Federal Ministry
of Finance

25 February 2022

Germany’s Federal Debt Rule (Debt Brake)

Contents

1. Background

Since the foundation of the Federal Republic of Germany, rules governing borrowing by the Federation have been set out in the Basic Law (*Grundgesetz*) while rules on borrowing by the *Länder* are contained in their respective constitutions. The version of Article 115 of the Basic Law that entered into force in 1969 following the reform of the constitutional rule on public finances and remained in effect up to the end of 2010, and which existed in a similar form in many *Länder* constitutions, stipulated that net borrowing could not exceed the total of estimated investment expenditure. Exceptions were permissible only to avert a "disturbance of the overall economic equilibrium". However, the institutional and economic conditions for fiscal and economic policy had changed considerably by the time the Economic and Monetary Union was established. At the European level, budgetary surveillance rules under the Stability and Growth Pact stipulate compliance with the Maastricht criteria. These specify that the general government deficit must not exceed 3% of GDP and general government debt must not exceed 60% of GDP, unless the debt-to-GDP value is on a clear downward trajectory. An excessive deficit procedure may be triggered if (a) the deficit exceeds the Maastricht threshold of 3% of GDP, (b) the level of debt exceeds 60% of GDP or (c) the agreed debt reduction path to reduce debt to the 60% threshold is not adhered to.

The preventive arm of the Stability Pact was introduced in the reformed Stability and Growth Pact in 2005. The main objective of this reform was to define country-specific medium-term budgetary objectives (MTOs). An MTO is a general government structural budget balance, adjusted to take into account cyclical effects and one off events, which member states must adhere to over the course of an economic cycle. The general government structural budget balance should be close to balance or in surplus.

In addition, together with 24 other EU member states, Germany signed the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union (Fiscal Compact). By signing the treaty, the contracting states committed themselves to implementing permanently binding fiscal rules. The Fiscal Compact stipulates that the country-specific MTOs must not exceed a general government structural deficit of 0.5% of GDP as long as the debt-to-GDP ratio is not significantly below 60%.[1]

Following extensive discussions between the Federation and *Länder*, a comprehensive reform of the constitutional debt rules which applied to both the Federation and *Länder* was adopted in early summer 2009 based on a proposal by the Federalism Commission II. The purpose of the reform was to lower Germany's public debt-to-GDP ratios which had increased sharply following the 2008/2009 financial crisis, and to take account of the changed institutional framework conditions at the European level. The reform was applied for the first time to the 2011

Further information on national and European fiscal rules is available at: https://www.bundesfinanzministerium.de/Content/DE/Standardartikel/Themen/Oeffentliche_Finanzen/Fiskalregeln/nationaleeuropaeische-fiskalregeln.html federal budget. Since then, the principle of balanced budgets at both the federal and *Länder* level has been anchored in Article 109 paragraph (3) of the Basic Law: "The budgets of the Federation and the *Länder* shall in principle be balanced without revenues from borrowing."

This limited the Federation's structural net borrowing (i.e. adjusted to take into account cyclical factors) to 0.35% of GDP. An outcome of the Federal Commission II discussions was that the *Länder* did not want to incur any new debt from 2020 onwards. The requirement of structurally balanced budgets has therefore applied to the *Länder* since 2020.

As part of the reorganisation of financial relations between the Federation and the *Länder*, Article 109a paragraph (2) sentence 1 was added to Article 109 of the Basic Law in 2017, whereby the Stability Council has been responsible since 2020 for monitoring compliance with the federal and *Länder* debt rules in line with EU budgetary surveillance requirements and procedures. The Federation and *Länder* have agreed on a coordinated procedure for this purpose.

2. Germany's federal debt brake

2.1. Structure of the debt brake

The core principle set out in Article 109 paragraph (3) of the Basic Law differs significantly from the previously applicable investment-related borrowing limit:

- The federal and *Länder* budgets must be balanced without revenue from loans. The principle of (structurally) balanced budgets anchored in Article 109 of the Basic Law for both the Federation and *Länder* is based on the core principle of the European Stability and Growth Pact and the Fiscal Compact that the member states must achieve their medium-term budgetary objective of "budgets close to balance or in surplus".
- The economic situation may be taken into account symmetrically. This means that an increase in net borrowing due to cyclical factors is allowed during an economic downturn, but there is less leeway for net borrowing during an upswing.
- A deviation from the MTO is possible in the case of natural disasters or extraordinary emergencies that are beyond the control of the government and which have a major adverse impact on public finances. If this exception is invoked, the borrowed amount which exceeds the stipulated upper limit must be repaid under a binding amortisation schedule.

The *Länder* regulate the details of the balanced budget principle within the framework of their responsibilities under the Constitution.

Article 115 paragraph (2) of the Basic Law specifies how the principles laid down in Article 109 of the Basic Law apply to the federal budget. The procedures for implementing Article 115 paragraph (2) of the Basic Law are laid down in the Act on the Implementation of Article 115 of the Basic Law (Article 115 Act) (*Ausführungsgesetz zu Artikel 115 GG (Artikel 115-Gesetz)*) and in the Ordinance on the Procedure for Determining the Cyclical Component under Section 5 of the Article 115 Act (Article 115 Ordinance) (*Verordnung über das Verfahren zur Bestimmung der Konjunkturkomponente nach § 5 des Artikel 115-Gesetzes (Artikel 115-Verordnung)*).

The debt brake was applied to the federal budget for the first time in 2011. High levels of debt resulting from the 2008/2009 economic and financial crisis meant that from as early as 2011 the federal government was unable to keep its structural net borrowing below the upper limit of 0.35% of GDP. An interim arrangement was put in place with Article 143d of the Basic Law, whereby the Federation had to gradually reduce its structural net borrowing by 2016. Since 2016, pursuant to Article 115 paragraph (2) sentence 2 of the Basic Law, revenue from loans cannot exceed 0.35% of nominal GDP. Article 143d of the Basic Law specifies that this is a one-off transitional phase. A further transitional phase is not provided for in the Basic Law. This is a significant difference to the Stability and Growth Pact, which helps member states correct deviations from their MTO by defining an adjustment path.

The basic structure of the debt brake and the method for calculating permissible net borrowing stipulated in Article 115 paragraph (2) of the Basic Law and in the Article 115 Act are illustrated in Figure 1 and explained in more detail below.

Figure 1: Basic structure of Germany's federal debt brake pursuant to Article 115 of the Basic Law

	Structural components (Article 115 paragraph (2), sentence 2)	0.35 % of GDP
-	(where appropriate) Repayment obligation due to recourse to the exception (Article 115 (2) sentence 7)	Exception to cover natural disasters or extraordinary emergencies that are beyond the control of the government and which have a major adverse effect on public finances. Resorting to the exception is possible only on the basis of a majority decision by members of the Bundestag, in combination with a binding amortisation schedule.
-	(where appropriate) Debt reduction requirement based on control account (Article 115 paragraph (2) sentence 4)	where a negative threshold of 1.5 % of GDP is exceeded; max. reduction 0.35% of GDP; during economic upswing only
-	Cyclical component (Article 115 paragraph (2) sentence 3)	using EU cyclical adjustment method
-	Balance of financial transactions (Article 115 paragraph (2) sentence 5)	based on the Maastricht budget balance calculation
=	permissible net borrowing	

2.2. Structural component / Structural net borrowing

The starting point for Germany's debt rule is the cap on federal borrowing set out in the Basic Law. Under the debt rule, new borrowing up to the value of 0.35% of GDP is permissible as a structural component. In contrast to the EU rules, Article 115 paragraph (2) of the Basic Law takes into account net borrowing as opposed to the structural budget balance (defined as the difference between revenue and expenditure). The cap on net borrowing applies not only to the federal budget but also to net borrowing for the federal government's special funds with their own borrowing authorisation. Borrowing authorisations that existed on 31 December 2010 for special funds that had already been established remain unaffected. This grandfathering provision is set out in Article 143d paragraph (1) of the Basic Law.

2.3. Cyclical component / Symmetrical treatment of economic cycles

The purpose of the cyclical component is to enable a fiscal policy that is responsive to cyclical conditions. This is achieved by taking into account current cyclical influences on revenue and expenditure using a cyclical adjustment method that increases or decreases the leeway for additional borrowing depending on the current economic situation. The cyclical component of the debt brake ensures that automatic stabilisers can function during periods of economic expansion and contraction.

The technical procedure for determining the cyclical component is defined in an ordinance. To ensure that the budget rule is as consistent as possible with European fiscal rules, the debt brake employs the cyclical adjustment procedure agreed and applied as part of European budget surveillance procedures. (See 4.3. “Section 5 [of the Article 15 Act] Cyclical component” and 4.4. “Article 115 Ordinance”.)

2.4. Adjustment for financial transactions

To achieve the closest possible alignment between structural net borrowing under the debt brake on the one hand, and the structural budget balance required under European rules on the other, revenue and expenditure are adjusted for financial transactions when calculating the upper limit for net borrowing. Financial transactions constitute activities that do not alter financial assets. This means, for example, that proceeds from the disposal of shares have no influence on structural net borrowing under the debt brake and hence cannot contribute to compliance with the borrowing limits. The granting of loans also has no influence on structural net borrowing, as this involves a corresponding increase in receivables. (See 3.4 “Financial transactions” and 4.3 “Section 3 [of the Article 115 Act] Adjustment for financial transactions”.)

2.5. Binding nature of the debt brake in budget execution – control account

To ensure that the debt brake provisions are also complied with when the budget is executed, a control account was established that is required to be balanced.

Non-cyclical positive and negative deviations from the structural net borrowing limit that arise in individual fiscal years during the execution of the budget are posted to the control account. Such deviations can arise, for example, when the financial impact of a tax reform develops differently than was forecast or if an ex-post assessment shows that the structural part of net borrowing was over- or underestimated. On the other hand, if changes to the budget are made as a result of actual cyclical developments that diverge from those that were forecast during the preparation of the budget, these are taken into account by adjusting the cyclical component to the actual cyclical development and do not affect the balance of the control account.

