both positive and negative.

In the 2008 financial crisis, for example, climate protection and other long-term goals were pushed into the background, while short-term economic interests instead dominated the political agenda. Climate protection lost priority on the political agenda. For years, climate change was noticeably less debated in the Bundestag before its presence increased again (see figure). There is no time for another postponement. Economic recovery and climate protection can – and must – go hand in hand this time.

"Tax bads, not goods" is an important slogan in the work of Green Budget Germany / Forum Ökologisch-Soziale Marktwirtschaft. It emphasizes that very idea: that higher taxes should be put on societal "bads" (like pollution and resource consumption) and the higher revenues should be used to reduce the tax burden on "goods" labour (as in: every work hour), in order to reduce unemployment and allow wages to rise.

Crises are a breeding ground for new ideas - good and bad - and a catalyst for their dissemination. The "scrapping premium" (officially: environmental bonus), which was conceived as an economic stimulus measure without consideration of ecological effects, has become infamous. As a result, old vehicles that could have been used for years were scrapped. They were replaced by vehicles that were on average more powerful and had higher CO₂ emissions. The Obama administration made things better: the American Recovery Act of 2009 promoted the creation of almost one million clean energy jobs in the wind and solar industries in the following years (Lashof 2020).

Another lesson is that some stimulus measures run the risk of preventing structural change. One example from the 2008 financial crisis is the so-called "zombie banks", which were only kept alive by subsidies and liquidity injections. The danger of a repetition of such unintended consequences of economic stimulus measures still exists today.
e.g. if fundamental structural change is to be "paused" for short-term crisis management:

“Europe should forget about the Green Deal now and focus on the coronavirus instead.”

Andrej Babiš, Czech Prime Minister

However, a sustainable structural policy does not attempt to “prevent” structural change, but recognises it and uses it to achieve social goals (climate protection, sustainable development, others) through it (cf. Bar/Jacob 2013). It is therefore important to examine economic stimulus measures and demands for their long-term effects and not only for their short-term contribution. Taking this into account, the mobilisation of enormous sums of money worldwide can also serve to seize a “historic opportunity” to jointly tackle the economic crisis and the climate crisis:

“Governments need to make sure they keep clean energy transitions front of mind as they respond to this fast-evolving crisis (...) They have a historic opportunity today to steer those investments onto a more sustainable path.”

Fatih Birol, Executive Director International Energy Agency

There is widespread agreement on many of the measures necessary in the short term (see section 1). National governments are mobilizing sums in the double or triple-digit billions to combat the crisis and are taking measures that would have been unthinkable only a short time ago. Given these huge levers, we should think very carefully about how to deal with them and beware of short-sighted crisis management that ignores long-term goals (i.e. we should leave the “wrong” things). Instead, we must do the "right" thing and think about tomorrow, i.e. implement measures that combine short-term interests (economic stabilisation) with the long-term perspective (energy system transformation, decarbonisation, digitalisation). Translating such ideas into concrete measures in economic stimulus packages would create real win-win situations.

3 Avoid the “wrong things”

"Primum non nocere – first do not harm" is part of the Hippocratic Oath. The same should apply to the "healing" of an economic crisis. Otherwise, there is a danger that fighting the short-term crisis will lead us to postpone urgent tasks and thus take one step forward and at the same time two steps back. Because, as Michael Thöne correctly notes: “The corona crisis relativizes the other problems, but their absolute size does not diminish. Rather, an additional, very large and acute problem has come on top of it” (Thöne 2020).

Many actors are already bringing their demands to bear in the current debate on the economic distortions resulting from the corona crisis. In some cases, demands from before the crisis are now reappearing in the guise of “necessary economic measures”. Some of them are in conflict with the long-term goals of climate protection. Examples from the European and German policy arena are:

- EU: Abolition of EU emissions trading (Barteczko 2020)
- EU: Softening of the CO2 targets EU car manufacturers (Mortsiefer 2020)
- EU: Putting European Green Deal "on hold" (Simon 2020)
- Germany: Postponement of the introduction of the CO2 price and the fertilizer ordinance (ntv 2020)
- Germany: Postponement of the increase of the air transport tax (Kiani-Kreß 2020; RND 2020)

