

Harmful tax competition

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How Bayer rigs corporate taxation in Europe



CREDITS

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Executive Summary

A growing number of case studies, court cases as well as the emerging analysis of country-by-country reports show: multinational corporations across many industries and countries use accounting tricks to shift their profits to corporate tax havens. This gives them an unfair competitive advantage over the local businesses and deprives the countries where they operate of important resources to maintain their health systems and tackle climate change. And – at least as problematically - it also contributes to a global race to the bottom in corporate tax rates.

Bayer AG is no exception. Like many other big multinationals, Bayer has subsidiaries in several tax havens - including 27 in the Netherlands as well as 15 in the inner-German tax havens Monheim and Schönefeld. Compared to local competitors in the countries where it operates, Bayer reduced its effective tax rate by nearly 10 percentage points and saved its shareholders approximately **three billion Euros** of tax over the last ten years. And, at least equally important, Bayer has repeatedly and directly contributed to speed-up the race to the bottom in corporate taxation both within Germany and in the EU. Thanks to falling tax rates in the countries and communities where it operates, Bayer has reduced its weighted nominal tax rate **from 39,5 to 22 percent** in the last 20 years. To do so, Bayer maintains close political connections at federal level and apparently uses easy to shift profits from intellectual property and real estate to incentivize major local tax cuts. As a result of the race to the bottom with the Netherlands and nearby Monheim, Leverkusen – the home of Bayer’s headquarters – has cut its corporate tax rate by 8 percentage points to only 24,6 percent for 2020. With tax rates falling at home, Bayer now reports nearly 60 percent of its taxes due in Germany – up from around 20 percent 10 years earlier – despite falling shares of German employees and sales in Germany.

This case study of Bayer and tax competition serves as a good illustration of current problems of corporate taxation:

1. Recent reforms have so far failed to stop both profit shifting and harmful tax competition and the current structure of corporate taxation fails to create a level playing field between big multinationals and small local competitors.
2. The minimum tax introduced in 2004 to limit inner-German tax competition helped to drive some of the most aggressive and less convenient tax havens out of business. But it failed to stop harmful tax competition because the difference to the average tax rate remains big and profits can still be easily shifted without major relocation of economic activity.
3. Under the current system, countries hosting big multinationals like the US in the case of big digital companies and Germany in the case of Bayer can protect their tax base at the cost of smaller and poorer countries in the EU and worldwide.

Unless profits are taxed where economic activity and substance are and strong and fair international rules ensure a level playing field, there is no such thing as “fair” tax competition. The EU urgently needs to reform the standards used to determine “harmful” tax competition and the work of its Code of Conduct group more broadly. The EU also needs to redouble its effort to contribute to a truly multilateral solution. Instead of looking to minimize its taxes, Bayer should increase its efforts to achieve its goal of “health for all, hunger for none” and to do so without destroying the planet along the way.

The case for change

What is a fair share of tax? And where should this tax be paid? Facing exploding corporate profits and increasing power of big multinational corporations these questions have moved from years of backroom discussions dominated by technical experts to become reasons for public scandal, protest and even boycott and have entered the political debate. This is good news because they are in essence political matters. But because of a lack of transparency and a high level of technical complexity grown over decades, enabling an even debate is very challenging. For mid-2021 the OECD has promised both a global minimum tax to fight base erosion and profit shifting and a redistribution of taxing rights better suited to the modern economy. Building on these efforts the new Commission has published another action plan to “make taxes simpler, fairer and better adapted to the modern world, while supporting the fight against tax fraud and avoidance” until 2024.

Ideas about what corporate tax and the tax rates should look like diverge widely. Some observers suggest replacing corporate taxes completely by income or wealth taxes due in the countries of the owners. Others favor some sort of destination-based cash flow tax that is more similar to a value-added tax charged in the country where the products are sold. But short of such radical reforms there seems to be a growing consensus that the effective tax rate for big multinationals should be at least as high as for their local competitors and that companies should pay their taxes where they are economically active and create value. Due to the by now well-documented aggressive tax avoidance by some of the biggest and best known multinational corporations calls for change are getting louder. Nevertheless, converting this broad political consensus into practical and effective policy is much more difficult than it might seem, not least because of the entrenched resistance to change by those companies and countries that benefit from the current system.

With this challenge and the public debate in mind, this study uses Bayer AG – a big Germany-based producer of pharmaceuticals and agricultural products – as an illustrative example to make the case that:

1. The reform needs to go beyond a quick and dirty tax on the business of the big digital corporations;
2. That – unless there are multilateral rules far beyond the current OECD-driven system to ensure a level playing field – tax competition can’t be fair. Instead it creates unfair advantages for big multinationals ready to dedicate considerable resources to rigging the system.
3. Countries and companies should not compete for the lowest taxes but the most conducive business environment and for sustainable solutions to the challenges of humanity.

The study starts with a review of the existing evidence on profit shifting and tax avoidance as well as the recent reform attempts. It then presents a snapshot of Bayer’s business structure and the main features of its tax policy. The third and main chapter uses Bayer as an example to draw lessons for the fight against harmful tax competition, for a global minimum tax and for the redistribution of taxing rights. The study concludes with recommendations for the role of the EU in the ongoing reform debate.

The status quo - evidence of profit shifting and tax avoidance

For many years multinational corporations have used accounting tricks to shift their profits from countries where their factories, employees and customers are located and where they benefit from existing infrastructure and education to letterbox companies without any economic activity or substance in countries where the profits are taxed at lower rates. This artificial profit shifting has contributed to a

destructive race-to-the-bottom that has reduced the average corporate tax rate in OECD countries from 38.84% in 1990 to 26.47% in 2020.

The biggest – often digital and US-based - multinational corporations stand out not only for their extremely high profits, but also for their particularly aggressive tax avoidance. With the "Goldcrest" project (after Luxembourg's national bird), Amazon trimmed its European activities for maximum tax avoidance right from the start and for many years shifted a big part of its European profits to an untaxed letterbox company without any employees.¹ Likewise, Apple negotiated a deal with the Irish tax authorities that allegedly gave them unjustified tax advantages of 13 billion Euros with most of the profits accruing in a letterbox company in Ireland.² Because they have important brand names, software, licenses, patents and other assets, profit shifting is easier for them. A study of Tax Watch (2018) documents the tax avoidance of the big five (Google, Cisco, Facebook, Microsoft and Apple) in the UK. A more recent study by Lenz (2020) shows that the US-tax at the end of 2017 has not changed the low taxation of European profits for four of them (without Cisco).

But the big digital companies are just the most recent and most visible examples for a more general problem. Allegations of artificial profit shifting against German chemical giant BASF date back to 1974³ and [German TV](#) reported about the tax avoidance structure of Ikea already in 2005. Arguably the most successful tax-focused boycott was directed at Starbucks in the UK (2012) and was followed by the documentation of profit shifting for McDonald's (2015). The [European Commission](#) has found illegal advantages for Fiat, Starbucks and Engie as well as several multinationals in Belgium, Gibraltar and the UK and is still investigating Ikea and Nike as well as Huthamäki. Previous studies of the Greens/EFA have documented current profit shifting practices of European companies such as Ikea (2016), BASF (2016), Zara/Inditex (2016) as well as Veolia (2017). In 2018, [Oxfam](#) documented that the big US-based pharma companies Pfizer, Johnson & Johnson, Abbott, Merck & Co shifted billions of profits out of the developed and developing countries where they were created. A study of Public Services International found similar results for the Germany pharmaceutical company Fresenius (2020). Finally, a study by the Greens/EFA (2020) shows how profits from European real estate continue to flow into tax havens despite reform efforts.

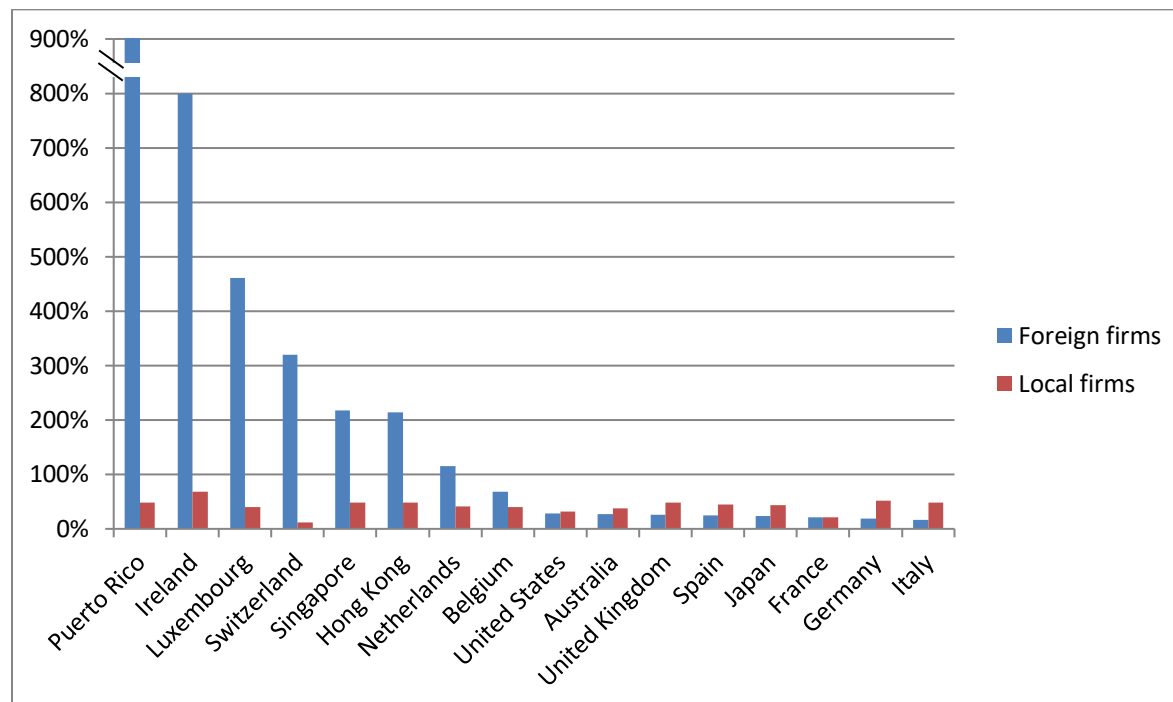
Beyond those individual examples, the emerging analysis of country-by-country reports shows both the high volumes of profits shifted to countries known to act as tax havens and that employees of big multinational companies there "produce" multiples of the profits of their peers in higher tax jurisdictions.

