# **IfM-Background Paper**



# Mittelstand policy during and after the Covid-19 pandemic

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## 1 Fundamental orientation of Mittelstand policy in times of pandemic

During the pandemic, Mittelstand policy is above all a policy of acute crisis management for the Mittelstand economy. It should mitigate the acute effects on businesses and entrepreneurs in order to limit the extent of the economic and societal damage. However, it is difficult to estimate and quantify the extent to which the Mittelstand sector will be affected (cf. Welter/Wolter 2021b), especially since the scope of the threat to their existence changes over time. For example, in the early summer of 2020, the pandemic and the anti-pandemic measures already exerted downstream effects on other sectors of the economy that were not initially affected (cf. Welter/Wolter 2020).

Mittelstand policy during the pandemic is therefore also a policy of ongoing and short-term changes, including the termination as well as the demand-oriented introduction of new measures. This also includes examining whether and to what extent Mittelstand policy needs to take corrective action because other pandemic-related policies and measures threaten to disadvantage Mittelstand businesses or specific sectors.

However, Mittelstand policy must not lose sight of the time "afterwards" (cf. Welter/Wolter 2021a), even if the acute problems of Mittelstand businesses predominate and an end to the pandemic is not in view. Already during the pandemic, future-oriented Mittelstand policy should look for tools to support Mittelstand businesses on their way out of the crisis and enable them to shape their longer-term business development.

In the following, we discuss possible starting points for these different roles of Mittelstand policy in the pandemic and assess ongoing measures.

#### 2 Classification of the measures taken so far

During the Covid-19 pandemic, a large number of support programmes have already been implemented. For the further design of Mittelstand policy during the ongoing crisis, but also for the time afterwards, it would be helpful if one could assess the effectiveness of the programmes launched so far. However, this is difficult to do at present, not only because of the short time span but also because there is simply a lack of data. Statistics on the uptake of measures allow for simple monitoring of implementation and may indicate possible deviations from the original objectives. Impact evaluations, by contrast, include the actual impact monitoring – i.e. the analysis of whether the observed effects can

also be attributed to the respective programme or measure (cf. Klemmer et al. 1996).

The federal government registers the volume of disbursed funds and the number of applicants. Within the framework of the federal government's Covid-19 aid measures for commercial enterprises and the liberal professions, approx. 90.4 billion euros have been approved or disbursed to date (as of 23.03.2021). This is the largest aid package in the history of the Federal Republic of Germany. The federal government's Covid-19 aid measures include loan programmes within the KfW Special Programme (49.0 billion euros), various grant programmes (28.3 billion euros), recapitalisation for large companies within the framework of the Economic Stabilisation Fund (8.5 billion euros), as well as guarantees (4.6 billion euros) (cf. BMWi 2021). Most of the aid – especially the loan and grant programmes – addresses SMEs but is often also accessible to large enterprises. Within the framework of the KfW Special Programme, SMEs represent approx. 98 % of all recipients and receive approx. 56 % of the total loan volume (own calculation based on Destatis 2021).

Grants are the type of support that enterprises take up most often. This is particularly true for Emergency Aid (Soforthilfe), which was approved for approx. 1.74 million self-employed and micro-enterprises with up to ten employees from the end of March until the end of May 2020. All other forms of aid - both grants and loans - are used by significantly fewer businesses. In terms of the number of applications (to date), Emergency Aid is followed by November aid (354,700), December aid (336,400; as of 23 March 2021 respectively), Bridging Money II (Überbrückungsgeld II, 173,700), Bridging Money I (122,000) and Bridging Money III (89,300). Under the KfW Special Programme, most commitments (SMEs and large enterprises) were made for the Entrepreneur Loan (81,000), the KfW Quick Loan (32,700) and the ERP Start-up Loan (7,700). In relation to the total number of currently approx. 3.467 million enterprises (of which 99.4% are SMEs), this means that Emergency Aid has by far achieved the greatest take-up (approx. 50%), followed by November- and Dezember aid with approx. 10% up to now.