The current crisis differs from typical economic crises 6, which is why these demands would not only cause great damage from a climate policy point of view, but would also have little economic impact in the current situation. Furthermore, such demands unsettle actors who have set their sights on long-term decisions (e.g. investors in renewable energies or companies investing in their decarbonisation), they slow down the necessary structural change towards a sustainable, low-carbon economy. Especially in a crisis, “directional stability” 7 is extremely important and an internationally coordinated economic policy has great advantages over an approach in which each country sets different priorities in national economic stimulus packages they want to educate themselves in the crisis, and to investors who invest their money in the expansion of renewable energies, for example.

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6 See comments by (Bofinger et al. 2020) on how the current situation represents both a supply and demand crisis.
7 This applies both to investment decisions by companies, to employees who are thinking about the direction in which
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(OECD 2020). Additionally, the long-term costs of unabated or “postponed” climate protection clearly exceed the investment requirements for the necessary decarbonisation. This insight should be common sense since the Stern Review (Stern et al. 2006).

4 Doing the "right thing" and thinking about tomorrow

The Hippocratic Oath further says: “secundum cavere, tertium sanare - secondly be careful, thirdly heal”. A good approach therefore attempts to think of short- and long-term challenges together: when dealing with the acute and short-term effects, not to lose sight of the requirements of long-term transformation tasks and to find potential synergies between the different objectives9:

1. **Health**: measures reduce the number of new infections and strengthen the health system.
2. **Emergency aid for employees* and companies**: Measures provide short-term support for employees*, households, and companies to cushion social hardship and economic downturn.
3. **Green structural change**: measures steer the economic relaunch in the right direction and promote sustainable structural change.

“Thinking about tomorrow” means above all keeping an eye on green structural change – without it we will not achieve any German or European climate protection or development goals. We should regard the massive public spending in the context of combating the corona crisis as investments in the future and use it to prepare companies and employees for structural change, to accelerate it and thus combine economic opportunities and climate protection10.

The following examples are an invitation to reflect critically on them and think creatively about the areas where there is further potential for synergy between the short term and the long term.

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8 Probably a “luxury” that political decision-makers currently would like to have and do not have.
9 The three-phase model by Fischedick & Schneidewind (2020) is similar to our approach.
10 This is precisely what Fischedick and Schneidewind (2020) call “targeted exploitation of synergy potential for urgently needed investments in the future”.
11 Part of the German “Klimapaket” climate policy package adopted at the end of 2019 was to increase the air traffic tax, which is scheduled to go into effect April 1st, 2020.
12 Lashof (2020) makes a similar argument with regard to the workers who lost their jobs in the US oil industry: “Let’s help those workers directly, such as by direct payments and extended unemployment and health benefits—not by increasing subsidies for oil production or bailing out oil companies.”
13 An ecologically and economically sensible short-term measure is the prevention of “ghost flights”, which only serve to ensure that airlines do not lose their entitlement to flight slots. The European Commission has now reacted and suspended the regulation for four months (Morgan 2020).

4.1 Aviation: Avoiding the wrong things and thinking about tomorrow

In the short term, demands for postponement of the increase in air traffic tax11 (“by at least one year”, according to the “Vereinigung Cockpit” (German Association of commercial aircraft pilots and flight engineers)) should be rejected. Such demands fail to recognise that the current collapse is not related to these policy measures, but is due to temporary entry bans, changes in travel behaviour, etc. After the end of the crisis, air travel will in all probability return to its pre-crisis levels. It would be a fatal sign in terms of climate policy if legislators were now to call on citizens to “fly more” and postpone or relax urgently needed climate protection measures.

Of course, the industry has been hit extremely hard by the current crisis and should be supported to an appropriate extent. Sensible approaches are to be found among employees (short-time work compensation, further training, increased parental allowance for parents who look after their kids at home, etc.)12 as well as among companies particularly short term liquidity support and deferrals. However, these crisis support measures should not inhibited the necessary reforms in the sector.

In the long term, the aid funds could be linked to increased investment in climate-friendly technologies (e.g. increasing research expenditure on alternative fuels, climate-friendly drives, etc.)13. The economic relaunch must be geared to the necessary change.

