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Digital Service Taxes

Kane Borders, Sofía Balladares, Mona Barake, Enea Baselgia

June 2023

NOTE



Abstract

Digital Service Taxes (DSTs) are a recently introduced fiscal tool designed to tax digital companies. This note collects all publicly available data to take stock of the first few years of DST implementation. Currently, twelve countries – both OECD and non-OECD – have an active DST in place. Current tax revenues from these DSTs are mostly in line with expected revenues, comparable in magnitude to estimated Pillar 1 revenues, and rising rapidly. First experiences (e.g., from the UK) suggest that DSTs can be effective at taxing digital companies that have tended to pay low corporate income tax rates in destination countries in a targeted way. However, the available data remains limited and more research needs to be done to progress towards a full cost-benefit analysis of DSTs.

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1 Introduction

Profit shifting by multinationals is a major phenomenon: 36% of profits made by multinationals were shifted to tax havens globally in 2015 (Tørsløv et al., 2023). In this regard, digital companies are particularly well structured to shift profits, as many of their services are based on intangible assets and these services can be provided over the internet without the need for physical presence in sales markets. Indeed, there is growing evidence that digital companies face significantly lower effective tax rates than traditional companies (European Commission, 2017). Digital services taxes (DST) have emerged as a direct consequence of profit shifting by digital companies. DSTs are a simple and flexible fiscal instrument for taxing such firms.¹ Typically, DSTs are a tax on the gross revenues of companies providing specified digital services to users within a jurisdiction. There are currently 12 countries with an active DST and 19 other countries either have paused its DST or are discussing the introduction of a DST.

The future of DSTs is closely linked to the future of Pillar 1 of the OECD's project to combat base erosion and profit shifting (BEPS).² The Pillar 1 of the BEPS project is a multilateral tax agreement that aims to reapportion multinationals profits for taxation based on real economic activity.³ Part of the agreement is that all participating members are to repeal their DSTs with the implementation of Pillar 1. The OECD aims for Pillar 1 to be implemented by the end of 2023. Given that no country has adopted Pillar 1 by May 2023, this timeline now appears (too) ambitious. The uncertainty surrounding Pillar 1 has led more and more countries to reconsider the introduction of a DST. For instance, Canada will implement a DST in 2024 - retroactive to 2022 - if Pillar 1 is not adopted by the end of 2023. The European Union also announced in November 2022 that it will relaunch the legislative process for the EU-wide DST if no progress is made on Pillar 1 this year.⁴

This note begins by defining what a DST is and assessing the state of implementation of DSTs around the world. Hence, this is an update of earlier inventories on the status of implementation of DSTs (KPMG, 2021; EY, 2020). Second, we compare the key features that differ among the various DSTs. Specifically, we find that OECD countries tax less but larger digital firms at a higher rate, while non-OECD countries tax a wider range of firms at lower rates. Next, we document both estimated and actual DST revenues for several countries. Overall, we observe a significant rise in revenues from DSTs. Also, evidence from the UK suggests that DSTs can be effective at targeting digital companies that have tended to pay little corporate income tax. Lastly, we compare the DSTs revenues with estimated net gains from Pillar 1. This analysis suggests that both revenues and the number of companies liable for taxation are of a similar order of magnitude.

¹DSTs are not the only fiscal instrument to tax the digital economy. Many countries have extended their existing fiscal tools to better cover the digital economy. The most common strategies are to extend an existing value-added tax (VAT) or goods and services tax (GST) to the digital sector, or to modify the definition of permanent establishment to better include digital companies in their corporate tax system (Caragher, 2023; KPMG, 2021).

²The BEPS package contains 15 action points to address international tax issues. The first action point ("Action 1") addresses the challenge of taxing the digital economy (see OECD (2017) for details).

³142 jurisdictions have committed to the agreement as of December 2022 (OECD, 2022).

⁴The EU suspended its initial DST proposal in July 2021.