However, it must be taken into account that not all enterprises are equally affected by the pandemic and thus do not need the same amount of support. Due to the Covid-19 pandemic, a split in the economy has emerged (cf. Welter/Wolter 2021b): One part of the economy is only slightly or not at all affected by the pandemic or even benefits from it (e.g. the construction industry, larger areas of

the manufacturing sector, ICT service providers). The other part – in particular large parts of the stationary retail trade, the hotel and restaurant sector and personal services – is severely affected and requires financial support due to the anti-pandemic measures. The required scope of Covid-19 aid is therefore significantly smaller than the total number of businesses in Germany. Over a longer period of time, particularly affected companies also combine several different measures or use follow-up programmes of the same support approach (e.g. Emergency Aid and Bridging Money I to III). On the other hand, another group of enterprises deliberately does without public financial aid (cf. BDI 2020), either because they wish to remain independent, fear the bureaucratic burden or because they are relatively unaffected.

The effectiveness of the Covid-19 aid measures is assessed above all by the declared goal of enabling fundamentally competitive businesses to survive the pandemic. Suppose one takes the number of (commercial) business closures in 2020 as a rough measure of effectiveness. In that case, there are some indications that the Covid-19 aid – in combination with other actions taken by the companies – has been effective: Surprisingly, the number of business liquidations has fallen substantially (-18.9%) and stronger than in previous years (cf. Kay/Kranzusch 2021). This also applies to many sectors that are particularly affected by the anti-pandemic measures, e.g. the hotel and restaurant sector, retail trade (excluding motor vehicles) and the "arts, entertainment and recreation" sector (cf. IfM Bonn 2021).

The sharp drop in the number of business liquidations is probably also partly due to the fact that a larger proportion of the solo self-employed with low fixed cost burdens continue to operate despite a significant drop in turnover. This may have different reasons, such as a lack of alternative sources of income or the expectation that business activities can be successfully resumed after the end of the crisis. More generally, the survival of enterprises is probably not exclusively (and sometimes not primarily) attributable to the public Covid-19 aid. Many enterprises have taken further measures on their own initiative to secure their existence, such as using financial (equity) reserves and postponing or suspending investments in innovation and R&D activities, fixed assets and

DIHK 2021).

<sup>&</sup>lt;sup>1</sup> Non-representative company surveys (with under-reporting of the more severely affected micro-enterprises) put the proportion of enterprises without negative effects on their current financial situation at approx. 50 % both in autumn 2020 and at the beginning of 2021 (cf.

internationalisation activities (cf. DIHK 2021, BDI 2020, KfW 2020). However, these measures reduce the future competitiveness, innovation and growth capacity of companies.

The grants that have been given to Mittelstand businesses are mostly based on the fixed costs incurred. This is in line with the primary objective of the aid, which is to ensure the continued existence of economically viable enterprises. Other points of departure, such as the previous year's turnover or profit, are problematic. In this way, those enterprises would receive higher grants that have higher reserves due to their good results in the recent past and would therefore survive the crisis in many cases even without additional aid. Overall, this would lead to higher deadweight effects. Furthermore, if aid were linked to the turnover or profit of the previous year, fluctuations that are a normal part of entrepreneurial activity<sup>2</sup> would have a considerable influence on the level of aid. This cannot be desirable.

The conditions of Covid-19 aid measures are generally designed in such a way that they ensure the effectiveness and accuracy of targeting and minimise (with some exceptions) deadweight effects. Nevertheless, deadweight effects are difficult to avoid altogether. However, under today's unique circumstances, they should not per se be seen as negative. In the case of the supplementary grants, deadweight losses have occurred insofar as they have also been provided to enterprises which, although negatively affected, would economically survive the crisis even without these funds. In view of the particular challenges faced by Mittelstand enterprises in the wake of the Covid-19 pandemic, this is appropriate and justifiable. This is all the more true as the attempt to avoid deadweight effects would have required complicated and bureaucratic regulations for all companies. Nevertheless, what must be avoided, is the permanent support of existing businesses whose prospects on the market are questionable. However, in the middle of the crisis it is difficult to identify these companies in advance and to distinguish them from those that have a good chance of surviving on the market.

The assessment of the effectiveness of the measures taken or of the economic policy in the Covid-19 pandemic depends not only on the amount of funds disbursed. Other essential factors are the associated application procedures, the

For example, a large acquired order may have led to above-average sales, or a large investment that will only lead to corresponding returns in later years may have a negative impact on profits in the short term.

communication policy and, in general, the "expectation management" and the reliability of the aid announced. If financial aid is announced but not or only partly disbursed over a longer period of time, this causes discontent among enterprises that are struggling for their financial survival. This undermines confidence in economic policy and can have lasting adverse effects on economic sentiment and expectations.