If actual net borrowing exceeds the upper limit on net borrowing (which is determined at the end of the fiscal year in question based on the actual impact of cyclical developments on the budget), the control account is debited. If actual net borrowing remains below the threshold, the control account is credited. Annual debits and credits on the control account are netted.

The control account therefore functions as a virtual “memory”. A positive balance does *not* constitute a credit that can be used in future budget years to extend the margin for borrowing.

If a cumulative negative balance on the control account exceeds the threshold of 1.5% of GDP, the provisions of the Basic Law (Article 115 paragraph (2) of the Basic Law) stipulate that this excess must be reduced in accordance with the economic cycle. Pursuant to the implementing provisions set out in ordinary legislation (section 7 (3) of the Article 115 Act), the control account already takes effect if the cumulative negative balance on the control account exceeds a threshold of 1% of GDP. At this point a brake on permissible net borrowing comes into effect by reducing the upper limit on net borrowing defined in Article 115 of the Basic Law by the amount exceeded, but by no more than 0.35% of GDP, and remains in effect until the exceeded amount has been reduced over the following years. The purpose is to prevent the cumulative negative balance limit on the control account of 1.5% of GDP being exceeded in the first place. Pursuant to the Article 115 Act, the obligation to reduce net borrowing applies only during economic upswings. (See 4.3. Section 7 of the Article 115 Act.)

At the end of the transition period pursuant to Article 143d of the Basic Law, the cumulative balance of the control account for the period encompassing the fiscal years 2011 to 2015 was cancelled on 31 December 2015 (section 9 (3) of the Article 115 Act). The reason for doing this was to deal with the estimation uncertainties in the definition of the transitional path.

If recourse is made to the exception set out in Article 115 paragraph (2) sentence 6 of the Basic Law, the amount to be recorded on the control account must be adjusted for the increased net borrowing resulting from the corresponding decision of the Bundestag (see the following example and Figure 2). This means that the amount borrowed based on the exception is not recorded on the control account. Instead it is repaid within an appropriate amount of time based on an amortisation schedule (Article 115 paragraph (2) sentences 6 and 7 of the Basic Law; see 2.6 below).

Pursuant to section 7 of the Article 115 Act, the provisional entry in the control account for the fiscal year is made on 1 March of the following year. The final entry is made on 1 September of that year.

Procedure for retrospectively assessing compliance with the debt brake, based on the example of the 2020 federal budget (Figure 2)

The table below shows how the debt brake was complied with in the 2020 federal budget, and the final balance posted to the control account on 1 September 2021. The upper limit for permissible structural net borrowing of 0.35% of nominal GDP is the starting point for calculating permissible net borrowing. The maximum permissible amount of structural net borrowing determined during preparation of the federal budget in a given year also applies to the final accounting of the budget. In 2020, the maximum permissible structural net borrowing was €11.7bn (position 4). This is based on the GDP of the year preceding the preparation of the federal budget (in this case 2018), as determined by the Federal Statistical Office.

In order to assess whether the cap on structural net borrowing of 0.35% of GDP was complied with, the cyclical component – which stems from the federal government's autumn projection from 2019 – must be adjusted for actual economic developments following closure of the budget.

The adjustment of the cyclical component for actual economic developments in September 2021 was carried out as follows: First, the difference between the nominal GDP growth rate in 2020 compared to 2019 (published by the Federal Statistical Office on 25 August 2021) and the increase in nominal GDP for 2020 projected by the federal government at the time of preparing the budget in December 2019 (federal government's autumn projection from October 2019) was determined. Since the actual trend in nominal GDP for 2020 was considerably worse, at -3.0 %, than projected in the autumn of 2019, the result is a negative adjustment value (-€207.2bn, position 5b, column "actual"). This value was added to the output gap for 2020 calculated at the time of the budget preparation (federal government's autumn projection from October 2019) and the total multiplied by the semi-elasticity of the federal budget (0.203). This resulted in a negative cyclical component of €42.6bn (position 5, column "actual"). Compared to the cyclical component at the time of the budget preparation of €0.5bn, the potential scope for borrowing increased by €42.1bn due to the deterioration of the economic situation compared to the 2019 autumn projection.

Actual net borrowing encompasses both federal net borrowing and the net borrowing of any new federal special funds with their own borrowing authorisation established since the debt brake entered into force. The federal budget closed with net borrowing of €130.5bn (position 8a, column "actual") while the special funds did not record any net borrowing relevant to the debt brake.

The permissible amount of net borrowing under the debt brake following closure of the budget (€60.9bn, position 7 in the "actual" column) is derived from the maximum permissible structural net borrowing (€11.7bn, position 4) less the cyclical component adjusted for actual economic developments (-€42.6bn, position 5 in the "actual" column) and less the balance of actual financial transactions (-€6.6bn, position 6 in the "actual" column). The Federation's structural net borrowing is calculated based on actual net borrowing adjusted for financial transactions and cyclical effects. Structural net borrowing in 2020 was €81.3bn or 2.43% of GDP (position 9 in the "actual" column). The upper limit of structural net borrowing and the permissible amount of net borrowing were significantly exceeded by €69.6bn (position 10 in the “actual” column).

The Covid-19 pandemic had a significant impact on the 2020 federal budget. The 2020 Budget Act of 21 December 2019 provided for a balanced budget with no new debt. The Deutsche Bundesbank made use of the exception under Article 115 paragraph (2) sentence 6 of the Basic Law for the first and second supplementary budget for 2020. The exceeding of the upper limit was therefore constitutional.

The amount to be posted to the control account had to be adjusted for the increased net borrowing (€69.6bn) based on the exception from the debt rule. Therefore a new amount did not have to be posted to the control account (position 11 in the “actual” column). Consequently the previous year’s balance on the control account of €47.7bn remained unchanged.

Having determined that an extraordinary emergency situation exists, the German Bundestag adopted an amortisation schedule according to which the loans taken out on the basis of the exception must be repaid. In the present case, it was decided that the loans taken out that exceed the upper limit should be repaid over 20 years in equal instalments starting in 2023. Consequently the amount to be repaid from 2023 onwards is €3.5bn per year.

Figure 2: Compliance with the debt brake in the 2020[1] federal budget (projected and actual)

		2020 Projected[2]	2020 Actual[3]
		€bn	
1	Maximum permissible structural net borrowing (as % of GDP) without the obligation to reduce net borrowing	0.35	
2	Nominal GDP for the year prior to the year in which the budget was drawn up (time of budget preparation)	3,344.4	
3	Obligation to reduce net borrowing	0.0	0.0
3a	In accordance with the amortisation schedule (Article 115 paragraph (2) sentence 7 of the Basic Law)	0.0	0.0
3b	From the control account	0.0	0.0
4	Maximum permissible structural net borrowing (1 x 2 - 3) with obligation to reduce net borrowing	11.7	
	% of GDP	*0.35*	
5	Cyclical component Projected: (5a) x (5c) Actual: [(5a) + (5b)] x (5c)	-0.5	-42.6
5a	Nominal output gap (at time of drawing up the budget)	-2.5	
5b	Adjusted for actual economic trends [actual (5ba) - projected (5ba)] % x (5bb)		-207.2
5ba	Nominal GDP (year-on-year change in %)	2.9	-3.0
5bb	Nominal GDP of previous year		3,473.4
5c	Semi-elasticity of the budget (without unit of measurement)	0.203	
6	Balance of financial transactions	-0.3	-6.6
6a	Revenue from financial transactions	1.1	1.0
6aa	Revenue from financial transactions Federal budget	1.1	1.0
6ab	Revenue from financial transactions Special funds	-	-
6b	Expenditure from financial transactions	1.4	7.6
6ba	Expenditure from financial transactions Federal budget	1.4	7.6
6bb	Expenditure from financial transactions Special funds	-	-
7	Permissible net borrowing (4 - 5 - 6)	12.5	60.9
8	Net borrowing (8a + 8b)	0.0	130.5
8a	Net borrowing federal budget	0.0	130.5
8b	Net borrowing of special funds	0.0	0.0
9	Structural net borrowing (8 + 5 + 6) [4]	-0.8	81.3
	in % of GDP [4]	-0.02	2.43
10	Derogation (+) from the upper limit based on the exception set out in Article 115 paragraph (2) sentence 6 of the Basic Law (9) - (4) or (8) - (7)	-	69.6
11	Debiting(-)/Crediting(+) of the control account (7) - (8) + (10) or (4) - (9) + (10)		0.0
12	Control account balance (previous year)		47.7
13	Control account balance (new) (11) + (12)		47.7

Any discrepancies in sums and products are due to rounding.

[1]With the second supplementary budget of 2021, the accounting method of the special funds without borrowing authorisation was changed. For special funds without borrowing authorisations, it is now the allocations from the core budget to the special funds that are taken into account rather than the financial balances of the funds. The change to the accounting method was applied with retroactive effect as of 2016. The amount that exceeded the upper limit in 2020 has therefore increased by around €41.9bn to around €69.6bn. The control account balance has gone down from about €52bn to €47.7bn.

[2]The 2020 projections are drawn from the 2020 Budget Act of 21 December 2019 (Federal Law Gazette I, 2020 no. 52, p. 2890).

[3]Final statement of the derogation from the permissible net borrowing presented in the 2021 budget account.

[4]Negative values denote surpluses.

Source: Federal Ministry of Finance

2.6. Securing the state's ability to act in emergency situations

The debt brake allows for exceptions in the case of natural disasters and unusual emergency situations such as the Covid-19 pandemic. Normal economic downturns, on the other hand, do not constitute a situation that could justify recourse to the exception.

In the event of natural disasters or unusual emergency situations which are outside the control of government and which have a major adverse impact on public finances, the upper limit for structural net borrowing of 0.35% of GDP can be exceeded subject to a majority decision by members of the Bundestag in accordance with Article 115 paragraph (2) sentence 6 of the Basic Law. Pursuant to Article 115 paragraph (2) sentence 7 of the Basic Law, this decision must be accompanied by an amortisation schedule, which must also be adopted by the German Bundestag. Repayment of the amount borrowed that exceeds the upper limit must be effected within an appropriate period of time (Article 115 paragraph (2) sentence 8 of the Basic Law). Accordingly, the amount borrowed based on the exception is not recorded on the control account. The amount to be recorded on the control account must also be adjusted for the borrowed amount.