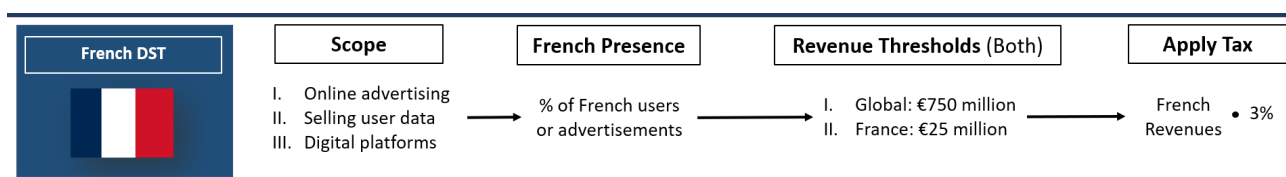
2 What is a DST

A Digital Service Tax (DST) is a tax on the gross revenues of a multinational company related to specific digital activities provided to users within a jurisdiction. The general structure of DSTs is similar: (i) they apply to a scope of digital services, (ii) rely on a calculation of national presence, (iii) can have revenue thresholds and (iv) apply a tax on gross revenues. All steps of the DST are applied separately for each in scope activity.

Figure 1 presents a representative example of a DST: the French DST. The scope of the French DST is online advertising, selling user data and the use of digital platforms. If a company provides any of these activities, the French presence of this activity is calculated by determining the percentage of global users or advertisements - depending on the scope activity - that are present in France.⁵ The global revenues related to this activity are then calculated. From the global revenues and the French presence, the French revenues related to this activity are then estimated (global revenues times French presence).⁶ The company is liable for a 3% tax if their global and French revenues related to the activity are above the thresholds (€750 million and €25 million respectively). The 3% tax is levied on the French revenues.

To better illustrate the French DST, consider a company that has one in scope activity: providing a digital platform. The company has 10% of its users in France and €1 billion in global revenues related to providing a digital platform. Hence, the company has €100 million in estimated French revenues (€1 billion times 10%). The company exceeds both the global (€1 billion > €750 million) and the French (€100 million > €25 million) revenue thresholds for providing a digital platform. The 3% tax is applied to the €100 million French revenues. Hence, France collects €3 million in DST from this company. If this company had several in scope activities, this process would be repeated separately for each in scope activity.

FIGURE 1
Overview of the French DST



Note: The French presence calculation depends on the scope activity: advertisements are used for online advertising and users for selling user data and digital platforms. A company must have revenues that exceed both revenue thresholds to be liable for the DST. The presence in France is determined through either the location of the server, the IP address or any other legal method. If a company has several in scope activities, the DST process - calculating presence, revenue thresholds and applying the tax - is applied separately to each scope activity.

⁵The number of users is used when the scope activity is selling user data or digital platforms. The number of advertisements is used when the scope activity is online advertising. All calculations are done by the French Tax Authority using data provided by the company.

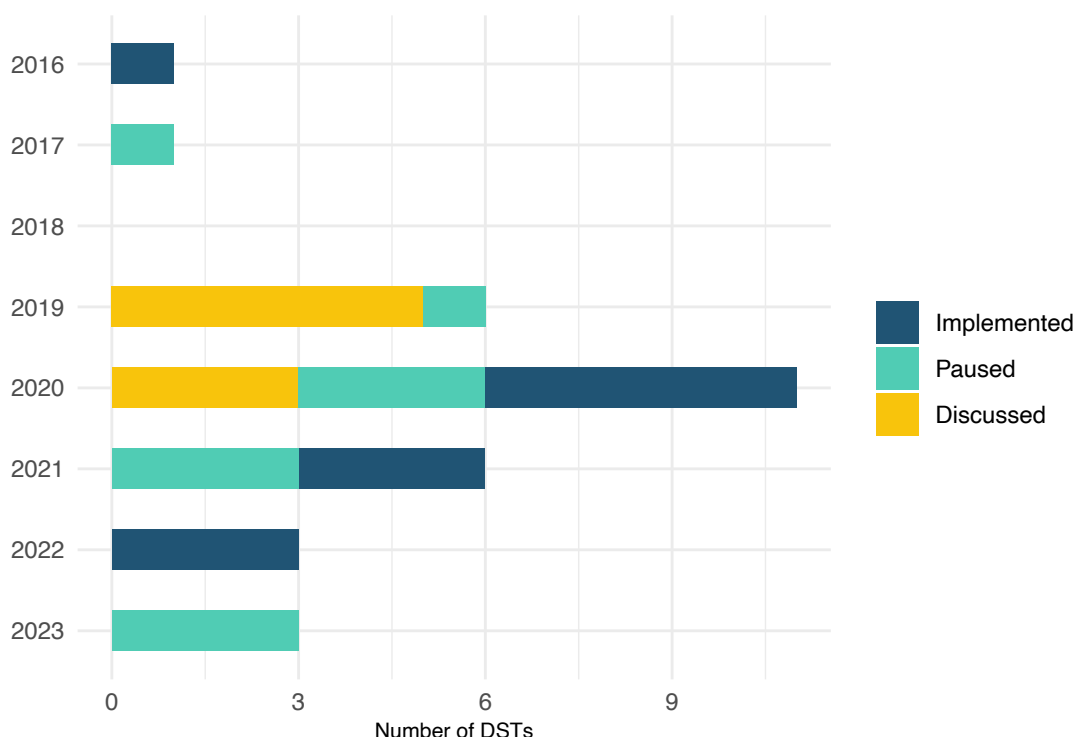
⁶The French revenues are inferred from the global revenues and the French digital presence. Pellefigue (2019) reports that they are not directly calculated by the company - unlike for global revenues - due notably to data privacy issues related to the auction pricing system used for online advertising.