4.2 Urban transport: Enabling win-wins for health & environment

A major problem of the current crisis is mobility. Goods and passenger transport must be maintained despite the health risks in order to enable critical transport flows and services. A short-term contribution to solving this problem could be investments in health security, e.g. by disinfecting
buses, trains etc. The role models could be cities with experience of epidemics in densely populated areas, such as Hong Kong or Singapore.

An increasing importance of bicycles in passenger transport can be expected. Offers for bike sharing on cargo bikes are already being adapted. In Bogotá, roads have been temporarily converted to bicycle traffic to facilitate mobility for people with a lower risk of infection (Walker 2020). It is true that relying on cars also represents a low-risk alternative. However, for many people, especially those on low incomes, this is not an option.

With a view to the long term, it would make sense to switch to bicycles and public transport in urban traffic. The otherwise everyday external effects of urban car traffic (above all noise, pollutant emissions, and traffic congestion) are currently becoming particularly apparent due to their absence. It remains to be seen whether the current crisis will change mobility behaviour in the long term, e.g. in favour of the bicycle. In any case, it will reveal the opportunities and risks of the status quo and identify opportunities for future investments.

4.3 „Energiewende“: Removing short-term hurdles to PV investment for the economy and energy system transformation

Short-term investments in small and medium-sized photovoltaic plants can support the economy and secure employment. To this end, the PV cap should be abolished immediately. According to the German Federal Network Agency, this cap on subsidies for the installation of 52 GW will be reached in April 2020, thus already deterring investment in photovoltaics today. The government has wanted to abolish it since September 2019 and a motion by the Greens parliamentary group in the Bundestag to lift the cap was rejected by the Economics Committee at the beginning of March (Haufe.de 2020). In this area, too, some actors refer to the “more urgent problem” of the corona crisis and thus try to play it off against climate protection (Bareiß 2020 as one example). The argument that PV supply chains are interrupted and cannot be delivered in Germany is not convincing.

In the case of large-scale PV plants, there may be delays in completion in the short term, as a result of which the entitlement to subsidies is lost, or penalties may become due in the event of delayed commissioning (Enkhardt 2020). In this respect, the German Solar Industry Association has requested the Federal Government to extend the deadlines for the realisation of such large-scale projects. This is a sensible measure in order not to harm investors.

In the long term and from a global perspective, it is important that investments in renewable energies do not come to a standstill, but that governments use this “historic opportunity” to accelerate the global transformation of energy systems (Birol 2020). For Germany, lifting the PV cap and promoting the installation of (especially small and medium-sized) PV systems and electricity storage would make double sense - to support the economic situation in the short term and to decarbonise electricity generation in the long term.

4.4 Public funding for energy-efficient building refurbishment: Win-win for the construction industry & climate protection

Short-term investments from the climate protection programme 2030 (e.g. for energy-related building refurbishment, replacement of oil heating systems) would contribute to stabilising the economic situation and have positive long-term effects if they could be sped up. Investments in

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14 When using bike sharing (also car sharing), the question of the possibility of transmission between users via surfaces (especially handlebars/steering wheels) arises. The Robert Koch Institute comments: “On the other hand, transmission via inanimate surfaces has not yet been documented. Other sources in the media speak of up to 72 hours that the viruses can survive on surfaces (SPIEGEL 2020).

15 As an example we would like to refer to the Berlin support programme for cargo bikes: https://www.lastenfahrradzentrum.de/f%C3%B6rderung-kaufpre%C3%A4mien/berlin/

16 Already in the climate protection program 2030 (September 2019) the German government declared that it wants to abolish the PV cap.

17 Note: Thomas Bareiß is Parliamentary State Secretary at the Federal Ministry for Economic Affairs and Energy. Criticism of the failure to recognize the economic significance of the PV sector was voiced, for example, by the German Solar Industry Association (Bundesverband Solarwirtschaft 2020) and the Chief Executive of the German Association of Energy and Water Industries, Kerstin Andreae.

18 Wood Mackenzie analysts stress that the Asian supply chains for photovoltaics and electricity storage are already recovering (Wood Mackenzie 2020).

