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FROM SAFE SAVINGS TO BIG BANGS – GERMAN FISCAL FEDERALISM DURING AND BETWEEN ECONOMIC CRISES

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ABSTRACT

Since 2007, the Federal Republic of Germany has experienced various major and minor crises. Of these, the financial crisis from 2007 and the Covid crisis were particularly severe. Yet German federalism seems to have weathered the tests of these two economic crises well. Although the crises occurred at a time when the financial relations between the governmental entities were being fundamentally reorganized. In the case of the Covid crisis in particular, the exact long-term fiscal burdens on the various federal levels will not be known for years to come. While public budgets are counteracting the crisis, they are not fully recovering, so that the fiscal burdens are accumulating. This increasingly limits the state's room for maneuver, and tendencies towards a polycrisis are becoming visible. This article shows what influence the respective crises had on the interaction between the federal, state and local governments and how the fiscal system adapted to the new economic environment.

Keywords: Fiscal-federalism; multi-level-government; public-finance; crisis management; polycrisis

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“We tell savers that their deposits are safe. The German government is committed to this as well.” (Angela Merkel, 2008).

“We want to come out of the crisis with a bang.” (Olaf Scholz, 2020)

Crises come and go. However, the associated uncertainty has the tendency of outlasting the actual crisis. It is therefore often politically advisable to convey a sense of security in uncertain times. Consequently, both quotes give an idea of how a holding line in uncertain times can be conceived through public statements by government leaders.¹

The economic crisis starting in 2007 and, more recently, the Covid pandemic of 2020 are striking examples. Even if masking obligations have been dropped, contact restrictions are being lifted and government support programs are being scaled back, there is still a deep sense of uncertainty about the challenges ahead. What is almost uncontested, however, is that both the great financial recession from 2007 and the economic crisis in the wake of the pandemic from 2020 onwards have challenged the way in which corresponding politics (along with policy) are made and how federal structures respond and function. While the financial and economic crisis from 2007 onwards initially affected individual sectors of the economy particularly hard and the resulting shock has spread consecutively to the economy as a whole, the Covid pandemic had a direct impact on the entire economy. What unites both crises, nevertheless, is that economic activity faded, corresponding tax revenues declined, unemployment rose, additional public spending hiked and economic outlooks worsened. Facing a sharp and abrupt economic recession, the German federal level as well as the states used different anti-cyclical measures in order to stabilize economic activity and to remain fiscal space. While the economic crisis from 2007 onwards with the economic downturn and the recovery phase lasting until 2020 have been extensively researched, the full impact of the economic downturn from 2020 onwards is still not fully overcome yet.

This paper examines the impact of both crises on the public finances of the federal authorities and the underlying measures taken in this regard. This also includes a quantitative analysis of publicly available data from all levels of government to provide a comprehensive picture of fiscal developments during and after the two crises. Special attention will be drawn to two federalism reforms that, as their content and timing are significant. This includes reform efforts during the major financial crisis and a redesign of the federal fiscal equalization system under the circumstance of an economically extraordinarily positive situation. Even though the financial crisis from 2007 is already 15 years in the past and the fiscal consequences of the Covid crisis are already fading, the controversy on the impact of both crises on the federal dynamics of the current federal structure is still ongoing.

II. FISCAL FEDERALISM IN GERMANY

The current structure of German fiscal federalism is characterized by its unitarism and cooperativism, which is reflected in the division of tasks, the distribution of taxes, and the active fiscal equalization between the levels of government under Article 70 of the Basic Law. A substantial part of public tasks, as stated in Art. 83 of the Basic Law

1. At the time of the quote, Olaf Scholz was still Federal Minister of Finance under the Merkel government, but he also shaped the word “bang” or “double bang” during his later time as Federal Chancellor.

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is initiated by the federal government (the ‘Bund’), but carried out by the states (the ‘Länder’) and municipalities. As a result of this *functional* or *executive federalism*, the distribution of expenditures and revenues is of central importance to ensure that all levels are endowed with the funds needed to fulfill their tasks (Lenk & Glinka, 2017a; Kempny, 2014). The German tax distribution can be characterized as a mixed system. Separate taxes are solely allocated to the respective level of government and account for around 26 % of total tax revenues (Bender et al., 2022). Yet the larger share of tax revenue (74 %) is generated by joint taxes, most notably the value-added tax and income tax. These are distributed to the various governmental levels according to different distribution keys (Bender et al., 2022). As federal laws regulate the specific distribution, the Bund holds the central position in the fiscal system.

In the federal system and in the two economic crises, municipalities play and have played a particularly important role: The municipal level accounts for 26 % of personnel expenditure, 55 % of capital expenditure, 39 % of operating expenditure and 38 % of operating grants to third parties (own calculations based on Destatis, 2019).² The municipalities are not a third federal level in their own right, but they have a constitutional right to self-government (Brümmerhoff & Büttner, 2018 or Geißler, 2020). The municipalities are subject to the legislation of the Länder with regard to structure, tasks or financing, which also leads to considerable differences between the Länder (Brümmerhoff & Büttner, 2018). In principle, the federal government does not transfer any tasks to the municipal level and the Basic Law does not provide for direct cooperation between the Bund and the municipalities (Art. 83, 85 and 108 Basic Law or Seidel & Vesper, 1999).

In principle, a functioning federal state should be able to sustain itself over time (Brinkmann et al., 2017, p. 650). Even though theories of fiscal federalism generally start from the assumption of an existing, stable and self-sustaining system, this assumption cannot be taken as a given in principle (Oates, 2005, p. 366-367). The resilience of fiscal federal systems may well change over time, especially during or after economic crises, which is why the federal system is usually also ‘*on trial*’ during an economic crisis (see, e.g. Kincaid et al., 2010). These ‘*trials*’ will be discussed in the following section.

II. GERMAN FISCAL FEDERALISM IN THE WAKE OF THE POLYCRISIS

1. The Financial Crisis is Followed by the Sovereign Debt Crisis

For the Federal Republic of Germany - as well as for many other countries - the Great Recession from 2007 onwards was the most severe recession since the Great Depression of the 1930s. Germany was hit hard by the global financial market turbulences and the slump in international trade following the collapse of the investment bank Lehman Brothers in September 2008. The ECB - and other central banks around the world - cut their key interest rates dramatically and where there was no further room for interest rate cuts, they resorted to unconventional monetary policy measures. Germany - like many other countries - experienced *three* interrelated crises (Zimmermann, 2012, p. 101). In the *first* crisis on the financial markets, the focus was on guarantees and loans as fiscal measures, followed by a *second* crisis in the real economy, which was responded to with quite effective measures of classical budgetary stimulus policy. In particular, the negative effects of the financial crisis on the labor market could be strongly cushioned in a European comparison with the labor market policy instrument of short-time

