

The temporary reduction in VAT under the Second Corona Tax Assistance Act: Unnecessary administrative burden or real relief?

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Abstract

The economic consequences of the Covid19 pandemic are increasingly hitting the economic system of the Federal Republic of Germany with full force. As of June 2020, the annual average gross domestic product recorded a significant decline and an increase in the unemployment rate.

In this article we examine the current research concerning the question of the temporary reduction in VAT because of the COVID19 pandemic. We aim to answer the question if this temporary reduction is an unnecessary burden or rather a real relief for involved companies. By the method of qualitative evaluation of relevant research and by the analysis of surveys on the topic, we show that the significant burdens on businesses as a result of the temporary reduction in VAT rates under the Second Corona Tax Assistance Act are absolutely contrary to the objective of creating a countercyclical catalyst to stimulate consumption and thus to positively influence the economy.

Keywords: Second Corona Tax Assistance Act, VAT

JEL codes: K34, G59

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1. Introduction

The economic consequences of the Covid19 pandemic are increasingly hitting the economic system of the Federal Republic of Germany with full force. As of June 2020, the annual average gross domestic product recorded a significant decline and an increase in the unemployment rate.² In comparison, this is an almost incomparable economic slump, which is only sought in the Great Depression of 1929. The causes of this crisis must be identified globally, as they are based on a negative shock on the supply and aggregate demand sides at the same time and, with marginal exceptions, affect all sectors and sectors, as well as lead to a short- and medium-term weakening of both export and domestic demand. In response and countermeasure, the Federal Government has put together a comprehensive stimulus package. The Second Corona Tax Assistance Act, passed by the legislator of the Federal Republic of Germany, is intended to counteract the economic shock resulting from a medical crisis of the Covid-19 pandemic. The law includes 57 individual measures with an aid and discharge volume for the financial years 2020 and 2021 of around EUR 130 billion. The aim of this stimulus package is to counteract a permanent recession. In addition to numerous direct financial assistance measures, the Second Corona Tax Assistance Act also includes the indirect measure,³ which is at the heart of the package of measures, in the form of a temporary reduction in the regular and reduced VAT rate. A measure that must currently look for its same in the European Union at this time. For the provisionally planned period from 1 July 2020 to 31 December 2020 (i.e. 6 months), the standard tax rate will be reduced from 19% to 16% and the reduced tax rate from 7% to 5%. The government's intention in this measure is to increase or maintain consumption and thus purchasing power in society.⁴ In principle, the choice of this instrument is to be welcomed, as it can thus have a broad impact that benefits every consumer equally, contrary to the temporarily discussed value and consumer vouchers, which only support selected industries and generate a higher administrative burden.

Lower-income consumers are to be disproportionately relieved, as they (must) use a large part of their disposable income for basic consumption purposes. The temporary limitation is intended, among other things, to temporarily relocate planned investments in consumer goods and major purchases in the future and to move them forward in the above-mentioned period. A consequential additional consumer incentive is the purchase premiums introduced in the context of climate protection for low-emission or zero new vehicles, which are intended to bring forward the planned consumption for the next 15 years. The combination of the two subsidies, for example, is intended to create a greater buying impulse. Incentive to save the final consumer 3% (19% to 16%) or 2% (7% to 5%) at the final price in order to stimulate consumption and thus aggregate demand in the short term. But low-income earners in particular may feel overlooked, as they often have no money for large purchases such as new cars or furniture, where they would save a lot

² See the economic situation in Germany in June 2020, press release on the economic Development from 15.06.2020, Federal Ministry of Economics and Energy.

³ See z.broad law on the implementation of fiscal assistance measures to cope with the Corona Crisis (Second Corona Tax Assistance Act) of 30.06.2020, Federal Ministry of Finance, matter 19/20058 ; Bach / Michelsen (2020), p. 1; Feldgen (2020).

⁴ See The Second Law on the Implementation of Fiscal Assistance measures to address the Corona Crisis (Second Corona Tax Assistance Act) of 30.06.2020, Federal Ministry of Finance, Art. 3 No. 3, Printed matter 19/20058.

as part of the tax rate reduction. Based on this, the concept of the "Porsche discount" has already entered the discussion.⁵

2. Current empirical status

Another key question is how robust the measure of a VAT reduction is in the face of an increasing infection situation. If new lock-down measures were to close shops and restaurants again, it would not benefit and exclude those companies that made large investments in hygiene concepts and measures during the pandemic. For some time now, empirical economic research and related studies, both at national and international level, have been dealing with the phenomenon of the ever-increasing complexity of the system of taxation of turnover/acquisitions. The same applies to the simplification or harmonization of systems and the highlighting or reduction of the associated bureaucratic⁶ and administrative costs.⁷ Thus, the central research aspect is also at this point, which cost-benefit ratio arises from the temporary reduction in the tax rate. At this point, costs in the form of administrative costs for the companies concerned are meant, as well as benefits for the tax-relieved end users and thus intended to increase liquidity for consumption. This issue is of interest, on the one hand, for the evaluation of such measures and, on the other, for better acceptance in practice.

2.1. Cost estimates

In an initial official estimate, the Federal Statistical Office puts the costs for companies at around EUR 238.7 million, resulting in an estimated cost per company of EUR 72.33. This effort is defined as the so-called "fulfillment expense of the economy".^{8 9} Already at this point in the survey it becomes apparent that the expenditure per enterprise with the average hourly rates of service providers is hardly feasible. Accordingly, it is ¹⁰already questionable whether the above-mentioned average expenditure per company is to be considered realistic due to the increased implementation effort already signalled from the business.¹¹

In the following, the administrative and implementation costs resulting from the temporary reduction in VAT rates from the point of view of the companies concerned will be analysed and forecasted. A valuable consideration is made exclusively from a practical consultant's point of view and technical observations, as well as with reference to the results of analyses and interviews. The first assessments and observations have already

⁵ See quote Dietmar Bartsch MdB, Party Die Linke.

⁶ See Wagner (2005); Niemann (2008), Knirsch et al. (2008); Eichfelder et al. (2010); Hoppe et al. (2019).

⁷ See Eichfelder (2011); Blaufus / Eichfelder / Hundsdörfer (2014); Eichfelder / Vaillancourt (2014); Blaufus / Hechtner / Jarzembki (2019); Blaufus / Hoffmann (2019).

⁸ See Federal Statistical Office (2020a), p. 5.

⁹ Official concept of red tape costs as defined by the National Standards Control Board, Federal Statistical Office (2020a).

¹⁰ This refers to service providers in the field of tax consulting, software and posor system service providers.

¹¹ See Eichfelder / Knaisch (2020), p. 3 et se.; Neufang / Schäfer (2020), p. 1440 ff.

been made on the basis of two expert reports commissioned by an opposition Bundestag group.¹²

The contribution also includes data on the relative expenditure of the companies concerned, as well as results of own validation calculations in order to check the estimates collected. These are compared with the previous values of the Federal Statistical Office in order to show to what extent and why they differ, respectively which errors may exist in the quantitative recording.

2.2. Topic related research

In the course of two consecutive surveys, Eichfelder and Knaisch interviewed 33 professionals in the areas of corporate management, accounting and tax consulting. The first ex-ante cost estimate includes the survey of 12 participants by means of open interviews. The respondents were asked to give an assessment of the burdens placed on enterprises and the associated expenses. In the second survey, the estimates of the first survey of 28 professionals were evaluated in the context of an ex-post estimate, with 7 respondents having already participated in the first survey.^{13 14}

Their results on the basis of the Standard Cost Model (SKM) have been included and extended in the study of this work. From our own practical experience, the central aspects of the actions to be carried out by the companies as well as the associated costs are presented. In contrast to the current estimates of the Federal Statistical Office, the burdens on the surveyed companies are determined in the following on the basis of the own observations, surveys and analyses and possibly previously not taken into account burdens. This includes not only the direct costs of the technical changeover, but above all additional burdens associated with the changeover. Examples include training and training costs, increased correction and control costs, as well as additional consulting costs. The expenses incurred are incurred in the form of both time and financial expenses. In other terms, the term "burdens" covers both expense items. It is not yet possible to quantify impending and unforeseeable charges in the course of audits by the financial authorities by means of cash inspections or audits and the associated increased risk of a distortion of cash accounts, as well as resulting tax estimates at the expense of companies.