19 The same applies to investments in charging infrastructure for the transport sector.
energy efficiency in particular can have a strong impact on employment (Umweltbundesamt 2019). Therefore, it would be important to examine which specific measures can be implemented in the quickly.\textsuperscript{20}

In the long term, higher public and private investments are needed to reduce the energy demand of the building sector. The more funds from the economic stimulus packages are leveraged for this purpose, the more likely it is that the climate targets will be met in 2030.

4.5 Work: From the short-term "need to work from home" to more digital collaboration and fewer business trips

In the short term, mobile working from home\textsuperscript{21} in the current situation promises a win-win-win situation: people do not pose a risk of infection for others; they can basically continue to work, and care for their children, albeit to a limited extent; ultimately, there is much less commuting and environmental pollution is reduced.\textsuperscript{22} In the short term, there is enormous growth potential here for applications that improve digital collaboration\textsuperscript{23} and digital further education.\textsuperscript{24} In the short term, it is important to help companies and their employees to improve their workflows and collaboration in a timely manner.\textsuperscript{25}

From an ecological point of view, the long-term perspective is exciting. How quickly will we be able to work better in the home office, and to what extent do employers no longer perceive home office use as a "necessary evil" but as an efficient option? How many business trips can and do we want to do without in the future because we have come to know and appreciate better, digital alternatives? There is potential here to stabilize the ecological advantages of "less commuting" or "having to go on business trips" in the long term. In order to tap this potential, the "home office experiences" of those who now work from home should be better through accompanying research. This way, we could better understand the changes needed in the future to enable more people to work more independently of location\textsuperscript{26} and in the long term, having to travel less for business purposes and thus reduce environmental impacts.

4.6 Further education: using the short-term slowdown to get fit for the demands of tomorrow

For some employees and companies, the crisis offers short-term opportunities to use for further training and up-skilling.\textsuperscript{27} Some further training opportunities also have positive effects on the environment. Through "green skills" opportunities, employees can train themselves specifically for the broad structural change of tomorrow.\textsuperscript{28}

An important bottleneck is the question of whether and how conventional face-to-face training can be digitalised provide short-term alternatives in the crisis to on-site training formats that are currently not possible.

It needs to be clarified who can provide this advice – the local Chambers of Commerce or trade unions could play a role here.

The question has not only an ecological, but also a social dimension: against the background of the rent debate in large cities and the rural exodus, a long-term opportunity is emerging here: if villages manage to provide people with the necessary infrastructure for home office work, this can bring location-independent jobs from the cities to the countryside. Such potentials should be actively developed in pilot projects (e.g. the Neuland 21 initiative) – detached from the question whether / when the next pandemic will "force" us to work from home.

The "Work for tomorrow" law (Arbeit-von-morgen-Gesetz) passed by the Bundestag on 13.03.2020 is intended not only to simplify access to short-time work benefits, but also to improve the promotion of further training during this period.

An example of this would be motor vehicle mechanics who are undergoing further training in the field of electromobility.
so that those interested in further training can take advantage of these opportunities in a timely manner. 29 Often, compulsory attendance is necessary to acquire certain certifications - but this attendance is not necessary for the simple transfer of knowledge. We should examine how such mandatory examinations can be made up for after the crisis. In the long term, these considerations are important as to how we can use the time of the crisis for further training in order to make individual employees (and their companies) fit for the coming structural change processes in their sectors - in order to guarantee long-term employment with good working conditions in Germany.

4.7 Energy prices: Reducing climate-damaging subsidies when oil prices are low

In the short term, low crude oil prices may lead to a reduction in energy efficiency efforts (Birol 2020). At the same time, the situation offers a window of opportunity to tackle the $160 billions of environmentally and climate-damaging subsidies for oil worldwide and to give a new impetus to the stalled international processes (for example in the G20 Peer Review process on reporting on environmentally harmful subsidies) to reduce subsidies. The International Monetary Fund publishes an update on global fossil fuel subsidies in May each year (Coady et al. 2019). Acceptance for the reduction of these subsidies could be higher due to the current low price level. 31 In the long term, progress in this area would be doubly important - for fiscal and climate policy reasons. The dismantling of environmentally harmful subsidies (e.g. kerosene tax exemption and the diesel privilege) could release billions of euros that the state will need to finance the stimulus measures, while at the same time making enormous progress in moving away from fossil energy.

