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Bach, Stefan

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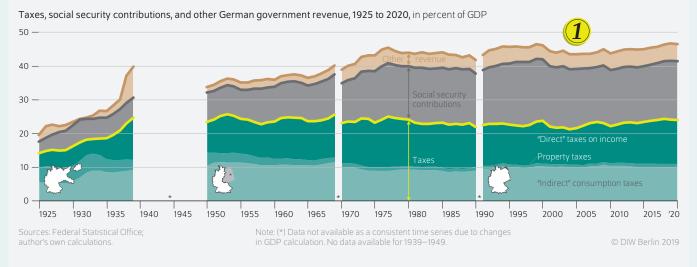
AT A GLANCE

100 Years of the Modern German Tax System: Foundation, Reforms, and Challenges

By Stefan Bach

- Erzberger financial reforms of 1919/1920 laid foundation of current tax system
- Overall tax-to-GDP ratio increased until the 1950s, since then it has remained between 22 and 24 percent most of the time
- Social security contributions-to-GDP ratio almost doubled since Wirtschaftswunder
- · Distribution recently an important issue in the debates about tax and social policies
- No significant decrease in tax burden expected

Since the 1950s, the social security contributions-to-GDP ratio has almost doubled while the tax-to-GDP ratio has remained fairly constant



FROM THE AUTHORS

MEDIA

"A genuine revolutionary change to the tax system is only possible and reasonable in certain situations, as was the case 100 years ago. Since then, the tax system has evolved rather gradually."



Audio Interview with Stefan Bach (in German) www.diw.de/mediathek

100 Years of the Modern German Tax System: Foundation, Reforms, and Challenges

By Stefan Bach

ABSTRACT

The tax and fiscal reforms headed by German finance minister Matthias Erzberger in 1919 and 1920 fundamentally reshaped German public finances. The total tax revenue as a percentage of GDP, or tax-to-GDP ratio, doubled and increased continually until the end of World War II. Since the 1950s, the tax-to-GDP ratio has remained between 22 and 24 percent of GDP most of the time. West Germany's economic recovery and the Wirtschaftswunder (economic miracle) following World War II began with the implementation of high income and corporate tax rates and wealth taxes, which were later decreased gradually. During this time, the welfare state was expanded and social security contributions increased markedly. Beginning in the mid-1970s, weak growth and fiscal consolidation dominated tax and fiscal policies. In the 1980s, tax policies were characterized by supply-side economics, and since the 1990s, by a (neo-)liberal reform agenda. Recently, the issue of distribution has come back into focus. Due to new challenges such as globalization, digitalization, social changes, immigration, maintaining infrastructure, and climate change, a substantial decrease in the tax burden is not expected.

The foundations for the modern German tax system were laid one hundred years ago. From July 1919 to March 1920, the Erzberger fiscal reform was implemented in an unprecedented effort, significantly driven by Matthias Erzberger, the Reich Minister of Finance at the time.¹

"War devastates finances," began Erzberger's first speech to the Weimar National Assembly,² referencing the disastrous situation of German public finances following World War I. Despite (or due to) extreme time pressure, domestic political upheaval, and the unfavorable economic situation in Germany, the Federal Government was able to almost fully reorganize, modernize, and centralize taxes and public finances. It was the first and only fundamental tax and fiscal reform to occur in Germany since the 19th century. Significant elements of the reform remain to date, such as the basic structures of the tax system and financial administration, the German General Fiscal Code, and centralized cooperative financial federalism.

This paper³ provides an overview of the development of the German tax system and social security contributions since the Erzberger fiscal reform. The development of the tax-to-GDP ratio and its structure are shown (Figure) using the available historical time series from financial statistics and the national accounts. Estimations from economic historians were used for the period before World War II.⁴

Deutsche Biographie, Erzberger, Matthias (in German; available online, accessed in November 2019. This applies to all other online sources in this report unless stated otherwise); Klaus Epstein, Matthias Erzberger und das Dilemma der deutschen Demokratie (Frankfurt am Main: Ullstein, 1976), 373 ff. (in German).