Scientific analyses that examine the effects of the measures have so far been very sporadic. For example, the Emergency Aid, which was launched as a oneoff grant payment in spring 2020, was evaluated. However, this was done on the basis of the respondents' personal assessment of the extent to which they would be able to maintain their self-employment over the next twelve months (cf. Block et al. 2021; Stiel et al. 2021).<sup>3</sup> Emergency Aid increased the subjective probability of survival of those respondents who received it by 4.4 percentage points. This is very low effectiveness compared to traditional start-up grant schemes. In the opinion of Block et al. (2021), one should take into account that this was a one-off payment. A differentiated analysis shows that the Emergency Aid managed to considerably alleviate the respondents' impairments in those sectors severely restricted by anti-pandemic measures: Here, respondents rate the probability of still being self-employed in twelve months as 12.5 percentage points higher than respondents in less affected sectors. A short processing time also played a role for the expected probability of remaining self-employed (cf. Stiel et al. 2021, p. 5).

For a detailed assessment of the effectiveness of Covid-19 aid and the identification of possibilities for improvement, such scientific evaluation studies are necessary. These require more time, which is why they can often provide useful information only with a delay. Possible supplementary measures could be representative user surveys that analyse satisfaction with the measures and procedures – in principle comparable to the regular surveys in the United Kingdom in the context of bureaucracy evaluation. The German dashboard of the Federal Statistical Office could also be expanded further to provide up-to-date overview statistics on the entirety of approved Covid-19 aid. After termination and with a valid database, it would also make sense to carry out a detailed evaluation of

This analysis is based on the survey of self-employed and micro-enterprises with up to nine employees, which was conducted by the Research Centre for Mittelstand businesses at the University of Trier and ZEW together with the VGSD in spring 2020. For the research procedure see the explanations in Block et al. (2021) and Stiel et al. (2021).

the various packages of support measures. Although this may be too late to deal with the current crisis, it would provide valuable insights and experience for future crises.

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#### 3 Mittelstand policy as crisis management policy

### 3.1 Entrepreneurial risk

In general, the risks associated with any entrepreneurial activity do not require any offsetting state intervention. In the pandemic, however, the entrepreneurial risk presents itself differently. For example, accelerating infection dynamics can cause a high level of sick leave among the workforce, which in turn would lead to a slump in production or the provision of services. If the company is then no longer able to meet the demand promptly or to a sufficient extent, this may lead to a serious drop in turnover. In principle, this can still be regarded as a business risk. However, due to the pandemic, it is more severe than in "normal" economic times and can increase with each new infection wave, so that in the long term, enterprises that were in a good economic position at the beginning can end up on the brink of insolvency or going out of business.

Nevertheless, anti-pandemic measures to contain infection dynamics mitigate the entrepreneurial risk. On the other hand, anti-pandemic measures can also increase the entrepreneurial risk, possibly to the point of threatening the company's existence. One example is the comprehensive closure of borders carried out for the first time in spring 2020. This particularly affected Mittelstand businesses with strong international ties, which were unable to switch to regional suppliers or sales markets at short notice. Besides, this also negatively affected the self-employed working in border regions. In response to this, many Mittelstand enterprises have adopted strategies to reduce risks in the event of renewed border closures (cf. Bunde 2021): they have critically examined and diversified their international integration, and some now increasingly rely on regional supply networks and sales markets. For self-employed cross-border commuters in so-called system-relevant sectors, the European Commission's guidelines on the free movement of labour during the pandemic, adopted at the end of March 2020, are taking effect (cf. European Commission 2020). Although the restrictions on border crossings from the Czech Republic in February 2021 caused some resentment among the companies due to the very short notice, there was no lasting impairment of their economic activity.

The question arises to what extent a policy of crisis management also includes compensation for the pandemically increased entrepreneurial risk. The example mentioned above illustrates that enterprises can usually help themselves by implementing appropriate strategic measures (see also Welter/Schlepphorst 2020; Zimmermann 2020). Only when fundamentally "healthy" businesses cannot "get back on their feet" on their own, despite their own efforts, and when the diversity of the Mittelstand and its economic and societal contributions are jeopardised, can selective and time-limited interventions be appropriate. Nevertheless, the clear identification of the target group and the extent to which they are affected remains problematic. This is especially true since company-specific or size-related measures to reduce the pandemically increased entrepreneurial risk could distort the market and force unsupported businesses out of the market.