¹ The [Guardian \(2016\)](#) provides a good summary of the project "Goldcrest". The [European Commission \(2017\)](#) qualified the case as illegal state-aid by Luxembourg.

² The European Commission published its conclusions in [2016](#). In 2020 the European Court of Justice ruled in favor of Apple but the European Commission [appealed](#).

³ Compare Ernst Piehl: Multinationale Konzerne und international Gewerkschaftsbewegung. Schriftenreihe der Otto-Brenner-Stiftung, Bd. 2. Frankfurt a. M. 1974.

Figure 1 – Pre-tax corporate profits as a share of employee compensation for local and for foreign firms



Source: Tørsløv, T. R., Wier, L. S., and Zucman, G. (2018)

Based on the first batch of country-by-country data released by the OECD in 2020, the [State of Tax Justice report](#) by the Tax Justice Network estimates that corporate tax avoidance by big multinationals adds up to a tax loss of 245 billion US-dollars. Similarly the [Missing Profits](#) project estimates the loss to be above 200 billion US-dollars or 10% of global corporate tax receipts based on foreign affiliate statistics. Similarly, Clausing (2020a) analyses aggregated country-by-country data from the US that was first published in 2019 and that can be corroborated with other detailed data on the activities of US multinationals. She identifies clusters of low activity havens such as the Cayman Islands, Bermuda, Luxembourg, Jersey or the Isle of Man with effective tax rates close to zero and profits per employee of up to 59 million US-dollars as well as higher activity havens such as Singapore, Switzerland, Netherlands, Puerto Rico, Ireland and Hong Kong with slightly higher effective tax rates and lower profits per employee. She further estimates taxes lost in the US on profits of US multinationals to be between 64 and 115 billion US-dollars based on the assumption that two thirds of the profits in tax havens belong to the US and one third to other countries. Using unpublished firm-level Cbcr data from Germany, Fuest et al (2021) confirm the finding that tax haven subsidiaries are notably more profitable and conclude that German multinationals shift profits to tax havens. But compared to Tørsløv et al their model only allocates 40% (instead of 60%) of the profits in tax havens to tax-induced profit shifting and they estimate that German multinationals shift only 3% of their foreign profits to tax havens (compared to a global average estimate of 40%). Based on their findings, they calculate the loss of German tax income from profits shifted to tax havens for tax avoidance by German multinationals to be 1,6 billion Euros per year.

Current developments in the field of corporate taxation

Essentially, rules for corporate taxation are decided at the national level. But the national-level rules are complemented by a complex set of bilateral tax treaties and international standards to avoid double taxation. Within the United Nations a small tax committee meets regularly to discuss international

corporate taxation but over the last years the OECD and its models and standards have factually dominated the international system. Under rising pressure from the public as well rising recognition of the systems' weaknesses both by traditionally disadvantaged countries from beyond the OECD and in the countries traditionally benefitting from the system but increasingly losing out to the aggressive tax avoidance from a few large multinationals, the OECD passed an action package against base erosion and profit shifting ("BEPS 1.0") in 2015. In 2021 the OECD is hoping to finalize action 1 of the previous package regulating digital companies in a package with further reforms ("BEPS 2.0"). For these reform debates the OECD has created the Inclusive Framework that gives a wider number of countries access to the negotiations. Nevertheless, proposals from the group of developing countries were largely ignored and a reform of corporate taxation unilaterally passed by the US at the end of 2017 combined with the threat of trade sanctions and withdrawal from the negotiations by the US yielded strong influence over the negotiations. Apart from a major cut in the nominal rate (from 35 to 21%) fueling international tax competition and a wide-ranging amnesty for previously untaxed foreign profits piling up in tax havens this reform included measures to incentivize shifting profits into the US and punishing those that shift them out.

2015 – BEPS 1.0 (OECD) and Anti-Tax Avoidance directive 1 and 2 (EU)

On behalf of the G20, the OECD has been working on reforms against base erosion and profit shifting since 2013 ("BEPS 1.0") and has created extended participation opportunities for non-members for this purpose via the so-called Inclusive Framework. The BEPS 1.0 reform debate resulted in largely voluntary proposals grouped into 15 actions. Out of these only four actions established mandatory minimum standards to be adopted by all signatories including on harmful tax practices, on the prevention of tax treaty abuse, on the preparation and exchange of country-by-country reports as well as on mutual agreement procedures. In addition, action 15 resulted in the adoption of a multilateral instrument with the aim to overwrite bilateral tax treaties. In contrast action 1 on the tax challenges arising from digitalization presented only a problem analysis for further discussion.

With the approval of the first [Anti-Tax Avoidance directive \(ATAD 1\)](#) in July 2016 and [ATAD 2](#) in May 2017 the European Commission transferred several of the OECD proposals into European law. The directives were supposed to be transposed by the member states until 1.1.2020 and 1.1.2021 respectively but several member states – among them Germany – have not completed this process on time. Several other OECD recommendations such as the multilateral instrument to change double tax agreements are ratified directly by the EU member states but many member states are slow to do so and make excessive use of the wide range of exceptions provided.

2017 – Tax cuts and jobs act (USA)

In the first year of Donald Trump's presidency, the U.S. government passed a major tax reform, the Tax Cuts and Jobs Act (TCJA), at the end of 2017. In addition to a far-reaching amnesty for high foreign profits and a tax cut from the previous 35% to 21%, as well as a sort of patent box for foreign-derived-intangible-income (FDII) the tax reform also included two measures against profit shifting and tax avoidance:

1. GILTI tax (Global Intangible Low-Taxed Income) - a minimum tax on low-taxed foreign earnings from intangible assets up to 10.5% and increasing to 13.125% in 2026 in the form of a top-up tax due in the U.S.
2. BEAT (Base Erosion and Anti-Abuse Tax) - a tax on related-party payments of US subsidiaries to their foreign affiliates.

A study by Lenz ([2020](#)) models the impact of the U.S. reform on Apple, Facebook, Google and Microsoft based on their 2016-2019 annual reports. According to the study, the reform led to only minor improvements in effective tax rates. With an average of 15.7%, the global effective tax rates stayed far below the massively lowered rate of 21% and even below pre-reform levels. At 11.6% to 12.9%, the taxation of foreign income remained far below the rates typically due in the source countries of the profits. Clausing ([2020b](#)) considers the global offsetting of profits (so-called global blending) to be the biggest flaw and estimates that without the revenue effect could be 2.5 times higher.

2018 - Taxing the digital economy and a minimum tax (OECD)

Building on action 1 of BEPS 1.0 on taxing the digital economy the members of the inclusive framework are currently negotiating the second comprehensive reform package against aggressive profit shifting. This package consists of two pillars - a redistribution of taxing rights (pillar 1) and a global minimum tax (pillar 2). In October 2020, the [OECD](#) presented the current status of the discussions in so-called blueprints, but postponed the main decisions until mid-2021 due to US opposition. Together with the blueprints, the OECD published updated [estimates](#) of the revenue and distributional effects of its reform proposals using data from publicly available financial reports as well as country-by-country reports provided by the member states. According to the latest estimates, the reform proposals would increase global corporate tax revenue by an estimated 47-81 billion US-dollars per year. These estimates were based on an effective minimum tax of 12,5% that – unlike the US model – doesn't allow global blending but grants the US an exemption from applying the international rules. The OECD further estimates that under the suggested conditions, the redistribution of taxing rights under pillar 1 would be limited to only about 100 billion US-dollars out of a total of 4.100 billion US-dollars of profits of large multinational corporations identified by the OECD. In parallel to the OECD negotiations the UN tax committee is discussing reform proposals that partly go beyond those of the OECD. This work is complemented by the so-called FACTI panel looking at ways to address illicit financial flows, including from corporate profit shifting and tax avoidance, and to improve multilateral collaboration.