2. Values from 2019 were chosen here to counteract the distortions caused by the Corona pandemic.

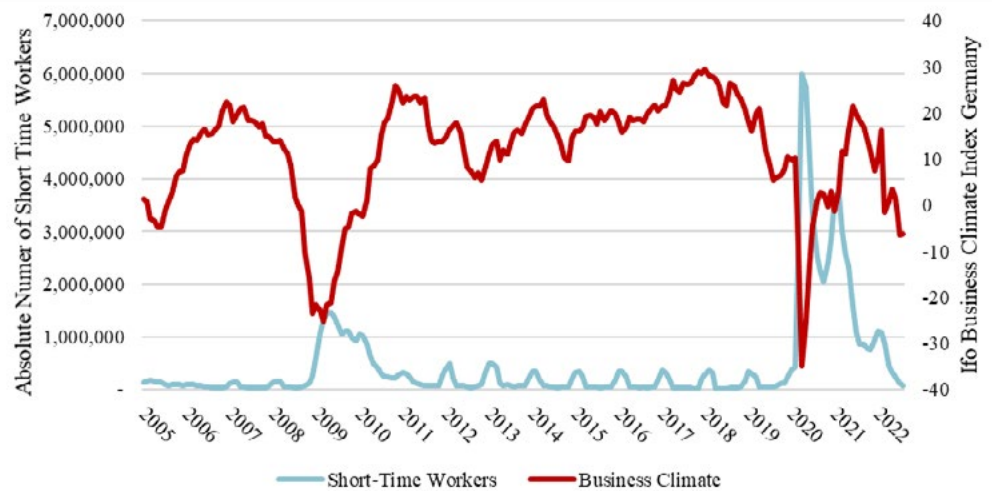
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allowance³ (Brenke et al., 2010, p. 6). *Figure 1* shows that there were more than 1.4 mil. short-time workers at the peak in May 2009. Thus, despite a historic slump in economic output, the crisis in Germany was halfway overcome in 2010 according to most economic indicators (Borger, 2010, p.1). An example of this is the ifo Business Climate Index in *Figure 1*, which is an early indicator of economic developments and which had already returned to the relatively high level of May 2007 by October 2010.

Figure 1: Short-Time Workers and ifo Business Climate Index for Germany



Source: ifo (2023); Federal Employment Agency (2023); Own illustration.

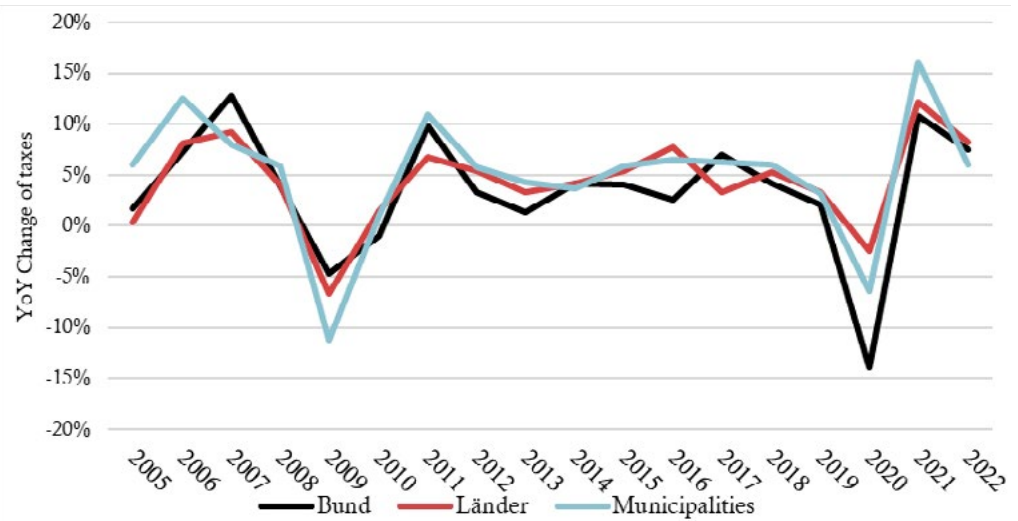
However, the averting of the crisis was not for free, as the public budgets contributed considerably to the mitigation of the crisis (Eltges & Kuhlmann, 2011, p. 143). The financial crisis and the crisis in the real economy caused public deficits and debt to skyrocket, and these crises were followed by a third crisis, the euro or sovereign debt crisis (Neubäumer, 2011, p. 831). The public budgets of the federal level were plagued by tax shortfalls of an unprecedented magnitude. As can be seen in *Figure 2*, federal tax revenue slumped by almost 5 % in 2009. As was to be expected, precisely those tax sources that were directly linked to the economy collapsed (Eltges & Kuhlmann, 2011, p. 143). Wage and income tax decreased by about €13 bn. from 2008 to 2009 (Eltges & Kuhlmann, 2011, p. 143). This happened, among other things, in the wake of short-time work. The direct taxes on profits such as corporate income tax and trade tax fell by almost the same amount from 2008 to 2009, each amounting to €8.6 bn. Only value added tax increased in the same period by €1 bn. by 2009 (Eltges & Kuhlmann, 2011, p. 143).

3. In the case of short-time work ('Kurzarbeit'), the Federal Employment Agency provides wage compensation for lost working time (usually in the amount of unemployment benefit) in order to help companies retain their employees in economically weak times. Short-time work can be applied in the event of a temporary, substantial and unavoidable loss of capacity to work. (Gehrke & Weber, 2020).

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Figure 2: Year-over-Year Change in Taxes, by level of government

Source: Deutsche Bundesbank (2023a), time series BBO1.BJ91; Own illustration.

Tax revenues at state and local level fell far more sharply than at federal level. In 2009, the Länder suffered a drop of -7 %, while the municipalities were the most severely affected level with -11 % (Figure 2). At the same time, the slumps in Länder and local government revenues were highly differentiated (Färber, 2013, p. 219). Because the slump in world trade was concentrated mainly on investment goods and durable consumer goods, those Länder whose economic structure was concentrated on the manufacturing sector suffered particularly from the slump in world trade (Zierahn, 2010, p. 275). While Baden-Württemberg and North Rhine-Westphalia were hit hardest by the crisis, the eastern Länder of Saxony, Saxony-Anhalt and Mecklenburg-Western Pomerania, for instance, lost significantly less than the national average (Eltges & Kuhlmann, 2011, p. 143; Schmidt-Seiwert, 2011, p. 117). At the municipal level, too, regions characterized by a particular export orientation were particularly affected (Eltges & Kuhlmann, 2011, p. 147). At the municipal level, in particular, profit-related taxes - especially corporate income tax and trade tax - slumped after they had risen strongly until 2008 (Deutsche Bundesbank, 2010, p. 76).