3 DSTs in the World

Figure 2 shows the number of DSTs that were implemented, paused and discussed per year from 2016 to 2023. During this period, 12 DSTs were implemented, 11 paused and 8 discussed. The first DST was implemented by India in 2016. The most active period for DSTs was 2019 to 2021, when 23 DSTs were implemented, paused or discussed. The BEPS agreement was signed in October 2021 and signing countries promised to not implement DSTs until the end of 2023. The three countries that implemented DSTs in 2022 - Tanzania, Nepal and Kyrgyzstan - have not signed the BEPS agreement.

FIGURE 2

Number of New DSTs Implemented, Paused and Discussed by Year



Note: The BEPS agreement was signed in October 2021. Signing countries promised to not implement any DSTs until the end of 2023. The three countries that implemented DSTs in 2022 - Tanzania, Nepal and Kyrgyzstan - have not signed the two-pillar agreement.

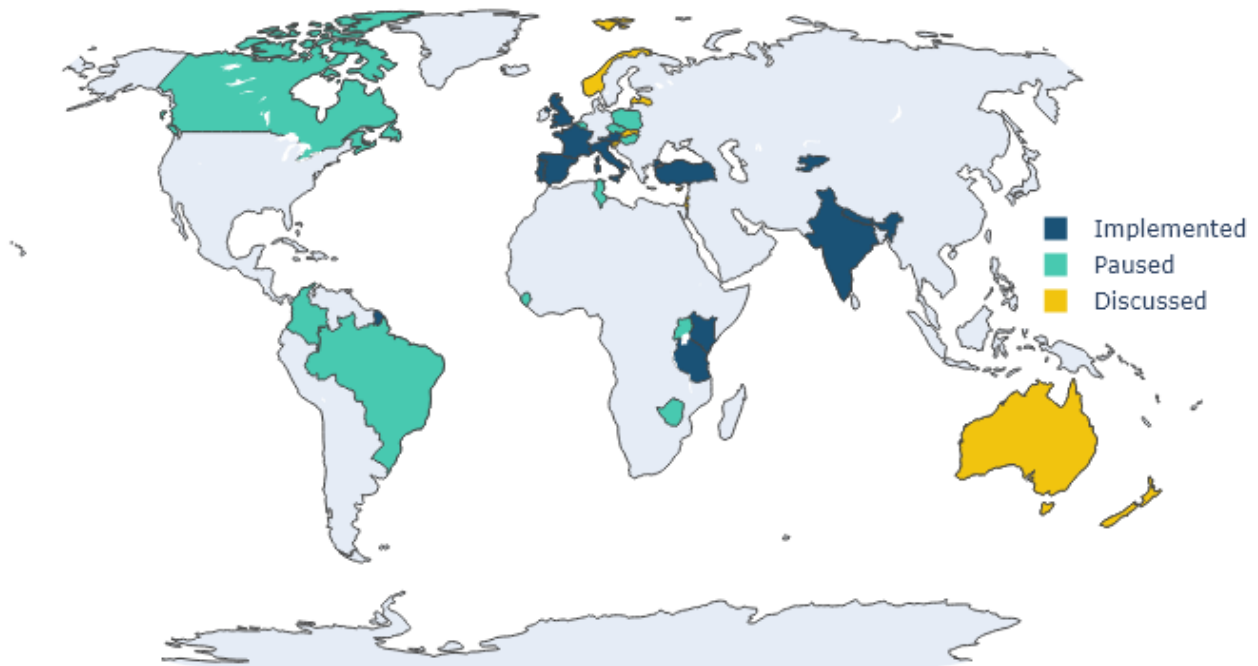
Figure 3 shows a map of all countries that have an active implemented DST (12), that have a paused DST (11) and that have discussed a DST (8). These 31 countries cover all continents and different levels of development (20 countries belong to the OECD, 11 do not).