The following section shows the survey methodology of 50 selected companies. Charges are determined from the point of view of the companies surveyed, as well as from a tax-frying point of view. Based on this, a quantitative estimate of the burdens is also made. Also an assessment of the estimates made by means of SKM, as well as a comparison with the procedure of the Federal Statistical Office. The results of the surveys are summarized and a summary is drawn up. Finally, a demolition is carried out with regard to possible or alternative measures, which could lead to a reduction in the expected loads.

¹² See Eichfelder (2020a); Eichfelder / Knaisch (2020), Eichfelder (2020b).

¹³ See Eichfelder (2020), p. 3 f.

¹⁴ See Eichfelder / Knaisch (2020) p. 3 f.

3. Methods

3.1 Company questionnaire

From June 2020 and the following third quarter of 2020, 50 companies were interviewed and analysed on the current reduction in VAT in order to identify the burdens and difficulties arising from the temporary reduction in VAT rates. The survey of companies is carried out in a standardized procedure by means of a questionnaire in a personal interview or in digital form. As part of this contribution, 50 companies affected by the VAT rate reduction were interviewed on their own register of mandates. These are all subject to so-called standard taxation under VAT law. These were enterprises in the retail trade sectors for end-users/consumer goods, wholesale B2B, manufacturing B2B, and services B2C. The size of enterprises is limited to small and medium-sized enterprises (SMEs) or company sizes within the framework of Sections 267a, 267 (1) and (2) of the Commercial Code of the Federal Republic of Germany, as well as the BMF of 13.04.2018, IV A 4 – S 1450/17/10001. The legal forms of the companies surveyed included sole proprietors in the form of commercial enterprises and professional activities, civil law companies, partnerships, partnerships and limited liability companies. The surveys¹⁵ have the intention to illustrate the qualitative burden and difficulties arising from the temporary reduction of VAT rates for the management of enterprises. The aim of the survey was to identify the most common challenges of conversion for businesses and to estimate the associated administrative costs in advance. The procedure is consistent with the Federal Government's guidance on the well-known standard cost model.¹⁶ The survey was carried out to ensure that the companies surveyed were not chosen unilaterally from a sector or sector, but from widely dispersed sectors. In this way, the respondents act as multipliers or representatives for different industries and company sizes in order to be able to show the different conditions. In particular, the size of the company was concerned with choosing a wide variation in the structure of the company and the associated cash and billing systems. Not only the farmers or owners were interviewed, but above all managers, employees with reference to the accounting systems and these of internal and external accounting. Taking into account the interviews conducted before the reduction in VAT rates, the average estimated costs of the average cost per unit of business have already resulted in an average of EUR 197.00 per business unit, i.e. more than twice as much as estimated by the Federal Statistical Office.

In another ex-post survey after the date of the reduction in tax rates as of 01.07.2020, the same 50 companies were asked again during the month of August about their experiences regarding the changeover. The intention of the second survey was to compare the experiences (both positive and negative) of the respondents from the practical implementation with the estimated determinants of the ex-Ante survey and thus to evaluate them. In the second survey, the focus was on two main aspects: on the one hand, the actual implementation costs in the form of technical conversion costs and, on the other hand, the interview of managers of the internal and external accounting of companies. Already during the survey phase and in the ex-post evaluation, a broad spectrum of

¹⁵ Further information on the companies surveyed will be provided in accordance with the GDPR professional requirements.

¹⁶ See the Federal Government / National Standards Control Board / Federal Statistical Office (2018); Federal Statistical Office (2020a).

observed burdens for companies was presented from both an industry-related and structural point of view.

3.2 Qualitative evaluation

During the interviews, a uniform subjectively perceived picture of the burdens imposed was very quickly apparent from the respondents' point of view. Namely, that the cost of the changeover is enormous and feels disproportionate in terms of the exculpatory intention of cutting the tax rate.¹⁷ The most common argument at this point was the hasty change in tax rates within a few weeks, which meant that there was hardly enough preparation time to implement the changeover efficiently and transparently. Due to the great haste and the temporary pressure, there was little time to delineate, for example, projected haircuts between 30 June and 1 July. The majority of respondents agreed that a change over the turn of the year would have been easier for many parties involved, since, in practice, demarcations for commercial and tax reasons have to be made at the end of the year anyway, which would certainly have brought relief. Due to the hasty implementation, the risk of errors in the implementation and the associated future correction effort is significantly high. Another weakness has been identified by the high level of digitalization and the so-called Industry 4.0 of the past few years. Both accounting procedures and payment transactions themselves and related other transactions have already been converted from analogue execution to digital execution. This was linked to outsourcing processes in this area to external service companies and consultants. Due to the short period from the decision of the decision on the VAT reduction by the legislator to the mandatory implementation of the deadline, this led to an incomparable overload of these same service providers, unlike the introduction of the GoBD-compliant and TSE/BSI-capable digital cash register systems in recent years. For these, there was a substantial wider transitional arrangement and thus a temporary equalization and relief for consultants and service providers.

In the first step, the companies had to work their way into the legal basis of the VAT rate change, which included, in addition to the pure change in the tax rate, the special provisions regarding the time limitation of instalments, partial and final invoices, as well as, among other things, long-term contracts with regularly recurring payments on the basis of the BMF letter, which already required external tax advice.¹⁸ On this basis, the pure price labelling had to be changed and these changes had to be recorded in the internal accounting and recording systems. In the case of long-term contracts which go beyond the planned period of the VAT reduction, such as permanent services in the form of electricity discount payments or season tickets and lodges, it was still possible to settle them at 19%. This already caps the savings effect in this area. As a facilitation, there is the right to reduce the previous pricing and tax rates in the internal accounting systems directly from 19% and 7% to 16% and 5%. Alternatively, maintain the price labelling with the previous tax rates and deduct them as a flat-rate discount during the payment process. This should be a work facilitation, especially for brick-and-mortar retailers and possibly also for B2C online areas. However, it is precisely this relief that seems to be ill-conceived in practice, since the flat-rate rebate is often not divided between the turnovers at the standard rate and the reduced rate, but is shown in total. This means that if an entrepreneur receives inputs that contain both benefits with a standard tax rate and a reduced tax rate, these are to be split manually and manually both in the recording of

¹⁷ See Federal Ministry of Finance (2020); Field genes (2020); Neufang / Schäfer (2020).

¹⁸ See BMF letter of 30.06.2020, BStBl I 2020, p. 584.

internal cash registers and accounting programs, as well as during the electronic processing of financial accounting by tax advisors.¹⁹ This fact alone means that the workload not only for the entrepreneur himself, but also for his tax office involved generates an additional time expenditure, which is to be recorded in monetary terms, as well as an increased potential for errors through manual recording and processing. This confirms a major weakness in this reform package, namely the application of the reduced tax rates to the entire value-added or performance chain, i.e. the complete B2B range up to the final consumer in the B2C sector. By treating VAT in the B2B sector as a continuous item, both for profit investigators after company capital comparison S. 4 (1) and 5 EStG, and for profit investigators after revenue surplus calculation S. 4 (3) EStG, only financial and temporal additional expenses due to administrative and adjustment expenses result for this area of the value chain. The advantage from this only benefits the last value-added level. From a tax perspective, this is to be valued neutrally. In the B2B sector, therefore, only companies that are not entitled to deduct input tax or export tax-exempt output transactions benefit, which are therefore equivalent to the aforementioned beneficiaries. This vulnerability could simply have been resolved by opt-out to the reduced VAT rates of 16% and 7%, as this would have been most likely used by companies with a retail sector. This is precisely where a weak point in the solution emerges, since an entrepreneur often cannot differentiate between wholesale purchases by entrepreneurs (B2B) or end users (B2C)²⁰ in his initial turnover. The opting would have been a relief only for companies with demonstrably pure B2B business. In addition, a further possibility of avoiding problems would simply be extended to the entire period of the measure by the transitional arrangements for correction of accounts published by BMF letters of 30.06.2020, according to Which a correction is not corrected and the full VAT deduction is to be granted for an incorrectly designated VAT.²¹