2020 – The European Commission's tax package (EU)

In light of the pandemic and the international climate crisis, the new Commission passed a tax package on [15 July 2020](#) with the goal of “securing prosperity through fair taxation”. A dedicated action plan for corporate tax was announced for autumn 2020 but was postponed together with the delayed decision at OECD-level. From the perspective of corporate tax, the two main elements of the tax package are the development of a cooperative compliance framework as well as the reform of the Code of Conduct group. Since its inception in 1997 the Code of Conduct Group has analyzed more than 400 tax regimes in the EU and has classified around 100 as harmful. Through the blacklisting process for non-EU countries introduced in 2016 another 120 harmful tax regimes were identified. Nevertheless, in its [communication](#) on tax good governance in the EU and beyond, the Commission acknowledges that developments such as the growth of multinationals and the importance of intangible assets have substantially changed the “nature and form of tax competition” and “prompted tax competition to escalate”. Meanwhile the Code of Conduct Group has continued largely unchanged and “both Member States and the European Parliament have questioned the ability of the Code to tackle contemporary forms of harmful tax competition”. As a solution, the Commission proposes – among others – to include “further types of regimes and general aspects of the national corporate tax systems” to examine “all cases of very low taxation” and to apply the Code “more transparently and effectively”, including through qualified-majority voting. Finally, the Commission stresses the need to include the results of international negotiations, especially around a minimum tax, and if no consensus is reached at global level to introduce this concept “in the Code as an EU standard”. Earlier attempts by the Commission such as the

proposal on fair taxation of the digital economy of [21st March 2018](#), the introduction of a common consolidated tax base for the EU first introduced in 2001 and re-launched with the action plan on fair corporate taxation of [17 June 2015](#) or public country-by-country reporting have so far been blocked by the member states.

Bayer as an example

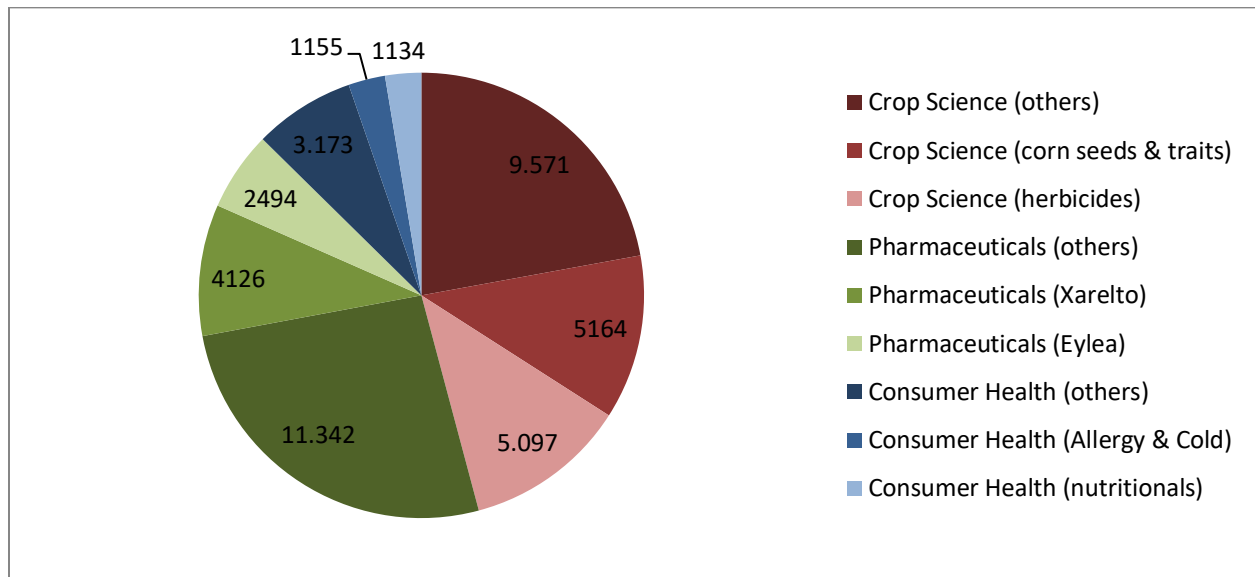
With a global turnover of 43,5 billion Euros Bayer AG (“Bayer”) is one of the biggest German companies. It produces pharmaceuticals and consumer health products as well as agricultural products such as seeds, pesticides and services, including the activities of US-based Monsanto since 2018. According to its corporate social responsibility report Bayer strives to contribute to *“health for all, hunger for none”* and tax payments are part of its added-value. Through its pharmaceutical section Bayer directly benefits from public healthcare budgets and its chemical section profits from activities that negatively impact the environment. The following chapter provides a snapshot of Bayer’s business structure and the main features of its tax policy.

The business structure

“Science for a better life – health for all, hunger for none.”

In 2019 Bayer had a global turnover of 43,5 billion Euros. After the acquisition of Monsanto in 2018 Bayer, according to company reports, became the *“largest integrated player in the agricultural industry”* and crop sciences became the biggest of Bayer’s three segments with a turnover of nearly 20 billion Euros. The segment includes a) seeds for corn and soy as well as various cereals and vegetables b) both chemical and biological pesticides and fertilizers and c) services. Seeds and other products are usually grown or filled close to the markets and sold through wholesalers or directly to farmers. As part of the Better Life Farming alliance Bayer has the goal to reach 100 million smallholder farms with its products. The second biggest segment – with a turnover slightly above 14 billion Euros - is pharmaceuticals, which includes medicine and some medical equipment usually sold through pharmacies and wholesalers. Its most widely sold product is Xarelto, a blood-thinner, followed by Eylea – a medicine to heal eye diseases. Together with UNFPA, Bayer aims to reach 100 million women with its oral or injected contraception products. Consumer health – with a turnover of 5,5 billion Euros the smallest of the three – comprises non-prescription drugs and nutritional products such as Elevit or Aspirin sold by pharmacies, supermarkets, drugstores and online.

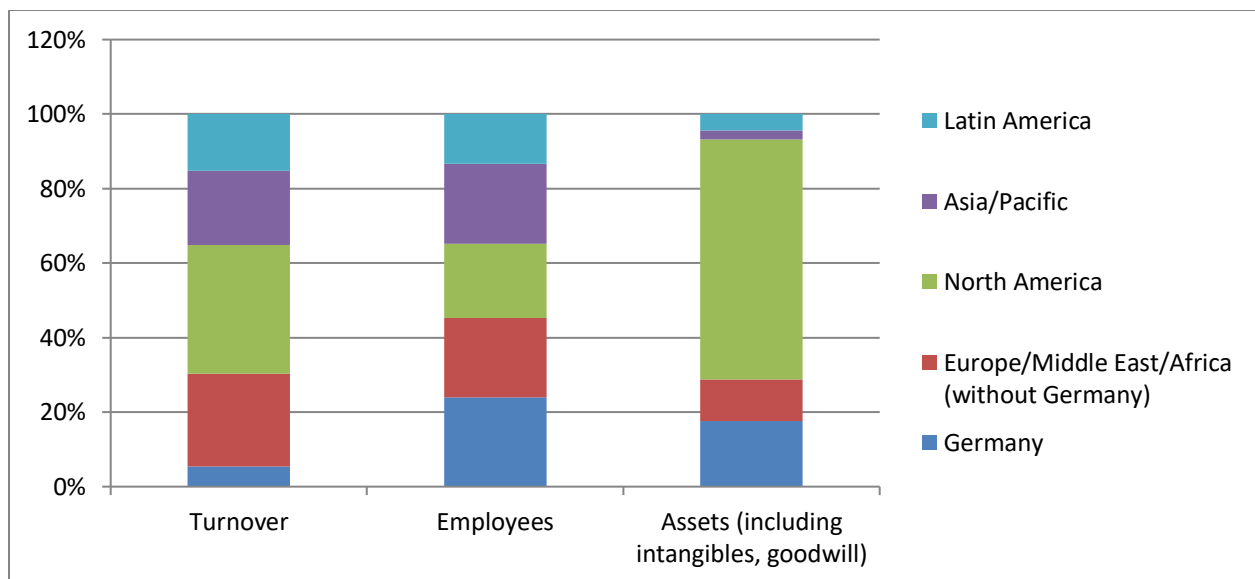
Figure 2 – Bayer's business segments and main products



Source: Own illustration based on annual report 2019

Bayer is a German company with its headquarter situated in Leverkusen and segment headquarters in Monheim (CropScience) and Berlin (Pharmaceuticals). The biggest part of the work force (24 %) is based in Germany but only a very small part of its sales are German by destination (5 %). The acquisition of Monsanto in 2018 has increased both workforce and turnover in North America and dominates the asset structure.⁴

Figure 3 - Regional distribution of turnover, employees and assets



Source: Own illustration based on annual report 2019

⁴ Bayer bought Monsanto at a price of 48,0 billion Euros but acquired only 5,7 billion Euros worth of tangible property. With 24,4 billion Euros slightly more half of the purchase price was booked as goodwill.

In 2019 Bayer spent 5,3 billion Euros on Research and Development and 16.000 (15,4%) employees work in this function, among them 7.800 scientists in 50 countries. Bayer produces 3,71 million metric tons of CO2 equivalents, 26 million cubic meters of wastewater and 316.000 metric tons of hazardous waste but aims to be carbon neutral by 2030 - including through the purchase of CO2 certificates.