The countries we label as having a paused DST have all proposed or adopted a DST that is not currently being implemented. Canada will implement a DST in 2024 if Pillar 1 is not adopted by the end of 2023. Hungary has had an active DST since July 2017, but the tax rate has been set to 0% since July 2019. Poland, Belgium, Columbia, Brazil and the Czech Republic all proposed a DST, but decided to not adopt it. Tunisia, Uganda, Zimbabwe and Sierra Leone all adopted a DST, but have not implemented it.⁷

⁷There is little information on the implementation status of these DSTs. Zimbabwe signed a contract with a company in the

FIGURE 3

Overview of DST Implementation in the World



Note: The countries that have an active and implemented DST are France, the UK, Italy, Spain, Austria, Portugal, Turkey, India, Kenya, Tanzania, Nepal and Kyrgyzstan. The countries that have a paused DST are Belgium, Poland, Hungary, Canada, Czechia, Tunisia, Uganda, Zimbabwe, Brazil, Colombia and Sierra Leone. Countries that have discussed a DST are Cyprus, Australia, New Zealand, Norway, Slovakia, Slovenia, Latvia and Israel.

The countries we label as having a discussed DST have not taken legislative action, but have only held government-level discussions or made statements about their intention to introduce a DST. New Zealand and Norway have stated that they will consider implementing DSTs if there is no progress on Pillar 1. The other countries - Cyprus, Australia, Slovakia, Slovenia, Latvia and Israel - have only had discussions that have been put on hold.

4 Characteristics of Implemented DSTs

Table 1 presents the three main characteristics of DSTs that differ: the scope, the revenue thresholds and the tax rate. Nine of the twelve countries have a "full" scope DST. This is a DST that covers online advertising, selling user data and providing digital platforms (like the French DST). The Austrian and Portuguese DST only cover online advertising, while India has both a full DST (adopted in 2020) and a DST limited to online advertising (adopted in 2016).⁸ OECD and non-OECD countries pursue different

British Virgin Islands in 2022 to handle the collection of their DST.

⁸The table shows that the Indian advertising DST (2016) and the Indian full DST (2020) have different targets: the advertising DST has a 6% tax rate aimed at smaller firms (national revenue threshold of €1350), while the full DST has a 2% tax rate aimed at larger digital firms (national revenue threshold of €220,000). If companies pay the 6% rate on online advertising, they are not eligible for the full DST.

strategies with their DSTs: OECD countries target large international digital firms at higher tax rates, while non-OECD countries tax a much wider range of firms at lower tax rates. An exception is Portugal, whose DST is similar to DSTs in non-OECD countries.

OECD countries target large companies through high global and national revenue thresholds. The global threshold is €560 million (£500 million) for the UK and €750 million⁹ for all the others. The national revenue thresholds vary from €2.5 million for Turkey to €30 million for the UK. The UK also does not subject the first €30 million (£25 million) in revenues to the DST. This is the only country with this type of exemption. Portugal is different from the other OECD countries: it has no global or national threshold.

Non-OECD countries target a much larger range of firms. In Kenya, Tanzania, and Kyrgyzstan, there are no revenue thresholds, so all digital firms are subject to DST. Nepal and India use low national revenue thresholds: €1,350 for the Indian advertising DST, €15,000 for the Nepalese DST and €220,000 for the Indian full DST. These low or zero thresholds allow less developed countries to target local firms with low revenue levels.

Therefore, OECD countries use more restrictive targeting, but higher tax rates: the average tax rate for OECD countries is 3.93% compared to 2.58% for non-OECD countries. Tax rates are also significantly higher for advertising DSTs (5% on average) compared to full DSTs (2.8% on average), which may be expected since advertising DSTs have a more restricted scope.