Thus, in principle, a regulatory approach (Ordnungspolitik) is preferable to such selective interventions. For example, one can assume that the temporary tax relief measures for enterprises (tax deferral, chargeback of special advance payments, reduction of advance payments, loss carry-back) contribute considerably to securing companies' liquidity. Also, the time-limited suspension of rules concerning the filing for insolvency is to be welcomed. Although the state intervenes in normal market activities, this is done to a reasonable extent (cf. Kay/Kranzusch 2021). Accordingly, this measure is likely to have supported enterprises that have temporarily and through no fault of their own reached the brink of insolvency due to the pandemic.

Finally, the measures of temporary bureaucracy reduction should be mentioned (cf. Nationaler Normenkontrollrat 2020). For example, because of the enacted contact restrictions, exemptions were made possible from regulations that required supervisory bodies and works councils to meet in person. Such and similar measures, e.g. the temporary suspension of reporting obligations, allow entrepreneurs to focus their capacities on guiding their businesses through the pandemic as best they can. Our research, however, indicates that temporary bureaucracy reductions for Mittelstand enterprises have not played a central role in the pandemic so far.<sup>4</sup> It is therefore advisable to re-examine which additional deadlines can be suspended or thresholds lowered.

<sup>&</sup>lt;sup>4</sup> The BMWi's Annual Economic Report 2021 and the website of the Federal Ministry of Finance also do not report any bureaucracy-related special regulations due to the Covid-19 pandemic, with the exception of partially simplified procedures for the examination and

#### 3.2 The existential threat to businesses and industries

The forced business closure represents the maximum possible damage to an individual company. For many Mittelstand entrepreneurs, the existential threat to their business goes beyond the purely economic damage: they fear that their life's work is at risk. They often see themselves as having a societal responsibility, e.g. towards their employees. As a result, they are also emotionally and psychologically burdened (cf. Welter/Wolter 2021b). In general, this holds independent of the current pandemic situation.

However, the current pandemic situation can significantly increase the likelihood of direct and indirect existential threats. This can affect individual enterprises, but also entire sectors and ultimately also the diversity of the Mittelstand. From the point of view of an individual enterprise, the probability of such a threat is all the higher, the worse its economic situation already was at the beginning of the pandemic. In addition, the probability of the risk increases during the pandemic if the business does not or cannot take countermeasures against the existential threat. The anti-pandemic measures that restrict or even prohibit entrepreneurial activity turn the already pandemically increased entrepreneurial risk into an existential threat. This does not only affect individual businesses but indirectly also other sectors of the Mittelstand.

Reducing the probability of the manifestation of such an existential threat is one of the main tasks of the Mittelstand policy in terms of acute crisis management. Entrepreneurs themselves will usually not be able to prevent the threat to their existence. Only for a short time may this be possible for economically well-positioned enterprises. For example, at the beginning of the pandemic, the equity capitalisation of Mittelstand enterprises was good: companies were able to draw on their reserves (cf. Welter et al. 2020a). However, this has consequences in the long term because these resources are no longer available for necessary investments in the future. With its measures for crisis management, Mittelstand policy therefore also secures the future of the Mittelstand economy. Nevertheless, Mittelstand policy is able only to reduce the existential threats but not to eliminate them entirely. A residual risk will remain.

Against this background, the aid programmes launched by the federal government have by and large served their purpose. The primary focus on

provision of financial aid. Similarly, an internet search (e.g. at the business associations) did not yield any further indications.

strengthening liquidity and corporate resources seems appropriate. As explained in chapter 3.1, it cannot be the purpose of the aid programmes to set the entrepreneurial risk to zero. Complete compensation of the pandemic- and measure-induced damages would not be appropriate. Therefore, the focus was rightly placed on the simplified provision of loans and liquidity-saving aid, e.g. in the area of taxation. However, the longer the crisis lasts, the greater the danger that fundamentally healthy businesses will also "fall ill". Mittelstand enterprises, e.g. in the areas of gastronomy, tourism or seasonal retail, which cannot hope for any demand catch-up effects (cf. Welter et al. 2020b), are little helped by loans. Here, policymakers could consider a partial conversion of loans into grants. On the other hand, a blanket replacement of loans programmes with grants seems inappropriate.