The crisis also caused a number of additional expenditures, mainly for economic stimulus programs and measures to bail out banks. The federal government increased its expenditures by 9.4 % in 2009 and 2 % in 2010 (Färber, 2013, p. 218). The Bund bore the main burden for the protection of illiquid financial institutions and banks as well as for the establishment of economic stimulus programs (Färber, 2012, p. 8). This was managed not only through the federal budget but also through newly established special funds (Färber, 2013, p. 217). In 2008 and 2009, the economic stimulus packages I and II, with budgetary measures amounting to around €30 and €50 bn., were adopted by the federal government to support the economy (Zimmermann, 2012, p. 102). Partly criticized for being decided too late (Roos, 2009, p. 400), the packages included funds for government investment, tax and duty cuts, declining balance depreciation, labor market policy measures, improved regulations on the use of short-time work and a scrappage premium for cars (van Deuverden, 2022, p. 176). Other measures included for example, the quite significant statement on safe savings deposits in Germany mentioned in the introduction, the financial market stabilization fund of €480 bn., which mainly supported the German banking sector and avoided contagion effects on other institutions and the real economy. The Financial Market Stabilization Fund existed as a special fund from 2008 to 2015 and consisted of €400 bn. in guarantees for banks

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and other capital collection agencies and €80 bn. in capital measures (German Finance Agency, 2023). To rescue the Hypo Real Estate Group alone, a bad bank was set up to which the bank's risk positions were transferred and which had raised loans of €192 bn. on the capital market at the end of 2010 (Färber, 2013, p. 218). At the level of the Länder, the picture was also very mixed, as some Länder had to pay for the losses of their state banks – especially in Bavaria, Schleswig-Holstein, Hamburg, North Rhine-Westphalia and Baden-Württemberg (Kallert, 2017, p. 20). In the case of a number of (state) banks, public funds were also used in an attempt to stabilize them and slow down the further decline in prices on the financial markets and the increase in the cost of loans (Kallert, 2017, p. 20f.). At the same time, not all crisis measures were directly budget-relevant, e.g. through the use of guarantees (Färber, 2013, p. 218f.). In addition, €115 bn. was made available as guarantees and credit assistance in an Economic Fund Germany (Schambach, 2010, p. 53). Whereby the economic fund, due to a low utilization, is a good example of how originally planned large financial amounts can ultimately turn out to be small and then even put little strain on the budget and, in particular, can also function psychologically (Zimmermann, 2013, p. 16). The measures were also aimed at a positive signal effect: for example, the insolvency of the car manufacturer Opel would have had a fatal signal effect, which is why the rescue seemed justified for the special situation of these years (Zimmermann, 2012, p. 102). The Investment and Redemption Fund (ITF) granted financial assistance to the Länder and municipalities to stabilize the economy for investments begun between January 27, 2009 and December 31, 2010. At the end of 2011, the ITF had taken out loans totaling €21.2 bn. to finance these investments (Färber, 2013, p. 217f.). Furthermore, the Federal Employment Agency was paid a subsidy of €16 bn. in 2010 to compensate for the loss of income due to the economic crisis (German Bundestag, 2010). Social security funds, in particular the Federal Employment Agency, made an important contribution to stabilizing the economy; Social security spending rose by 5.9 % in 2009 and by 1.3 % in 2010 (Färber, 2013, p. 218).

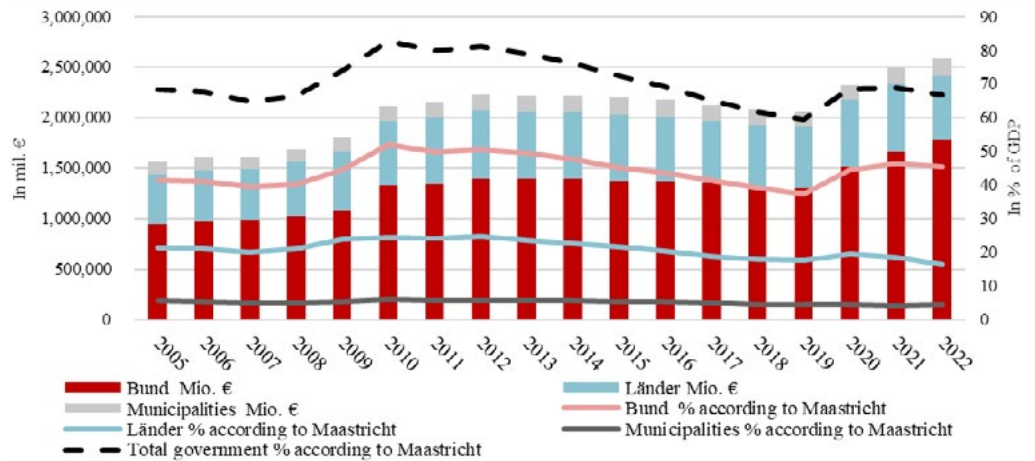
With the revenue shortfalls and substantial additional spending, public debt increased significantly. As *Figure 3* shows, public debt (as a percentage of GDP, pink line) increased by a maximum of 18 percentage points from 2007 to 2010 (from 64.9 % to 82.8 %), with the share of public debt held by the Länder and the share held by municipalities remaining relatively constant at 30 % and 8 %, respectively. At the federal level, debt increased by €988 bn. to €1.398 bn. (+41.6 %) from 2007 to the end of 2014. The Länder debt increased by 30.6 % in absolute terms over the same period. At the same time, however, significant differences can be seen in the debt ratios as a percentage of GDP between the federal and state (as well as local) levels: the federal level increased from 39.5 % to 52.1 % from 2007 to 2010, while at the same time the state level saw an increase from 20.2 % to 24.6 % and the local level from 5.1 % to 6 %.

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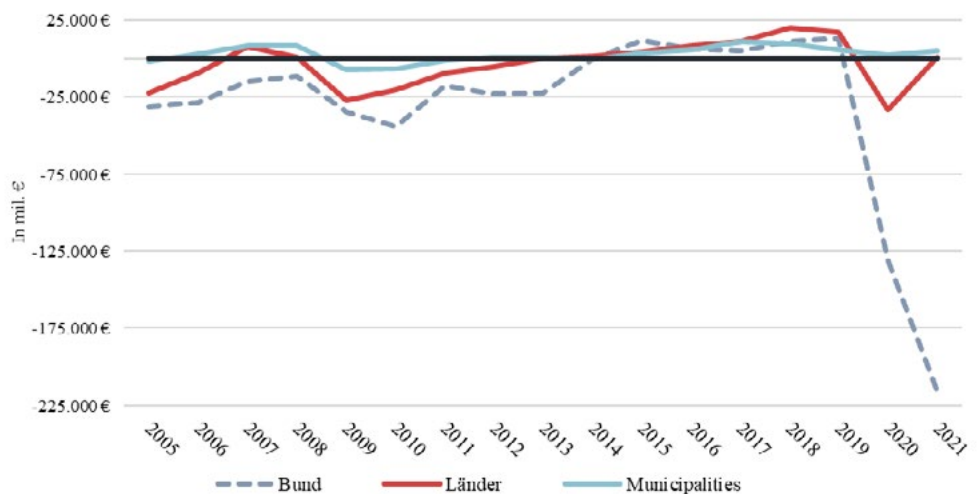
Figure 3: Government debt, by level of government



Source: Deutsche Bundesbank (2023b), time series BBK01.BJ90; Own illustration.