The business burdens resulting from the reduction in VAT are very different and individual, but relatively homogeneous in their basic structure. Companies with internal accounting systems in the form of simple inventory management systems, which apply the above-mentioned flat-rate rebate in the context of the payment process, instead of changing the price display, have a relatively limited, simple conversion effort. Small companies with a simple service or product portfolio, such as retail and wholesale, are examples of this. This is particularly true insofar as the effort of internal and external scheduling and dissemination is manageable, i.e. accounting systems are applied, which on the one hand make the implementation of the changed tax rates easily implemented and on the other hand offer a direct connection to external accounting.²²

On the other hand, more complex structured or larger companies face correspondingly higher burdens. Companies with initial turnover in the form of mixed sales are particularly affected. But also the already mentioned permanent services, which are not billed by discounts or partial services. In this case, there is a possibility that the VAT rates of all payments and services rendered to date may change in the aftermath if the final date of performance falls within the second half of 2020. Due to the structural complexity of the companies and the associated internal recording systems, such as merchandise

¹⁹ A common example of this is the purchase of tastings and representation costs of a entrepreneur within the framework of his company at a supermarket or disco.

²⁰ An example of this can be seen, among other things, from the VAT-free remedy provider, who nevertheless

inputs, which are issued to VAT, must be paid in full and thus have income tax expenditure in the amount of tax rate reduction and ultimately liquid funds, despite higher Income tax burden.

²¹ See Federal Ministry of Finance (2020), p. 46.

²² At this point, simple cash register systems are meant, e.g. within the framework of the GoBD-compliant

management, controlling, financial accounting and similar interfaces, it is all the more difficult to implement or adapt the tax changes, which increases the effort and risk potential.²³ If there are also operational foreign interfaces or contacts, the problems will increase further. This means that for a short period of 6 months, numerous internal tax typings of business transactions have to be created new or additional. The labelling of these alone requires an increased degree of effort and, above all, attention. Central examples of this are intra-Community acquisitions, the reverse charge procedure with catalogue services or the so-called Section 13b (construction services). If foreign contacts are not only in the form of external business relations, but also in the form of internal interdependencies within the framework of international business divisions, group structures with parent-subsidiary-grandson company structure and holding companies, there are also multiple charges, since both the German and international companies have to take the changeover into account in their own system. An example of this is the situation that a German limited liability company has a wholly-owned subsidiary in the EU, the management of the subsidiary takes place in personal union within the framework of the German parent company. Accordingly, the company established in the other EU country is to be treated under German tax law, this is completed if there are also clearing payments in this ratio.

Regardless of whether simple or complex structures, the changeover requires an increased instruction and communication effort in each constellation, both in-house and by external service providers. Especially when a large number of employees or customers need to be informed about the changes, this leads to an enormous cost and time expenditure, which can quickly culminate in a high number of working hours. A surveyed medium-sized company operating at the b2B level (with international internal and external links) stated that the training and communication of the legal basis of the reform in the BMF letters, i.e. the changes in the transitional arrangements, invoice corrections, long-term contracts and partial services, took several days for all affected employees throughout the company, which resulted in a high staffing of staff and thus additional staffing costs. In particular, industrial enterprises from the lower medium-sized enterprises with long-term project planning services beyond the application period in the form of discount and partial services stated that the administrative burden on customers in the form of invoice corrections, supplementation and amendment of contracts, as well as the delimitation of already rendered services, require a high additional burden. Higher actual internal personnel hours thus lead to higher personnel costs and thus to additional costs of implementation. Some companies in this group even stated that, due to the difficult to delimit services provided as of 30.06 / 01.07.2020, it is in some cases not possible to make realistic delimitations, which is why agreement has already been requested with the relevant tax administrations to waive the correction to the detriment of the companies. Another company even accepted the loss of revenue due to the adjustment of hundreds of long-term individual rental contracts for rental machines, since the individual expenses per contract (e.g. written contract supplement, including confirmation by tenants, change of rental prices for the period, correction of debit orders and SEPA mandates) generate higher costs than the false representation of the openly sold VAT amounts.

In addition to the time expenditure item, the second major cost block is the area of electronic information processing systems. The decisive factor is whether the implementation of the amended VAT rates leads to a high or reasonable effort. The easier it is to maintain the rates, the less time and money. This depends, among other things, on

²³ See Federal Ministry of Finance (2020); Feldgen (2020); Neufang/Schäfer (2020).

how many different systems exist in the company (goods management, controlling, logistics, financial accounting, etc.) and how complex the corresponding interfaces and variables have to be adapted therein. Already with the announcement of the changeover and the temporary limited conversion period, one of the companies interviewed states that it was already clear at that time that a timely functioning changeover was not feasible. A medium-sized company with so-called continuous services in the field of administrable enterprise VPN software worked with the higher-level ERP software Microsoft Dynamics NAV and also maintains 156 own sub-individual systems. According to the company's estimate, the changeover would take at least 2 months, including the test phase, due to the programming and control effort, and the process would have to take place in parallel with the ongoing operational process. This shows that the planned period of 6 months will be characterized by both the conversion and the subsequent decommissioning. As a result, the composition of comprehensive VAT adjustments for continuous services, as well as the high number of interfaces to be processed, means that a timely changeover of the systems due to the high time pressure of the short conversion phase ultimately makes it seem hopeless. Thus, these companies are more or less urged by the legislature to continue working with the previous tax rates of 19% (reduced 7%) and to be liable for the overly high tax card in the B2B area in accordance with Section 14c (1) UStG for the overly high tax card and thus liable, but their business customer can nevertheless only be 16% (or 5%) as VAT. In this way, companies accept, for example, a turnover tax of EUR 19 on a net turnover of EUR 100. However, according to Section 14c (1) Of the UStG, the customer has to pay only 16 euros. However, since 19% of the invoice shows that the company has to pay 19 euros to the tax office, but receives only 16 euros. As a result, the company voluntarily loses 3 euros of its net turnover, thereby subsidising the state's financial budget or paying a penalty fee for non-implementation of the rule. Since the damage caused by a faulty changeover can have greater and longer-term consequences than the inclusion of the higher tax rates and the associated consequences of Section 14c (1) of the UStG, this can nevertheless be cheaper and safer for individual companies from a commercial point of view due to the limited period of currently 6 months. In order to compensate, therefore, an attempt is made to generate higher revenues with the given capacities in order to amortize the costs that are harmful.

Irrespective of the individual conversion problems of the individual companies, 91% of the respondents recorded the observation based on their own financial accounting that their energy suppliers and software service providers in particular have maintained the previous VAT rates. This is another point where the problem of permanent benefits emerges. For the selection of the tax rate, it is decisive when the annual total consumption is read or the software services are provided in full and thus when a final settlement is subsequently made. In the standard case, constant discounts are paid monthly for the year 2020 and read in January 2021, as well as settled. These cases lead to a necessary and increased adjustment effort for down payment or down payments /partial services, as well as adjustments to direct debit SEPA payments, as well as the correction of (debit) invoices to a scale of millions. In addition to energy suppliers, some of which are also municipal enterprises, other municipal bodies, which are directly outsourced from local government and represent self-employed administrative units for the fulfilment of public purposes, also have numerous adaptation problems. This, too, has emerged from the survey of companies. An example of this is job tickets provided by employers to employees and permanent tickets in public transport. In the case of services provided by transport companies and companies, both municipally and privately, quarter, half and annual tickets are also classified as permanent services, which can again lead to numerous invoice corrections. In contrast to the energy suppliers, many ticket systems and vending

machines also need to be changed. This can already be done centrally and externally, but it leads to increased effort and may need to be checked locally and manually to avoid inconsistencies.