In the short term, aid and investment packages can halt the economic downturn, secure jobs and stabilise companies. Economic aid and economic conjuncture measures have a distributional dimension per se and, depending on their design, benefit one group or another to a greater extent. This means that there is a risk that the way in which the crisis is combated will exacerbate the already existing inequality of income and wealth. Assets such as shares and bonds are disproportionately owned by wealthy people and are therefore drivers of inequality (see e.g. Runkel 2014, Kuhn et al. 2018). The falling real estate and asset prices of the 2008 financial crisis therefore interrupted the decades-long trend of growing inequality. Since then, however, inequality of income and wealth has risen sharply again in many countries (see e.g. Spannagel/Molitor 2019). In the response to Covid-19, the social dimension of all measures must be examined more closely in order to ensure social acceptance of the aid and stimulus measures. State aid for large companies should not be given without conditions (see e.g. Lazonick et al. 2020) and the preservation of jobs must be clearly prioritised over shareholder value.

In the long term, distribution issues and people’s perception that things are “fair” in our societies are very important. A social transformation towards sustainability also requires a greater degree of social cohesion. Inequality between rich and poor groups within our societies and in the international context has risen sharply: while the world’s richest 1% receive more than 20% of global income, the poorest 50% receive less than 10% (WID 2018). Economic research also shows that the amount of assets now “hidden” in offshore tax havens has grown to 10% of global GDP over the last four decades and belongs to only the richest part of the offers, which can take place digitally, are often very strongly oriented towards office employees and their needs.

Crisis situations can act as a catalyst for the reduction of environmentally harmful subsidies (see Bar et al. 2011).
richest 1% (Alstadsæter et al. 2018). The fact that huge assets can be “hidden” offshore from tax authorities harms us all, limits the ability of our communities to act (e.g. to finance health care systems) and polarises our societies.
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**LITERATURE**


Lazonick, W., Hopkins, M., Jacobson, K., Palladino, L., Erdem Sakinc, M., Tulum, O. (2020): 4 Ways to Eradicate the Corporate Disease That is Worsening the Covid-19 Pandemic. Available at: https://www.ineconomiCS.org/perspectives/blog/4-ways-to-eradicate-the-