Simultaneously, the budget balances of the various levels of government decreased considerably. As can be seen in *Figure 4*, the federal government again recorded the most extensive slump, followed by the Länder and local governments. Nevertheless, particularly relevant for the German context, local governments closed with record high deficits, especially in 2009 and 2010 (Boettcher & Freier, 2022, p. 647). A municipal budget crisis escalated in the context of the international financial crisis and the budget balance reached negative record levels of €-7.5 and €-6.9 bn. in 2009 and 2010 (*Figure 4*). This also led to a record increase in short-term municipal debt, for example in the form of cash advances (2012: €47 bn.) (Person & Geißler, 2020, p. 200). Although the German economy recovered relatively quickly after the economic and financial crisis, it took several years for budget balances to recover (*Figure 4*). Against the backdrop of rising municipal cash advances and the euro crisis, public budgets could not be relieved conclusively for a long time (Eltges & Kuhlmann, 2011, p. 144). Even though the impact of the financial crisis on public budgets varied until 2020, however, federal budgets improved significantly from 2011 and were in positive territory from 2015 to 2019 (*Figure 4*).

Figure 4: Budget Balance, by level of government



Source: Deutsche Bundesbank (2023c), time series BBK01.BJ90; Own illustration.

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After all, the federal, state and municipal authorities have greatly mitigated the consequences for the population at the price of a sharp increase in debt (Eltges & Kuhlmann, 2011, p. 144). Even though the successes on the labor market were quite remarkable, the consolidation phase that was then initiated did not leave people and various federal levels unscathed (Eltges & Kuhlmann, 2011, p. 144). In the course of the Federalism Reform II⁴, a debt brake was introduced in June 2009 (Art. 109 Basic Law), which stipulated, among other things, that the federal government may only have a structural debt of 0.35 % of the gross domestic product (Art. 115 Basic Law). The Länder were also no longer allowed to run structural deficits over the economic cycle from 2020 onwards. Politicians set themselves narrow debt limits with the so-called debt brake (Eltges & Kuhlmann, 2011, p. 144). The new regulation applied to the federal government and the Länder from 2011 onwards, although a transitional regulation stipulated that deviations would still be possible for the federal government until and including 2015 and for the Länder until and including 2019. Although this meant that the deadlines were several years in the future, some state governments, for example, immediately began to introduce their own debt limits and thus influenced their spending capacities (Hecker et al., 2016, p. 14). Even though the debt limit refers to the federal level and the Länder, the municipal level, as a constitutional part of the Länder level, felt immediate effects, as in the following years there was potentially a transfer of tasks from the federal and Länder governments to the municipalities, which led to higher additional financial expenditures for the municipal level (Lenk et al., 2012, p. 16). It thus closed the “valve” of indebtedness for the public budgets and put all federal levels under considerable fiscal adjustment pressure (Eltges & Kuhlmann, 2011, p. 144).⁵ As a result, the budget balances of the Bund, Länder and municipalities improved significantly (*Figure 4*), which was also influenced by a significant improvement in the revenue situation (Eltges & Kuhlmann, 2011, p. 144). Moreover, a distinctive feature of the crisis was that horizontal fiscal relations temporarily became more balanced when transfer payments from donor countries to recipient countries declined for the first time in recent history (Kincaid et al., 2010, p. 11).

The federal Republic experienced an upswing from 2010 onwards and the longest period of growth in the unified Germany, with 2019 being the tenth consecutive year of GDP growth (BMWK, 2019, p. 9; Destatis, 2020). It remained among the world’s top exporters in the aftermath of the financial crisis, achieving its highest-ever trade surpluses in 2015-2017, while experiencing robust domestic growth and being a historically low interest rate environment (BMWK, 2019, p. 9; Destatis, 2023, p. 3). The federal government itself achieved a balanced budget as of 2014, which was last achieved in 1969 (BMF, 2015, p. 4). Alongside the dynamic development of the economy and public finances

4. The second stage of the federalism reform focused in particular on modernizing the financial relations between the Federation and the Länder in order to adapt them to the changed framework conditions for growth and employment policy. Between March 2007 and March 2009, the Federalism Commission II, set up by the Bundestag and the Bundesrat, drew up a package of measures, the result of which centered on the introduction of the new joint debt rule. The introduction of the debt brake was motivated not least by the fact that European requirements regarding the general government deficit were to be met by implementing the debt-limiting regulation. In this context, it is particularly relevant that the debt targets relate to the country as a whole. With a maximum structural net new debt of 0.5%, the aim was to create a balance between the governmental entities. While the federal government was relatively quick to claim a share of 0.35% for itself, the Länder first discussed whether they needed the remaining leeway of 0.15% and second couldn’t agree on an allocation mechanism. This resulted in a common position on the structural prohibition of new debt. The remaining 0.15% was consequently not used. The debt brake is thus significantly more restrictive than the European requirements with regard to structural net borrowing. (German Bundestag & German Bundesrat, 2010, p. 91-106).

5. The implemented fiscal rule was also intended to help resolve a conflict that entered the new Article 109 of the Basic Law in the course of the Federalism Reform II. While paragraph 1 refers to the autonomy of the budgets of the Bund and the Länder, paragraph 2 describes that the Bund and the Länder jointly bear obligations arising from legal acts of the European Community. In order to find a balance between individual autonomy and joint obligations, the debt brake has been implemented as a regulatory coordinator (Art. 109 Basic Law).

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negotiations began on the redesign of the federal fiscal equalization system, which was to permanently change the financial relations between the Bund and the Länder.

2. The Reform of German Fiscal Federalism Between the Chairs

10 years after the start of the crisis in 2007 and 8 years after Federalism Reform II, in 2017, the financial relations between the Bund and the Länder were reformed again, as the regulations on federal fiscal equalization had to be reorganized. The reform was necessary insofar as central legal bases for the vertical and horizontal distribution of available public funds expired at the beginning of 2020 (Lenk & Glinka, 2017a, p. 103). This included the legal basis of the central postulate of the Basic Law, which states that the different financial strengths of the Länder must be adequately balanced. The subject was therefore no less than the question of how financial resources had to be distributed in the future so that state and local authorities are in a position to adequately fulfil the tasks incumbent upon them. The outcome of the political negotiations meant comprehensive changes to the status quo, which was valid until 2019, with significant consequences for the federal government, the Länder, and indirectly also for the municipalities. The reform covers two different aspects of federal governance: One part of the reform covers the existing distribution of responsibilities between the federal levels, the other part covers the existing distribution of public revenues in the Länder (Lenk & Glinka 2017b, p. 422-426). However, there is no direct connection between the results of the two parts of the reform. The changes in the distribution of tasks and revenues were - in contrast to the fundamental demands of the economic theory of federalism - not coordinated with each other, but rather discussed and ultimately decided upon as different packages of demands side by side (Lenk & Glinka, 2017c, p. 506-507).