² Matthias Erzberger, "Reden zur Neuordnung des deutschen Finanzwesens" (speech, Weimar, Germany at the National Assembly, July 8, 1919), State Library Berlin (in German; available online).

³ For a more in-depth overview, see Stefan Bach, "100 Jahre deutsches Steuersystem: Revolution und Evolution," *DIW Berlin Discussion Paper* 1767 (in German; available online), published in *Steuer und Wirtschaft* 2/2019.

⁴ Due to regular revisions and conceptual changes in the national accounts, gross national product calculations are not available as a consistent time series. Gross domestic product (GDP) has systematically increased over the course of major changes to its calculation, such as improved coverage of financial services, intangible assets, or public investments in civil engineering and weapons systems. The changes were only back calculated over certain time periods. Therefore, the tax ratios before 1991 and 1970 are systematically higher than after, as can be seen from the breaks in the time series.

Erzberger reform doubled tax-to-GDP ratio and centralized the tax system

Before World War I, the overall tax-to-GDP ratio in Germany was eight percent.⁵ In addition, social security contributions accounted for around two percent of GDP. Legislative powers to levy and collect taxes were left in great part to the states.

The Erzberger fiscal reform standardized and reformed all significant taxes nationwide, significantly increasing the tax burdens.⁶ With public finances centralized and tax administration now a federal responsibility, the states had little say in tax policy following the reforms. Instead, the Federal Government provided them with equalization payments.

After the reforms, a progressive tax with rates up to 60 percent was in effect; in contrast, the top tax rate had been eight percent during the years of the German Empire. The 20 percent corporate income tax was introduced while the general sales tax was increased and expanded to become a general consumption tax. A gains tax and the *Reichsnotopfer* (a onetime capital levy) were used to siphon off capital gains and raise the tax burden on the wealthy. Furthermore, the inheritance tax was expanded and a wealth tax was levied beginning in 1923.

Nevertheless, tax increases were barely able to reduce the high budget deficits and did not prevent hyperinflation in 1923. After the currency was stabilized, however, the tax cuts allowed the Federal Government to pursue fiscal consolidation. As a result, the overall tax-to-GDP ratio increased to 15 percent by 1925 (Figure). Compared to the years before World War I, the ratio had almost doubled.7 The revenue structure at the time already resembled the current tax system: the cornerstones are the "indirect" consumption taxes (general sales tax, excises such as energy taxes, tobacco taxes, and alcohol taxes) and the "direct" income taxes, including the corporate income tax and the local business tax. Wealthrelated taxes were also quite important at the time, but that has since changed.8 Social security systems were expanded during the Weimar Republic and social security contributions rose to six percent of GDP accordingly.

Tax-to-GDP ratio increased during Great Depression

As a result of the Great Depression, real GDP decreased by 20 percent between 1930 and 1932, wages and prices fell, and the unemployment rate increased to 30 percent.⁹ The Federal Government implemented austerity and deflation policies in response beginning in 1930, leading to increases in the general sales tax, the excise and a crisis tax, and a new surcharge on the income tax. In addition, the states and municipalities increased property taxes and local business taxes. Together with consistent consumption and wealth taxes, the overall tax-to-GDP ratio increased to over 18 percent of GDP (Figure). It was not until 1932, when reparations were canceled and the Depression ended, that the Federal Government decided to implement tax breaks.

Nazis further increased tax-to-GDP ratio

Although they promised wide-ranging tax relief, the Nazis consolidated the tax system and enforced taxes more stringently. Taxes and the fiscal authorities were used to propagate tyranny, genocide, and a policy of conquest.¹⁰ The Jewish population and other minorities were successively discriminated against and expropriated for tax purposes.¹¹

Beginning in 1936, taxes were increased to finance job creation programs, infrastructure investments, and arms programs. The overall tax-to-GDP ratio increased to almost 25 percent of GDP by 1939 (Figure). Income and corporate income taxes in particular were increased further when the war began in 1939. As the government pursued its policies of war and extermination, spending and debt increased significantly, leading to the utterly shattered state of public finances by the end of World War II.