The exception was used for the 2020 and 2021 federal budgets and for the draft federal budget for 2022. An individual amortisation schedule was drawn up in each case. In line with the requirements set out in the Basic Law, the Bundestag approved the following amortisation schedule: the amount borrowed in 2020 which exceeded the upper limit for net borrowing permitted under the debt brake must be repaid between 2023 and 2042 (20 years) and the amount borrowed in 2021 must be repaid between 2026 and 2042 (17 years) in equal annual instalments (see Bundestag printed paper 19/20128 and 20/505).

In the context of adopting the federal budget for 2022, the consolidation and configuration of the amortisation schedules for the years 2020 to 2022 will be reviewed. It is planned to align the repayment period with that of the EU's pandemic relief fund (2028 to 2058, 31 years).

The amortisation schedule and the associated repayment obligation will help to gradually reduce the government debt ratio which has increased as a result of the crisis. However, the amortisation schedule does not require a direct net repayment of loans taken out following recourse to the exception. Rather, repayments are initially made by restricting the scope for new borrowing. Net repayment becomes necessary only when permissible net borrowing becomes negative. "Negative net borrowing" gives an indication of the net repayment amounts that need to be paid back each year to fulfil the repayment obligation under the amortisation schedule.

Figure 3 The debt brake in the 2021 budget preparation

		Projected[1] €bn
1	Maximum permissible structural net borrowing (as % of GDP) without an obligation to reduce net borrowing	0.35
2	Nominal GDP for the year prior to the year in which the budget was drawn up (time of budget preparation)	3,449.1
3	Reduction of net borrowing	0.0
3a	In accordance with the amortisation schedule (Article 115 paragraph (2) sentence 7 of the Basic Law)	0.0
3b	From the control account	0.0
4	Maximum permissible structural net borrowing (1 x 2 - 3) with obligation to reduce net borrowing	12.1
	% of GDP	*0.35*
5	Cyclical component Projected: (5a) x (5c) Actual: [(5a) + (5b)] x (5c)	-12.8
5a	Nominal output gap (at time of preparing the budget)	-63.3
5b	Adjusted for actual economic trends [actual (5ba) – projected (5ba)] % x (5bb)	
5ba	Nominal GDP (year-on-year change in %)	6.0
5bb	Nominal GDP of the previous year	
5c	Budget semi-elasticity (without unit)	0.203
6	Balance of financial transactions	-8.5
6a	Revenue from financial transactions	1.0
6aa	Revenue from financial transactions Federal budget	1.0
6ab	Revenue from financial transactions Special funds	-
6b	Expenditure from financial transactions	9.4
6ba	Expenditure from financial transactions Federal budget	9.4
6bb	Expenditure from financial transactions Special funds	-
7	Permissible net borrowing (4 - 5 - 6)	33.4
8	Net borrowing (8a + 8b)	179.8
8a	Net borrowing federal budget	179.8
8b	Net borrowing of special funds	0.0
9	Structural net borrowing (8) + (5) + (6)	158.5
	% of GDP	*4.60*
10	Exceeding (+) of the upper limit based on the exception set out in Article 115 paragraph (2) sentence 6 of the Basic Law (9) - (4) or (8) - (7)	146.5
11	Debiting(-)/Crediting(+) of the control account (7) - (8) + (10) or (4) - (9) + (10)	
12	Control account balance (previous year)	
13	Control account balance (new) (11) + (12)	

Any discrepancies in sums and products are due to rounding.

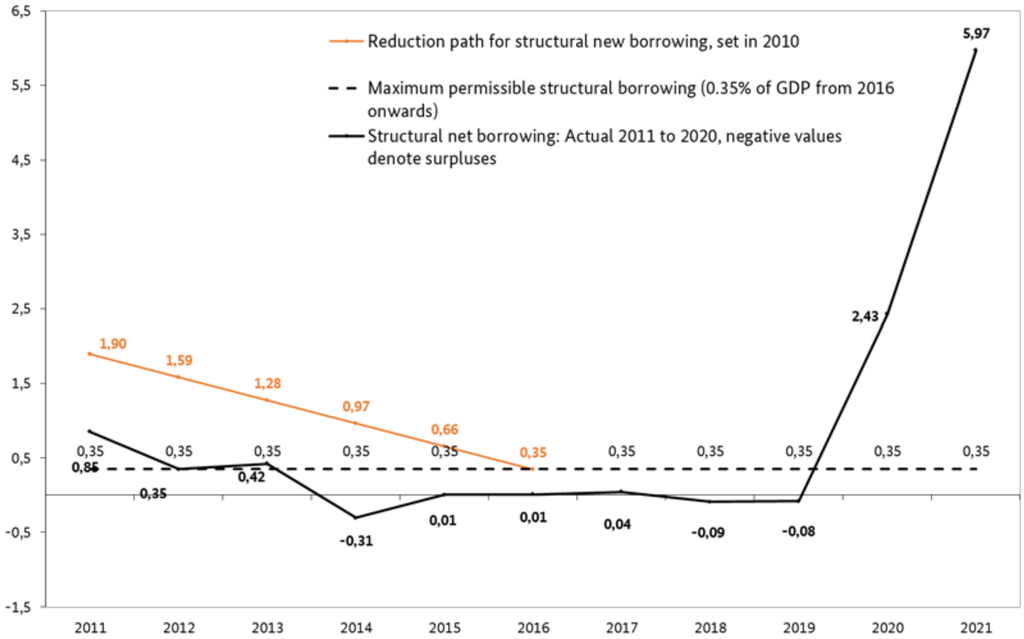
[1]The 2021 projections are drawn from the 2021 Budget Act of 21 December 2020 (Federal Law Gazette I, 2020 no. 66, p. 3208).

Source: Federal Ministry of Finance

2.7. How does the debt brake work in practice?

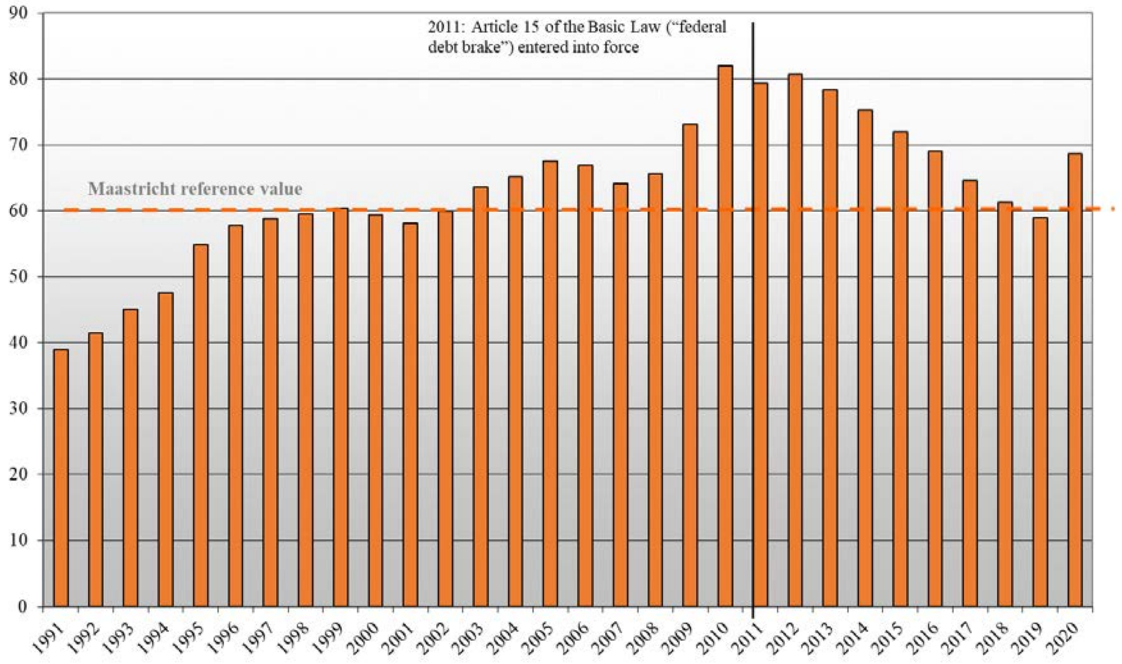
With every Budget Act (*Haushaltsgesetz*), the German Bundestag approves an overview of how permissible net borrowing is calculated under the heading “Calculating permissible net borrowing pursuant to section 5 of the Article 115 Act and the Ordinance on the Procedure for Determining the Cyclical Component pursuant to section 5 of the Article 115 Act” (*Berechnung der* *zulässigen Kreditaufnahme nach § 5 des Artikel 115-Gesetzes sowie der Verordnung über das Verfahren zur Bestimmung der Konjunkturkomponente nach § 5 des Artikel 115-Gesetzes*) (see, for example, the Act Adopting the Federal Budget for the 2021 Fiscal Year of 21 December 2020 (Federal Law Gazette I no. 66, p. 3208, Budget Act 2021 p. 23). This overview shows how the debt brake is complied with in the federal government's budget projection, i.e. the draft budget plan (see also Figure 3.) At the end of the fiscal year the difference between the upper limit on borrowing (as determined under the rules of the debt brake) and the actual amount borrowed is calculated and booked to the control account provisionally on 1 March of the following year, then conclusively on 1 September of that year (Article 115 Act). The provisional calculation in accordance with the rules of the debt brake is shown in the federal government's annual accounts (*Haushaltsrechnung des Bundes*) for the fiscal year. The final calculation is published in the Finance Ministry's monthly report and is a component of the federal government's annual accounts in the following year. Since the introduction of the debt brake up to and including 2019, the upper limit for net borrowing under the debt brake was not exceeded in any year (Figure 4). In 2019 – the year before the start of the coronavirus pandemic – structural net borrowing was -0.08 % of GDP (structural surplus).