It was not until October 14, 2016 that the heads of the federal and Länder governments reached a final agreement. The Länder had largely prevailed in the reorganization of federal-Länder financial relations. In return, the Länder agreed to the transfer of responsibilities demanded by the federal government in April 2016. In its entirety, the compromise involved a comprehensive legislative initiative. The required approval of both chambers of parliament was still pending for the multiple amendments to the Basic Law and the drafting and rewriting of numerous individual laws. In the parliamentary groups in particular, there seemed to be a certain amount of resistance to the design of the reform (Lenk & Glinka, 2017c, p. 506-507).⁶

The value added tax share of the Länder was increased by about €4.02 bn. at the expense of the federal share (Art. 2 'Act on the Reorganisation of the Federal Fiscal Equalisation System from 2020 onwards and on the Amendment of Budgetary Provisions'). The increase was partly by means of an annual fixed amount and partly in a dynamic form by a relative increase in the Länder's share of total value added tax revenue (Lenk & Glinka, 2017c, p. 507). The distribution of the value added tax to the single Land is based on the number of inhabitants. Financially weak Länder receive a surcharge, financially strong Länder a discount (Lenk & Glinka, 2017c, p. 507). This is done by a comparison of an equalization measure with a financial strength measurement. Gaps in financial strength will be uniformly compensated by 63 % (§10 'Act on the Financial Equalization between the Federal Government and the Länder'). The direct fiscal equalization among the Länder and the preceding advance value added tax equalization of the former system were thus completely abolished. Furthermore, unconditional grants of the

6. In particular, there was criticism of a reduction in solidarity among the Länder and the increasing dependence of financially weak Länder on the federal government that the compromise would entail. The draft bills were referred to the Budget Committee, which, among other things, set up several expert hearings. Most of the invited experts were critical of the reorganization of federal-Länder financial relations.

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federal level to the Länder have been increased, and two new vertical instruments were introduced (German Bundestag, 2022a, p. 8). The agreed regulations on federal fiscal equalization are generally valid for an unlimited period. According to Art. 143f of the Basic Law, a further reorganization is possible after 2030 at the earliest, provided that it is requested by the Federal Government, the Bundestag or at least three Länder (Art. 143f Basic Law). Until a further reorganization has been decided, the recently agreed regulations continue to exist with a maximum duration of 5 years, starting from the time of the request for negotiations on a reorganization. In the very year in which the reformed tax rules were to take effect, the new system was tested by an unprecedented health care crisis and a subsequent economic crisis.

3. A Unique Combination of Health and Economic Crisis

The economic crisis from 2020 onwards - as in other countries - had quickly displaced the economic crisis from 2007 onward from its position as the most severe economic crisis since 1930 (BMWK, 2020, p. 11; OECD, 2021, p. 7). The Covid pandemic led to a historically unique combination of a health crisis and an economic collapse worldwide, with supply and demand shocks (including large stock market slumps), with the economy highly dependent on pandemic events and containment measures closely interacting with economic and business cycle policy instruments to mitigate the economic consequences (OECD, 2020, p. 4; OECD, 2021, p. 7; Vöpel, 2021, p. 319). As in the crisis from 2008 onwards, the ECB was also characterized by quick action in the form of further monetary policy easing during the Covid crisis. At the time, there was still a risk that low inflation would become entrenched in view of the severity of the crisis and after years of very weak price development (Nagel, 2022).

While Bund and Länder budgets were in a favourable starting position at the beginning of 2020, with the outbreak of the pandemic in Germany in the spring of 2020, both levels of government faced the challenge of dealing with the exogenous shock and, in particular, the economic consequences of recurrent closures. On the one hand, fiscal policy measures were aimed at closing the financing gap created by falling tax revenues and rising expenditure burdens - this was necessary because the countercyclical offset of automatic stabilizers proved insufficient for this purpose. On the other hand, a number of measures were adopted to relieve the financial situation of private households and companies with the help of transfer payments. Although Germany also experienced its most severe and rapid stock market collapses ever, the fact that a renewed 'top-down financial crisis' was largely avoided in 2020 with substantial national intervention is potentially also due, among other things, to 'lessons learned' from the past decade (Buch, 2021).

The Bund took a three-pronged approach to combat the pandemic effects. First, extensive direct action was taken to protect public health. Second, the Bund took measures to safeguard the industrial economy and employment. Third, it provided aid to the Länder and municipal governments. While the initial focus (April to September 2020) was set on short-term measures to secure the liquidity of private households and businesses that were rather vague regarding their direction of impact, but fiscally effective, the support measures changed in the further course to more tailored solutions for private households and businesses (Aroney et al., 2021, p. 126). These solutions required more processing and therefore exhibit a time lag, but were more accurate. The Bund generously resolved the typically conflicting goals of accuracy versus swiftness by providing rapid emergency aid (Aroney et al., 2021, p. 126). To support private households and businesses, the Bund primarily resorted to transfer payments, subsidies and loans. These included the short-time allowance, the extension of unemployment benefit, the child bonus and the numerous bridging aids for companies. Moreover, lending had been supported via the creation of the Economic Stabilization Fund and the special programs

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of the 'Kreditanstalt für Wiederaufbau' (KfW). The most important individual federal measures in the two supplementary budgets for 2020 are the Corona emergency aid (max. €18 bn.), the bridging aid (max. €25 bn.), the additional spending regarding livelihood protection (around €5.5 bn.), the coverage of additional burdens on the Federal Employment Agency (over-year loan of €9.3 bn.), which also includes the extension of short-time working allowance, and the payments to the healthcare fund (€11.5 bn.). The supplementary budget for 2021 approved further one-off business assistance of €25.5 bn. In addition, the KfW special program provides a significant part of the liquidity support for companies: Since the launch of the special program on March 23, 2020, it had enabled a total of €49 bn. in additional corporate financing (Arbeitskreis Steuerschätzungen, 2020; BMF, 2021; KfW, 2021).

In addition to the economic measures, the window of opportunity had been used to implement structural measures that were not directly related to the pandemic (Thater, 2021, p. 34). In addition, the Bund supported the Länder and municipalities. This particularly included the permanent increase in the federal share of municipal expenditures for housing and heating, which now amounts to 74 % (approx. €3.4 bn. in additional annual expenditures for the Bund). In addition, a lump-sum compensation for the municipalities' shortfall in trade tax revenues granted for 2020 was borne equally by the federal and Länder governments and totaled €11.8 bn. Moreover, the Bund had increased its contribution to the expenses of the 'new' Länder in East Germany under the Entitlement and Vested Rights Transfer Act by 10 % to amount to a total of 50 % (€300 mil. p.a.), starting in 2021. On the revenue side, the Bund also used crisis instruments. These included, among others, the temporary reduction in value-added tax, adjustments to advance tax payments and deferrals of tax payments coordinated by the Bund, as well as the extension of the tax loss carryback.⁷ The latter results in a delayed return of corporate taxes to pre-crisis levels (Bender et al., 2021, p. 198).

As depicted in *Figure 1*, the ifo business index decreased sharply from 2019 to 2020 by -34.9 %. This was a more severe downturn than during the great financial crisis. Consequently, the amount of short-time workers increased significantly in the same period from around 50,000 to 5.7 mil. However, this sharp increase was only temporary as the decline already started in the consecutive year. This time period was also shaped by the economic consequences of the Russian invasion of Ukraine, which unfolded during the recovery from the Covid-related impact on the job market. However, while the number of short time workers decreased since 2020 onwards, the business climate index worsened again.