Wirtschaftswunder despite high tax-to-GDP ratio and increasing social security contributions

Following World War II, reconstruction and the *Wirtschafts-wunder* in West Germany began with the implementation of top income tax rates of up to 95 percent, a corporate income tax rate of 60 percent, and high wealth taxes, which were transferred over from the war economy. Simultaneously, strong investment incentives were introduced, in particular depreciation allowances.¹²

⁵ Mark Spoerer, "Öffentliche Finanzen," in *Deutschland in Daten. Zeitreihen zur Historischen Statistik*, ed. Thomas Rahlf (Bundeszentrale für politische Bildung, 2015), 106 (in German; available online).

⁶ Cf. for the following, the contemporary overviews in Finanzarchiv (1920) (in German; available online) as well as Alex Möller, "Reichsfinanzminister Matthias Erzberger und sein Reformwerk. Blickpunkt Finanzen," *Heft 7, Informationshefte des Bundesministeriums für Wirtschaft und Finanzen* (Bonn: Stollfuss, 1971); Hans-Peter Ullmann, Der deutsche Steuerstaat: Geschichte der öffentlichen Finanzen vom 18. Jahrhundert bis heute (Munich: Beck, 2005), 101ff. (in German; available online).

⁷ Spoerer, "Öffentliche Finanzen," 106.

⁸ This applied to the real estate transfer tax, capital transfer taxes, real estate property tax, wealth tax, inheritance tax, and the *Hauszinssteuer* (tax on housing rent), which absorbed the property owners' profits accruing to debtors.

⁹ Albrecht Ritschl, Deutschlands Krise und Konjunktur 1924–1934. Binnenkonjunktur, Auslandsverschuldung und Reparationsproblem zwischen Dawes-Plan und Transfersperre (Berlin: Akademie, 2002) (in German; available online).

¹⁰ Ralf Banken, Hitlers Steuerstaat: Die Steuerpolitik im Dritten Reich (Berlin/Boston: De Gruyter Oldenbourg, 2018) (in German; available online).

¹¹ Christiane Kuller, Bürokratie und Verbrechen: Antisemitische Finanzpolitik und Verwaltungspraxis im nationalsozialistischen Deutschland (Munich: Oldenbourg, 2013) (in German; available online).

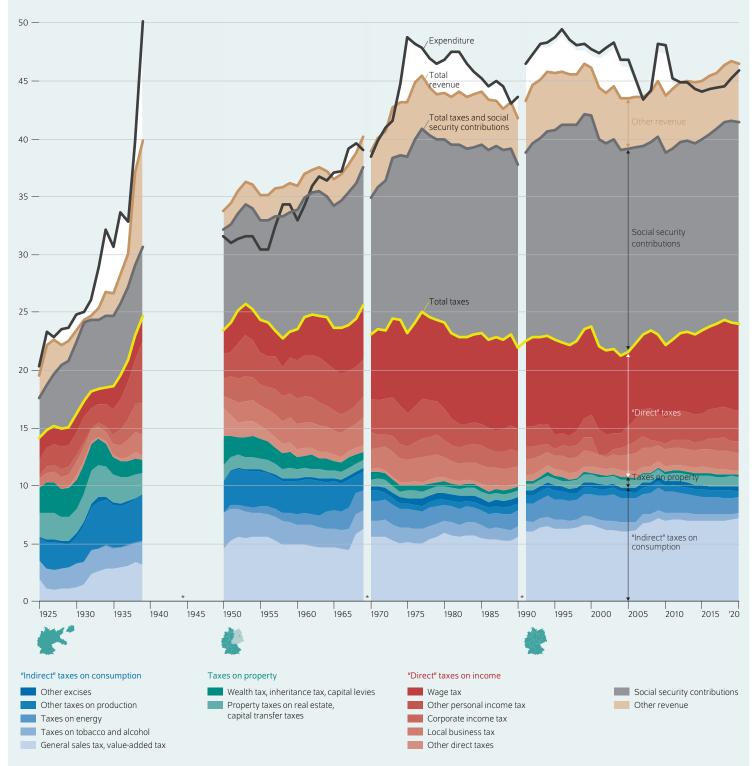
¹² Jutta Muscheid, Die Steuerpolitik in der Bundesrepublik Deutschland 1949–1982 (Berlin: Duncker & Humblot, 1986), 24 ff., 32 ff.; Zoltán Jákli, Vom Marshallplan zum Kohlepfennig: Grundrisse der Subventionspolitik in der Bundesrepublik Deutschland 1948–1982 (Opladen: Westdeutscher Verlag, 1990), 61 ff. (in German; available online).