Effective tax rates

"In accordance with this and our core LIFE values, we do not engage in artificial transactions without business substance. Our approach to tax planning is that tax optimization should follow business needs and that profits are taxed with regard to our global value chain." [Bayer – approach to tax](#)

Already for several years Bayer reports its tax payments as part of its value-added for society. Following a general trend among big multinationals and a requirement introduced in the UK in 2018, Bayer recently adopted a [tax policy](#) around five values namely Certainty, Cooperation, Compliance, Competitiveness and Clarity. Its interpretation of competitiveness – “pay tax in line with value creation” – resonates with the current consensus of international corporate tax reform. Bayer defines clarity as “self-explanatory transparency in the right hands” but provides only limited geographical detail on its economic activities, profits and tax payments to its shareholders and to the public in its annual report. The reports split employees and sales by geographical region. For Germany they also provide information on the assets (without differentiating between tangible and intangible) and for taxes “current or paid”. Over the last ten years, Bayer’s global effective tax rate according to the profit and loss statement averaged 23,8%. This is nearly 10% below the nominal rates in Leverkusen that hosts its headquarter as well as in the countries where Bayer had most of its sales during this time. Compared to these rates, Bayer saved approximately three billion Euros of taxes.

Table 1 – Profits and tax rates 2010 – 2019

Bayer AG	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	Total
Profit before tax	2.880	1.886	4.577	4.773	5.245	4.414	4.207	3.176	3.363	1.721	36.242
Taxes due (profit/loss)	450	496	1.329	1.017	1.227	1.071	1.021	723	891	441	8.636
Effective tax rate	15,6%	26,3%	29,0%	21,3%	23,4%	24,3%	24,3%	22,8%	26,5%	25,6%	23,8%
Nominal tax in Leverkusen*	32,5%	32,5%	32,5%	32,5%	32,5%	32,5%	31,9%	31,9%	31,9%	31,9%	32,2%
Nominal tax Bayer's markets**	27,3%	27,4%	33,9%	34,0%	34,1%	34,1%	34,1%	34,1%	34,1%	34,1%	32,7%

Source: Own compilation from annual reports 2010 to 2019

* Corporate tax in Germany has three elements. I) The corporate tax proper (“Körperschaftsteuer”) which was lowered from 25 % to 15 % in 2008, II) The solidarity surcharge („Solidaritätszuschlag“) that is levied since 1991 and equals 5,5% of the corporate tax or 0,825 % since 2008, III) the local business tax (“Gewerbesteuer”). The rate for the local business tax is determined by each community and profits are split between communities based on a formulaic approach using labor force as the sole determinant. The rates vary between close to 7 % (the mandatory minimum since 2004) in some small jurisdictions and more than 15 % in bigger cities. Leverkusen, the home of Bayer, increased its rate from 16,1 % (until 2013) to 16,625 % (until 2019) and has recently lowered it to only 8,75 %.

**For the years 2016 to 2019 Bayer publishes the turnover for five countries (Germany, Switzerland, USA, Brazil, and China) which together make up about 50 % of turnover. The values for the years 2010 to 2015 are extrapolated based on the 2016 figures.

Compared to its peers among the 30 biggest listed companies from Germany the effective tax rate of 23,8 % puts Bayer in the bottom third of the list with 19 companies booking higher rates and nine

companies with lower rates. Competitors from similar industries include Covestro (26,25 %), Fresenius (26,1 %), Linde (23,9 %) or Henkel (23,38 %) and BASF (22,9 %) (Redeker 2020).

Presence in tax havens and evidence of profit shifting

The term tax haven has no commonly agreed definition and being present in a tax haven doesn't equate to artificially shifting profits there. The EU uses information sharing, the absence of harmful tax practices and zero tax rates as its criteria for blacklisting countries as tax havens but the resulting list is political because it accepts promises and by definition excludes all EU countries. We therefore complement the EU's list with all countries scoring worse than 70 % in the [corporate tax haven index](#) (CTHI) of the Tax Justice Network.⁵ According to this definition, out of the 488 subsidiaries listed in Bayer's consolidated accounts 66 (or 13,5 %) are located in international tax havens, including two from the EU's blacklist (Panama, BVI). In addition, 15 out of Bayer's 59 German subsidiaries are located in inner-German tax havens, namely Monheim (close to Leverkusen) and Schönefeld (close to Berlin).⁶ Bayer doesn't publish its profits by country but – according to German law – provides the unconsolidated profits for its most important subsidiaries. These unconsolidated profits booked in tax havens add up to 4,3 billion Euros compared to consolidated profits of 2,9 billion Euros. The three tax havens with the highest profits are the Netherlands, Delaware and Monheim. In many countries on the list, Bayer has substantial activities justifying at least part of the profits booked there and a lot of the profits, especially those booked in the Netherlands are dividends that are usually taxed in the source countries and therefore tax-free in most places in the world. The following sub-chapters will have a closer look at those numbers but based on the available figures it is neither possible to calculate the share of consolidated profits booked in tax havens nor the share of artificially shifted profits there.

⁵ Since there is no common definition of international tax havens, all states on the EU list of non-cooperative jurisdictions for tax purposes as well as those with a score above 70 in the Tax Justice Network's Corporate Tax Haven Index are classified as international tax havens. Additionally, the top 15 corporate tax havens according to Oxfam (2016) are taken into account. Furthermore, the U.S. state of Delaware is considered separately and is not assigned to the United States. In total, 35 jurisdictions are classified as international tax havens.

⁶ A community is considered as an inner-German tax haven when the local business tax rate is 10,5 percent or less.

Table 2 – Subsidiaries in tax havens and unconsolidated profits

	No. of subs	Profits (in m€)	CTHI rank
Netherlands	27	2.086	4
Delaware	15	756	na
Switzerland	8	395	5
Singapore	3	47	8
Cyprus	2	23	18
UAE	1	8	12
Hong Kong	2	7	10
Ireland	2	4	11
Luxembourg	2	4	6
Panama	1	2	26
Curacao	1	0	21
Bermuda	1	na	2
BVI	1	na	1
<i>Subtotal (international)</i>	66	3.331	
Monheim	5	733	na
Schönefeld	10	260	na
Total	81	4.324	

Source: Own compilation based on Anteilsbesitzliste 2019

Despite comprehensive search we could find little information on Bayer's tax practices around the world. In Greece, Bayer is contesting a claim by the tax authorities for the payment of 130 million Euros for the tax years 2014, 2016 and 2017 in connection with an intra-company loan. In Canada, Bayer is contesting a request for detailed transfer pricing documentation for the tax years 2013 to 2015.⁷ Finally, Bayer S.A. in Brazil publishes detailed accounts including related party transactions. They contain the purchase of goods mainly from Bayer CropScience AG in Monheim as well as a loan of nearly 1 billion Euros (3,9 billion Brazilian Reais) at an interest rate of 7,02% from Bayer World B.V. in the Netherlands. According to its consolidated accounts, Bayer reports retained earnings in foreign subsidiaries of 17,5 billion Euros not intended to be repatriated to Germany. Based on the applicable tax rate in Leverkusen in 2019 this saved Bayer 284 million Euros of tax that would otherwise be due in Germany.

Netherlands

Quick facts:

- ✓ Corporate Tax Haven Index (TJN): Rank 4/64, oasis score 78/100
- ✓ Tax Attractiveness Index (LMU et al.): Rank 12/100, attractiveness 0.61/1
- ✓ EU Semester Report 2020: Economic evidence suggests that the Netherlands tax rules are used for aggressive tax planning. Specifically, rules such as the absence of withholding taxes.
- ✓ Corporate tax rate: 21.7% (from 2021, before 25 %)
- ✓ Withholding taxes on dividends, patents or licenses: up to 0% possible, participation exemption applied generously, beneficial network of DBAs

⁷ <https://tpcases.com/canada-vs-bayer-inc-july-2020-federal-court-t-272-19/>

- ✓ Patent box regime
- ✓ Bayer: 27 subsidiaries

According to Tax Justice Network (2020) the Netherlands accounted for a global corporate tax loss of 27 billion US-dollar and Tørsløv, Wier and Zucman (2018) consider it the largest tax haven in the world. The Netherlands are an attractive country for holding companies because no withholding taxes are levied on outgoing royalty and interest payments, the participation exemption for dividend received is applied generously, there is an extensive and often advantageous network of double taxation treaties and special income tax rules for expat managers are available. A recent study by the Dutch Bureau for Economic Policy Analysis (2019) shows that between 5% and 35% of dividend payments and between 20% and 30% of interest payments from the Netherlands went to low-tax jurisdictions or tax havens. For royalty payments, as much as 60% went directly to Bermuda. At the beginning of 2021, the general corporate income tax rate was lowered from 25% to 21.7%. In exchange, a new withholding tax of 21,7 % on payments of interest and royalties to low-tax countries was introduced. In 2007 the Netherlands further introduced the so-called innovation box that reduces the tax on income connected to intangible assets to 7% (9% since 2021). These benefits only apply to intangible assets created in the Netherlands and after 2007. In 2017 the innovation box regime was reformed to avoid qualification as harmful according to OECD rules. As part of this reform the amount of profits that can benefit from the box was capped and the need to document the Dutch research efforts was substantiated, at the same time application was extended beyond patents.⁸

Bayer's 27 subsidiaries in the Netherlands include:

- ✓ Bayer Global Investments B.V which serves as a financing and holding company and received dividends of 1,7 billion Euros and a total tax-exempt income of 1,89 billion Euros in 2019. With a profit of 1,3 billion Euros and tax expenses of 594 thousand Euros, the effective tax rate is close to zero. Nevertheless most of the dividends come from high-tax countries including Finland, Brazil, Japan, Italy or France. By directing these dividends to the Netherlands, Bayer avoids approximately 1% of tax that would result from a virtual cost deduction on received dividends due in Germany.
- ✓ Bayer World Investments B.V. that according to Bayer's consolidated report had profits totaling 272 million Euros in 2019 but doesn't publish any information on its profits in the Netherlands. Judging from the transactions visible with related parties this company seems to have finance and treasury functions, for example giving intra-company loans to Bayer's subsidiary in Brazil.
- ✓ BUS C.V. with an unconsolidated profit of 127,9 million Euros but without any further information on its activity.
- ✓ Bayer Capital Corporation B.V. acting as a finance company issuing bonds in excess of 5 billion euros and makings loans to other group members in the amount of 4.1 billion euros in 2018 without any employees.