TABLE 1

Main Characteristics of Implemented DSTs

Country	Scope	Global Threshold	National Threshold	Tax Rate	Year
OECD					
United Kingdom	Full	€560 million	€30 million	2%	2020
France	Full	€750 million	€25 million	3%	2020
Italy	Full	€750 million	€5.5 million	3%	2020
Spain	Full	€750 million	€3 million	3%	2021
Turkey	Full	€750 million	€2.5 million	7.5%	2020
Austria	Advertising	€750 million	€25 million	5%	2020
Portugal	Advertising	None	None	4%	2021
Non-OECD					
Kenya	Full	None	None	1.5%	2021
Tanzania	Full	None	None	2%	2022
Nepal	Full	None	€15,000	2%	2022
Kyrgyzstan	Full	None	None	2%	2022
India	Full	None	€220,000	2%	2020
India	Advertising	None	€1,350	6%	2016

Note: Full means the three main scope activities: online advertising, selling user data and providing digital platforms. Global and national thresholds are revenue thresholds. If not in EUR, they are converted to EUR using the yearly average exchange rate of the year of implementation. In the UK, the first €30 million (£25 million) in revenue is not subject to the DST. India has two DSTs: one limited to advertising and a full DST. If a company pays the advertising DST, it is not subject to the full DST. Year is the implementation year. France implemented a DST at the end of 2020 that is retroactive to 2019.

⁹€750 million is a revenue threshold used to determine multinational liability in several major EU and OECD tax programs, notably the Common Consolidated Corporate Tax Base (as of 2016), the BEFIT proposal and Pillar 2.

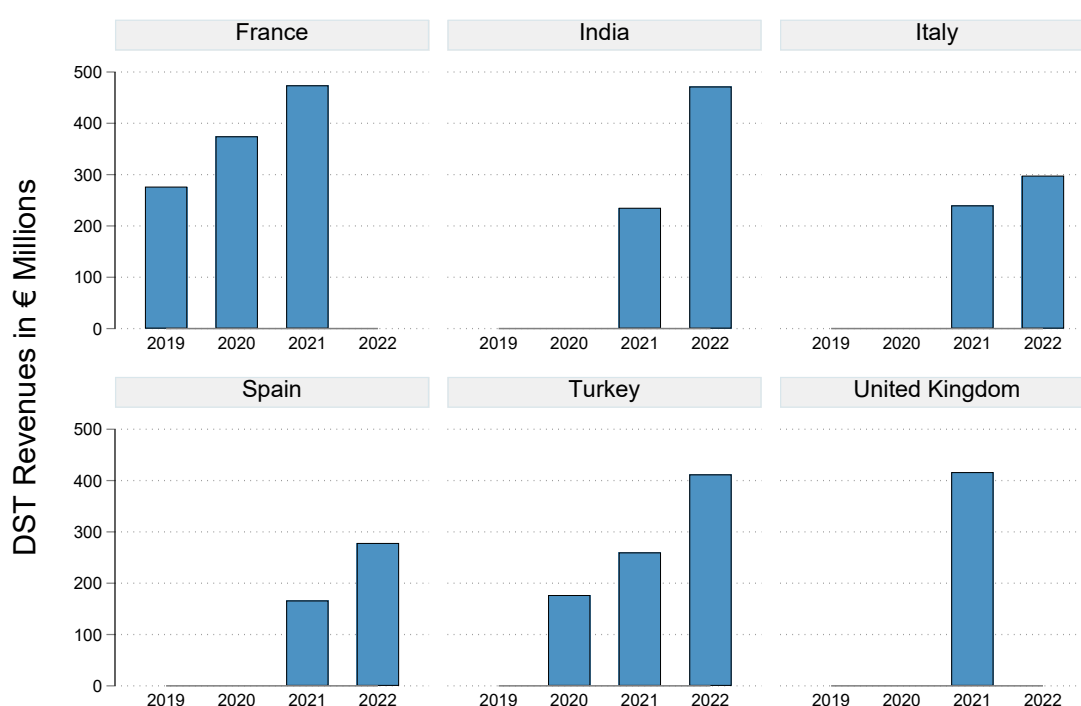
5 Revenues from DSTs

5.1 Collected Revenues

Figure 4 shows the total DST revenues for all countries that have implemented a full DST.¹⁰ DST revenues range between €166 million and €474 million. They have increased by 134% for Turkey, 100% for India, 71% for France, 67% for Spain and 24% for Italy. Kenya (not shown) has DST revenues below €1 million for 2021 and 2022.