Figure 4: Change in the Federation's structural net borrowing – in % of GDP –



Source: Federal Ministry of Finance

Figure 5: Trend in the Maastricht debt-to-GDP ratio – in % of GDP –



Source: Deutsche Bundesbank

Figure 5 shows the trend in **government debt** since 1991, in particular the sharp rise following the 2008/2009 financial crisis, as well as its reduction following the introduction of the debt brake. The government debt ratio – federal, *Länder* and local authority debt in % of GDP – was 39.0% of GDP in 1991 and rose to 64.2% in 2007, the year before the economic and financial crisis. In 2009 and 2010 the situation was exacerbated by the financial and economic crisis, so that in 2009 the Maastricht debt ratio rose to 73.2% of GDP, reaching its peak of 82.0% in 2010. After 2011 it decreased to 58.9% of GDP (Figure 5) in 2019, thereby falling below the Maastricht reference value. In 2019 the Federation's share of debt was 37.4% of GDP. The debt brake, in combination with a sustained economic upswing and strong GDP growth between 2011 and 2019, contributed to a substantial and lasting reduction of the general government debt-to-GDP ratio.

The fiscal burden of the coronavirus pandemic increased the government debt ratio to 68.7% of GDP in 2020 and by an expected 70¼% of GDP in 2021 (Finance Ministry forecast of November 2021). The financial impact of the pandemic on the federal budget resulted in structural net borrowing increasing to 2.43% of GDP in 2020 (see Figure 2) and 5.97% of GDP in 2021. The amount by which the upper limit of 0.35% of GDP was exceed in 2021 (due to recourse to the exception pursuant to Article 115 paragraph (2) sentence 6 of the Basic Law) was €193.9bn (provisional calculation on 1 March 2022). In accordance with the amortisation schedule adopted by the German Bundestag, this amount must be repaid between 2026 and 2042 in annual instalments of €11.4bn (cf. Bundestag printed paper 20/505; see 2.6).

3. Glossary

3.1. Automatic stabilisers

Public revenue and expenditure fluctuate during the economic cycle. When the economy is performing poorly, tax revenue declines (compared with the trend in normal economic circumstances) and government spending increases. As a result, public budgets exert an automatic stabilising effect on the economic process. A similar stabilising effect occurs when the economy is performing well. The →cyclical component of the debt brake ensures that these automatic stabilisers can operate during good and bad economic times, thereby leading at all times to fiscal policies that are responsive to economic cycles.

3.2. Semi-elasticity of the budget

The semi-elasticity of the general government budget is a measure of the reactivity of the government →budget balance (in % of GDP) to a change in GDP. It measures by how many percentage points →the budget balance to GDP ratio changes in the case of a 1% increase in GDP. The value of this amount depends on the individual elasticities of all revenue and expenditure categories that make up the → budget balance, as well as their respective weights as a percentage of GDP. This factor is an attempt to reflect, as realistically as possible, the impact of GDP growth on actual budgetary trends.

The semi-elasticity of the general government budget is derived from the sum of the partial elasticities of cyclically dependent taxes, social security contributions and labour market expenditures. The European Commission regularly recalculates the semi-elasticity of the budget following a specific cycle. Its most recent recalculation in 2018 involved updating the weights used to aggregate the partial elasticities. The recalculated weights resulted in a general government budget semi-elasticity of 0.504 (previously 0.551) for Germany. The updated semi-elasticity of the budget was applied for the first time in the federal government's 2019 annual projection. This means that a (positive) →output gap of 1% of →potential GDP (i.e. when the economy is strong) increases the ratio between the general government cyclical →budget balance and GDP by 0.504 percentage points.[2]

[2] The basis for determining budget semi-elasticity was provided by the calculations in N. Girouard and C. André (2005): "Measuring Cyclically-Adjusted Budget Balances for OECD Countries", OECD Economics Department Working Papers 434. In recent years, these calculations have been revised and updated in various steps. Cf. G. Mourre, G.-M. Isbasoiu, D. Paternoster and M. Salto (2013): "The cyclically-adjusted budget balance used in the EU fiscal framework: an update", European Commission, European Economy, Economic Papers 478; G. Mourre, C. Astarita und S. Princen (2014): "Adjusting the budget balance for the business cycle: the EU methodology", European Commission, European Economy, Economic Papers 536, European Commission, Report on Public Finances in EMU 2018: Recent developments in the fiscal surveillance framework, Institutional Paper 095, January 2019.

The semi-elasticities of the budgets of the individual layers of government (Federation, *Länder*, local authorities and →social security funds) are derived from the semi-elasticity of the general government budget, which is also used in the budgetary surveillance process under the European Stability and Growth Pact.

The semi-elasticity of the federal budget (section 5 subsection (3) of the Article 115 Act; section 2 (3) of the Article 115 Ordinance) measures the cyclically induced change in the ratio between the →federal budget's net lending/borrowing and GDP, when GDP deviates from potential output by 1%. It is calculated as the sum of the partial elasticities of the general government budget's semi-elasticity, weighted with the federal shares of cyclically dependent general government budget revenues and expenditures. The semi-elasticity of the federal budget has been calculated at a rounded value of 0.203 since the federal government's 2019 annual projection (previously it was 0.205).[3] The new budget semi-elasticity was used for the first time in the debt brake when drawing up the 2020 federal budget and fiscal plan to 2023.

3.3. One-off effects

One-off effects are temporary fiscal effects that do not have a lasting influence on the condition of public budgets. Examples of such one-off effects mentioned in the code of conduct for the European Stability and Growth Pact include: the sale of non-financial assets, proceeds from auctions of publicly owned licences, short-term costs caused by natural disasters, tax amnesties, and revenues from the transfer of pension obligations. In the European budgetary surveillance procedure the European Commission determines which effects member states must adjust as one-off effects.

In contrast to the calculation of the structural deficit under EU budgetary surveillance procedures, no adjustments for one-off effects are made under the debt brake. This means, for instance, that proceeds from the auction of a telecommunications frequency, as a non-cyclically induced one-off effect, decrease →structural net borrowing. Conversely, →structural net borrowing is increased e.g. by the payment of one-off financial compensations from the federal budget to four energy supply companies (EnBW, E.ON/PreussenElektra, RWE and Vattenfall) on the grounds of Germany's accelerated nuclear phaseout following the Fukushima disaster in 2011. The parties involved reached an agreement in March 2012 (the Federal Constitutional Court established the need for such compensation in its decisions of 6 December 2016 and 29 September 2020).

[3] Monthly Report of the Federal Ministry of Finance April 2019 *"Aufteilung der 2018 neu berechneten Budget-semielastizität auf Bund, Länder, Gemeinden und Sozialversicherungen"* (Allocation of the semi-elasticity of the budget, newly calculated in 2018, among the Federation, *Länder*, local authorities and social security funds) – https://www.bundesfinanzministerium.de/Monatsberichte/2019/04/Inhalte/Kapitel-3-Analysen/3-6-budgetsemielastizitaet.html

This approach, which deviates from the approach at the EU level, is justified because there is no clear and unequivocal definition of the term “one-off effects” that could be applied categorically during the preparation of the budget and be reflected in the budget titles; thus, incentives for creative budgeting to extend the scope for net borrowing would have been generated.

3.4. Financial transactions

Transactions relating to financial assets (receivables and payables) are defined as financial transactions. These are transactions that do not affect financial assets, meaning that cash movements are accompanied by offsetting entries for receivables or payables, e.g. privatisation proceeds (exchange of equity investment assets for cash receipts) or the granting of loans (disbursement of cash to acquire a receivable). Proceeds from auctions of publicly owned licences do not count as financial transactions, however.

By adjusting revenue and expenditure for financial transactions (section 3 of the Article 115 Act), Germany’s debt brake is aligned as closely as possible with the definitions laid down in the European System of Accounts (ESA), which apply on the basis of European rules.

This adjustment ensures that privatisation revenues, which were used in the past to fulfil the requirements of the old version of Article 115 of the Basic Law, can no longer serve as a means to comply with borrowing limits. This eliminates a significant inconsistency between the Maastricht budget balance under the European Stability and Growth Pact, and permissible →net borrowing under national budget legislation.

The adjustment takes into account only financial transactions that can be taken from the budget directly via the budget groupings of revenues and expenditures. Financial transactions within the framework of the debt brake are therefore not necessarily consistent with the definition of financial transactions under Eurostat accounting rules.

The following groupings are to be factored out, as financial transactions, from the expenditures that count towards maximum permissible net borrowing:

- Acquisition of holdings and other capital assets
  831 Acquisition of holdings and similar acquisitions in Germany
  836 Acquisition of holdings and similar acquisitions abroad

- Loans to the public sector
  852 Loans to the *Länder*
  853 Loans to local authorities and associations of local authorities
  854 Loans to special funds
  856 Loans to social insurance providers and to the Federal Employment Agency
  857 Loans to special purpose associations

- Loans to other sectors
  861 Loans to public undertakings and institutions
  862 Loans to private companies
  863 Loans to other domestic borrowers
  866 Loans to foreign borrowers

Conversely, the following groupings are to be factored out, as financial transactions, from the revenues that count towards maximum →permissible net borrowing:

- Revenue from the sale of holdings and capital repayments
  133 Revenue from the sale of holdings and other capital assets
  134 Capital repayments

- Loan repayments from the public sector
  172 Loan repayments from the *Länder*
  173 Loan repayments from local authorities and associations of local authorities
  174 Loan repayments from special funds
  176 Loan repayments from social insurance providers and from the Federal Employment Agency
  177 Loan repayments from special purpose associations

- Loan repayments from other sectors
  181 Loan repayments from public undertakings and institutions
  182 Other loan repayments from domestic borrowers
  186 Loan repayments from foreign borrowers

3.5. Budget balance

A distinction must be made between the budget balance based on cash data (fiscal statistics) and based on national accounts (Maastricht budget balance).