Table 1: Overview national and international policy measures (as of March 19th, 2020)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Country / institution</th>
<th>Description</th>
<th>Source(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal policy measures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wage subsidies, wage subsidies</td>
<td>DE</td>
<td>Short-time work allowance: Employment agency or unemployment insurance pays compensation for lost wages through short-time work.</td>
<td>4, 10</td>
</tr>
<tr>
<td></td>
<td>FR</td>
<td>France plans to support short-term unemployed as well as the continued payment of wages for parents during school and daycare closings etc.</td>
<td>8, 10</td>
</tr>
<tr>
<td></td>
<td>IT</td>
<td>State subsidy for severance payments for redundant workers.</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>OUT</td>
<td>Wage subsidies for small and medium-sized companies. Wage subsidies for trainees and trainees.</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>DK</td>
<td>The state will take on 75% of the wages of threatened jobs in the next three months (with&gt; 50 layoffs or 30% of the workforce).</td>
<td>7</td>
</tr>
<tr>
<td>Deferral or support of social security contribu-</td>
<td>DE, FR, ES</td>
<td>Subsidies for social welfare recipients.</td>
<td>8th</td>
</tr>
<tr>
<td>tions etc.</td>
<td>OUT</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>UK</td>
<td>Three-month “payment leave” for households with payment difficulties with mortgages.</td>
<td>6</td>
</tr>
<tr>
<td>Tax cuts</td>
<td>UK</td>
<td>Property taxes are suspended for one year</td>
<td>8th</td>
</tr>
<tr>
<td>Tax deferral</td>
<td>DE, FR, IT, UK, US</td>
<td>The tax payment (e.g. trade and corporation tax) can be postponed.</td>
<td>8, 10</td>
</tr>
<tr>
<td></td>
<td>IT</td>
<td>Deferral of mortgage payments, electricity and energy bills etc.</td>
<td>8th</td>
</tr>
<tr>
<td>Direct subsidies</td>
<td>EU</td>
<td>EU countries can pay companies up to EUR 500,000 in direct financial aid. Relaxation of the guidelines on national aid and the rules of the Stability and Growth Pact (“debt cover”). Investment initiative from the Structural Funds.</td>
<td>3, 4</td>
</tr>
<tr>
<td>Government loans and loan guarantees</td>
<td>DE, FR, IT, US</td>
<td>€ 100 billion loan guarantees for small and medium-sized companies</td>
<td>8, 10</td>
</tr>
<tr>
<td>Monetary policy measures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest rate cuts</td>
<td>USA, CA, AUS, CHN</td>
<td>Key interest rate cut</td>
<td>1, 6, 10</td>
</tr>
<tr>
<td>Liquidity support, lending</td>
<td>JP, USA</td>
<td></td>
<td>1, 10</td>
</tr>
<tr>
<td></td>
<td>ECB</td>
<td>Banks in the euro area will have access to a three-digit billion amount in the next three months (bridge financing)</td>
<td>3</td>
</tr>
<tr>
<td>Purchases of bonds, stocks etc.</td>
<td>ECB</td>
<td>since Nov. 2019, focus now on corporate bonds</td>
<td>2, 10</td>
</tr>
<tr>
<td></td>
<td>JP</td>
<td>The Japanese central bank will buy ETFs for around $ 113 billion in 2020. Another around $ 18 billion will be set aside.</td>
<td>10</td>
</tr>
<tr>
<td>Lending</td>
<td>ECB</td>
<td>Long-term tenders to banks</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>UK</td>
<td>Lending to companies (via banks)</td>
<td>2</td>
</tr>
<tr>
<td>“Helicopter money” (direct payments to citi-</td>
<td>HK</td>
<td>the equivalent of around 1,200 euros for all adult citizens</td>
<td>2</td>
</tr>
<tr>
<td>zens)</td>
<td>IT</td>
<td>500 euros for self-employed; Cash bonus for people who work during the lockdown (e.g. taxi driver, postman).</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>US</td>
<td>U.S. citizens are said to receive at least a $ 1,000 check from the federal government. If need be, more will follow.</td>
<td>12</td>
</tr>
<tr>
<td>World Bank, development banks etc.</td>
<td>IMF (international)</td>
<td>Affected (developing) countries have access to $ 50 billion via the Rapid Financing Instrument (RFI) and Rapid Credit Facility (RCF). Other instruments are available.</td>
<td>1, 5</td>
</tr>
<tr>
<td></td>
<td>Weltbank (international)</td>
<td>$ 12 billion in emergency aid to developing countries, including through the International Bank for Reconstruction and Development.</td>
<td>11</td>
</tr>
</tbody>
</table>
How the necessary economic support measures can cushion the corona crisis and accelerate the ecological transition
(Update March 30th, 2020)

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>KfW (DE)</td>
<td>500 billion euro loan program for companies with government guarantees.</td>
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<td></td>
<td>Expansion of export credits</td>
</tr>
</tbody>
</table>

**Other**

<table>
<thead>
<tr>
<th>Nationalization</th>
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<tbody>
<tr>
<td>Nationalization of affected corporations (similar to the “bad banks” in the context of the 2008 financial crisis)</td>
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<tr>
<td>DE</td>
<td>The state of Bavaria buys company shares worth 10 billion euros</td>
</tr>
<tr>
<td>FR</td>
<td>The option is being checked (e.g. Air France)</td>
</tr>
</tbody>
</table>

Sources:
5. IMF (2020) “Policy Steps to Address the Corona Crisis”
7. https://tribunemag.co.uk/2020/03/denmarks-answer-to-the-coronavirus-recession?fbclid=IwAR0BLRAiyVYYFmV3OTiC9ax1aKqppQsKQeakgNgHqzgMwEJbSSnNd0NzMOZyc
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