FIGURE 4

Collected Revenue Amounts for Countries With a Full DST



Note: All data is from official sources, except for India for which we rely on journalistic sources. A full DST is a DST that has a scope covering online advertising, selling user data and providing digital platforms. Revenue data is not yet available for France and the UK in 2022. The Indian revenue data also includes the advertising DST revenue - the data found combines both - so it is slightly over-estimated. The UK and India fiscal year does not follow the calendar year, so the year on the graph corresponds to the fiscal year starting the year before (ie. 2021 corresponds to April 2020 to April 2021). Kenya (not shown) has DST revenues below €1 million for 2021 and 2022. No revenue data found for Nepal (not available because implemented in July 2022) and for Kyrgyzstan (implemented in January 2022).

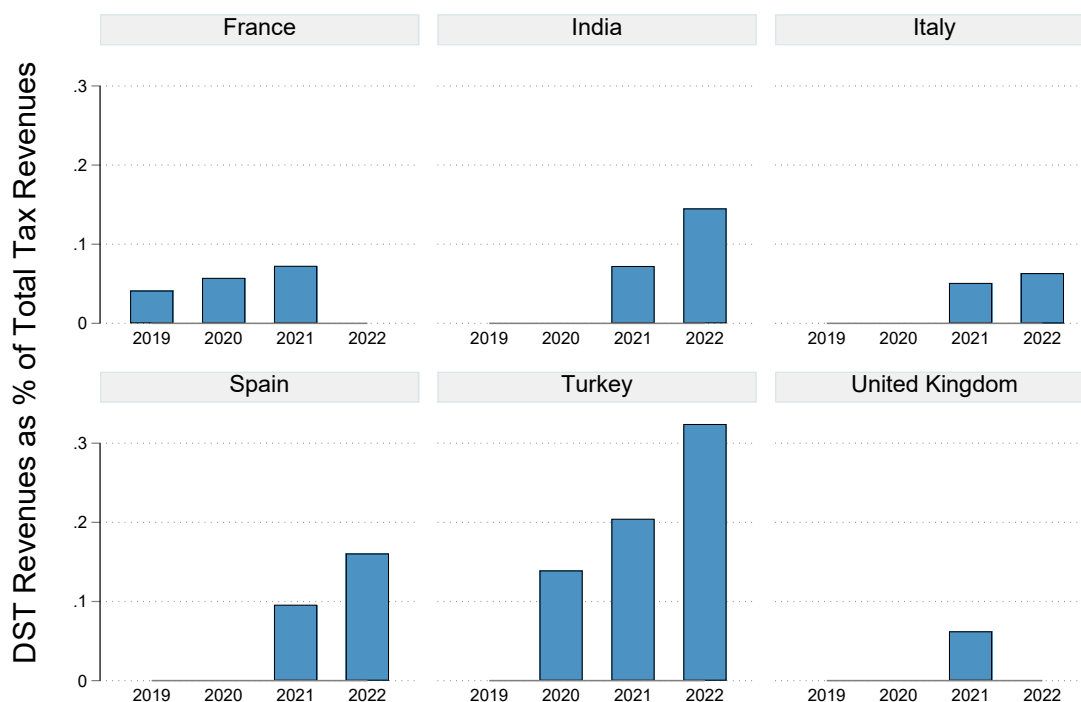
Figure 5 shows the total DST revenues as a percentage of total tax revenues. They range from less than 0.1% in most countries to a little above 0.3% for Turkey in 2022. They account for a relatively similar percentage of the total tax revenues for all countries. Therefore, although the overall amount collected

¹⁰With the exception of Kenya, Nepal and Kyrgyzstan. Kenya has DST revenues that are below €1 million. It is not shown. Nepal implemented a DST in July 2022, so data is not yet available on the 2022/2023 fiscal year. Kyrgyzstan implemented its DST in January 2022, but we have been unable to find revenue data.

is quite small, it can constitute a source of revenue for countries of different development levels.¹¹