A budget balance based on cash data equates to the difference between revenue and spending. This excludes revenue from loans on the credit market, withdrawals from →reserves, revenue from internal offsetting and seigniorage and expenditure on the repayment of debt incurred on the credit market, allocations to →reserves and expenditure from internal offsetting.

EU budgetary surveillance assesses the general government balance based on national accounts (Maastricht budget balance). In contrast to the budget balance based on cash accounting, the Maastricht budget balance allocates revenue and expenditure to the period to which they relate. Furthermore, →financial transactions do not constitute revenue or expenditure under the rules for calculating the Maastricht balance.

The debt brake, on the other hand, takes into account →net borrowing. The budget balance and net borrowing can differ significantly, e.g. because transfers from reserves reduce net borrowing but do not affect the budget balance. To achieve an alignment with the Maastricht budget balance, →structural net borrowing is adjusted for →financial transactions in accordance with the requirements of the debt brake.

3.6. Golden rule

The golden rule of fiscal policy states that the government may only increase new borrowing if, at the same time, its net assets increase by at least the same amount. The argument justifying this approach is that net government investment (= gross investment minus depreciation) is accompanied by asset formation on the government side, and that this benefits future generations, which means that it is fair for future generations to bear a share of the financing. Behind this lies the idea that productive public investments in themselves increase future potential GDP per inhabitant. The golden rule is designed to prevent the current generation from spending at the expense of future generations.

The previous version of Article 115 of the Basic Law was geared towards this golden rule. However, the interpretation in the Basic Law diverged from the golden rule in key points.

For example, it permits borrowing up to the amount of gross investments planned for in the budget, in line with the definition of investment in section 10 (3), no 2 of the Budget Principles Act (*Haushaltsgrundsätzegesetz*). This definition describes gross investment and does not include net appreciation or net asset formation by the federal government, as it does not take into account depreciations and divestments. Even grants and subsidies, which do not constitute assets for the government entity itself, are counted as gross investments. Investment defined in this way also included investment grants to the private sector and to other countries.

3.7. Cyclical component

The cyclical component is defined in section 5 of the Article 115 Act. The details of the procedure for determining the cyclical component were set out in the Article 115 Ordinance by the Federal Ministry of Finance, in agreement with the Federal Ministry for Economic Affairs and Climate Action. The procedure for determining the cyclical component is aligned with the cyclical adjustment method used within the framework of the European Stability and Growth Pact.

"If an economic trend deviating from the normal conditions is expected for the fiscal year, as a cyclical component, the upper limit on revenues from borrowing to be included in the budget […] shall vary by the amount of those revenues from borrowing or by the amount of budget surpluses which corresponds to the expected effect of the economic trend on the budget" (section 2 (2) of the Article 115 Act).

The cyclical component is needed to calculate →structural net borrowing – i.e. the amount of net borrowing that is independent of cyclical effects. The cyclical component is also needed to determine how much →structural net borrowing is permitted, taking into account changes in revenue and expenditure caused by cyclical factors, so that the budget can be planned in a reliable manner. The cyclical component is used to add leeway to structural net borrowing during cyclical downturns, and to reduce it when the economy is performing well.

The cyclical component is the →product of the output gap and →the semi-elasticity of the federal budget. The semi-elasticity parameter indicates how the balance of federal revenues and expenditures changes in response to a change in aggregate economic activity.

The cyclical component is determined when the federal budget is prepared, after the end of the budget year (sections 2 and 3 of the Article 115 Ordinance). If a →supplementary budget is needed, the cyclical component must be calculated anew at such time (section 4 of the Article 115 Ordinance). (See also section 2 (2), section 7 (1) sentence 1 and section 8 sentence 3 of the Article 15 Act)

The cyclical component used in preparing the budget is calculated by multiplying (a) the estimated →output gap for the relevant budget year with (b) the →semi-elasticity of the federal budget.

When determining the cyclical component after the closure of the budget, the cyclical component determined at the time of preparing the budget is adjusted to actual economic outcomes. The difference between (a) the change in GDP established by the Federal Statistical Office at the time of posting to the →control account and (b) the change in nominal GDP expected at the time of preparing the budget is added to the →output gap estimated at the time of preparing the budget.

If a →supplementary budget is adopted, a similar process is used to recalculate the cyclical component: Here the cyclical component estimated at the time of preparing the budget is adjusted in line with the expected change in the macroeconomic projection by correcting the →output gap by the difference between (a) the expected change in GDP for the current fiscal year at the time of preparing the →supplementary budget (based on the federal government's updated macroeconomic projection) and (b) the expected change in GDP for the current fiscal year at the time of preparing the budget.

3.8. Control account

In contrast to the provisions under the old version of Article 115 of the Basic Law, the debt brake is not limited only to the budget preparation process. After the closure of the budget, it is determined how much the actual →net borrowing deviates from the amount which is arrived at as the upper limit on the basis of the economic trend's actual effect on the budget. The differences are posted to a control account. If actual →net borrowing is less than the upper limit, a positive entry is posted to the account; if actual net borrowing exceeds the upper limit, a negative entry is posted to the account. These entries are treated cumulatively across fiscal years. The control account thus constitutes a kind of virtual "memory", which can be used to monitor compliance with the debt break. If a cumulative negative balance on the control account exceeds the threshold of 1.5% of GDP (Article 115 paragraph (2) sentence 4 of the Basic Law), immediate budget policy action is required, as the Basic Law stipulates that such situations must be remedied and the control account balance improved. The implementing provision set out in ordinary legislation (as opposed to constitutional law) (section 7 (3) of the Article 115 Act) stipulates that the account must be balanced as soon as the cumulative negative balance on the control account exceeds the threshold of 1% of GDP. This is designed to prevent, from the outset, the cumulative negative balance on the control account from exceeding 1.5% of GDP, which is not permitted. To prevent the obligation to reduce net borrowing from hampering economic growth, section 7 (3) of the Article 115 Act stipulates that borrowing should only be reduced if there is a positive change in the →output gap and that reductions may not exceed 0.35% of GDP.

If recourse is made to the exception set out in Article 115 paragraph (2) sentence 6 of the Basic Law, the amount to be recorded on the control account must be adjusted for the increased net borrowing resulting from the corresponding decision of the Bundestag. This means that the amount borrowed based on the exception is not recorded on the control account. Instead it is repaid within an appropriate amount of time in accordance with an amortisation schedule (Article 115 paragraph (2) sentences 6 and 7 of the Basic Law).

Once a given fiscal year's budget is actually executed, a provisional entry is posted to the control account on 1 March of the following year on the basis of provisional figures on the aggregate performance of the economy. The conclusive entry is then posted on 1 September of that year.

In order to ensure that the accumulated entries (up to 2015 these were accumulated positive entries) posted to the control account up to 2015 in accordance with the →transitional arrangement do not distort the function of the control account after the transition period is over, a provision was included in section 9 (3) of the Article 115 Act stipulating that the control account balance accumulated up to that point will be cancelled when the transition period ends on 31 December 2015.

3.9. Supplementary budget

In cases where supplements to the Budget Act (cf. section 8 of the Article 115 Act) become necessary due to unforeseeable developments in revenue and expenditure (and where no exceptional circumstances exist in accordance with Article 115 paragraph (2) sentence 6 of the Basic Law), the amount of maximum permissible →structural net borrowing determined at this time may be exceeded by up to 3% of the estimated tax revenue included in the budget. These supplements may not include any new measures that lead to higher expenditures or lower revenue. Adjustments are made exclusively to the →cyclical component determined at the time of preparing the budget to current economic trends. To do so, the →output gap estimated at the time of preparing the budget is added to the amount of the difference between (a) the expected change in GDP at the time of preparing the supplementary budget and (b) the expected change in GDP for the current fiscal year at the time of preparing the budget; the sum is then multiplied with the →semi-elasticity of the budget.

Regardless of any additional spending that may be permitted in a supplementary budget, the entry to the →control account must still show the amount by which →actual net borrowing upon closure of the accounts exceeds the amount of permissible net borrowing determined when the budget was first prepared.

3.10. Net borrowing

For public budgets, **net borrowing** is defined as the difference between net borrowing and the amortisation of existing loans. In the federal budget, net borrowing is shown in departmental budget 32, item 3201 32511 830 00 as “Revenue from loans on the credit market”. Net borrowing does not equal the change in debt levels. For example, →debt levels could increase in the event of a draw-down from reserves if the funds are not taken up on the capital market until they are actually needed. Net borrowing, however, would remain constant in the event of a withdrawal from reserves.

The amount of **permissible net borrowing** is generally derived from the maximum permissible →structural net borrowing less the →cyclical component and the balance of the →financial transactions (see Figure 1).

The amount of permissible net borrowing is initially calculated during the budget preparation process. For the →control account entry following closure of the budget, this amount is recalculated using a →cyclical component updated on the basis of actual GDP outcomes and the actual balance of financial transactions.

With →supplements, too, the amount of permissible net borrowing is recalculated on the basis of the →cyclical component as adjusted to current estimated GDP outcomes and on the basis of the balance of →financial transactions corresponding to the supplement.

3.11. Public-private partnerships (PPPs)

Under the federal debt brake, all PPP-related expenditures are recorded when payments are reflected in the cash figures (financial statistics). As part of EU budgetary surveillance, entries for expenditures for PPP projects are booked when they are incurred, in line with the system of national accounts.

PPP-project-related investment expenditure is booked as gross government investments in the national accounts, with the financing required for this expenditure included in government debt levels as fictional amounts. In line with ESA 2010 and the explanatory “Manual on Government Deficit and Debt”, the PPP instalments are divided up into interest payments (imputed financing costs of the PPP project); service payments (for services by the private PPP partner) and amortisation (repayment of the imputed financing). Government debt always increases at the beginning of the PPP project by the amount of the underlying investment and is subsequently repaid via the imputed amortisation.