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#### 3.3 Inequalities

In general, Mittelstand policy starts where the enterprise size (smallness) poses specific risks. Here, regulatory principles (Ordnungspolitik) must be taken into account (cf. Welter et al. 2016). Furthermore, in the current pandemic situation, certain anti-pandemic measures can affect the Mittelstand in a special way (cf. Welter/Wolter 2021b). In principle, the ongoing anti-pandemic policy places a particular burden on some types of businesses (enterprise sizes, sectors) so that the general public is burdened as little as possible. This makes macroeconomic sense because the benefits for the general public will probably (significantly) outweigh the losses of the particularly burdened.

Empirical analyses for the USA indicate that anti-pandemic measures have had little impact on the economy as a whole, while individual behavioural changes have had a strong effect. One example is that purchases were no longer made in stationary retail outlets for fear of infection but were rather made online (cf. Goolsbee/Syverson 2021).<sup>5</sup> The authors of this study also showed a shift in demand from large to smaller enterprises.

Thus, the trade sector shows both crisis winners and losers. This applies irrespective of the enterprise size: stationary trade with non-food products has been

The authors examined consumer behaviour in more than 2.25 million enterprises and 110 different sectors using visitors' mobile phone data. According to the results, the number of visitors fell by 60 percentage points. Only 7 percentage points could be attributed to state or municipal shutdown regulations. The study was updated in February 2021 with comparable results for the moderate influence of political lockdowns on economic impact (cf. https://bfi.uchicago.edu/insight/research-update-drivers-of-economic-decline).

severely affected for the most part, while online shopping (usually large corporations) has been able to expand its market share. Here, the pandemic is reinforcing a long-standing structural trend. However, in some retail companies, the pandemic has also ensured that the already necessary digitalisation of sales channels has been taken up more quickly. In food retailing, both large and small enterprises tend to have benefited from the pandemic.

The enterprises are also affected differently depending on their size. Thus, a disproportionately large number of solo self-employed persons can be found in the economic sectors particularly affected by the anti-pandemic measures: In 2019, this was the case for just over half of all self-employed persons. In the "other services" sector, which includes hairdressing and beauty salons, this was the case for two out of three self-employed. In "arts, entertainment and recreation", solo self-employment was even by far the predominant form with 87 %. However, one should also note that in the strongly negatively affected hospitality sector, solo self-employment is the exception with a share of only 23 %.

In the sense of a crisis management policy, the Mittelstand policy should only intervene very selectively in this regard. The programmes offered and their continuous adjustments (e.g. hardship funds) are already designed to mitigate inequalities such as the downstream existential threats to companies and sectors. What is needed here is the role of the Mittelstand policy in shaping the way out of the crisis, which we will discuss in the next chapter.

### 4 Mittelstand policy as a way out of the crisis and into the future

## 4.1 From crisis management to future-oriented Mittelstand policy

Crisis management – as described in the previous chapter – is likely to dominate Mittelstand policy for some more time. The extent of the pandemic crisis justifies the concentration on sectoral and size-related measures – also taking into account the "free-rider problems" or deadweight effects that always accompany them. However, these measures should always be understood as temporary interventions. The exit from the present aid programmes should not be abrupt but gradual. A future-oriented Mittelstand policy, as briefly outlined in the Economic Stimulus And Future Package of summer 2020, facilitates the exit. Abrupt termination of the present aid programmes would already be questionable because it would require a concrete end to the pandemic situation. But this is unrealistic. With increasing immunisation of the population and widespread testing, the harsh anti-pandemic measures can be successively withdrawn so that ever-

larger parts of the Mittelstand economy can reopen – completely. However, those sectors, where demand cannot make up for earlier slumps or only to a limited extent (e.g. culture, tourism, the hospitality industry), may be dependent on aid for a longer period of time to overcome the crisis.

One may, therefore, recommend once again to design the present crisis management measures and those that may be introduced in the future on a degressive basis. The simplified application for aid should also not be abruptly terminated but phased out in small steps (cf. Welter/Wolter/Holz 2020).