In addition, both Bayer (until 1989) and Monsanto (until 1991) had financing operations in Curacao, a former Dutch colony. Bayer continues with a subsidiary there.

⁸ Compare for example: <https://www.tax-consultants-international.com/read/innovation-box>

Delaware

Quick facts:

- ✓ Income from intangible assets such as patents and trademarks as well as out of state income are not taxed locally
- ✓ No requirement of publishing financial accounts
- ✓ Bayer: 15 subsidiaries

Delaware is one of the preferred places for US-holding companies and a popular secrecy jurisdiction. It has 1 million inhabitants and 1.4 million registered entities. Sixty-seven percent of the companies listed in the Fortune 500 stock market index have their legal domicile there. In Delaware income from patents, trademark rights or other intangible assets is tax-free. Furthermore, profits generated outside of Delaware are not taxed locally. In addition, there are hardly any requirements for the establishment of companies and little transparency. Many of the Bayer entities in Delaware are related to Monsanto.

Monheim and Schönefeld

Quick facts:

- ✓ Local business taxes about half of its neighboring big cities and close to the mandatory minimum
- ✓ Bayer subsidiaries: 15

Like Delaware in the US, Monheim and Schönefeld are inner-German tax havens. German corporate tax consists of the federal corporate tax (15 %) and the local business tax ("Gewerbesteuer"). The rate for the local business tax is determined by each community and varies between the mandatory minimum of 7 % and 19,25 %. Leverkusen, where Bayer AG is registered, increased its rate from 16,1 % (until 2013) to 16,625 % (until 2020) and has recently lowered it to only 8,75 %. Neighboring Monheim, home to Bayer CropScience AG since 2005, had already decreased its local business rate to the same level in various steps starting 2012. Bayer Intellectual Property GmbH was set up in Monheim on the 26th of March 2012, few days after the approval of the tax cut, followed by Bayer CropScience Beteiligungs GmbH in 2014 as well as Bayer US AG & Co KG and Bayer US II GmbH & Co KG in 2017. The tax rate in Schönefeld (close to Berlin), where Bayer has a total of 10 subsidiaries, was already set at the minimum of 7 % before and increased to 8,4 % in 2015.

Thanks to a gap in the German accounting directive, none of Bayer's 15 subsidiaries in the inner-German tax havens of Monheim and Schönefeld publishes financial reports and therefore no information about the number of employees, taxable income and taxes is available. For the 15 subsidiaries the consolidated accounts contain unconsolidated profits of nearly 1 billion Euros in 2019 and nearly 3 billion Euros in 2018. According to its [website](#) Bayer CropScience employs around 2.000 people in Monheim.

Table 3 – Subsidiaries in inner-German tax havens

Name	City	Profit (2019, €1,000)	Profit (2018, €1.000)
Bayer CropScience Aktiengesellschaft	Monheim am Rhein	977.600	3.021.500
Bayer CropScience Beteiligungsgesellschaft mit beschränkter Haftung	Monheim am Rhein	21.000	-3.500
Bayer Intellectual Property GmbH	Monheim am Rhein	-3.700	600
Bayer US AG & Co. KG	Monheim am Rhein	-95.000	-299.300
Bayer US II GmbH & Co. KG	Monheim am Rhein	-166.600	-126.700
Fünfte Bayer Real Estate VV GmbH & Co. KG	Schönefeld	71.300	18.000
Sechste Bayer Real Estate VV GmbH & Co. KG	Schönefeld	60.200	95.500
Zweite Bayer Real Estate VV GmbH & Co. KG	Schönefeld	43.500	42.500
Alcafleu Management GmbH & Co. KG	Schönefeld	41.900	117.400
Dritte Bayer Real Estate VV GmbH & Co. KG	Schönefeld	29.600	25.800
Erste Bayer Real Estate VV GmbH & Co. KG	Schönefeld	10.000	7.500
Vierte Bayer Real Estate VV GmbH & Co. KG	Schönefeld	1.700	1.800
Adverio Pharma GmbH	Schönefeld	1.700	4.300
Lilienthalstraße Nr. 4 GmbH	Schönefeld	0	200
Bayer Real Estate Waltersdorf Verwaltungs-GmbH	Schönefeld	0	0
Total		993.200	2.905.600

Source: Own compilation based on Anteilsbesitzliste 2019 and 2018

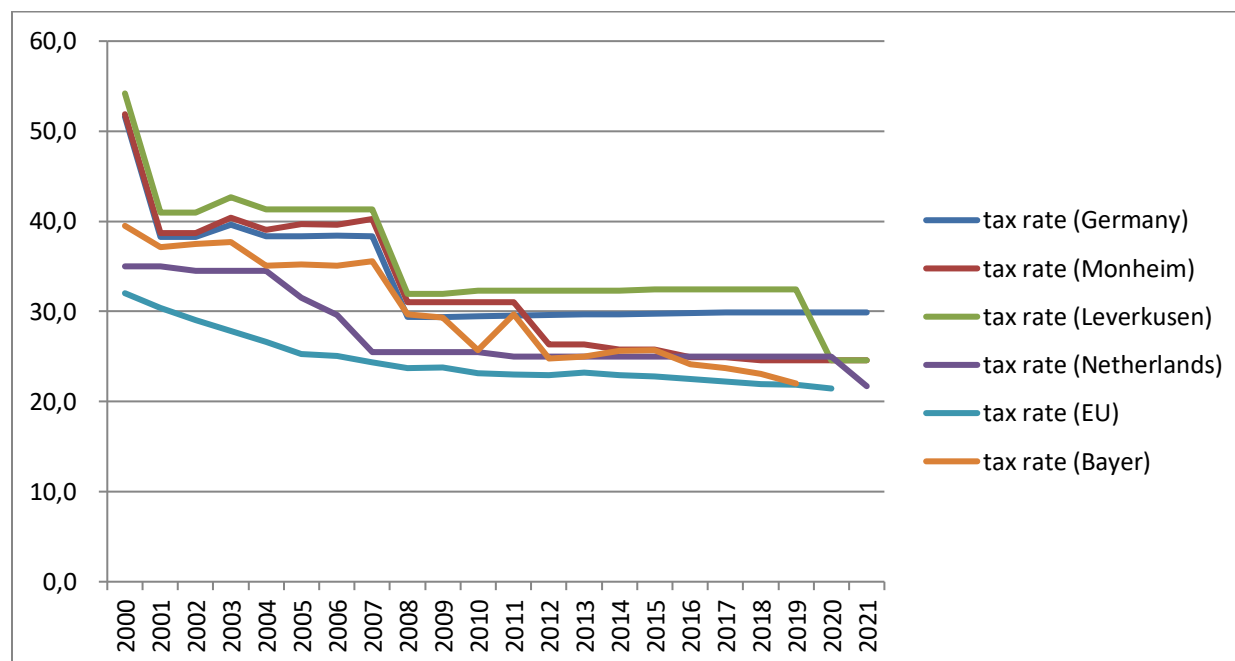
Lessons for corporate tax reform

The OECD and the UN as well as the EU are currently working to reform the international system of corporate taxes. The two main elements of this reform are a global minimum tax to limit tax competition and a redistribution of taxing rights adapted to the modern economy. The following two sub-chapters look at these two elements with Bayer as a test case.

Ending the race to the bottom through a minimum tax

Bayer provides a textbook example of harmful tax competition in Europe as well as in Germany. At the same time the German experience with rules trying to limit this competition provide interesting insights for global tax reform. The following graph compares the development of nominal corporate tax rates as calculated by Bayer for its global operations with those in the EU, Netherlands, Germany as well as the German cities Leverkusen and Monheim where Bayer has its corporate headquarter and important subsidiaries. It shows that Bayer's corporate tax rate has fallen significantly over the last 20 years following the trend in its major locations.

Figure 4 – Development of nominal tax rates for Bayer and important locations



Source: Nominal tax rate of Bayer based on the weighted average presented in the annual reports. Tax rates for Germany, Netherlands and EU based on Eurostat. Tax rates for Monheim and Leverkusen based on own compilation

A closer look at the tax cuts depicted in the graph above shows Bayer has often played an active and problematic role.

Stage 1 – Tax cuts in Germany followed by tax cuts in the Netherlands followed by further tax cuts in Germany

In 2001, when Germany lowered the corporate tax rate from around 50% to less than 40%, one of the central drivers was Heribert Zitzelsberger. He had left the finance ministry in 1989 to work as Bayer's head of tax. Still in this role he was part of an expert panel to draft proposals for the corporate tax reform in 1998 and oversaw their implementation back in the finance ministry as secretary of state for

taxes from 1999 to 2001.⁹ The German tax cut was followed by a stepped decrease in the Netherlands from 35 percent in 2002 to 25,5 percent and the introduction of the patent box in 2007. One year later, Germany followed suit and cut its corporate tax rate to 29,4 percent.