GERMAN TAX SYSTEM

Figure

Taxes, social security contributions, and other government revenue and expenditure, 1925 to 2020

In percent of gross domestic product (GDP)



Notes: Tax revenue national accounts: Taxes received by the government sector, incl. capital taxes and taxes payable to the EU. Social security contributions received by the government sector. Other direct taxes: Motor vehicle tax on households, direct taxes of municipalities, other taxes on households. Other taxes on production: Motor vehicle tax on corporations, extra duties, other taxes on corporations. 1925 to 1939; German Reich, revenue statistics, GDP, other revenue and expenditure: Ritschl and Spoerer (1997), Spoerer (2015). 1950 to 1969: Former Federal Republic (by 1959, not incl. West Berlin and Saarland), national accounts revision 1991. 1970 to 1990: Former Federal Republic, national accounts revision 2005. 1991 to 2018: Germany, national accounts revision 2019. 2019, 2020: Author's own projection. (*) Data not available as a consistent time series due to changes in GDP calculation. No data available for 1939–1949.

Sources: Federal Statistical Office, national accounts (VGR); author's own calculations.

During this period of dynamic economic growth, the overall tax-to-GDP ratio increased to over 25 percent of GDP in the years 1952–54 (Figure). Public budgets had large surpluses, as the increases in tax revenue were frequently underestimated.13 Wealth taxes were of great significance in the 1950s as well, in particular due to capital levies of the burden-sharing legislation. High income tax rates were gradually reduced until 1958 and the top tax rate was lowered to 53 percent. Yet income tax remained the dominant source of tax revenue, increasing to 7.5 percent of GDP by the mid-1960s. Despite high levels of nominal and real income growth, the income tax rate was only minimally adjusted until the 1970s. Therefore, continually more taxpayers were entering the first progressive tax bracket. In contrast, excises and wealth-related taxes lost significance. The overall tax-to-GDP ratio remained at around 24 percent of GDP in the 1960s.

Social security was expanded swiftly during the early years of the Federal Republic, accompanied by a successive increase in social security contributions. As a result, revenue from social security contributions increased until the end of the 1950s to over ten percent. By the end of the 1960s, it had reached over 12 percent of GDP (Figure).

Fundamental sales tax reform of 1968 and moderate tax reforms of 1974 and 1975

The Stability Act of 1967 and the fiscal reforms at the end of the 1960s made use of the tax and public finance systems to stabilize the economy.¹⁴ Thanks to the economic boom of the late 1960s and early 1970s, tax revenue increased. The overall tax-to-GDP ratio amounted to around 24 percent of GDP and social security contributions were 14 percent of GDP in 1974 (Figure). Surcharges on income and corporate income taxes were meant to dampen demand and inflation.

The 1973 oil crisis heralded the end of the *Wirtschaftswunder*. Unemployment rose, budget deficits increased significantly, and financial and social policies followed a path of fiscal consolidation. The tax-to-GDP ratio remained high and social security contributions increased to over 16 percent of GDP in the 1980s.