Nevertheless, even during the current crisis, Mittelstand policy need not only ensure the survival of the Mittelstand economy but also focus on its future viability. After all, it is a matter of safeguarding the long-term economic and societal contribution of the Mittelstand. The current crisis management policy runs the risk of cementing an outdated image of the Mittelstand: the image of an economic sector in need of help, which cannot make it on its own and must therefore be assisted, but which also plays a negligible role in the overall economic recovery – with the exception of its industrial enterprises. This was already evident in the spring of 2020 during the first lockdown. At that time, it was discussed to make the priority opening of economic sectors dependent upon their level of value-added, as primarily found in the manufacturing sector (cf. Abele-Brehm et al. 2020). This was repeated at the beginning of 2021, when it was suggested that renewed closures would have to take into account the corresponding losses in value-added as well as the integration into global supply chains (cf. Baumann et al. 2021, p. 27). The implicit assumption was, though never explicitly mentioned: Industry is vital for Germany's future development and must be preserved. Services, trade, gastronomy and tourism, micro-enterprises and the self-employed contribute little to value creation and can therefore be neglected.

However, such an assumption is not supportable: for one thing, the share of gross value added of the manufacturing sector in 2020 was 19.7 %<sup>6</sup>, which also includes numerous craft enterprises. And even among the industrial companies, the vast majority are Mittelstand.

Above all, however, such an approach negates the fact that the societal contribution of the Mittelstand consists of more than its economic value creation (cf. Welter/Schlepphorst 2020). This includes its role in societal cohesion not only in

<sup>6</sup> If utilities and others are added, this share rises to roughly 23 %.

times of crisis but also, for example, in stabilising democratic structures (cf. Bousbah/Kübler 2016). Values such as commitment and reliability, which the Mittelstand conveys in a credible manner, can reduce the uncertainty of all market participants and weaken negative expectations. Finally, the responsibility of the Mittelstand for its own employees and the region in which the company is located should also be mentioned. This plays a major role, especially in the revival of the economy. Start-ups, which are important for economic recovery, are more likely to take place in regions that traditionally have a large number of small businesses, while this is much less the case in regions that have historically been characterised by large-scale industry (cf. Fritsch/Wyrwich 2017). These diverse societal contributions of the Mittelstand are overlooked if one looks only at the economic value-added and the economic sectors with the largest shares thereof.

# 4.2 Strengthening competitiveness and innovation capacities and managing structural change

The (global) economy does not stand still during the Covid-19 pandemic but may develop in completely new directions as a result of changes in consumer preferences and behaviour. Therefore, the market opportunities and competitiveness of companies will be based in part on different or newly prioritised factors after the pandemic. Thus, Mittelstand policy finds itself in a trade-off between safeguarding enterprises' survival and being open to structural change (cf. Holz 2020). While crisis management policy is geared towards safeguarding the companies' existence and mitigating the direct negative effects of the pandemic, future-oriented Mittelstand policy should enable Mittelstand enterprises of all sizes and from all sectors to once again bear the entrepreneurial risk themselves and to shape their own corporate development. It lays the foundation for the future strategic orientation and development of the Mittelstand.

On the way out of the crisis, the strengthening of competitiveness and innovation capacities, as well as the management of structural change, are of particular importance for the Mittelstand. The enterprises should be able to start or continue a sustainable corporate development based on renewal. Those economic sectors where the pandemic has accelerated structural change (e.g. trade) should be enabled to manage it (better). In this way, the Mittelstand economy can be strengthened even more to overcome potential future crises.

The Economic Stimulus And Future Package launched in summer 2020 is already partly geared towards sustainable economic development based on

modernisation. A number of the measures fundamentally support the competitiveness and revitalisation of the Mittelstand and, indirectly, the structural change in affected sectors.

- The expanded depreciation options for digital economic goods and the possibilities for supporting Mittelstand companies in their digital transformation facilitate the continuation of the crisis-induced digitalisation drive in Mittelstand companies.
- The "Social Guarantee 2021" which prevents social security contributions to rise above 40% strengthens the international competitiveness of Mittelstand businesses. Here policymakers should consider extending this guarantee beyond 2021. This would be important because one can expect that both the public health insurance and the old-age pension insurance will face considerable additional burdens as a result of the Covid-19 pandemic. Thus, without a prolonged social guarantee, an increase in contribution rates is to be expected.
- The tax regulations regarding degressive depreciation and the extension of the loss carry-back (see chapter 4.3) protect the liquidity of companies and provide incentives for investments, which are becoming more important on the way out of the crisis. In a such way, investments that have been postponed can be resumed more quickly.

Important for the revival of the Mittelstand economy are the financial reserves and the equity base of the enterprises. At present, one cannot conclusively assess the extent to which the equity ratios of the Mittelstand – which were quite good at the beginning of the crisis – have diminished during the pandemic. Survey results at least suggest that the current pandemic could end the upward trend in Mittelstand equity ratios (cf. Gerstenberger 2020). There are also isolated indications that the self-employed are drawing on their old-age provision. Should the meltdown of equity capital in the Mittelstand continue, additional – possibly temporary – equity capital assistance could provide a remedy and support the Mittelstand in building up equity capital again.