All of this may be little effort or change for the final consumer, but for the companies themselves all this is associated with the aforementioned problems. As a result, the business surveys have shown that there are many complex problems, particularly in the area of permanent services coupled with recurring advance payments due to the temporary reductions in VAT rates. The additional technical implementation effort in the area of internal Enterprise Resource Planning, inventory management and billing systems leads to a high load, if not overload, of the internal and external service providers in the IT sector, which will take several months despite the greatest efforts to process the accrued conversion orders. The Federal Ministry of Finance has sent a letter dated 30.06.2020 on the temporary new regulations. Despite extensive explanations, as an abstract administrative regulation, it was not possible to answer all the open questions relevant to practice. Examples of this are the permanent services already mentioned, such as subscriptions, database access, software services, licenses and consumption rights. In addition, there are problems with the price adjustments associated with the reduction in the tax rate, since different tax rates are to be applied here for the same operation. An example of this are discounts, bonuses and special leasing payments. In these circumstances, all affected products and compositions had to be adapted accordingly. Due to the time pressure and the amount of adaptations, errors in these processes are hardly avoidable and corresponding evaluations, as well as adjustment corrections are indispensable. The system of German VAT itself provides an additional degree of complexity, namely the different dates of origin of the tax, since the application depends on the date of supply of services (debit-taxation) and not on the date of payment (actual control). This raises further problems in determining which benefits should be reported and accounted for with the higher, old and which with the reduced, new rates.²⁴

Ultimately, the strong time pressure of the application under which implementation is required means that the error rate and vulnerability in the context of the posting of transactions of internal and external accounting can increase extremely, which in turn can lead to a high audit and control burden in subsequent periods over the following periods. The reason for this is that contractual agreements are often made over several periods. It can be assumed that in the following years the intensity and scope of external tax audits by the tax administration, as well as VAT and cash checks, will increase sharply, which means that the consequences of this reform can lead to incalculable negative liquidity effects or bottlenecks in the form of increased tax repayments in combination with an interest rate of 6% per anno in accordance with section 238. Especially since, despite the increased revision and control effort, errors are overlooked or partially concealed. This should make the facts clear, namely that the legislator will try to generate part of the tax losses in economic positive times, including the interest burden. A timely effect will also be the revised changeover to the original or possibly re-adjusted tax rates after the end of the adjustment period. Likewise, the accrual postings to be drawn up after the end of the year in the context of the preparation of the annual financial statements, as well as the preparation of the VAT annual statement for the tax period 2020. The associated sales and VAT sampling will lead to a significant increase in processing costs on the part of the external accounting of companies, but also on the part of tax advisors, resulting in downstream costs. Due to the high susceptibility to errors and the associated risks, not only random, but also in some cases, full audits of facts and business incidents will be

²⁴ See Federal Ministry of Finance (2020), 2 f.

necessary. To sum up, there is a relatively uniform opinion on the reduction in VAT rates across all respondents, namely that this leads to massive burdens on businesses in all areas.

3.3 Assumptions of quantitative estimates

The basis for the construction is an expert report on behalf of the Federal Ministry of Industry, which had determined in advance the cost savings from various possible tax simplification measures. Further basis is the well-known standard cost model, as well as the current state of empirical literature, which Eichfelder and Eichfelder/Vaillancourt provide. The basis for estimating this work is the survey^{25 26 27} and analysis of the 50 selected enterprises, which has already been presented. No random companies were deliberately selected in order to achieve a wide spread rather than a one-sided one. The first step was to identify the standard activities. Once these are identified, the time required to them shall be valued at the corresponding cost per unit of work. These labour costs must be supplemented by additional costs such as consulting costs and material costs, i.e. so-called material costs²⁸. Based on this, these costs are quantified by the number of enterprises in the selected sample on the total number.

In contrast to the previous procedure of the Federal Statistical Office, the value of the estimated size is determined in this work depending on the size of the employees. This approach is justified by the interviews conducted, as well as the consistency of the literature on the tax costs of bureaucracy, that these increase as the size of the company increases. On the basis of an ex-ante and ex-post model,²⁹ the costs are determined on two levels. The ex-ante survey of companies before the changeover resulted in costs of around 2.27 billion euros on the basis of linear extrapolation. Table 1 of the following section shows an overview of the individual cost estimates from the surveys and analyses. On the basis of the ex-post survey, the results of the first estimate should be evaluated. For this purpose, respondents were presented with the results of the first ex-ante estimate, which should now compare their own costs with those of their size class and classify them themselves. Based on the group average³⁰, a large number of respondents ranked their own average costs ex-post higher than in the ex-ante estimate. In the aftermath, 17 of the respondents subsequently rated their ex-ante estimate as too low, especially in the area of medium-sized enterprises, which were in favour of a higher estimate on the basis of their own experience. A total of 15 classified the cost estimate as realistic or abstained from classification. For small businesses and solo self-employed workers, 11 respondents supported a reduction in estimated costs. In line with these findings, the estimated costs for medium-sized enterprises were significantly increased by the cost of training and communication, as well as marginally reduced for small businesses and solo self-employed enterprises and this adaptation transferred accordingly to the model created. In the context of the cost estimation of the work, the focus of the focus is on the subsequent workflows and burdens for the companies. Firstly, the induction, training and communication of the change (block I). Secondly, the actual conversion and adaptation of the internal accounting and ERP systems (Block II). Finally, control, evaluation and

²⁵See Eichfelder et. already (2010); Eichfelder / Evers (2011).

²⁶ See The Federal Government / National Standards Control Board / Federal Statistical Office (2018).

²⁷ See literature review in Eichfelder (2011) and Eichfelder / Vaillancourt (2014).

²⁸ See The Federal Government / National Standards Control Board / Federal Statistical Office (2018).

²⁹ See Eichfelder / Vaillancourt (2014), p. 121 ff; Blaufus / Hoffmann (2019), p. 187.

correction (Block III). Thus, the process steps of the changeover are divided into three over categories along the implementation process. In addition, external costs for advising third parties, i.e. tax consultants and IT service providers, are considered, as well as material costs as well as increased material and resource consumption, as well as future costs in the context of future audits. This includes both costs for care (tax advisors) and tax repayments (including interest and penalty fees).

Block I mainly includes the introduction to the obligation to provide information for the company itself, as well as communication regarding changes towards its own personnel, customers and suppliers, as well as the training of personnel. Also meetings with internal and external consultants and similar activities. It turned out that the effort required to communicate the measures in the companies was considered to be very high and positively correlated with the size of the company. The training needs for internal employees and possibly also for the field service, as both parties must be able to communicate externally the changes in their own systems to customers and suppliers.

Depending on the complexity and structure of the internal billing and ERP systems, the conversion effort in Block II depends primarily on the nature of the systems and the number of interfaces. The effort was manageable for companies that worked with high-quality systems but had a marginal number of interfaces, i.e. mostly small companies. The implementation at this point mainly involved electronic updates of systems, adaptation of input masks and subsequent verification by entering various sample business transactions. More complex systems with numerous different interfaces had to be reprogrammed partly using external service providers and partly additional facts had to be recorded, such as for transactions with partial services (instalment payments and final invoices) at the previous tax rate and in parallel with the new tax rate. For these systems and interfaces, test runs for verification, evaluation and possibly corrections had to be carried out again.

At this point, it can be seen that both the time and the financial effort in the control and correction process depends on the upstream stage, i.e. the structure of the company, as well as on the quality of the billing systems. Thus, the more qualitatively and transparently a system is structured in a simple business model, the lower the corrections are likely to be after the adjustment. Nevertheless, revision and validation processes are also necessary here. However, an invoice correction is necessary as soon as down payments or changed prices have to be posted. However, as the change in tax rates was implemented in the short term under high time pressure, it can be assumed that many errors and related corrections will occur even after the system has been changed in the course of the second half of 2020. However, a "four-eyes principle" between the production of annual financial statements and ongoing financial accounting means that there is still a chance to detect and correct errors in good time. In the context of the permanent benefits already explained, a significant degree of corrections and adjustments to the accounts are to be expected, especially at the end of the year or the turn of the year, or depending on the duration of the reform after the abolition of the reduced VAT rates. This shows that the process is not completed by purely implementing the tax rates into the structure and systems and thus the corresponding costs can be foreseen, but that, among other things, an increased volume of corrections will result in higher financial and temporal burdens than usual. It should be noted that even on the part of the legislator only the implementation and introduction is always spoken of. However, reversal will also lead to additional positions on the part of companies, although reduced by experience curve effects from the implementation process.