Stage 2 – Tax cuts in Monheim followed by tax cuts in Leverkusen

One part of the German tax rate – the local business tax – is decided at community level enabling communities to lower the overall corporate tax to as little as 22,825 percent. In 2011, the average nominal tax rate in Germany was 29,4 percent, nearly 5 percentage points above the rate in the Netherlands. At Bayer's headquarter in Leverkusen the rate was 32,275%. In this situation, the major of

“With the decision to lower the local business tax [...Monheim...] managed to establish itself in the midfield of international tax competition [...] with a tax rate below 25% Monheim is ahead of its competitors Austria and Netherlands with 25% each”.

Major of Monheim, 2016

Monheim am Rhein – a town close to Leverkusen and about a quarter of its size – decided to lower its tax rate to 26,325% promising to bring it below 25% in the following years. Before doing so he reportedly talked to company representatives to convince them to relocate to Monheim and stressed that he was not looking to attract individual craftsman from neighboring towns but big global corporations.¹⁰

Being one of the big companies already present in Monheim before the decision, Bayer was one of the first to hear the call. On 26th of March 2012, just a few days after the decision to retroactively lower the business tax was made, Bayer established its subsidiary Bayer Intellectual Property GmbH there, followed by Bayer CropScience Beteiligungs GmbH in 2014 as well as Bayer US AG & Co KG and Bayer US II GmbH & Co KG in 2017. According to newspaper reports the finance secretary of Leverkusen estimated that Bayer Intellectual Property GmbH alone would help Bayer to shift around 30 million Euros of taxes to Monheim¹¹ – a claim which can't be confirmed because Bayer doesn't publish any accounts for its subsidiaries in Monheim. Overall, lowering the tax rate has brought about 4.500 new jobs to Monheim (+41%)¹² but more importantly it has increased the business tax income by a factor of nearly 20. With this additional income, Monheim managed to repay all its debt, renovate the city, provide free kindergartens and even free bus tickets for all its inhabitants (including on buses going there from Leverkusen), while Leverkusen's income dropped dramatically.

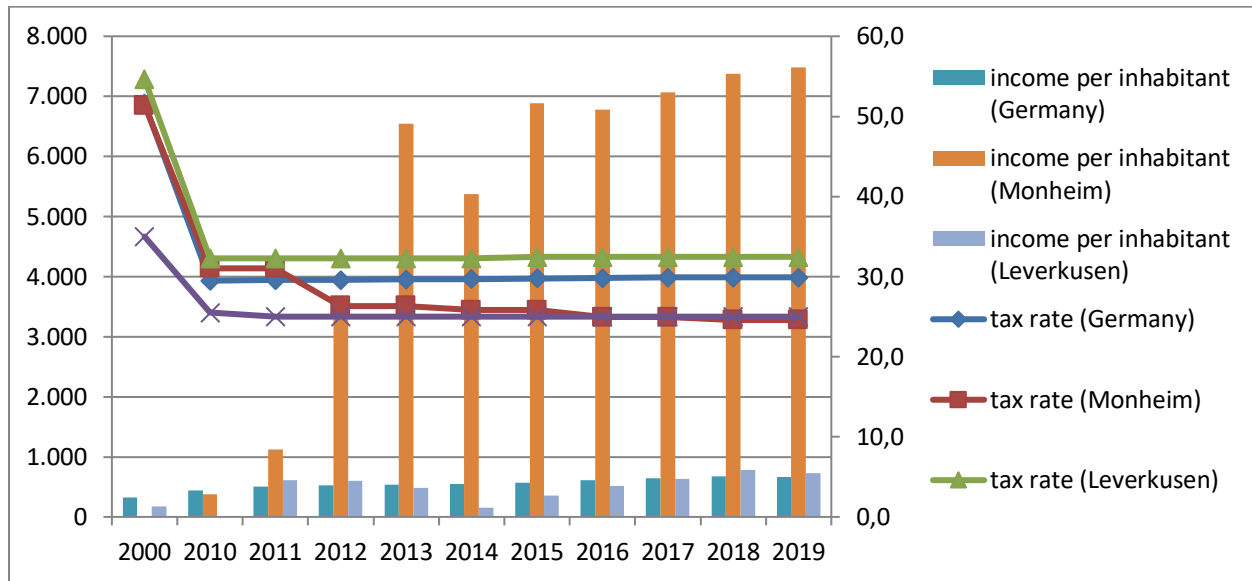
⁹ For more details see <https://www.zeit.de/2005/37/Steuern/komplettansicht> (in German)

¹⁰ Quoted in: Dirk Neubauer (2016): [Das Wunder am Rhein](#). In Das Parlament Nr. 10-11, 7 March 2016. And again in the budget plan 2017 - original text: „Mit dem Beschluss der Senkung des Gewerbesteuerhebesatzes zum 1. Januar 2017 auf 260 Punkte ist die Etablierung im Mittelfeld des internationalen Wettbewerbs mit einer Steuerquote von unter 25 % gelungen. [...] Mit der genannten Steuerquote von knapp unter 25 % liegt Monheim am Rhein seit dem Jahr 2017 vor den Konkurrenzstaaten Österreich und Niederlanden mit jeweils 25 %.“

¹¹ <https://www.wiwo.de/finanzen/steuern-recht/steuern-bayer-sorgt-fuer-frust/14712816-3.html>

¹² https://rp-online.de/nrw/staedte/langenfeld/wirtschaft-in-monheim-hat-sich-rasant-entwickelt_aid-52811449

Figure 5 – Development of business tax income per inhabitant and nominal tax rates in Germany, Monheim and Leverkusen in comparison



Source: Own compilation based on public accounts

„For years, the city has been in a regional, and even global tax competition [...] In direct competition with neighboring communities with extremely low business tax rates Leverkusen is not competitive with its current tax rate”

When Leverkusen after long discussions decided to lower its own tax rate at the end of 2019, finance secretary Markus Märtens had, according to press reports¹³, talked to the big corporations with creative tax departments who ensured him increasing tax income. Asked in the city council and by the press he continues to reject giving any more information on which companies he talked to or even which companies have come new to the city claiming tax secrecy.

One company that seems to be shifting its profits back to Leverkusen is Bayer. In December 2020, Bayer relocated some of its real estate holding companies (Erste, Zweite, Dritte und Vierte Bayer Real Estate VV GmbH & Co KG) that reported more than 100 million Euros of profit in 2019 from Schönefeld to Leverkusen.

The balance sheets of Bayer on the one hand and Monheim as well as Leverkusen on the other clearly show the effects of the tax competition. While Monheim prospered, business tax income in Leverkusen fell sharply in 2013/14/15 and only reached its 2010 levels in 2019 – after years in which the German economy has seen a continuous boom in general and one of its biggest companies has increased its global footprint and more than doubled its profits. And while Leverkusen is budgeting with increasing tax income for 2020 and 2021 it is now the neighboring cities Dormagen and Krefeld fearing significant losses.¹⁴ In the meantime, Bayer is recording ever lower tax rates.

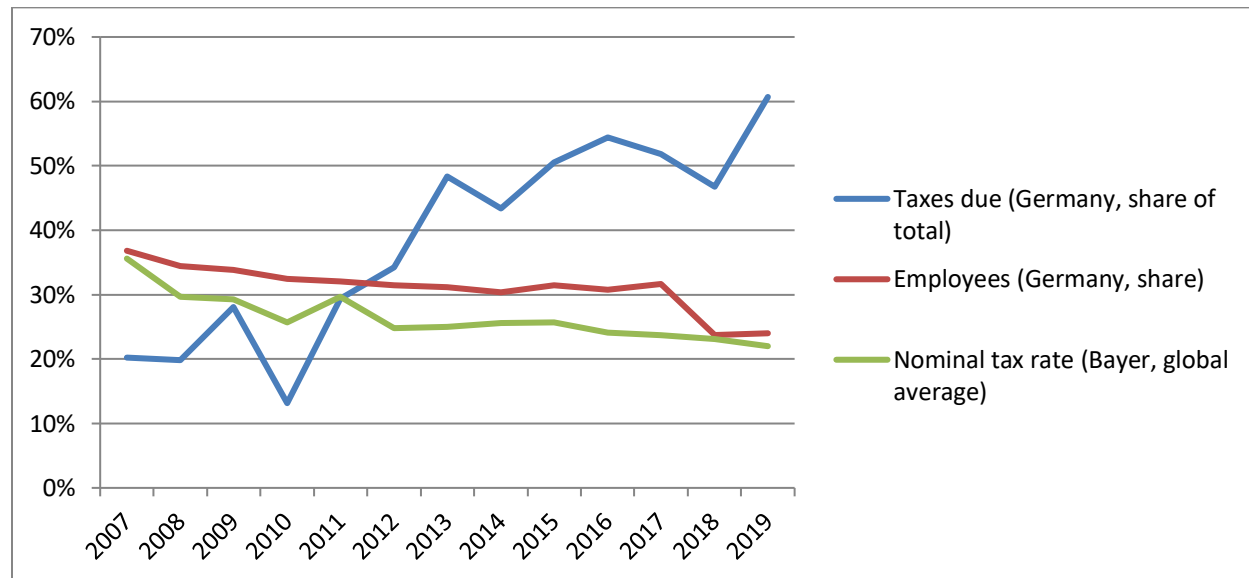
¹³ Thomas Käding (2019): Rat macht die Stadt zum Steuerparadies für Firmen. Kölner Stadtanzeiger, 17th December 2019. Picture: <https://www.leverkusen.com/guide/Bild.php?view=35354>

¹⁴ https://rp-online.de/nrw/staedte/leverkusen/leverkusen-will-gewerbesteuer-senken-krefeld-und-dormagen-sind-sauer_aid-39944737

Stage 3 – Tax cuts in the Netherlands followed by tax cuts in Germany?