Strengthening or reviving the innovation capacities of the Mittelstand economy also plays an important role on the way out of the crisis. Incentives to stimulate innovation activity are offered by the increase in the funding limit of the R&D tax allowance from two to four million euros, which was enacted retroactively from July 2020 to June 2026 in the Second Corona Tax Assistance Act. This primarily addresses those enterprises that already conduct R&D. These are mainly the

larger Mittelstand companies. Consequently, in its latest annual report, the Expert Commission on Research and Innovation criticises the lack of consideration given to SMEs (EFI - Expertenkommission Forschung und Innovation 2021, p. 23).<sup>7</sup>

In addition, a large part of innovation activity in Mittelstand takes place outside of R&D (cf. Brink et al. 2018; Maaß/May-Strobl 2016). If innovation activity drops sharply for a longer time, the future development and competitiveness of Mittelstand companies are at great risk. Indeed, the uncertainties during the pandemic are likely to lead to a decline in long-term innovation spending in Mittelstand enterprises. According to the Mannheim Innovation Panel, SMEs were already assuming significantly declining innovation expenditure in spring 2020 (2020: minus 9% and 2021: minus 5%), while large enterprises expected stable innovation budgets for 2020 and even a slight increase for 2021 (cf. Rammer et al. 2021). Enterprises whose innovation activity is impaired cite above all financing constraints as a reason for this (79 % of manufacturing, 64 % ICT, cf. ZEW 2021a).

On the other hand, the crisis also acts as a catalyst for innovations such as process or business model innovations. At present, it is not foreseeable whether these pandemic-driven innovations may serve only as temporary crisis emergency solutions or whether they form a sustainable basis for the companies' future development.

This leads to the question of which further measures might be adequate to stimulate innovation dynamics in the Mittelstand. The Future Package places one focus on forward-looking technologies such as climate technologies and artificial intelligence, and in this context also offers support to Mittelstand companies for their use. However, it is equally important that Mittelstand enterprises can already participate in the development and marketing of future technologies. These can form the basis for new start-ups as well as for the necessary strategic reorientation of existing businesses in the aftermath of the pandemic.

The R&D tax allowance provides taxable companies a 25% subsidy on internal R&D personnel costs, regardless of company size, of which a maximum of two million euros per year (or four million euros by 2026) may be claimed. Only about 10 % of the companies with R&D personnel costs recorded in the Stifterverband's R&D survey exceed the original assessment basis of two million euros. Of these, approx. 8 % (1,120) are enterprises with more than 250 employees and only 2 % (360) belong to the group of SMEs (cf. the assessment in Bertschek et al. 2020).

At the same time, the Mittelstand is dependent on skilled employees. Already now, the lack of knowledge-intensive skilled personnel is an obstacle to innovation (cf. Hoffmann et al. 2020). This situation is likely to worsen in the medium term. Since large enterprises are generally more attractive employers, the Mittelstand may permanently have greater difficulties recruiting new skilled employees. The vocational and continuous training of staff members, which positively affects the innovation activities of the Mittelstand (cf. Brink et al. 2018), also suffers during the pandemic. Here, it would be necessary to examine the extent to which further stimulus measures or even a continuation or expansion of the newly introduced training subsidies are required for the way out of the crisis.

However, it is also essential to keep an eye on start-up dynamics and adjust Mittelstand policy, if necessary. Start-ups certainly benefit from many measures in the Future Package to revitalise the Mittelstand economy. Moreover, start-up activities have not (yet) collapsed as dramatically as initially feared. Therefore, one can expect them to revive quickly (cf. Kay/Kranzusch 2021). The new Future Fund, launched with the adoption of the 2021 federal budget, offers support opportunities, particularly for innovative and growth-oriented start-ups. It remains to be seen whether further explicit support for start-ups, such as a start-up grant for smaller ventures, will be necessary.

In this context, the support of enterprises that are already struggling should also be critically reviewed. The longer the pandemic lasts, the more problematic this becomes. Economic policy runs the risk of allocating vast sums of money to enterprises that, in the long run, will disappear from the market. Besides, there is a danger that competition will be distorted to the detriment of otherwise viable start-ups with fresh ideas. For this reason, if it becomes apparent that existing enterprises no longer have sufficient prospects on the market, the discontinuation of further aid should be considered. This should be done even at the risk of losing aid that has already been provided.