The developments on the job market and the overall economy also led to a decline of taxes on all governmental levels. Overall tax revenues declined by -10.3 % for the Bund, roughly -3.1 % for the Länder and about -6.4 % for the municipalities. The harsh decline in taxes was mainly due to tax decreases of the corporate tax and value added tax. As shown above, the tax decline was not distributed evenly between the governmental levels. The main burden was distributed to the Bund which not only had to deal with a decline in its own tax revenues due to a decline in the shared taxes but also decided to introduce changes in tax legislation in order to support businesses and private households.⁸ However, one year later, taxes already increased rapidly due to the effects of anticyclical fiscal policy as well as less Covid-related measures, such as lockdowns. The tax decline of the municipalities, however, was offset by federal and state measures. In

7. By the end of June 2022, four Covid tax aid bills had been passed by the federal legislature.

8. During the crisis, a discussion arose whether the recovery of taxes would be more V-shaped or U-shaped, i.e. more rapidly or rather in the medium term. Since the assumption of the general tax recovery path differed, also the proposed measures to cope the crisis differed significantly.

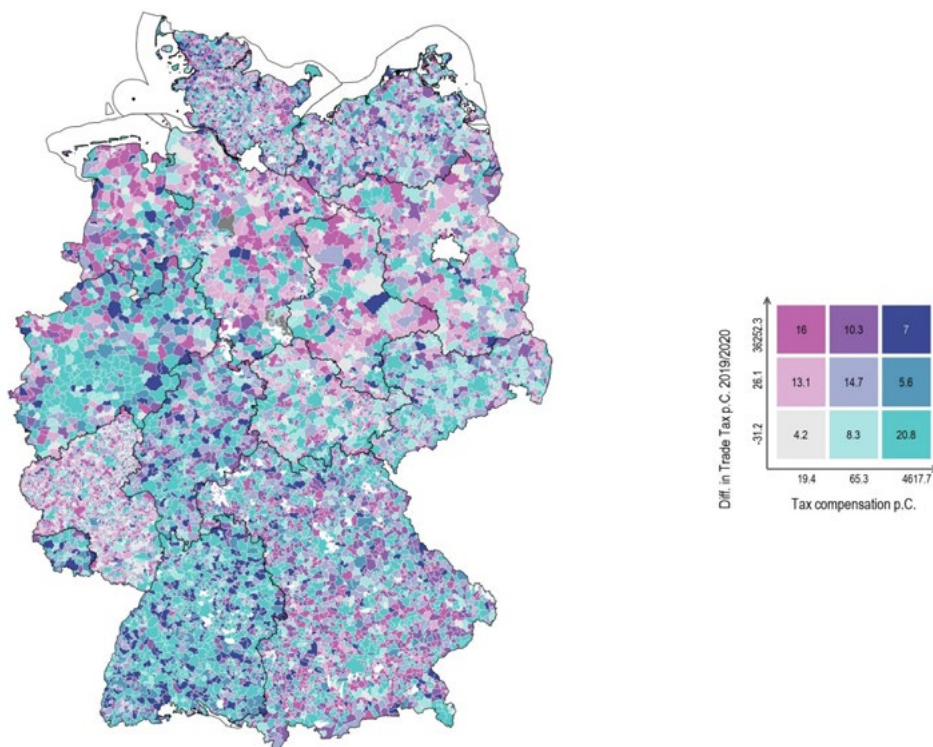
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particular, this included historically unique trade tax compensation which was borne equally by the Bund and the Länder. As shown in *Figure 5*, the compensation scheme broadly offset the trade tax losses of the municipal level. A symmetrical picture would mean that those municipalities that suffered a relatively sharp drop in trade tax compensation also received a high compensation payment. Conversely, municipalities that suffered a comparatively weak slump in trade tax would also have to have received a low compensation payment. In *Figure 5*, a symmetrical behavior can be observed for a total of just 25.9 % of the municipalities. There were high outliers in the extreme case where the trade tax slump was relatively small and, at the same time, the compensation payment was high. This was the case in 20.8 % of all cases. Conversely, in 16 % of the cases, the trade tax slump was severe, but the compensation was relatively weak.

Figure 5: Municipal trade tax compensation during the Covid pandemic



Source: Bundestag (2021) and Destatis (2022); Own presentation, own calculations.

However, the compensation payments were offset if the Länder had made a prior compensation payment. The downward deviations can thus be partially explained by that. The deviations from symmetric behavior are generally caused by the fact that the trade tax revenue shortfalls to be compensated where forecasted values at that point in time. These were taken from the regionalized tax estimate. All in all, for the municipal level, the trade tax compensation scheme led to an overcompensation which not only balanced trade tax losses but also, in sum, led to considerable additional financial revenues.

The measures of the federal and state level led to sharp increases in the debt levels, as shown in *Figure 3*. This was mainly due to the fact that substantial borrowing was inevitable, caused by expenditure increases and decreases in revenues. The Bund, therefore, made use of the option to activate the exception clause in the federal debt rule on account of the pandemic. As a result, the Bund's debt increased by around €214 bn. in 2020 (+18 % compared with 2019), increasing to a total of around €1.4 trillion as of December 31, 2020. Further borrowing of around €215.4 bn. was done in 2021. As a

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consequence, the debt-to-GDP ratio for the Bund increased from 59.7 % (2019) to 68.7 % (2020) and currently amounts in 2021 69.3 % (Deutsche Bundesbank 2022). In 2022, the debt-to-GDP ratio declined to 66 % due to two major reasons. First, borrowing on the capital market in 2021 exceeded cash requirements due to the uncertain budget situation which will reduce new borrowing and secondly, the expected high nominal GDP growth in 2022 (+6.6 %) will in itself reduce the ratio significantly (German Bundestag, 2022b, p. 11).

These large amounts reflect, not least, the task facing the Bund in dealing with the crisis. In this respect, the federal budget, with its general government control function, had the task of implementing a macroeconomic stabilization policy and support measures. However, the Bund has not only used Covid-related borrowing to cope with the pandemic. For example, around €60 bn. of unused credit appropriations have been channeled into the Climate and Transformation Fund for the green transformation (Thater & Flachs, 2022, p. 37).⁹ In this respect, the Bund has taken the opportunity not only to channel funds into short-term stabilization, but also to cover long-term structural additional needs, whose relationship to the Covid pandemic, however, is at least debatable.¹⁰

All these developments led to a sharp decrease in the budget balance of the federal government. As *Figure 4* indicates, the municipal level however, in total, experienced only a slight decrease in the budget balance.¹¹ This was possible due to the extensive aid provided by the Bund and the Länder as discussed above. Concerning the federal level, not only crisis measures led to a worsening budget balance. The extensive use of borrowing was extended in 2022 with the implementation of a military special fund (€100 bn.) in the wake of the Russian invasion of Ukraine. That was only possible because the exemption clause of the debt brake was still activated and an additional article in the basic law was introduced, stating that deficits of the military special fund are not included in the calculation of the debt brake (Art. 87a Basic Law). Besides the military special fund, the federal government introduced an economic stabilization fund in order to cope the economic impact of the pandemic. It had a volume of roughly €600 bn. which was reduced to €250 bn. in 2022 in guarantees and loans (German Finance Agency, 2022). Originally ending in July 2022, it was used afterwards to tackle the effects of the energy crisis and was equipped with credit authorizations of €200 bn. (German Finance Agency, 2022). However, since gas and electricity prices normalized relatively quickly on a broad scale, a considerable amount of credit authorizations (€35 bn.) is left unused.¹² Furthermore, around €44 bn. has been allocated to a reserve in 2023 (Bundeshaushaltsplan, 2023, p. 105).