But Bayer apparently did not only reallocate its profits and tax payments from one German city to another. Around the time of the tax cuts in Germany, and without any significant shift of employees, the share of taxes due there increased significantly while the global average tax rate remained largely unaffected even falling slightly below 25%, which is surprising considering that tax rates for most of its German locations with the exceptions of Monheim and Schönefeld was at around 30%.¹⁵.

Figure 6 – Development of Bayer's share of taxes due in Germany in comparison to employees and nominal tax rate



Source: Own compilation based on annual reports

Some part of the additional income that helps to pay for free bus tickets for the inhabitants of Monheim and might pay for the reopening of the public pool in Leverkusen in future might therefore come from the Netherlands, other European countries or developed and developing countries around the world. With the global tax rate falling continuously some countries along the chain stand to lose. Most likely it is those without major headquarters. In its submission to the consultation on the European Commission's proposal on public country-by-country reporting, Bayer used its European (or German) tax payments as an argument against transparency holding that: "In particular, countries outside the EU have an interest to substantially increase their tax base and will use the data obtained under CbCR to this end. Through this, profit-sharing are increasing – with the result that the existing European tax base and thus the financing of the national budget would be threatened."¹⁶

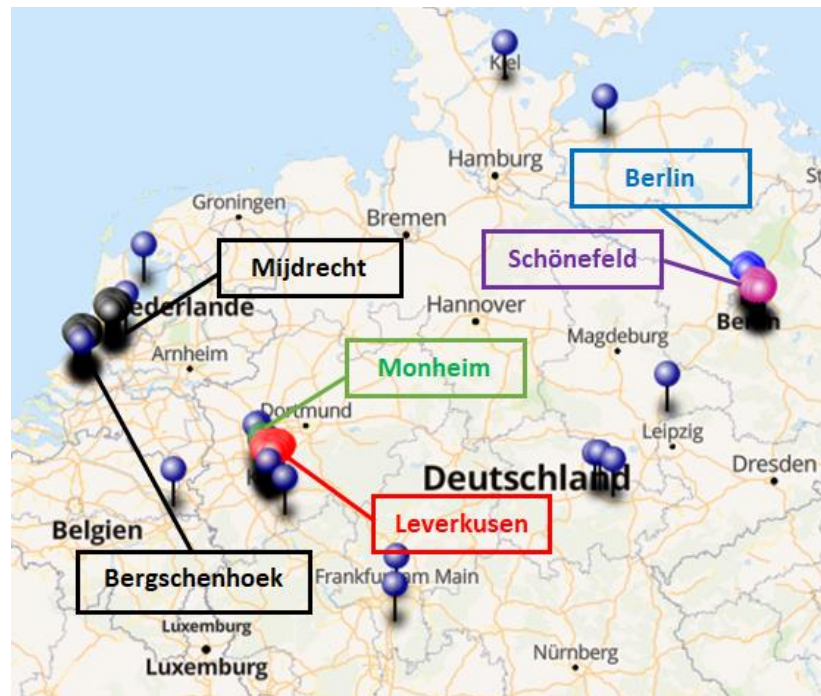
In 2021, the corporate tax rate in the Netherlands drops to 21,7 % and businesses and politicians in Germany are demanding a further tax cut of 5%. Among them is Reinhold Hilbers, finance minister of

¹⁵ In the consolidated annual accounts Bayer provides information on „income taxes due or paid“ for Germany and the rest of the world. This is the tax due in the respective year (according to profit and loss) plus the deferred taxes. Until 2016 this sum largely equals the taxes actually paid according to the cash flow statement. After 2016 the two figures diverge significantly. Taxes due are lower than taxes paid according to the cash flow for all years except 2000 and 2005 but in 2018 and 2019 the latter exceed the former by a factor of 4 and above. This indicates that the take-over of Monsanto was recorded very differently for tax than for financial accounting.

¹⁶ Translated from German, more details in <https://www.taxjustice.net/2018/04/24/new-report-the-global-battle-for-corporate-transparency/>

Niedersachsen of the CDU.¹⁷ Since 2019, the head of the CDU's business council (MIT) in Osnabrück-Emsland, Niedersachsen is Till Olaf Voss head of global finance, tax & legal policy, public affairs at Bayer.¹⁸

Figure 7 - Mapping tax competition – the location of Bayer's subsidiaries



German measures against tax competition

Beyond the example of Bayer and the developments in Monheim and Leverkusen the development of tax rates in Germany gives a somewhat different picture. While tax rates have dropped dramatically in these two towns closely connected to Bayer, local business tax rates have on average increased and more communities have raised their tax rather than to lower it (EY, 2020). Several factors contributed to the fact that tax competition didn't end in a harmful race-to-the-bottom throughout Germany:

1. In 2004, Germany introduced a minimum local business tax of 7 % (adding up to 22,88 % at the current rate of the current federal rate) putting some of the most aggressive and less convenient inner-German tax havens like Norderfriedrichskoog out of business.¹⁹
2. There are various redistributive mechanisms at the federal, state and district level reducing the incentive for individual communities to increase their tax income by lowering the tax and sharing the benefits from increased income with neighboring communities.²⁰ For example Monheim transferred nearly 50% of its overall income in 2019.²¹

¹⁷ <https://www.ndr.de/nachrichten/niedersachsen/Corona-Hilbers-will-Steuern-fuer-Firmen-senken,corona3658.html>

¹⁸ <https://www.linkedin.com/in/till-olaf-voss-854002108/>

¹⁹ In the 1990s, Norderfriedrichskoog, a small town at the coast close to Denmark with just 70 inhabitants, managed to attract subsidiaries of several big companies such as Deutsche Bank, Lidl and Siemens by not levying any local business tax. After the introduction of the minimum rate most companies left the town for more conveniently located tax havens and Norderfriedrichskoog had to increase its local business tax to 11,76%.

²⁰ The redistributive system is very complex consisting of a) Gewerbesteuerumlage - a redistribution of business tax income depending on the local tax rate with communities with lower tax rates paying more (up to 17,25%) than those with average rates (10%) b) Kreisumlage – being a share of total income differing from district to district

3. Within the same entity or tax group (but not for separate subsidiaries) income is allocated based on the sum of salaries of local employees. For separate subsidiaries a top-up tax of profit distribution usually applies (Betriebskostenabzug). This makes profit shifting somewhat more difficult for bigger companies and virtually impossible for local businesses.
4. For the communities, business tax often is one of the biggest sources of income and many don't have big corporations that can and do ensure steady income after the tax cut like it apparently happened in both Monheim and Leverkusen.
5. Big multinationals can use international profit shifting, reducing the pressure to cut taxes.

The example of Bayer shows that tax competition can make some small places prosper. But overall it benefits big corporations at the cost of local businesses and communities. The example also shows that relatively small differences in tax rates can make a big difference for the allocative decision of profits without a link to economic activity and that big companies actively influence the rates they are charged with their behavior. A minimum tax that is far below the current average tax rate (like the one currently negotiated at OECD level) helped to put the most aggressive and less convenient inner-German tax havens out of business. Combined with redistributive measures and a formulaic profit split method it helped to stop the race to the "new" bottom internally, but it is very unlikely that comparable rules can be achieved at an international level and even if they could, it is unclear whether they would withstand the pressure of the more flexible and aggressive multinationals. A global minimum tax that is allocated based on economic activity as recently proposed by the Tax Justice Network ([2021](#)) might help to overcome the main challenges.

Ensuring taxes are paid where value is created

After the task of determining what a fair share of tax is, the difficult question arises where that fair share should be paid. Apple develops its technology in the USA, produces the iPhones in China and sells them throughout the EU but shifted most of its European profits to an Irish letter box company. The main reason for the Starbucks boycotts was that unlike its local competitors it didn't pay taxes where it was selling its coffee and had many of its coffee shops (the UK) – nor where the coffee beans for that coffee were grown. As a reaction, the OECD made the goal to tax profits where economic activities take place and where value is created a central piece of its reform debate. Defenders of the current system of entity-level taxation and allocation of profits according to transfer prices claim that the underlying idea of functional analysis and arms-length remuneration of these functions tries exactly that. And BEPS 1.0, in particular action 5 on harmful tax practices as well as adjustments to the transfer pricing rules through actions 8 to 10, tried to strengthen the alignment of profits and economic substance. But the current system continues to consider the provision of capital or rights and the corresponding payments of interests, license fees or royalties as part of value creation in the countries where this "passive" value creation takes place without requiring much "real" activity. The places where products are sold can levy VAT but don't receive any share of corporate profits. And when corporate tax rates decrease around the world, a growing part of corporate income is at least in theory taxed as personal income in the countries of the owners - unless they evade that tax or receive special treatment on their (foreign) capital income.

c) Finanzausgleichsumlage – additional redistribution from communities with high income with different rules depending on the state d) Schlüsselzuweisungen – redistribution to ensure fulfillment of basic tasks.