In the financial statistics, conventional public construction projects generally lead directly to expenditure in the budget due to the associated investment (construction). With PPP projects, however, construction and payment diverge: in an ideal scenario, the private partner constructs and finances the entire project and then operates it over the lifecycle (with PPP projects having up to 30-year contractual lifecycles), while the contracting authority spreads its payments to the private partner evenly over a period of up to 30 years, depending on the duration of the contract.

Under the debt brake, then, the relevant figure is the debit in the amount of the annual payments to the private partner recorded in the budget.

A PPP may, in principle, only be used if economic feasibility studies have clearly shown it to be the most cost-effective procurement option over its lifecycle in every individual case. The form of the booking under the debt brake must not exert any influence on decisions about the form a project takes (i.e. whether it is executed by the state or as a PPP).

Transferring the procedure for PPP entries in the national accounts to the debt brake would mean that the budget-based concept of the debt brake would have to be expanded to include virtual, model-based elements. Refraining from further alignment with the Maastricht deficit means the debt rule is easy to apply. There is no need to add or deduct any elements; the debt brake takes expenditure into account in the manner in which it is actually incurred in the budgets.

3.12. Output gap / potential output

The output gap indicates the difference between GDP and potential output. Potential output describes aggregate output rates, which are derived from output factors under normal capacity utilisation, and thus constitutes a measure for an economy’s medium and long-term potential for growth. Output gaps, i.e. where GDP diverges from the potential output path, reflect the degree of under- or over-utilisation of aggregate production capacity. In the case of under-utilisation, the output gap is negative (“negative output gap”), in the case of over-utilisation, it is positive (“positive output gap”).

The estimate of the output potential is made in line with the method applied in budgetary surveillance procedures under the European Stability and Growth Pact, which is based on the Cobb-Douglas aggregate production function. The method to be used is continuously developed by the Output Gaps Working Group of the European Union’s Economic Policy Committee (EPC), with support from the European Commission’s Directorate-General for Economic and Financial Affairs (DG ECFIN).

The federal government estimates the potential output and thus also the →cyclical component for the debt brake on the basis of the national accounts figures provided by the Federal Statistical Office and on the basis of the federal government’s current macroeconomic forecast, which is certified by an independent body, the Joint Economic Forecast project group (*Projektgruppe Gemeinschaftsdiganose*).

3.13. Reverses

Building up reserves in the federal budget may be necessary for objective reasons and drawing on them does not lead to an increase in →net borrowing. Draw-downs from reserves decreases the federal budget’s net borrowing. The possibility of protecting →structural net borrowing with the help of draw-downs from reserves constitutes a key difference between the debt brake system and the European system of budgetary surveillance.

Under the European budgetary surveillance procedure, the formation of reserves or assets and subsequent draw-downs cannot improve the Maastricht budget balance. The →budget balance is the difference between revenue and expenditure; reserve allocations or draw-downs are merely financing transactions which have no influence on the Maastricht budget balance.

3.14. Special funds

The version of Article 115 paragraph (2) of the Basic Law which applied until 2010 allowed exemptions for special funds. This meant that special funds could be created which were not subject to the debt brake, had their own borrowing authorisations, and were ultimately not subject to any limit. In accordance with Article 143d paragraph (1) of the Basic Law, this continues to apply only for borrowing authorisations that existed on 31 December 2010 for already created special funds.

The currently applicable Article 115 of the Basic Law no longer contains an exemption for special funds. The cap on →net borrowing applies not only to the federal budget but also to federal special funds with their own borrowing authorisation created as of 1 January 2011. Special funds without their own borrowing authorisation are accounted for in the federal budget's net borrowing through the transfers from the federal budget to these special funds and are thus posted as →net borrowing within the meaning of the debt brake.

Two special funds with their own borrowing authorisation and financial assets are currently relevant for the debt brake: the Financial Market Stabilisation Fund (*Finanzmarktstabilisierungsfonds*) and the Economic Stabilisation Fund (*Stabilisierungsfonds*). These funds are not directly tied to the federal budget. They do not form part of the federal cash flow cycle.

Pursuant to the second Financial Market Stabilisation Act (*Zweites Finanzmarktstabilisierungsgesetz*) of 2012 – after the debt brake entered into force – the Financial Market Stabilisation Fund included an additional borrowing authorisation of €20bn. If this additional borrowing authorisation to finance new measures had been used, it would have been relevant for the debt brake if the measure was not a →financial transaction. The granting of this borrowing authorisation also stipulated that if the borrowing authorisation is used for expenditures that are not →financial transactions, the Deutsche Bundesbank must determine an amortiastion schedule if the loans taken out for this purpose exceed the total permissible borrowing for the Federation under the debt rule pursuant to Article 115 paragraph (2) of the Basic Law.

Section 9 (6) of the Act on the Establishment of a Financial Market Stabilisation Fund (today section 9 (6) of the Stabilisation Fund Act) clarified that borrowing on the basis of measures taken up to 31 December 2010 and their follow-up measures is subject to the provisions set out in the second half sentence of sentence 2 of Article 14d paragraph (1) of the Basic Law. The debt rule does not apply to the stabilisation measures that were granted before 31 December 2010 and that are still in place. No new measures of the Financial Market Stabilisation Fund were granted after 31 December 2010 and since 2015 they can also no longer be applied for.

The Economic Stabilisation Fund was created at the start of the Covid-19 pandemic to fund measures to stabilise businesses. Under section 24 (1) of the Stabilisation Fund Act, the Federal Ministry of Finance is authorised to borrow up to €200bn for the Economic Stabilisation Fund. In 2022 this was reduced to €150bn (Act Amending the Stabilisation Fund Act and the Economic Stabilisation Acceleration Act (*Gesetz zur Änderung des Stabilisierungsfondsgesetzes und des Wirtschaftsstabilisierungsbeschleunigungsgesetz*) of 20 December 2021 (Federal Law Gazette I p. 5247)). These funds can be used to purchase capital instruments and ownership interests and to refinance pass-through transactions by the KfW development bank. As with the Financial Market Stabilisation Fund, the Bundestag must adopt an amortisation schedule for uses of the borrowing authorisation other than for →financial transactions, if permissible borrowing under the debt rule would be exceeded as a result of loans taken out by the Economic Stabilisation Fund for this purpose (section 24 (3) of the Stabilisation Fund Act; see also 4.6).

3.15. Social security

The individual branches of the social security system are subject to their own fiscal rules, which are laid down in social policy legislation; however, this legislation also generally provides for balanced budgets. In general, the revenues and expenditures of social security funds are to be balanced without revenue from borrowing, thereby avoiding continual deficits. Temporary deficits that may arise can be financed by drawing on →financial reserves, by adjusting contribution rates, or through federal grants. In line with European rules, the fiscal balances of social security funds are included in the general government balance, and they are subject to the general government budget monitoring and coordination procedures carried out by the Stability Council.

3.16. Structural net borrowing

The Federation's **structural net borrowing** is the sum of the actual →net borrowing, the →cyclical component and the balance of the financial transactions (see Figure 2). **Maximum permissible structural net borrowing** generally corresponds to the →structural component of 0.35% of GDP; in some cases, repayment obligations due to the use of the exception to Article 115 of the Basic Law and obligations to reduce borrowing must be deducted from the →control account. If the accumulated negative balance on the →control account exceeds 1% of GDP, the amount by which the 1% of GDP was exceeded is reduced during an economic upswing (section 7 (3) of the Article 115 Act). The amount by which the 1% of GDP was exceeded, which may, however, not exceed 0.35% of GDP, is deducted from the →structural component. This reduces maximum permissible borrowing, and has a knock-on effect for permissible →net borrowing. If the exception provided for by Article 115 of the Basic Law was invoked in one of the preceding years, maximum permissible structural borrowing is lowered by the repayment amount determined in the amortisation schedule. Permissible →net borrowing is consequently also reduced until the additional new borrowing from the year in which the exception was invoked has been repaid. If the permissible →net borrowing for a given fiscal year is negative, net repayment is necessary.

The divergence between the maximum permissible structural net borrowing and the actual structural net borrowing under the debt brake is adjusted for the borrowed amount (following recourse to the exception) that exceeds the upper limit, and →posted to the control account.

3.17. Structural component

The structural component of the debt brake is 0.35% of GDP. Without the obligation to reduce borrowing from the →control account and without a repayment obligation due to use of the exception provided for in Article 115 of the Basic Law, the structural component corresponds to the structural component of maximum permissible →structural net borrowing.

The Federal Statistical Office calculates the GDP figure used as the basis for determining the structural component. Nominal GDP for the year preceding the preparation of the budget serves as the point of reference (see section 4 of the Article 115 Act). The structural component for each fiscal year is conclusively determined at the time when the budget is adopted and applies unchanged for the closure of the budget as well.

3.18. Transitional arrangement

During the transitional period from 2011 to 2015, the structural component was reduced in equal steps from its 2010 starting value to 0.35% of GDP in 2016 (see Article 143d paragraph (1) of the Basic Law; section 9 of the Article 115 Act). The starting value – →structural net borrowing for the year 2010 – was specified at the time when the 2011 federal budget was drafted (i.e. in summer 2010) and was only an estimate since the fiscal year had not yet concluded at that time. The expected amount of →structural net borrowing in 2010 (€53.2bn or 2.2% of GDP), which was used as the basis for plotting the reduction increments, was the sum of (a) the amount of actual →net borrowing for the 2010 federal budget expected at that time (€65.2bn), (b) the cyclical component (which at -€12.0bn was negative in 2010) and (c) the estimated actual balance of financial transactions (€0.03bn) (see Figure 6). The reduction path was plotted in a linear fashion, which resulted in annual incremental reductions of approximately 0.31% of GDP for the transitional period from 2011 to 2016. During the transitional period, →net borrowing every year was less than the cap of 0.35% of GDP after calculating compliance with the debt brake.