A fundamental sales tax reform occurred in 1968 with the introduction of the VAT system with pre-tax deduction. The discussion around a significant tax reform was taken up again in the early 1970s, ¹⁵ but wide-reaching plans to reform income, trade, and wealth-related taxes were barely implemented in the tax reform of 1974–75. Instead, the corporate income tax was significantly modified beginning in 1977. A full deduction procedure was introduced that extensively

integrated the corporate income tax into the personal income tax and remained in effect until 2001. Tax administration law was also modernized in the 1970s with the revision of the German General Fiscal Code.

Supply-side economic concepts since the late 1970s

In the late 1970s, the Federal Government adopted supply-side economic concepts in response to structural problems, weak growth rates, and stagflation. The new policies called for a regulatory restructuring of taxes and duties that would promote growth. Value-added tax and excises were increased and the social security systems were stabilized by benefit cuts and increases in contributions. Accompanied by numerous individual measures to broaden the tax base, the linear-progressive income tax scheme was introduced over the course of multiple reforms until 1990. As a result, the high progressive tax rate for lower and middle-income earners as well as the top tax rate decreased. Overall, the reform resulted in marked tax relief, leading the overall tax-to-GDP ratio to fall below 23 percent by 1990 (Figure).

Reunification brings financial challenges

German reunification was a focal point of fiscal policy beginning in the early 1990s.¹⁶ As a part of regional development programs, massive tax breaks were introduced for investments in the East German states, which resulted in considerable tax deficits. VAT and excises taxes were increased in order to finance these investments, and the solidarity surtax¹⁷ was introduced. Moreover, social security contributions increased to over 19 percent of GDP by 1998 (Figure).

Since the 1990s, the Federal Constitutional Court has been focusing on new priorities, such as forcing legislators to abolish unequal treatment and disparities in tax law. This applies to the court findings regarding the tax allowance for dependent children, the personal allowance, taxation of capital income, valuation procedures for wealth and inheritance taxes, taxation of retirement income, and multiple later findings on inheritance and the real estate property tax.

Significant tax reforms under SPD-Green government

By the mid-1990s, high unemployment rates and increasing globalization had improved the appeal of major tax reforms. Beginning in 1998, the SPD-Green government coalition gradually reduced the top income tax rate to 42 percent, cut tax benefits, and fundamentally reformed the corporate

¹³ The related controversies between the Federal Government and economic research institutes led to the foundation of the *Steuerschätzungen* working committee (tax revenue forecast working committee) in 1955, which still exists today: Federal Ministry of Finance, *50 Jahre Arbeitskreis* "*Steuerschätzungen*," (Berlin: May 2005) (in German; available online).

¹⁴ Muscheid, Die Steuerpolitik in der Bundesrepublik Deutschland, 115 ff.; Ullmann, Der deutsche Steuerstaat, 192 ff.

¹⁵ Muscheid, Die Steuerpolitik in der Bundesrepublik Deutschland, 142 ff.

¹⁶ Dieter Vesper, 25 Jahre Deutsche Einheit. Was hat die Finanzpolitik im Anpassungsprozess geleistet? Eine Bilanz, Expert advice on behalf of the Economic and Social Policy Department of the Friedrich Ebert Foundation (in German; available online).

¹⁷ In the Figure, the solidary surtax is included in the revenue from the wage tax, other income tax, and the corporate income tax.

income tax.¹⁸ Their ecological tax reform combined environmental and climate policy goals with tax system reforms.¹⁹

Overall, these SPD-Green reforms led to significant tax and social security contribution relief. The tax-to-GDP ratio sank by two percentage points of GDP from 2000 to 2005 (Figure), which was due in large part to the income and corporate income tax relief. The expanded federal budget surplus stabilized social security contributions, which were financed by an increase in VAT and the energy tax. These increases also raised the share of indirect taxes in overall tax revenue. Together with weak economic growth, budget deficits increased to significantly over three percent of GDP. After 2005, growth resumed and the tax-to-GDP ratio increased again.