Since small companies and solo self-employed people, already due to their size, work with relatively simple structures and processes, the internal effort in the company should be

manageable, since they primarily cooperate with external service providers and are unlikely to have their own internal specialists. The amount of work, which can usually be quantified on an hourly basis, is likely to be a maximum of half to two days in total. The distribution among the three groups is likely to be unevenly weighted, since the greatest need for Block I is probably already available through external providers and Blocks II and III should be relatively transparent and easy to implement with successful induction, training and communication. The additional costs by third parties in the form of consultant costs, as well as material costs, are between EUR 45 and EUR 185 per hour worked on the basis of average costs established in practice. This applies in particular to the hourly rates of cash register manufacturers during the changeover, as well as advice from specialists in external financial accounting.

If one considers the small enterprises in isolation without solo self-employed persons, since they have to be looked after very individually depending on the sector, it can be assumed that the communication of information to the client in Block I alone should take two to three hours of work. In total, internal communication for induction, communication and training should be used to cover a total working time of 5 to 11 hours. In the standard case, the effort involved in converting the internal billing systems associated with Block II should not exceed 4.5 to 9 working hours. The final regular expenditure for control in the first months of the changeover should amount internally, as well as externally, in the current process, in total two to three hours per month. The additional material costs as well as other consultant costs are case-specific different, in relation to the respective billing and cash register systems. This can include both the acquisition of new cash systems, but also only short support in relation to individual business transactions.

A higher workload is likely to result in medium-sized and therefore medium-sized enterprises. This can lie with a few days with simply structured mandates. In the case of complex structures, the amount of invoice corrections and associated corrections in financial accounting are likely to increase significantly, correspondingly there is a risk that the workload will be significantly higher. The already mentioned medium-sized company with an annual turnover of about 31 M. Euro from the field of continuous services information technology assumed that the burdens in Blocks I and II would require a calculated time of about 30 hours of work and that more than 500 invoice corrections would be incurred. For each corrective invoice, a time expenditure per employee of 8 to 15 minutes was estimated. Extrapolated with an average of 6 minutes, this results in 50 additional employee hours. Other companies stated that it has already taken more than 47 hours to send employees (both internally and externally). For consultants' and material costs, a standard daily rate of 1 was set for these companies from EUR 100 up to EUR 5,000.

It is therefore clear that for larger medium-sized companies with complex structures, a variety of different continuous services and other demanding interfaces, the time required is quickly measured at several hundred hours. For larger enterprises outside the survey with an order of magnitude of 0.5 to 1 B. Euro turnover is therefore likely to cost several hundred workers for cost block I alone, i.e. training and communication of staff. Even larger companies of more than a B. Euro annual turnover is therefore likely to require an even greater amount of time, as well as a high level of material and consulting costs. Examples of this are the costs of communication to customers, as well as consultant fees, which can quickly be in the five- to six-digit range in this size class.

The additional and future costs incurred in the context of future external tax audits are negatively correlated with the short period of implementation. The short period increases the risk of error due to time pressure and the degree of complexity, which at the same

time increases the spreads between the actual and audit balances, so that the accompanying subsequent tax determinations are increased during an audit. Accordingly, these should not be included as fixed determinants, but should be included as a surcharge factor in the other costs, bearing in mind at this point that large enterprises are subject to a complete audit and that there is a risk only for small enterprises, but no certainty of an external tax audit. Should there be an external tax audit, the additional burdens are expected to increase by around one-fifth. For the probability and frequency of an audit, the audit statistics of the Federal Ministry of Finance are used. The most recent statistics for 2018 show a probability of 1.1% for very small enterprises, 3.2% for small enterprises, 6.3% for medium-sized enterprises and 21.6% for large enterprises. However, it must be borne in mind for these quantities that an external audit examines not only one but, as a rule, three financial years. Accordingly, there is a risk of additional costs over the years. This situation is considered in the above-mentioned probabilities by multiplying with the average number of audited financial years of 3.3. This does not include the above-mentioned special VAT audits and cash checks. It should also be noted that an external tax audit does not primarily focus on traffic taxes, but, depending on the company's field of activity, VAT can play a minor role compared to income taxes.^{31 32} This means that there will continue to be situations in which a temporary change in VAT rates does not have a significant impact on the burdens arising from an external tax audit. As a result, the effects of the neglected special VAT audits, as well as the overweight of VAT, will be mutually reconsidered or approximately neutralized in a regular external audit. Accordingly, the evaluation relates only to the facts presented in the statistics for audits.

Operating mode	<u>Trading companies</u>		<u>Manufacturing Operations</u>		<u>Freelance professions</u>	
Company size according to BMF	Annual turnover	Tax profit	Annual turnover	Tax profit	Annual turnover	Tax profit
Micro-enterprises	Up to 210.000 Euro	Up to 44.000 Euro	Up to 210.000 Euro	Up to 44.000 Euro	Up to 210.000 Euro	Up to 44.000 Euro
Small enterprises	Up to 1,1 M. Euro	Up to 68.000 Euro	Up to 610.000 Euro	Up to 68.000 Euro	Up to 990.000 Euro	Up to 165.000 Euro
Medium-sized companies	Up to 8,6 M. Euro	Up to 335.000 Euro	Up to 5,2 M. Euro	Up to 300.000 Euro	Up to 5,6 M. Euro	Up to 700.000 Euro
Large enterprises	over 8,6 M. Euro	over 335.000 Euro	Over 5,2 M. Euro	Over 300.000 Euro	Over 5,6 M. Euro	Over 700.000 Euro

Table 1: Delimitation characteristics of farm sizes for 2019³³

After the charges have been recorded in working hours, they must be valued accordingly at a price. The estimated value of the compliance expense of the Federal Statistical Office (2020a) is estimated at EUR 34.50 and an annual turnover of EUR 56.40 from EUR 100 million. This corresponds to the average labour costs across all sectors and sectors in the Federal Republic of Germany, with reference to a medium level of qualification. This does

³¹ See Federal Ministry of Finance (2019), p. 29 ff.

³² An example of this would be if no foreign relations and no special cases in the context of VAT, but only domestic sales take place at the standard tax rate.

³³ See BMF of 13.04.2018, IV A 4 - S 1450/17/10001.

not take into account the dependence of labour costs on the sector concerned, the level of qualification of personnel and the size classification of enterprises. However, this is not a distorting aspect, since the following is not to determine the actual individual costs of each sector or sector, but the overall economic burden. As the divergences within the selected sample are neutralized, applying the average labour costs for the entire sample appears appropriate. It is further shown that this assumption of costs can also be classified as a stable estimate by the variation and orientation of the labour cost rate according to the skill level of the employees and / or by the industry.^{34 35}

Annual turnover per company	Time spent in hours h	Consulting and material costs incl. system adjustments in euros	Additional costs for future external audits	Share of d. Companies with external audit risk
from 17,500 euros to 50,000 euros	2 h	46 €	20%	3,63%
from 17,500 euros to 50,000 euros	4,5 h	93 €	20%	3,63%
from 17,500 euros to 50,000 euros	7,5 h	186 €	20%	3,63%
250,000 euros to 500,000 euros	9 h	373 €	20%	10,56%

Table 2: Assumption of estimated costs for micro and small enterprises

³⁴ See Federal Statistical Office (2020a), p. 8.

³⁵ See. The Federal Government / National Standards Control Board / Federal Statistical Office (2018), p. 55.