Figure 6: Calculation of 2010 structural net borrowing (in €bn) in accordance with the transitional agreement

Net borrowing (as of June 2010)	65.2
Plus balance of the financial transactions	0
Plus cyclical component (from spring 2010 forecast)	-12.0
Structural net borrowing	53.2
Nominal GDP for the year preceding budget preparation (from spring 2010 forecast)	2,407.2
2010 structural net borrowing as % of GDP as the starting point for reduction	2.21
Annual reduction increments from 2011 onwards, with equally spread increments until maximum permissible structural net borrowing of 0.35% of GDP is reached by 2016 (as % of GDP)	0.31

Figures may vary due to rounding.

Source: Federal Ministry of Finance.

3.19. Change in the accounting method

The accounting method for special funds without a borrowing authorisation was changed with the second 2021 supplementary budget (cf. Bundestag printed paper 20/300 p. 6 f.). In future, the calculation of the debt brake will take into account only special funds with their own borrowing authorisation created after 1 January 2011, and no longer take into account the financial balances of special funds without a borrowing authorisation, as used to be the case. For special funds without a borrowing authorisation, it is now the transfers from the core budget to these special funds that are relevant for net borrowing within the meaning of the debt rule, rather than the financial balances of the funds.

With the previous accounting method, a surplus from a special fund without a borrowing authorisation from a transfer from the core budget balanced out the core budget's deficit or net borrowing. It was only the outflows from special funds without a borrowing authorisation that were relevant for structural net borrowing within the meaning of the debt brake. Now the transfers from the federal budget to the special funds are booked as net borrowing within the meaning of the debt brake.

The new accounting method for the special funds without borrowing authorisation has been aligned with the method used for the core budget. Transfers to and withdrawals from the reserves of these special funds are now booked in exactly the same way as is already the case in the core budget.

To ensure that the change to the accounting method is carried out in a system-compatible manner and that past allocations are recorded correctly, the new method was applied with retroactive effect from 2016. This involved adjusting the balance on the control account (which must be maintained in accordance with Article 115 (2) sentence 4 of the Basic Law) and the borrowed amount determined in 2020 (due to recourse to the exception pursuant to Article 115 paragraph (2) sentence 6 of the Basic Law).

As a result, the balance on the control account has been reduced from around €52bn to around €47bn. The borrowed amount that exceeded the upper limit, based on the exception, in 2020 has increased from around €41.9bn to around €69.6bn. Following the change to the accounting method, the amount to be repaid for the year 2020 is €3.5bn per year as of 2023 (previously €2.1bn) and for the year 2021 to 1 March 2022 about €11.4bn per year (provisional result).

4. Legal basis

4.1. Article 109 of the Basic Law

(1) The German Federation and the *Länder* manage their budgets autonomously, and are independent of each other.

(2) The Federation and the *Länder* shall jointly meet the obligations of the Federal Republic of Germany resulting from legal acts of the European Community for the maintenance of budgetary discipline on the basis of Article 104 of the Treaty Establishing the European Community and shall, within this framework, give due regard to the requirements of overall economic equilibrium.

(3) The budgets of the Federation and the *Länder* shall in principle be balanced without revenues from borrowing. The Federation and *Länder* may introduce rules intended to take into account, symmetrically in periods of economic expansion and contraction, the effects of cyclical developments that deviate from normal conditions, as well as exceptions for natural disasters or unusual emergency situations that are beyond governmental control and are substantially harmful to the state's financial capacity. For such exceptions, a corresponding amortisation schedule is to be adopted. Details for the budget of the Federation shall be governed by Article 115 subject to the proviso that the first sentence above shall be deemed to be satisfied if revenues from borrowing do not exceed 0.35 percent of nominal gross domestic product. The *Länder* themselves shall regulate details of their budgets within the framework of their constitutional powers subject to the proviso that the first sentence above shall be deemed to be satisfied only if no revenues from borrowing are permitted.

(4) A federal law requiring the consent of the Bundesrat may establish principles applicable to the Federation and the *Länder* governing budgetary law, the responsiveness of budgetary management to economic trends, and long-term financial planning.

(5) Sanctions imposed by the European Community in connection with the provisions of Article 104 of the Treaty Establishing the European Community in the interest of maintaining budgetary discipline shall be borne by the Federation and the *Länder* at a ratio of 65% to 35%. In solidarity, the *Länder* as a whole shall bear 35% of the charges incumbent on the *Länder* according to the number of their inhabitants; 65% of the charges incumbent on the *Länder* shall be borne by the *Länder* according to their degree of causation. The details are laid down in a federal law requiring consent by the Bundesrat.

Article 109a (2) sentence 1 of the Basic Law

(2) From the year 2020, oversight of compliance with the provisions of paragraph (3) of Article 109 by the Federation and the *Länder* shall be entrusted to the Stability Council. This oversight

shall be focused on the provisions and procedures regarding adherence to budgetary discipline from legal acts based on the Treaty on the Functioning of the European Union.

4.2. Article 115 of the Basic Law

(1) The borrowing of funds and the assumption of sureties, guarantees, or other warranties which may lead to expenditures in future fiscal years shall require authorisation by a federal law specifying or permitting computation of the amounts involved.

(2) Revenues and expenditures shall in principle be balanced without revenues from borrowing. This principle shall be deemed to be satisfied if revenues from borrowing do not exceed 0.35% of nominal gross domestic product. In addition, when cyclical developments deviate from normal conditions, effects on the budget in periods of economic expansion and contraction must be taken into account symmetrically. Deviations of actual net borrowing from the upper borrowing limit specified under the first to third sentences above shall be recorded on a control account; debits exceeding the threshold of 1.5% of nominal gross domestic product are to be reduced in accordance with the economic cycle. More precise details, particularly with regard to the adjustment of revenues and expenditures for financial transactions and the procedure for calculating the upper limit on annual net borrowing, taking into account economic developments on the basis of a cyclical adjustment method together with the control and balancing of deviations of actual net borrowing from the standard limit, shall be regulated by a federal law. In the event of natural disasters or unusual emergency situations which are outside the control of government and have a major impact on the financial position of the government, these upper borrowing limits may be exceeded on the basis of a decision by a majority of the Bundestag's members. The decision must be accompanied by an amortisation schedule. Repayment of the amounts borrowed under the sixth sentence above shall be effected within an appropriate period of time.

4.3. Act on the Implementation of Article 115 of the Basic Law (Article 115 Act)

Article 115 Act of 10 August 2009 (Federal Law Gazette I p. 2704, 2704) amended by Article 4 of the Act of 15 July 2013 (Federal Law Gazette I, p. 2398)

Section 1 – Borrowing authorisations

The Budget Act determines the level up to which the Federal Ministry of Finance may borrow

1) to ensure expenditure is covered

2) to ensure cash payments can continue to be processed in an orderly manner (liquidity loans)

To the extent that these liquidity loans have been repaid, repeated use may be made of the authorisation. Liquidity loans fall due no later than six months after the end of the fiscal year for which they have been taken out.

Section 2 Principles for estimating loans to cover expenditure

(1) When budgeting revenues and expenditures in normal cyclical conditions, revenues and expenditures must in principle be balanced without revenues from borrowing; revenues and expenditures must be adjusted for financial transactions. Borrowing of up to 0.35% of nominal gross domestic product is permissible as a structural component.

(2) If an economic trend deviating from the normal conditions is expected for the fiscal year, as a cyclical component, the upper limit on revenues from borrowing to be included in the budget under subsection (1) above may vary by the amount of those revenues from borrowing or by the amount of budget surpluses which corresponds to the expected effect of the economic trend on the budget.

Section 3 Adjustment for financial transactions

Expenditures for the acquisition of holdings, for repayments of principal to the public sector and for the granting of loans shall be factored out of the expenditures under section 2 subsection (1), first half-sentence; those revenues from the sale of holdings, from borrowing from the public sector and from loan repayments shall be factored out of the revenues under section 2 subsection (1), first half-sentence.

Section 4 Basis for determining permissible structural borrowing

The Federal Statistical Office will calculate the gross domestic product used as the basis for determining permissible structural borrowing in accordance with section 2 (1) sentence 2. The nominal gross domestic product for the year preceding the preparation of the budget will serve as the reference.

Section 5 Cyclical component

(1) The amount of the cyclically induced revenues from borrowing or budget surpluses to be included in the budget in accordance with section 2 subsection (2) shall be derived from the expected cyclical deviation from normal cyclical conditions.

(2) A cyclical deviation from normal cyclical conditions shall be deemed to exist if an under-utilisation or over-utilisation of aggregate productive capacities is expected (output gap). This is the case if the potential gross domestic product to be estimated on the basis of a cyclical adjustment method deviates from the expected gross domestic product for the fiscal year for which the budget is prepared.

(3) The cyclical component is the product of the output gap and budget sensitivity which indicates how the federal revenues and expenditures change when overall economic activity changes.

(4) In agreement with the Federal Ministry of Economics and Energy, the Federal Ministry of Finance will, by means of a statutory instrument and without the consent of the Bundesrat, stipulate the details of the procedure for determining the cyclical component in conformity with the cyclical adjustment method applied within the framework of the European Stability and

Growth Pact. The procedure will be reviewed and developed further on a regular basis taking the current state of knowledge into account.

Section 6 Exceptions

In the event of natural disasters or unusual emergency situations which are outside the control of government and have a major impact on the financial position of the government, the borrowing limits under section 2 may be exceeded on the basis of a decision by the Bundestag in accordance with Article 115 paragraph (2) sentence 6 of the Basic Law. This decision must be combined with an amortisation schedule. Repayment of the amounts borrowed under sentence 1 above will be effected within an appropriate period of time.

Section 7 Control account

v(1) Where actual borrowing deviates from the amount which, at the end of the relevant fiscal year, is arrived at as the upper limit under section 2 on the basis of the economic trend's actual effect on the budget, this deviation shall be posted to a variance account (control account). To the extent that exceptional circumstances in accordance with Article 115 (2) sentence 6 of the Basic Law have been invoked, the amount to be posted must be adjusted for the increased net borrowing as a result of the corresponding decision. The deviation to be posted will be determined annually on 1 March of the year following the fiscal year in question and updated over the further course of the year, for the final time on 1 September of the year following the fiscal year in question.