Fundamental tax reforms fail in the early 2000s

Beginning in 2003, a discussion on fundamentally reforming the personal and corporate income taxes developed again. Friedrich Merz's *Bierdeckel* (bar tab) suggestion²⁰ as well as proposals from Paul Kirchhof²¹ received considerable attention. However, they could not implement these suggestions. The proposed broadening of the tax base received great resistance, and the reduced tax rates would have led to relief for high income earners to a large degree. Experts estimated the possible resulting momentum in growth and effects from simplifying the tax system to be modest.²²

After the Grand Coalition formed in 2005, these discussions subsided quickly. Instead of tax cuts, the standard VAT rate was increased to 19 percent. As a result, social security contributions were stabilized and the budget was balanced. The top income tax rate was increased to 45 percent beginning in 2007.

To stabilize the corporate tax burden at an acceptable level to be perceived internationally as an attractive business location, corporate tax rates were reduced from 38 to 30 percent in 2008. In return, the tax base was broadened and tax avoidance opportunities were reduced. At the same time, the final withholding tax on capital income of 25 percent was introduced.

Distribution is main tax policy issue since the financial crisis

In response to the financial and economic crisis of 2008/2009, there were moderate tax cuts, depreciation privileges, and improvements to the corporate income and inheritance tax reforms. Revenue from taxes and social security contributions increased rapidly as the economy recovered quickly. Since 2010, the economy has been in a prolonged upswing, only beginning to cool down recently. Increases in tax revenue combined with low interest rates turned budget deficits into surpluses. The policy of *schwarze Null* (black zero, maintaining a balanced budget) prevented tax cuts, which resulted in high tax burdens, especially on middle class and higher earners.

While tax system issues were previously primarily a concern of the liberal and conservative political spectrum, they have become a focal point of left-wing parties following the financial crisis, with an emphasis on distribution. As a result of tax, labor market, and social reforms as well as economic development, income and wealth inequality increased markedly in the 2000s. In response to this development, high incomes and significant wealth should be taxed more heavily, with higher tax rates, wealth taxes, and reformed inheritance taxes.

Tax-to-GDP ratio of more than 24 percent in 2018

The Grand Coalition beginning in 2013 largely ignored tax policy. As the personal exemption was the only part of the income tax rate adjusted from 2011 to 2016 while the income thresholds of the tax brackets remained constant, tax burdens and revenue increased due to the progressive nature of the tax system. Revenue from business taxes also grew markedly because of the boom. Revenue from excises remained low, however, as the rates were hardly adjusted. The overall taxto-GDP ratio reached 24.3 percent of GDP in 2018 while revenue from social security contributions increased to 17.1 percent of GDP (Figure).

In the Grand Coalition starting in 2018, the CDU/CSU and SPD agreed on a minimum tax program. Beginning in 2021, the final withholding tax on capital income will be reformed and the solidarity surtax will only be imposed on high-income earners. In the case of the real property tax, the Federal Constitutional Court has ruled that the tax base will have to be adjusted.

Revolution or evolution: what comes next?

The Erzberger fiscal reform comprehensively modernized the German tax and fiscal systems and created foundations that are still in place today. These reforms also mark the breakthrough of the modern tax and welfare state in Germany in terms of revenue and tax-to-GDP ratio. The Nazis and World War II increased the tax-to-GDP ratio further. Since the 1950s, the overall tax-to-GDP ratio in Germany has remained at a relatively constant level of 22 to 24 percent of GDP most of the time. Social security contributions, in contrast, increased markedly to 17 percent of GDP.

¹⁸ Marc Buggeln, "Keine Aktion Volksbeglückung. Der Spitzensteuersatz als Politikum," *Mittelweg* 36, vol. 1 (2018): 70 ff. (in German; available online); Stefan Bach, "Steuerreform: Notwendige Anpassungen vorgenommen, der große Wurf blieb aus," *Vierteljahrshefte zur Wirtschaftsforschung* 77 (2008): 172 ff. (in German; available online).

¹⁹ Stefan Bach, "Zehn Jahre ökologische Steuerreform: Finanzpolitisch erfolgreich, klimapolitisch halbherzig," *DIW Wochenbericht*, no. 14 (2009) (in German; available online).