Estimated costs per group of turnover for medium and large holdings							
Annual turnover per company	Integration & sighting (time spent in hours h)	Training & Information (time spent in hours h)	Adaptation of internal & external systems (time spent in hours h)	Test runs, control & revision (time in hours h)	Consulting and material costs incl. system adjustments in euros	Additional cost for future external audits	Share of companies with external audit risk
500.000 Euro up to 1 M. Euro	15 h	5,5 h	4,5 h	4,5 h	560,00 €	20%	10,56%
1 M. Euro up to 2 M. Euro	18 h	7,5 h	5,5 h	5,5 h	750,00 €	20%	20,79%
2 M. Euro up to 5 M. Euro	28 h	11 h	8 h	8 h	930,00 €	20%	20,79%
5 M. Euro up to 10 M. Euro	46 h	17 h	14 h	14 h	1.120,00 €	20%	20,79%
10 M. Euro up to 25 M. Euro	70 h	33 h	18,5 h	18,5 h	1.400,00 €	20%	71,28%
25 M. Euro up to 50 M. Euro	93 h	47 h	23 h	30 h	1.870,00 €	20%	71,28%
50 M. Euro up to 100 M. Euro	140 h	84 h	28 h	28 h	2.800,00 €	20%	71,28%
100 M. Euro up to 250 M. Euro	187 h	93 h	47 h	47 h	5.600,00 €	20%	71,28%
250 M. Euro up to 500 M. Euro	234 h	117 h	58 h	58 h	11.700,00 €	20%	71,28%
500 M. Euro up to 1 B. Euro	467 h	234 h	117 h	117 h	23.350,00 €	20%	71,28%
More than 1 B. Euro	934 h	467 h	234 h	234 h	46.700,00 €	20%	71,28%

Table 3: Assumption of estimated costs for micro and small enterprises

The previous tables show in detail the assumptions described so far on the basis of the surveys and analyses for the ex-ante cost estimate. Based on this, the first step was to record the additional average bureaucracy costs per business unit in the respective group. The costs determined are then extrapolated to the total costs by applying the case figures

of the current VAT statistics 2018 in the respective sales size groups. This extrapolation is also based on the above-mentioned VAT statistics.³⁶

4. First results

After applying the work steps described so far, the total estimated burdens are estimated at around 2.27 billion euros. It should be noted that the estimate covers only the administrative costs and does not take into account the additional risks to the undertakings in external audits, such as tax repayments, interest, prohibition of the VAT deduction due to missing or incorrectly issued invoices. Equally disregarded and not mentioned, the administrative costs within the tax administration, which have not yet been further described, are not taken into account, which are additionally incurred by the State in addition to the losses resulting from tax revenues. In addition, follow-up costs which may result from the fact that the undertakings are delaying investments and realignments due to misplaced priorities, since they are utilized by the conversion processes due to the tax changes, or because they expect subsequent tax losses due to the risk of error.

In comparison, the total cost of 2.27 billion euros is 9.3 times the compliance expense of 238.7 Mas determined by the Federal Statistical Office. for the limited period of the VAT reduction and thus corresponds to 11.35% of the planned production volume of EUR 20 billion as a result of the tax rate reduction.³⁷ If one compares these with the red tape costs of the total VAT of EUR 9.6 billion, which according to the Bureau of Statistics' red tape database of the Federal Statistical Office, which seems to be rather conservatively estimated, this cost estimate would lead to a temporary but skyrocketing increase in the bureaucracy costs of the VAT system of 23.6%.^{38 39} As an interim result, it should be noted that the additional cost burdens for the economy as a whole associated with the temporary adjustment of VAT rates are to be classified as very high and were previously assessed by the Federal Statistical Office as too low, which in turn leads to the presumption that no realistic estimate could be made at this point due to the investigation by a non-independent federal authority.

The following table 4 provides an overall view of the distribution of charges by enterprise size. The costs per company in euros, as well as the costs per turnover are named as a percentage. The information on sales revenues for the individual groups is taken from the SALES tax statistics 2018. Table 2 shows that absolute costs are positively correlated with the size of the enterprise, i.e. as the size of the enterprise increases sharply and for very large enterprises it is even close to EUR 100,000.⁴⁰ With regard to turnover, the prevailing opinion of literature is confirmed, namely that small enterprises are much more burdened by administrative costs compared to large enterprises.⁴¹

³⁶See Federal Statistical Office (2020b), Table 2.2.

³⁷ See Federal Statistical Office (2020a), p. 8.

³⁸ See Bach / Michelsen (2020), p. 5.

³⁹Self-evaluation on <https://www-skm.destatis.de/webskm/online>, (query of 03.09.2020).

⁴⁰See Federal Statistical Office (2020b), Tabelle 2.2.

⁴¹ See Eichfelder / Vaillancourt (2014), p. 121 ff.

Annual turnover per company	Costs per company	Cost per revenue
from 17.500 Euro up to 50.000 Euro	112,18 €	0,3513%
50.000 Euro up to 100.000 Euro	224,36 €	0,3120%
100.000 Euro up to 250.000 Euro	448,71 €	0,2801%
250.000 Euro up to 500.000 Euro	780,51 €	0,2207%
500.000 Euro up to 1 M. Euro	1.104,61 €	0,1568%
1 M. Euro up to 2 M. Euro	1.464,30 €	0,1045%
2 M. Euro up to 5 M. Euro	1.999,91 €	0,0646%
5 M. Euro up to 10 M. Euro	2.874,56 €	0,0412%
10 M. Euro up to 25 M. Euro	4.499,00 €	0,0292%
25 M. Euro up to 50 M. Euro	5.998,68 €	0,0172%
50 M. Euro up to 100 M. Euro	8,998,02	0,0123%
100 M. Euro up to 250 M. Euro	14.198,70 €	0,0093%
250 M. Euro up to 500 M. Euro	25.150,41 €	0,0072%
500 M. Euro up to 1 B. Euro	46.503,50 €	0,0067%
More than 1 B. Euro	93.006,99 €	0,0024%

Table 4: Overall view the distribution of charges by enterprise size

5. Review and comparison of cost estimates

5.1 Review of time expenditure against the time value table economy

First, the assumptions made about the time required by companies to the data of the economy time value table are compared in the Guide to the Standard Cost Model, which depend on the activity itself and the level of complexity. Depending on the degree of complexity, the estimated effort for "data procurement" is presented with an average of 2 minutes (simple), 10 minutes (medium) and 60 minutes (complex). For the area "Induction into the information obligation" the time required is between 3 minutes (simple and medium) and 60 minutes (complex). "Training and training" is expected to take between 2 minutes (simple), 30 minutes (medium) and 480 minutes (complex). This shows that the differences vary greatly depending on complexity, so that the classification as "simple" refers to actions that correspond to rigidly schematic standard activities, thus requiring little to no prior knowledge and thus requires only 2 minutes of work. Taking into account the not simple situation of demarcation in the use of different VAT rates, the level of complexity at this point should be⁴² classified as medium to complex. For this reason, the analysis in the survey is limited to very small, small and maximum medium-

⁴² See the Federal Government / National Standards Control Board / Federal Statistical Office (2018), p. 53 ff.

sized enterprises, since the stresses can still be determined relatively easily here than for large complex enterprises.

Looking at small businesses with revenues of 0.5 to 1 M. Euro is assumed to require a total of 18 hours, of which 6 working hours may be spent on "training, training and communication", technical "conversion of accounting and ERP systems", and "control and correction". If the supercategories are further broken down into standard activities, the information obligations "induction into the duty to provide information" and "internal meetings" such as team meetings, "external meetings" with tax consultants and IT service providers, as well as "training and training participation" are assigned to the category "induction, training and communication". Assuming, as has already been mentioned, a "medium" degree of complexity for these activities, 153 minutes per employee should be taken into account in the case of a one-off increase in the number of activities. This effort increases accordingly with repeated or repeated occurrences. In order to meet the estimated effort, n would therefore be sufficient for approximately two employees or, with three, even to create overcapacity. It should be taken into account that the management in the personal union and an employee have to deal with the issue.

The second group, with the "Conversion of accounting and the ERP system", can be divided into other sub-activities such as "procurement of data" and "processing of data". If the medium to high complexity already mentioned is taken into account due to the large number of individual problems in the conversion of internal billing systems, there is already a time requirement of 3 hours and 15 minutes with a simple system adjustment. It should be noted that the need for adjustment will arise again at the end of the year with the expiry of the temporary tax rate reduction. However, since the effort is at least twice, it is not to be assumed that there will be a linear doubling, but only 5 hours, since learning and experience curve effects can already be used for the reversal at the end of the year.