The Länder hold less decision-making authority compared to the Bund. Although their role is central to the organization of public health protection, the effectiveness of their fiscal measures can be considered to be limited. As a result of their dependence on the revenue from shared taxes, the Länder are exposed to corresponding effects without

9. A constitutional complaint by the CDU/CSU parliamentary group against the transfer of unused credit authorizations is still pending at the Federal Constitutional Court.

10. For example, the State Court of Hesse recently ruled for the state that a causal connection must exist between the triggering event and the increased borrowing. In this respect, the special fund implemented in Hesse to deal with the pandemic was not covered by the constitution. (Buscher, 2022, p. 42).

11. In addition, the Bund increased its contribution to the cost of housing by up to 75 %, which provided structural relief for the municipalities. State measures had a complementary effect here. However, these measures varied from state to state and included stabilization of the municipal fiscal equalization system, compensation for short-falls in income tax, subsidies for social spending, the coverage of defaulted daycare contributions, and deficits in local public transport and municipal hospitals (Meyer 2022, p. 60-61).

12. In this regard, the Bund currently plans to use these unused credit authorizations for other measures, which are not directly linked to the energy crisis. This will be subject to an extensive legal debate.

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having sufficient room to maneuver. Amid the pandemic emergency, the Länder made extensive use of the option of suspending the Länder debt brakes – although these debt brakes had formally been in place since 2020 to prevent the Länder from taking on new structural debt. In addition to borrowing, which all Länder resorted to, some Länder chose to release reserves, transfer financing surpluses or suspend repayment obligations (CoR, 2021, p. 42; Vallée et al., 2021, p. 12). While pandemic-related net borrowing in 2020 averaged €1,344 per inhabitant in the Länder, net borrowing by the Bund averaged €2,621 per inhabitant (Hesse et al., 2021, p. 14).¹³ In addition to the cyclical policy measures, structural policy measures such as spending to advance digitization were taken (Hesse et al., 2020, p. 110-111). This shows that, on the one hand, pandemic-related additional spending has been recognized and priced in and, on the other, structural policy measures have been taken. Like the Bund, the Länder have thus taken advantage of the window of opportunity to finance projects that are not directly related to the pandemic but have a sustainable economic effect. In 2020, the Länder realized a total €56.7 bn. in net borrowing and increased their debt level to around €636 bn. (+9.7 % compared with 2019), although the Länder as a group had originally mobilized borrowing authorizations far more than €100 bn. (Woisin, 2021, p.20).¹⁴

In the case of the Länder, too, the tendency is continuing to use additional debt options for other purposes as a result of the pandemic-related exemption from the state debt brakes. The Saarland and North Rhine-Westphalia have already set up special funds for transformation tasks and crisis management with a volume of €3 bn. and €5 bn. respectively. Meanwhile, the state of Berlin is planning to implement a special fund for climate protection, resilience and transformation with a volume of up to €10 bn. (Beirat des Stabilitätsrates, 2023, p.23).

After the individual crises have been described in more detail in terms of their impact and scope, the following section compares the two events.

IV. DIFFERENT CRISES DEMAND DIFFERENT MANAGEMENT

The period before, during and after the crises can be classified in terms of fiscal policy, with a comparison of the fiscal stance and economic development. This can be done through the annual change in the cyclically adjusted balance and the annual change in the output gap (difference between actual output and potential output). The resulting fiscal path of Germany, plotted in *Figure 6*, can be divided into four modes: (1) First, a decrease in the output gap (deterioration of the economic environment) hand in hand with an increasing budget balance (restrictive fiscal policy) leads to a procyclical restrictive course. In this scenario, fiscal policy does not stabilize the economic downturn with additional spending. (2) If the output gap increases and the budget balance stays restrictive, an anti-cyclical restrictive behavior is implemented which curtails an overheating of the economy. (3) If the budget balance deteriorates and the output gap turns negative, the fiscal stance stays anti-cyclical, but in an expansive manner. Fiscal policy increases its expenditures in order to tackle an economic downswing. (4) Lastly, if the economic situation improves (output gap improves) and the budget balance stays

13. In comparison: net borrowing was zero in 2019 and federal net lending/borrowing of around €-70 per PE was generated (repayments).

14. It should be mentioned that the capital markets also attribute a strong burden-sharing and transparent role to the fiscal equalization system for the subnational levels, which weakens the link between tax revenues and the individual economic performance of the regional authorities and keeps the creditworthiness of the subnational levels in line with the rating of the Bund. (Fitch Ratings, 2021; Zimmermann & Barisono, 2021, p. 1)

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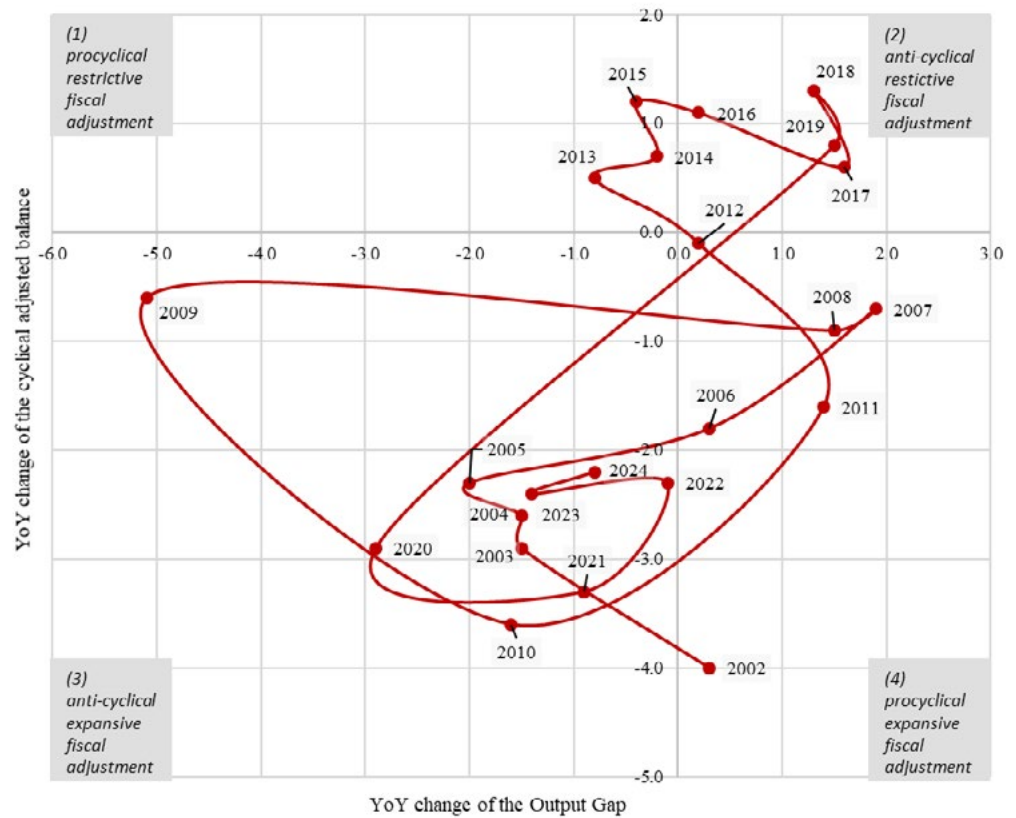
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in negative territory, a procyclical expansive course appears. This would indicate, that the economy is overheating but fiscal policy is not stopping its expenditure growth.