Finally, it should be considered to what extent the structural change in the Mittelstand economy can - and should - be further supported by Mittelstand policy. In the current Future Package, this aspect is still neglected (cf. Welter/Wolter 2020, p. 7) or is limited to selected sectors. For example, a bonus programme "Investments in the Future of the Vehicle Manufacturing and Supplier Industry" has been launched, which supports regional innovation clusters, among other things (cf. BMWi 2020a). Such a programme can also actively support structural change in the Mittelstand supplier industry. However, in the present case, it is

only aimed at enterprises that participate in supply chains for the production of land-based vehicles. In principle, the programme is intended for businesses of all sizes. Nevertheless, due to the focus on new, modern production processes and their application, the programme tends to address mainly larger enterprises. Small companies could benefit from the possible direct promotion of regional clusters - but only if these clusters are located in regions with primarily small supplier businesses. This is not very likely, since the main goal of this programme is to secure the future viability of the vehicle industry. It would be welcome if in future comparable programmes also take the concerns of the many small enterprises into account.

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#### 4.3 Adjustment of the framework conditions

A future-oriented Mittelstand policy should focus on a regulatory policy approach (Ordnungspolitik). Favourable framework conditions to the Mittelstand indirectly support the gradual exit from aid measures and facilitate the new start or restart for enterprises. For example, relieving businesses of bureaucratic burdens could allow them to channel the otherwise required resources into a strategic reorientation.

To this end, it should first be examined which of the temporarily introduced bureaucracy exemptions should be continued over a longer period of time or even made permanent because, for example, the underlying obligations are permanently dispensable. Besides, the National Regulatory Control Council (Normenkontrollrat) recommends a moratorium on additional burdens on businesses in its annual report for 2020. Until the end of 2021, legal regulations should not introduce new information obligations for companies. Any additional compliance burden should require a specific justification if the regulation is to become effective in 2021. It is precisely these information obligations that are perceived as very burdensome by Mittelstand enterprises (cf. Holz et al. 2019). Therefore, the proposal should definitely be implemented.

Of the relief measures for the economy mentioned in the Economic Stimulus and Future Package, the tax regulations on loss carry-back are particularly relevant. This was increased to a maximum of 5 million euros in the Second Corona Tax Relief Act and can be offset against the company profit of the previous year (in this case, 2019). The Third Corona Tax Assistance Act raised this maximum amount to 10 million euros. This possibility applies to income and corporate tax. Such measures are to be welcomed. They protect the liquidity of enterprises in the short term while at the same time hardly burden public finances in

the medium to long term. However, those companies whose taxable profit in 2019 was low due to high investment activity may only benefit to a small extent from the increased loss carry-back. This could be remedied by extending the carry-forward period to several years. Hence, we support the proposal of the German Council of Economic Advisers, which suggests, among other things, a temporal extension of the tax loss carry-back (cf. SVR 2020).

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However, it is also important to have framework conditions that enable insolvent companies and self-employed persons to restart quickly. Self-administered protective shield proceedings, which support a forward-looking restructuring of companies, were already introduced in 2012. Yet, they account for only a negligible share of insolvency proceedings and tend to be used more by entrepreneurs with a company size of 50 employees or more. The restructuring procedure, newly introduced in 2021, offers another option in the phase of impending insolvency and thus for the longer-term way out of the crisis: from now on, it is not required anymore that all creditors agree on the proposed solution. Nevertheless, the procedure is more suitable for larger (Mittelstand) enterprises with a high level of debt capital borrowing.

For the smaller Mittelstand and especially for the self-employed, the law on shortening the residual debt discharge facilitates a possible new start. It should be examined to what extent the residual debt discharge, which was recently shortened to three years, can be further reduced to enable an even faster restart. Experience has shown that entries with credit bureaus such as SCHUFA considerably hinder a new start. This is an important signal for those micro-enterprises and self-employed who are likely to become insolvent in the crisis<sup>8</sup> but who could in principle consider a new start.

Dörr et al. (2021) assume that an insolvency gap has developed in particular among microenterprises, many of which already had poor credit ratings before the crisis. Across all company sizes, ZEW (2021b) estimates this gap at around 25,000 enterprises.

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