(2) Where the balance is negative, steps shall be taken to balance the control account. The control account's negative balance is not to exceed a threshold of 1.5% of nominal gross domestic product. The GDP figure to be applied shall be determined in accordance with section 4.

(3) Where the control account's balance is negative and where the amount of the balance exceeds 1% of nominal gross domestic product, the borrowing authorisation under section 2 (1) sentence 2 decreases in the next year respectively by the excess amount, but not exceeding 0.35% of nominal gross domestic product; the decrease becomes effective only in years when there is a positive change in the output gap.

Section 8 Right to variance in cases of supplements to the Budget Act and to the budget

In the case of supplements to the Budget Act and to the budget, the amount of permissible net borrowing calculated under section 2 (1) sentence 2 may be exceeded up to the amount of 3% of the tax revenues included in the budget. These supplements may not include any new measures that lead to higher expenditures or lower revenue. Only expected economic outcomes are updated for the purpose of calculating the cyclical component. The provisions of section 7 remain unaffected.

Section 9 Transitional arrangement

(1) This Act will be applied for the first time to the federal budget for the year 2011.

(2) Section 2 (1) will apply during the period from 1 January 2011 to 31 December 2015 subject to the proviso that the structural deficit for the 2010 fiscal year is reduced in equal steps from 2011 onwards.

(3) Section 7 will apply subject to the proviso that the control account's cumulative balance for fiscal years 2011 to 2015 is reset to zero with effect from 31 December 2015.

4.4. Ordinance on the Procedure for Determining the Cyclical Component under Section 5 of the Article 115 Act (Article 115 Ordinance)

Article 115 Ordinance of 9 June 2010 (Federal Law Gazette I, p. 790)

On the basis of section 5 (4) sentence 1 of the Article 115 Act of 10 August 2009 (Federal Law Gazette I, p. 2702, 2704), the Federal Ministry of Finance, in agreement with the Federal Ministry of Economic Affairs and Energy, orders as follows:

Section 1 Object of the Ordinance

This Ordinance governs determination of the cyclical component in the case of preparing the federal budget under section 2 (2) of the Act, in the case of supplements to the Budget Act under section 8, sentence 3, of the Act, and following the end of the fiscal year under section 7 (1), sentence 1, of the Act.

Section 2 Determining the cyclical component during the preparation of the budget

(1) The cyclical component is determined during the preparation of the budget (section 2 (2) of the Act in combination with section 5 of the Act) by multiplying the output gap determined pursuant to section 2 with the budget sensitivity determined pursuant to section 3.

(2) To determine the output gap as the difference between GDP and potential output (section 5 (2) of the Act), the potential output which corresponds to the gross domestic product achievable when production factors are utilised at normal capacity must be estimated. The estimate must use the Cobb-Douglas aggregate production function, in line with the method applied in budgetary surveillance procedures under the European Stability and Growth Pact. The production function models potential output as a combination of labour and capital stock utilised at normal capacity, multiplied by the trend in total factor productivity as a measure of technological progress under normal capacity utilisation.

(3) The budget sensitivity (section 5 (3) of the Act) covers the cyclically induced change in the federal budget balance in relation to GDP if GDP deviates from potential GDP by 1%. Budget sensitivity is calculated as the sum, weighted with the federal shares of the cyclically dependent general-government budget revenues and expenditures, of the partial elasticities of the general-

government budget sensitivity which is also used in the budgetary surveillance method under the European Stability and Growth Pact.

(4) The cyclical component is calculated on the basis of the data from the Federal Statistical Office's national accounts and the federal government's current macroeconomic forecasts for the short and medium term that are relevant to the respective years of estimate.

Section 3 Determination of the cyclical component after budget closure

When determining the deviation to be posted to the control account under section 7 of the Act, the cyclical effect on the budget must be taken as the basis for calculating permissible net borrowing (cyclical component after closing the budget). For this purpose, the cyclical component determined at the time of preparing the budget under section 2 must be adjusted for actual economic outcomes by correcting, for the respective fiscal year, the output gap which was determined at the time of preparing the budget. The adjustment is made on the basis of the difference between (a) the change in GDP established by the Federal Statistical Office at the time of posting to the control account and (b) the change in nominal GDP expected at the time of preparing the budget.

Section 4 Determining the cyclical component in supplements to the Budget Act

In the case of supplements to the Budget Act under section 8 sentence 3 of the Act, the cyclical component determined under section 2 at the time of preparing the budget must be adjusted to the assessment, which has meanwhile been amended, of the overall economic trend in the fiscal year by correcting the output gap determined at the time of preparing the budget by the amount of the difference between the change in gross domestic product in the fiscal year expected at the time of preparing the supplementary budget and the change in the gross domestic product in the fiscal year expected at the time of preparing the budget.

4.5. Article 143d of the Basic Law

(1) Articles 109 and 115 in the version in force until 31 July 2009 must be applied for the last time to the 2010 budget. Articles 109 and 115 in the version in force as from 1 August 2009 must apply for the first time to the 2011 budget; borrowing authorisations existing on 31 December 2010 for special funds already established must remain unaffected. In the period from 1 January 2011 to 31 December 2019, the *Länder* may, in accordance with their applicable legal regulations, deviate from the provisions of paragraph (3) of Article 109. The budgets of the *Länder* are to be planned in such a way that the 2020 budget fulfils the requirements of sentence 5 of paragraph (3) of Article 109. In the period from 1 January 2011 to 31 December 2015, the Federation may deviate from the requirements of Article 115, paragraph (2) sentence 2. The reduction of the existing deficit should begin with the 2011 budget. The annual budgets are to be planned in such a way that the 2016 budget satisfies the requirements of Article 115 paragraph (2) sentence 2 of the Basic Law; the further details will be regulated by a federal law.

(2) To assist them in complying with the requirements of Article 109 paragraph (3) from 1 January 2020 onwards, the *Länder* of Berlin, Bremen, Saarland, Saxony-Anhalt, and Schleswig-Holstein may receive, for the period from 2011 to 2019, consolidation assistance totalling €800 million annually from the federal budget. The respective amounts are €300 million for Bremen, €260 million for Saarland, and €80 million each for Berlin, Saxony-Anhalt, and Schleswig-Holstein. The assistance must be provided on the basis of an administrative agreement in accordance with a federal law requiring the consent of the Bundesrat. The assistance is granted on the condition that the financial deficits are completely eliminated by the end of 2020. The details, especially the annual reduction increments for the financial deficits, the Stability Council's monitoring of the reduction of financial deficits as well as the consequences entailed in case of non-compliance with reduction increments, will be regulated by a federal law requiring the consent of the Bundesrat and by an administrative agreement. There may be no simultaneous granting of consolidation assistance and budget rehabilitation assistance on the basis of an extreme budgetary emergency.

(3) The financial burden resulting from the granting of the consolidation assistance must be borne equally by the Federation and the *Länder*, to be financed by the latter from their share of value-added tax revenue. The further details must be regulated by a federal law with the consent of the Bundesrat.

4.6. Act for Establishing the Economic Stabilisation Fund (Stabilisation Fund Act)

Stabilisation Fund Act of 10 July 2020 (Federal Law Gazette I p. 1633) amended by the Act Amending the Stabilisation Fund Act and the Economic Stabilisation Acceleration Act of 20 December 2021 (Federal Law Gazette I p. 5247)

Article 1 Financial market stabilisation

Section 9 – Borrowing authorisation

(1) To cover expenses and measures under sections 5a, 7 and 8 and 8a subsection (4), first sentence, numbers 1 and 1a of this Act and to cover measures under sections 1 to 4 of the Rescue Takeover Act, the Federal Ministry of Finance shall be empowered to take out loans of up to 30 billion euros for the Fund. (2) The amounts from repaid loans shall accrue back to the borrowing facility under subsection (1) above.

(3) In the case of discount securities, the net amount shall be offset against the borrowing authorisation.

(4) Subject to the preconditions of section 37 subsection (1), second sentence, of the Federal Budget Code, the facility for the authorisation defined in subsection (1) above may, with the consent of the Budget Committee of the German Bundestag, be exceeded by up to 10 billion euros.

(5) The Federal Ministry of Finance is authorised to take out loans of up to €60 billion for the Fund for the purpose of granting loans pursuant to section 8a (10) sentence 1. Subsections (2) and (3) apply mutatis mutandis.

(6) Where loans are taken out for expenditures that are not financial transactions as referred to in section 3 of the Article 115 Act of 10 August 2009 (Federal Law Gazette I, p. 2702, 2704), a separate decision by the German Bundestag concerning the repayment of the federal debt increased by this amount must be obtained in connection with the next decision concerning a budget act, insofar as the permissible borrowing under the debt rule has been exceeded through such loans. The repayment must be effected within an appropriate period of time. In accordance with this amortisation schedule, the Federation's permissible net borrowing under the debt rule is reduced in the respective years. Loans taken out for the purpose of financing expenditure incurred due to measures taken up until 31 December 2010 and follow-up measures pursuant to section 13 (1a) and (1b) of this Act are subject to Article 143d (1) sentence 2 of the Basic Law.

Article 2 Economic stabilisation

Section 24 – Borrowing authorisation

(1) The Federal Ministry of Finance is authorised to take out loans of up to €50 billion for the Economic Stabilisation Fund to cover expenditure and measures pursuant to section 22 of this Act. The Ministry is additionally authorised to take out loans of up to €100 billion for the Economic Stabilisation Fund for the purpose of granting loans pursuant to section 23.

(2) Section 9 (2) and (3) applies accordingly.

(3) Where loans are taken out for expenditures that are not financial transactions as per section 3 of the Article 115 Act of 10 August 2009 (Federal Law Gazette I, p. 2702, 2704), a separate decision by the German Bundestag concerning the repayment of the federal debt increased by this amount must be obtained in connection with the next decision concerning a budget act, insofar as the permissible borrowing under the debt rule has been exceeded through such loans. The repayment must be effected within an appropriate period of time. In accordance with this amortisation schedule, the Federation's permissible net borrowing under the debt rule is reduced in the respective years.