The German fiscal stance in *Figure 6* changes from 2002 to 2024 considerably. Especially in the first crisis from 2008 to 2009, the fiscal stance turned anti-cyclical, indicating that fiscal policy limited the downswing of the economy. This continued in 2010. Since the change in the cyclical adjusted balance improved just slightly but the economic environment recovered fast, a procyclical expansive fiscal stance occurred. Starting from an anti-cyclical *restrictive* fiscal stance in 2019 the fiscal stance turned into an anti-cyclical *expansive* stance in 2020 due to crisis measures. For 2021 to 2024, the fiscal stance is considered to stay anti-cyclical since the economy is currently recovering from the Covid-impact as well as the economic implications for Germany following the Russian invasion of Ukraine.

Figure 6: Fiscal Stance, 2002-2024



Source: AMECO 2023; Own Illustration.

Both crises differ fundamentally in their causes. After the financial crisis starting in 2007, the effect on the real economy was delayed. This was followed by lengthy structural adjustment processes. In contrast, the Covid pandemic had a direct and severe impact on supply and demand. In both crises, the government (especially the German federal government) substantially increased its spending to stimulate demand and mitigate the negative effects of the crisis on the population and the economy. At the same time, spending by social security systems increased massively, for example, as a result of short-time work benefits. The short-time work instrument was particularly significant in both crises, but the crises in the labor market had different impacts. While the increase in registered unemployment after 2007 was relatively moderate and concentrated in the manufacturing sector, the Covid crisis hit the labor market much harder and more

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comprehensively. However, the Covid crisis followed a long-lasting boom (also in the labor market), which is why the unemployment rate was still below the level of the financial crisis in absolute terms. During the financial crisis, there were two stimulus packages; measures included for example a scrappage premium for cars and the introduction of declining-balance depreciation. In the Covid crisis, bridging aid for companies in particular, but also costs for vaccinations and tests, caused government spending to rise. The Covid crisis was also used extensively to build up new special funds that can be used after the crisis. This can also be interpreted as ‘tricking’ the debt brake, which was created to prevent excessive deficits. This ‘trick’ is mainly used at federal level, but it is also used to some extent at the Länder level. (Arnold, 2022; Gehrke & Weber, 2020)

Table 1: Comparing the Two Crises

	The Great Recession	Covid crisis
Origin and development	Subprime mortgage crisis in the USA, spread to global financial crisis, followed by sovereign debt crisis in Europe	Covid pandemic triggers health crisis leading to global economic collapse, with economy highly dependent on pandemic events and containment efforts
Basic monetary policy conditions	Interest rate cuts, followed by unconventional monetary policy measures	After years of low interest rates, even further monetary policy easing; unconventional monetary policy prevails
Magnitude	Second most severe recession since the Great Depression in the 1930s	Quickly displaced the economic crisis from 2007 from its position as the most severe economic crisis
Impact	Contraction in lending in the wake of the financial crisis, followed by a slump in consumer spending and private investment, deduction of public and private debt delays recovery in subsequent years	Unique simultaneity of global supply and demand shock (including largest stock market crash), crisis hit the labor market disproportionately harder
Public countermeasures	Focus on stabilizing the financial system and consumer and investment demand (through economic stimulus packages), only demand stabilization necessary	After previous experience from the financial crisis, there was no fundamental debate on whether the state should take countermeasures, extensive and rapid measures followed, even more extensive use of short-time workers. Measures weren't highly accurate, but were implemented in a timely manner (accuracy vs. volume: discussion was decided in favor of volume).
Recovery phase	Slow recovery, but then long growth phase	Strong and rapid rebound, with medium-long-term effects being overshadowed by a new crisis (war in Ukraine)
Federal dynamics	Bund absorbed most of the shock	Bund absorbed most of the shock, with subnational levels seeming to come out of this crisis even better.

Source: Own Illustration.

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V. CONCLUDING ON THE FEDERAL DYNAMICS

Since 2007, the Federal Republic of Germany has gone through various major and minor crises, and it seems that the crisis mode has changed significantly: one storm follows another. Although public budgets are counteracting the crisis, they are not fully recovering, so that fiscal crisis burdens are accumulating. This increasingly limits the state's room for maneuver. Tendencies toward a *polycrisis* are becoming visible. This is also being fueled by the long-term transformation tasks, such as in the areas of climate protection, energy transition and digitization, which make fiscal policy action necessary.

For the most part, German federalism seems to have weathered the tests of the two economic crises well. The Bund in particular absorbed most of the shock to public finances through relief and support measures (without a clear reduction in the competences of the subnational levels) in both crises. Even if federal support, at least directly for the time being, is not subject to any clear centralizing tendency, but fiscal policy with the 'bang' may have influenced the symbolic leadership position of the federal government federal debates also in the future. Whether the fiscal measures under discussion were in some sense 'oversized' is a matter of debate, but what is quite clear is that the fiscal responses (especially in the Covid pandemic) were quick, and thus the spontaneous crisis management (by the Bund and the Länder) created discretionary fiscal space where there was no systemic resilience. Crisis hedging has worked either way, insofar as the level that can bear the heaviest fiscal burdens (the federal government) has also essentially shouldered them. Crises of that magnitude undoubtedly required an unconventional and proactive response. Even though economic crises can in principle have considerable consequences for a state and also for its federal structures (e. g. through centralization), the balance of power and responsibility between the different levels of the German government remained largely unchanged. Although the new fiscal equalization system between the federal levels was applied for the first time in 2020 (due to the Federalism Reform II), the system of tax collection and allocation under the fiscal equalization system was retained. The way the system has dealt with the two special situations is also a key indicator for the long-term resilience of the fiscal system. However, for the Covid crisis in particular, the precise long-term fiscal burdens on the various federal levels will not be known for years to come. This is reinforced by the fact that the effects of the Corona pandemic are overshadowed by the Russian invasion of Ukraine and the consequences for the German economy. Old and new challenges mix since the energy crisis, record inflation and supply shortages are putting the German federal state on a new trial – the polycrisis continues.

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