²⁰ Resolution B 1 of the 17th Party Congress of the CDU Germany 2003, A modern income tax law for Germany. Ten guiding principles for radical simplification and fundamental reform of the German income tax system (2003) (in German; available online).

²¹ Paul Kirchhof (ed.), Einkommensteuergeselzbuch. Ein Vorschlag zur Reform der Einkommenund Körperschaftsteuer (C.F. Müller: 2003) (in German); Paul Kirchhof, Bundessteuergesetzbuch. Ein Reformentwurf zur Erneuerung des Steuerrechts (C.F. Müller: 2011) (in German; available online).

²² Stefan Bach, "Grundlegende Reform der Einkommensbesteuerung: Inwieweit kann die Bemessungsgrundlage verbreitert und das Steuerrecht vereinfacht werden?" *DIW Wochenbericht* no. 36 (2005): 523–527 (in German; available online); Clemens Fuest, Andreas Peichl, and Thilo Schaefer, "Is a flat tax reform feasible in a grown-up democracy of Western Europe? A simulation study for Germany," *International Tax and Public Finance* 15, no. 5 (2008): 620–636 (available online).

GERMAN TAX SYSTEM

The basic structure of the German tax system has remained constant following World War II. The main sources of tax revenue are indirect taxes (VAT and excises) as well as income taxes, including business taxes. Since the 1960s, revenue from income taxes has risen, especially from the wage tax. The share of VAT in indirect taxes increased while the significance of excises decreased. Energy taxes and VAT were expanded during the 1990s and 2000s and income and business taxes were lowered. The importance of wealth-related taxes has decreased significantly since the 1950s.

The tax system is complex and was regularly adjusted. Every 15 to 25 years since the 1950s, there have been debates on a "fundamental tax reform," but they largely go nowhere. Historically, the most significant changes were driven by economic and social changes that tax policy was forced to react to with gradual adjustments: an evolution, not a revolution. Major tax reforms include the switch from a general sales tax to VAT at the end of the 1960s, personal and corporate income tax reforms in the 1970s, the gradual income tax reforms from 1996 to 2005, the business tax reforms of 2001 and 2008, and the expansion of energy taxes until 2003.

Over the past two decades, tax policy has taken a (neo-)liberal approach, driven by structural problems, globalization, and tax competition. Distribution has begun to be of greater

JEL: N44, H20, H11 Keywords: History of taxation, tax system, tax reform concern recently as well. For example, the significant burden on earned income due to social security contributions and income tax is increasingly being viewed as a problem, both in terms of distribution as well as economic development. Hikes in property-related taxes or rising top income tax rates are currently being proposed to finance relief for earned income.²³

Digitalization, demographic and socio-spatial changes, infrastructure improvements, and increased efforts to combat climate change pose long-term challenges for public finances. As economies and financial markets become more internationally integrated and the digital economy grows, internationally coordinated changes to the tax bases are needed. Unless there are major savings in the expenditure of public budgets, no substantial reductions in the tax burden are to be expected in the future.

Stefan Bach is a research associate in the Public Economics Department at DIW Berlin | sbach@diw.de

²³ However, even moderate relief for broad sections of the population quickly leads to tax deficits of 30 billion euros per year, see Stefan Bach and Michelle Harnisch, "Steuer- und Abgabenreformen für die neue Legislatur: Untere und mittlere Einkommen gezielt entlasten," *DIW Berlin Discussion Papers* 1706 (in German; available online); Stefan Bach, Hermann Buslei, "Wie können mittlere Einkommen beim Einkommenstuertarif entlastet werden?" *DIW Wochenbericht* no. 29 (2017): 391-399 (in German; available online). Higher taxes on inheritances and real estate or a moderate increase in the top tax rate are often proposed as a counter-financing measure, cf. European Commission, *Country Report Germany 2019* (2019) (available online); OECD, *Germany Economic Snapshot* (2019); IMF, *Germany. 2019 Article IV Staff Report* (2019); and Statement by the Executive Director for Germany, July 10, 2019 (available online).

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