For the third group "Controls and corrections" standard activities such as "checking the data and inputs", as well as "error corrections", which, according to the standard cost model, require it to work a working time of about half an hour, i.e. 34 to 35 minutes, within the framework of a medium to high level of complexity. Since these activities are not only incurred once, but are likely to occur on a monthly basis, the cumulative value over 6 months reaches an assumed effort for "control and correction" of 5 hours.

In relation to larger companies, the results to date can be transferred in principle. However, it can be assumed that the level of complexity also increases as the size of the company increases, which in turn leads to sharply increasing charges according to the time value table, as well as to expenses that may be incurred multiple times. According to the time value table, "internal meetings" and "external meetings" would take 10 hours and 8 hours, respectively, for complexly structured companies. In addition, assuming that these are incurred in multiple forms and involve a large number of employees, the relatively high time expenditure for large companies of around 500 hours with a turnover of EUR 0.5 to EUR 1 million seems to be realistic. In addition, it is still important to ensure that training according to the time value table in complexly structured companies is also set at 8 hours.

5.2 Alternative assumptions for the evaluation of working time expenditure

As already stated in section 4.2, the calculation of the total economic costs is based on average hourly labour costs per enterprise of EUR 34,50 and annual turnover of EUR

56.40 from EUR 100 million. In principle, this does not consider the fact that labour costs can vary fundamentally from one company to another, depending on the size and the sector. This should mean that the costs of very small enterprises and solo self-employed companies should be underestimated and, conversely, underestimated for very large enterprises. This thesis can be justified by the fact that the analysis is intended to estimate the overall cost of bureaucracy, but not the individual burdens of individual sectors or company sizes. It is therefore critical to assess that the incorrect inclusion of labour cost distribution can also lead to estimation errors in relation to the overall economic bureaucracy costs.

Accordingly, the robustness of the estimate should be verified within the framework of the standard cost model. The guide to estimating compliance costs shows labour costs by sector and by skill level of employees. For an initial examination of the robustness of the estimate, the average labour costs for each size category of enterprises are determined only according to the sectoral structures obtained from the VAT statistics. The average labour costs of each sector are taken into into the fore. As a result, labour costs in the individual size categories differ from EUR 31.57 to EUR 36.23, bringing the total cost to EUR 2.21 billion.

In addition, it can be assumed that as the size of the company increases, the average level of qualification and work of those employees in the company who are entrusted with the areas of taxation and accounting increases. It is assumed that the level of qualification for companies with revenues of up to EUR 0.25 million is to be classified as low, between EUR 0.25 and EUR 5 as medium and for companies up to EUR 5 million as a high level. This realignment creates a further corridor for the approach of labour costs between EUR 20.31 and EUR 61.37, which are now positively correlated with company size. Taking this methodology into account, the total cost of red tape for enterprises is cumulative of EUR 2.47 billion. Comparing the different variants of the distribution of average labour costs, it can be seen that the impact on the estimated cost of bureaucracy as a whole is marginal. This shows that the overall result is a robust estimate and that the compliance effort by the Federal Statistical Office is significantly underestimated or undervalued.

5.3 Comparison to the official cost estimate

The compliance effort calculated according to the estimates of the Federal Statistical Office is exceeded by the result in this work by 9.3 times. On this basis, it is necessary to examine what this significant deviation is based on and how it can be explained. First of all, it should be noted that the way in which the Federal Statistical Office⁴³ estimates the burden of performance differs greatly from the procedure in the context of this work. Above all, the Federal Office neglects deviations between the individual size classes and assumes that there is approximately an identical effort in all size categories. From a practical point of view, this greatly simplified assumption is completely denied and refuted by both the companies concerned, external service providers and consultants. It is also contrary to the current literature on the cost of tax, according to which the costs are significantly dependent on the size class of the companies and are positively correlated.⁴⁴

In line with this literature, the term "bureaucracy costs" is also used in this work. The Federal Statistical Office, on the other hand, applies the so-called "compliance burden" in accordance with the definition of the National Standards Control Board, although the

⁴³ Federal Statistical Office (2020a), p. 8 ff.

⁴⁴ See Eichfelder (2011), p. 41 f.; Eichfelder / Villancourt (2014), p. 121 ff.; Blaufus / Hoffmann (2019), S. 187.

differences between the two terms are unlikely to play a role. According to Section 2 (1) of the Act establishing a National Standards Control Council, the definition of compliance costs includes the complete measurable time and costs incurred by complying with a federal law requirement for fellow citizens, business and public administration. However, no purely calculus costs are taken into account.⁴⁵ By focusing purely on the fulfillment costs of the economy, the terms are thus almost identical to the concept of cost used in this work.

If one looks at the elaboration of the Federal Statistical Office in more detail, it can be seen that this takes into account only a small number of standard activities and costs, which are incurred for companies within the framework of the temporary reduction in vat rates. Thus, for the entire number of companies, this only includes the standard activity of "adjustment of tax codes with associated accounts" with a working time of 75 minutes.⁴⁶ In the case of companies with a cash register system, i.e. from the retail trade, catering and other services in total, the Federal Statistical Office has included at least expenses for the conversion of cash register systems. In addition, for a further 2.5 million companies, the "adjustment of invoices" costs will be taken into account. For this purpose, 10 minutes are calculated or accepted per company. Individual assumptions of the Federal Statistical Office are questionable. Among other things, the amount of companies from 2.5 million and 714,050 is below 3.3 m. This leaves open the question of whether and to what extent the expenditure for the other 85,950 companies was included. A further 60,000 holdings are included as part of the registration of the Federal Office, which involved a total of 774,000 holdings with cash register changes. However, the VAT definitions of a company need to be addressed here. The VAT statistics used as a source for extrapolation are based on enterprises and not from enterprises. An entrepreneur can run several different businesses by law, but these are always combined as one company. Thus, individual branches (businesses) and subsidiaries of individual companies are likely to be added regularly to the parent company in the context of a VAT-based organization. However, it does not show to what extent the 85,950 enterprises not covered were taken into account in the calculation. In addition, when assuming that the Federal Statistical Office assumes that companies in the retail trade, catering and other services only have to adapt the cash register systems for the adjustment of invoices (cash receipts, receipt documents) and do not otherwise have to make any further changes to the invoice. As a result, it is assumed that the 714,050 companies record initial sales exclusively via cash register systems. The Federal Statistical Office does not record any charges other than those listed so far. The costs for the developers and the distribution of booking and cash register systems are estimated by the Federal Office at 8 million euros. However, since the costs have a marginal impact in determining the overall burden, it would have been more appropriate to determine the costs resulting from this for all companies. As a result, the average charges per enterprise set according to the Federal Statistical Office are EUR 72.33.

As an interim conclusion, it should be noted that the estimates and assumptions of the Federal Statistical Office are opposed to some of the main criticisms. As a result, this leads to a severe underestimation of the cost burdens on the companies concerned. Another example is the adjustment expenditure in the context of accounting, i.e. the "adjustment of tax codes with associated accounts" and "adjustment of invoices", which, at 85 minutes per company, are still justifiable and realistic for a small enterprise, but which should not be sufficient for a larger company with more complex systems. It is interesting to note that the expenses (personnel and material) for the directly modified new pricing in the

⁴⁵ See. The Federal Government / National Standards Control Board / Federal Statistical Office (2018), p. 5.

⁴⁶ See Federal Statistical Office (2020a), p. 8, 10.

retail trade are explicitly neglected and thus assume that these are not changed, but that the option to discount the VAT rate during the payment process is consistently chosen. Similarly, the adjustment of (long-term) contracts, as well as corrections to the accounts for permanent benefits without any objective reasoning, is neglected.⁴⁷ It should also be noted that the Federal Statistical Office included the expenditure of the informative signage for reducing VAT rates only at retail outlets, but not at other retail or catering companies. In addition, the validation of empiricism must be critically questioned, since the estimate "Adjustment of invoices" is based on only two company statements and, moreover, no information on the number of companies surveyed is given at all in the case of "adjustment of tax codes with associated accounts". As a result, an empirical validation of the estimated working time expenditure in this area cannot ultimately be confirmed. It is therefore all the more surprising that the Federal Office accounts for 65.6% of the total estimated compliance expense on the above two cost items.