²¹ These transfers mainly consisted of 37,3 million Euros of Gewerbesteuerumlage (out of business tax income of 304 million Euros) and 159,2 million Euros Kreisumlage. Nordrhein-Westfalen (the state of Monheim and Leverkusen) doesn't have an extra tax for rich communities (Finanzausgleichsumlage) while Brandenburg (the state of Schönefeld) has a rather strict one (<https://www.rbb24.de/politik/beitrag/2020/12/zossen-beschwerde-sonderabgabe-bundesverfassungsgericht-gescheit.html>)

In its CCCTB proposal (2016)²² the European Commission suggested to answer the question where profits should be taxed with a simple formula giving equal weight to sales, labour (equally divided between payroll and number of employees) and fixed assets (intangibles are excluded). In its decision to approve the proposal (2018) The European Parliament added a data factor made up of the volume of data collected and data exploited. But the proposal is stuck in Council. In the meantime, the BEPS 2.0 proposals of the OECD suggest a substance-based carve-out based on employees and tangible assets for pillar 2 and to allocate some part of the so-called residual profits exceeding a certain profitability benchmark to the market country, i.e. the country where sales take place. In contrast, the current system of profit allocation for German local business tax uses labour as the only factor. The example of Bayer shows:

1. Unlike small and local companies, big multinationals can shift considerable parts of their profits without shifting much of their economic activity under the current system. This is not an issue of digital companies and international tax havens only. Both Monheim and Leverkusen have cut their taxes in the hope of attracting additional income – and in the case of Bayer this apparently and at least to some part came without significant relocation of its activities. The share of easily shifted and inherently difficult to value intangible assets - in the case of Bayer mainly patents and licenses – clearly outstripped the tangible assets in the past with tangible assets making up about 30%. The take-over of Monsanto in 2018 has brought this share down to less than 15% due to the high value allocated to both goodwill and other intangible assets. But significant profits in inner-German tax havens were also related to “tangible” real estate assets.

Figure 8 – Share of tangible assets over time



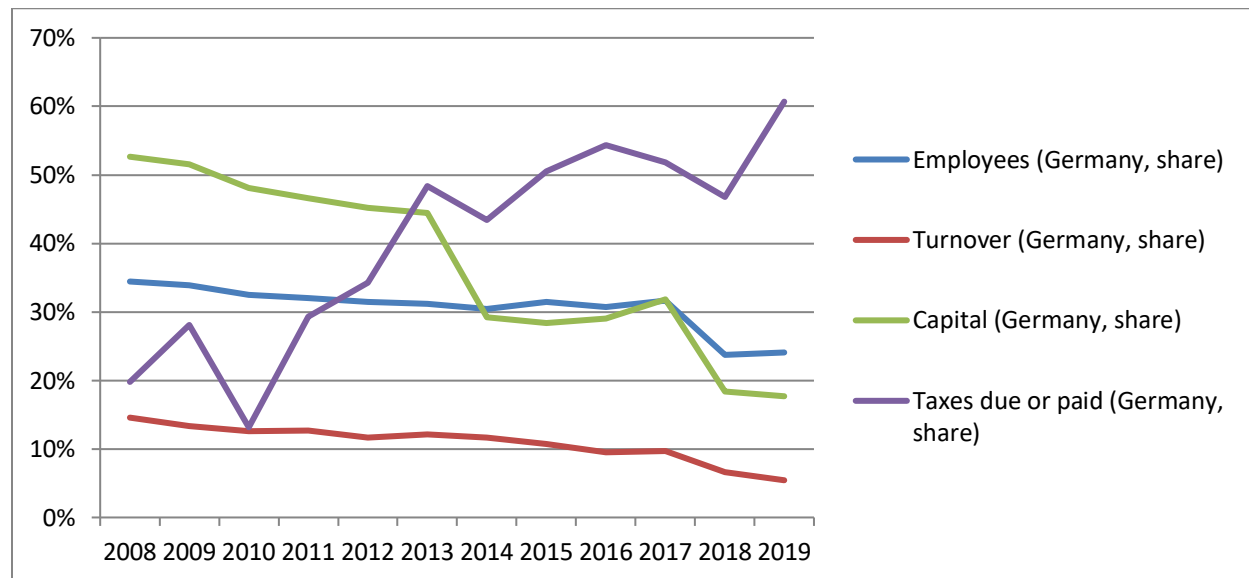
Source: Own illustration based on annual reports

2. At least in the case of Bayer, the current system benefits the country with the corporate headquarter and is not aligned with any of the factors of value creation suggested by the Commission. Even though Bayer has facilities and subsidiaries in many countries and most of its

²² The proposal was split into the rules for a common corporate tax base and rules for consolidation. The formula is part of the consolidation (https://ec.europa.eu/taxation_customs/business/company-tax/common-consolidated-corporate-tax-base-ccctb_en)

market destinations most of its employees, assets and sales are outside Germany more than half of the taxes were paid in Germany. And while the shares of employees, sales and assets²³ in Germany and Europe have even decreased further over the last years, the share of taxes due in Germany has increased significantly coinciding with tax cuts there.

Figure 9 – Development of location of business activity (employees, turnover, capital) vs. location of taxes paid



Source: Own illustration based on annual reports

3. The OECD proposals for the redistribution of taxing rights (pillar 1) will most likely not affect Bayer for various reasons. First, due to the high goodwill allocated to the purchase of Monsanto and the high depreciations costs for its intangible assets Bayer's return from the consolidated trade accounts most likely will fall below the benchmark for residual profits. Second, the limitation on digital and "consumer-facing" business would most likely exclude both the sale of agricultural products and services to wholesalers and business clients. The qualification of the pharmaceutical industry is still unclear. The OECD still considers excluding the sale of prescription drugs – possibly according to a global classification – as they are often sold through pharmacies and subject to state regulation a subsidy rather than free consumer choice.

One main argument against corporate taxation according to the main value drivers is that it would increase the international competition for these factors. This is because multinationals trying to shift profits to low tax jurisdictions would have to actually shift employees and/or factories. In contrast, shifting sales and customers arguably is much more difficult. This is also one of the reasons why the current OECD proposal relies only on the latter. But this argument is flawed in two ways. First, an effective global minimum tax could significantly limit or even eliminate this competition. Second, even though companies can't easily relocate their costumers, the final destination of sales is not always easy to determine and subject to gaming for example through the use of third-party vendors.

²³ Bayer only reports geographical distribution for the sum of tangible assets, goodwill and other intangible assets.

The role of the EU for change

The treaty of the European Union does not directly call for the harmonization of direct taxes but Article 94 provides some leeway when the functioning of common market is affected. Already as early as 1962 and again in 1970 the Commission has studied harmonization measures in the field of corporate taxation. First proposals in 1975 were later withdrawn and a draft proposal of 1988 was never tabled due to the reluctance of most Member States. After the adoption of the Parent-Subsidiary directive that turned out to severely limit anti-abuse mechanisms against companies from other EU member states, the Code of Conduct group was established to address harmful tax practices only in 1997. A communication on corporate tax issued in 2001 focused largely on removing individual tax obstacles to cross-border trades and raised the long term plan for a consolidated tax base.²⁴ This plan was finally implement with the 2011 proposal for the CCCTB that was re-launched in 2016 and approved by Parliament in 2018 but is still stuck in Council until today. Since its inception, the Code of Conduct group embraced the idea of fair tax competition and focused on eliminating narrowly-defined harmful tax practices. Similarly a proposal by the Commission on the fair taxation of the digital economy of [21st March 2018](#) has so far been blocked by the member states.

More recently the European Court of Justice in a contested landmark ruling ([T Danmark](#)) used a wide interpretation for permitted anti-abuse provisions. Furthermore, the Commission has started to criticize harmful tax practices in several member states beyond the narrow definition of the Code of Conduct group in its annual Semester Reports and the framing of the Commissions efforts around corporate tax has changed from “making it fairer, more efficient and more growth-friendly” (action plan 2015) to “make taxes simpler, fairer and better adapted to the modern world, while supporting the fight against tax fraud and avoidance” (action plan 2020). The latter action plan acknowledges that “both Member States and the European Parliament have questioned the ability of the Code to tackle contemporary forms of harmful tax competition” and proposes some reforms. With respect to international corporate tax reform the Commission seems to be planning to build on the proposals of the OECD and the dedicated action plan for corporate tax announced for autumn 2020 was postponed together with the delayed decision at OECD-level. But the Commission in its communication suggests that if no consensus is reached at global level the concept of a minimum tax should be introduced unilaterally “in the Code as an EU standard”.

Despite these recent shifts, several European countries continue to feature high in the list of the biggest tax havens and the space for unilateral action against them remains limited by the EU treaty rules and basic freedoms. At the same time, considering the strong vested interest of the United States to avoid additional taxation of big and profitable US multinationals outside the United States, the EU is an essential counter-weight to achieve a more balanced multilateral outcome. The EU should strive for a multilateral reform that:

1. strengthens the fairness and legitimacy of the international system;
2. generates additional revenue for sustainable development;
3. minimizes profit shifting and tax avoidance.

This requires a more clearly spelled out Plan B with unilateral measures for the case the OECD negotiations fail to satisfy these conditions or fail completely. The main focus of that work should be a paradigm shift for the work of the Code of Conduct that gets rid of the idea of “fair” tax competition, introduces a sufficiently high minimum tax and creates effective tools against EU tax havens.

²⁴ For more details see: https://ec.europa.eu/taxation_customs/business/company-tax/overview_en

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