Nor does it take into account the burdens in the field of 'training, communication and training', which are estimated by the enterprises surveyed in the context of this work to be a high percentage of between one third and half of the total working time expenditure. The burdens of the Controls and Corrections activity are also not taken into account, although transactions such as down payments, price changes, standing and similar items require correction postings and corrected invoices with changed tax rates, even in cases where there are no transactions to be corrected. The need for the "control" activity in consideration of the complex demarcation situation and the associated additional burdens from correction postings is neglected, as is the increasing consulting costs, additional material costs, IT and software costs, as well as expenses for external other services as the company grows in size. Due to the non-approach of costs in the context of future audits, the Federal Statistical Office indirectly assumes that these are either non-existent or that the changeover is completely without errors or corrections.

Taking into account the presented procedure and working methods of the Federal Statistical Office in comparison with the survey carried out in the context of the contribution, as well as from a practical consultant's point of view, it can be seen that the Federal Office has included only a partial part of the actual cost burdens resulting from the temporary reduction in the tax rate. Due to this limited cost-taking, the high deviation from the estimate in the context of this work appears to be conclusive, as shown by the vehement cost underestimation. It should be noted that the Federal Statistical Office provides a rather inadequate and inaccurate picture of the cost burden.

6. Conclusion and outlook

In summing up, the estimated cost of bureaucracy is high due to the temporary reduction in vat rates in the context of this work on the basis of the company surveys conducted and the SKM and differ significantly from the results of the Federal Statistical Office. Evidence shows that the total estimated total cost of work is 2.27B. 9.3times the compliance expense of 238.7 M determined by the BafS. Euro. This represents 11.35% of the planned production volume of 20B under the temporary reduction in vat. Euro.^{48 49} Comparing the red tape costs of the total VAT of EUR 9.6 B. shown by the Office for National Statistics' red-cost database,⁵⁰ the cost estimate of the temporary tax rate reduction leads to a

⁴⁷ See Federal Statistical Office (2020a), p. 9.

⁴⁸ See Federal Statistical Office (2020a), p. 5.

⁴⁹ See Bach / Michelsen (2020), p. 5.

⁵⁰ Self-evaluation on <https://www-skm.destatis.de/webskm/online> (query of 03.09.2020).

temporary increase in the cost of bureaucracy of the VAT system of 23.6%. The estimate of costs made in the contribution is in addition to the assumptions and workflows of the SKM in accordance with the Guide to Determining Compliance Costs and is robust in terms of varying labour cost rates. As a significant result, the additional charges estimated by the Federal Statistical Office in the context of the temporary reduction in VAT rates were greatly underestimated. Whether this was deliberately initiated by the renunciation of the inclusion of standard activities is excluded at this point. The above-mentioned underestimation is mainly due to the absence of the inclusion of basic burdens such as training, communication, counselling and examination costs. In addition, due to the insufficient empirical validation of the assumptions of the Federal Office. The significant burdens on businesses as a result of the temporary reduction in VAT rates under the Second Corona Tax Assistance Act are absolutely contrary to the objective of creating a countercyclical catalyst to stimulate consumption and thus to positively influence the economy.

In the aftermath of this comparison, therefore, it is necessary to question how the legislator, as well as the tax administration, intend to justify the additional costs and negative effects and, above all, to compensate for them. At the same time, the survey of companies has shown that there are ways to reduce costs or reduce working time. An important signal would be the extension of the transitional arrangement and an amendment under Section 14c of the UStG, or extending the temporary period to a full calendar year in order, among other things, to simplify the settlement of permanent benefits. Looking at the reform package from a fiscal point of view, the issue of the correction of the accounts will hardly be avoidable, especially if there is otherwise a reduction in taxes and thus a reduction in tax revenue. However, this cannot be assumed, since the reform reduces tax rates and thus seeks to relieve the burden on society, which is associated with a waiver of tax revenue on the part of the state. Another useful approach on the part of companies to reduce burden reduction would be to exclude the pure B2B facts and transactions from the tax rate reduction. In particular, larger companies, which are more affected by the conversion burden and work especially with down payment, partial payment and down payments in the context of long-term project ingestion, would thus save working time and thus ultimately costs.⁵¹

Taking into account the almost elapsed period at the time of the preparation of the contribution to the temporarily limited reduction in vat rates, it is questionable whether possibilities still exist or are even useful in order to reduce the bureaucracy costs identified. If, due to the difficult economic situation, the temporary period is extended beyond 31.12.2020, some of the measures identified could still be implemented. The extension of the transitional arrangement by waiving Section 14c (1) of the UStG over the full period of temporary duration, due to the characterization of the VAT as a continuous post in the B2B sector, would be considered useful here. This could reduce the activities of "control and correction" to situations that lead to a truly harmful tax reduction. Accordingly, invoice corrections in the B2B area should be excluded and corrections of invoices already submitted should be reduced to a minimum of work. For future external tax audits, special VAT audits and cash checks, special arrangements should be introduced which take into account the situations of the VAT rate reduction only in cases where there is a real risk of tax reduction. This would be helped by internal risk management in the form of a "traffic light system" on the part of the financial administration. In particular, the increasing costs and risks associated with the size of the company in the context of future external audits can quickly lead to additional additional burdens in addition to the

⁵¹ As an example of this, the respondents included medium-sized building societies and subcontractors in the fields of network technology, as well as crafts.

general bureaucracy costs in the billions of dollars, which in addition speaks in advance for a preventive reduction of bureaucracy costs and simplification regulations. The changes listed can reduce red tape costs in order to achieve the objective of a higher net production volume and, in the end, to reduce the burden on the entire economy.

As to how robust the measure of a VAT reduction is in relation to an increasing number of infections, a clear answer has been given in recent weeks. The new lock-down measures have once again closed shops, sports and leisure venues, the travel industry, cultural sites and gastronomy. It is precisely these companies, during the pandemic, that have had high investments in hygiene concepts, as well as red tape costs as a rising tax rate change. They do not now benefit from the tax rate reduction and are even partially excluded from it. This confirms the results of economists that, instead of a reduction in VAT rates, it is more targeted to make direct financial transfers to those households and businesses that actually suffer income losses as a result of the pandemic. According to this, the approximately 18 billion euros that the tax rate reduction will cost within the 6 months could have had a greater and more positive effect through targeted distribution and investments by the Federal Government. In this respect, the measure of the reduction in vat rates as an economic stabilizer should be reconsidered after the end of the year and targeted investments should instead be made. Among other things, test capacities could be expanded in order to make economic activities on the basis of social contacts easier again. Rapid tests would no longer require comprehensive anti-corona measures, but only clusters. Reforming state bridging aid could also lead to a more goal-oriented impulse. The funds paid to SMEs so far should depend more on the profits of enterprises. In the places where the average industry average for the industry compared to the same period last year, these slumps should be compensated by the state. This would therefore be the same as short-term allowances in order to achieve equality between workers and entrepreneurs. Until now, SMEs can only charge fixed operating costs. At the present time, the concept of entrepreneurial pay has been reintroduced into the discussion about new aid, which would, above all, involve freelancers and solo self-employed people better in the funding process. At the same time, an increase in basic security for low-income earners would help them in particular. By investing in new education and care concepts, the lack of teaching and associated "home schooling" could be reduced, while at the same time preventing workers from returning to the labour market more efficiently. But all in all, the central course of time depends on the reason of society, i.e. on compliance with rules, as well as hygiene and distance measures. A second "strict" lock-down would be far more fatal for the economic system than the first in the spring. This is due to the fact that companies have already used up a large part of their existing capital reserves as a "buffer". Thus, an unprecedented wave of bankruptcies would start, and thus also drastic consequences on the labour market, so that on disposable incomes and in the end result have on basic consumption. In this situation, the measure of a reduction in VAT rates would probably have a much smaller impact.

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