FIGURE 5

Full DST Revenue Amounts as a Percentage of Total Tax Revenues

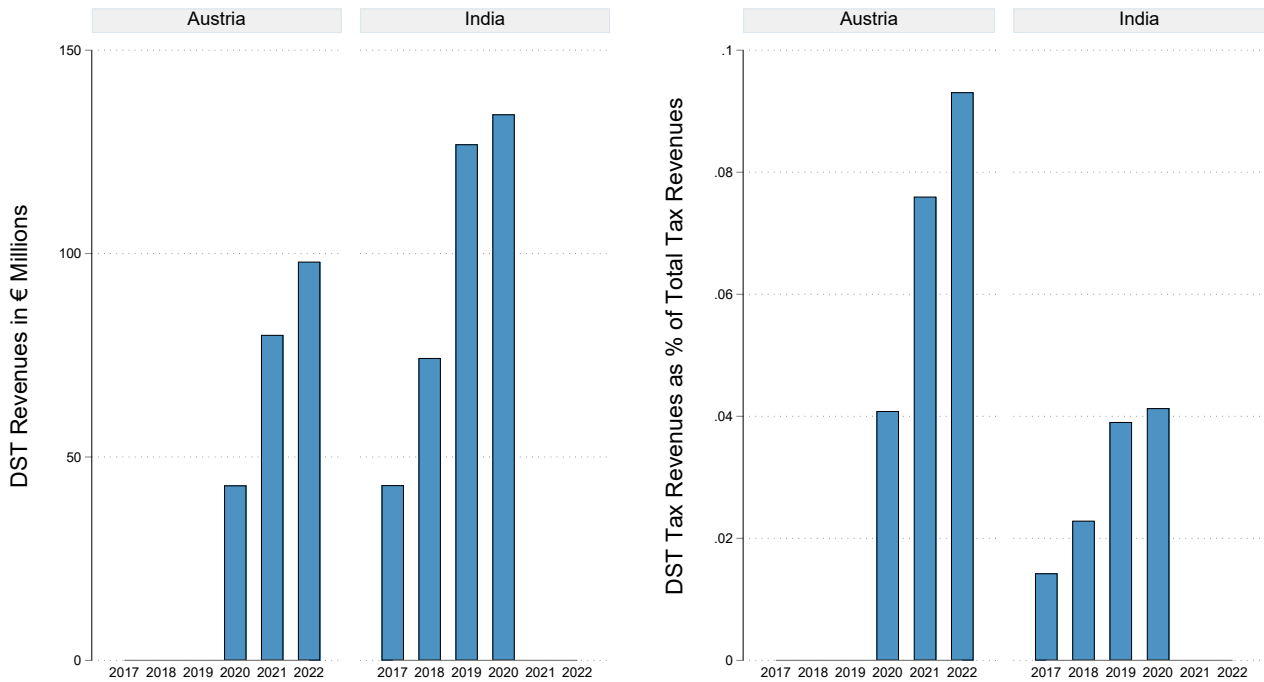


Note: All data is from official sources, except for India for which we rely on journalistic sources. A full DST is a DST that has a scope covering online advertising, selling user data and providing digital platforms. Revenue data is not yet available for France and the UK in 2022. The Indian revenue data also includes the advertising DST revenue - the data found combines both - so it is slightly over-estimated. The UK and India fiscal year does not follow the calendar year, so the year on the graph corresponds to the fiscal year starting the year before (ie. 2021 corresponds to April 2020 to April 2021). Kenya (not shown) has DST revenues below 0.1% million for 2021 and 2022. No revenue data found for Nepal (not available because implemented in July 2022) and for Kyrgyzstan (implemented in January 2022).

Figure 6 shows total collected revenues in millions (left graph) and as share of total tax revenues (right graph) for Austria and India which have implemented an advertising DST.¹² For India, revenues increased from about €40 million in 2017 to €140 million in 2020 – an increase of almost 250% in three years -. As with the full DST, the percentage of these amounts is low compared to total tax revenues - between 0.02% and 0.1% - but not significantly different for Austria and India, two countries with different levels of economic development.

¹¹According to the World Bank, Spain, France, the UK and Italy are all high income countries. Turkey is a middle-high income country and India is a lower middle-income country.

¹²No revenue data found for Portugal which implemented an advertising DST in February 2021.

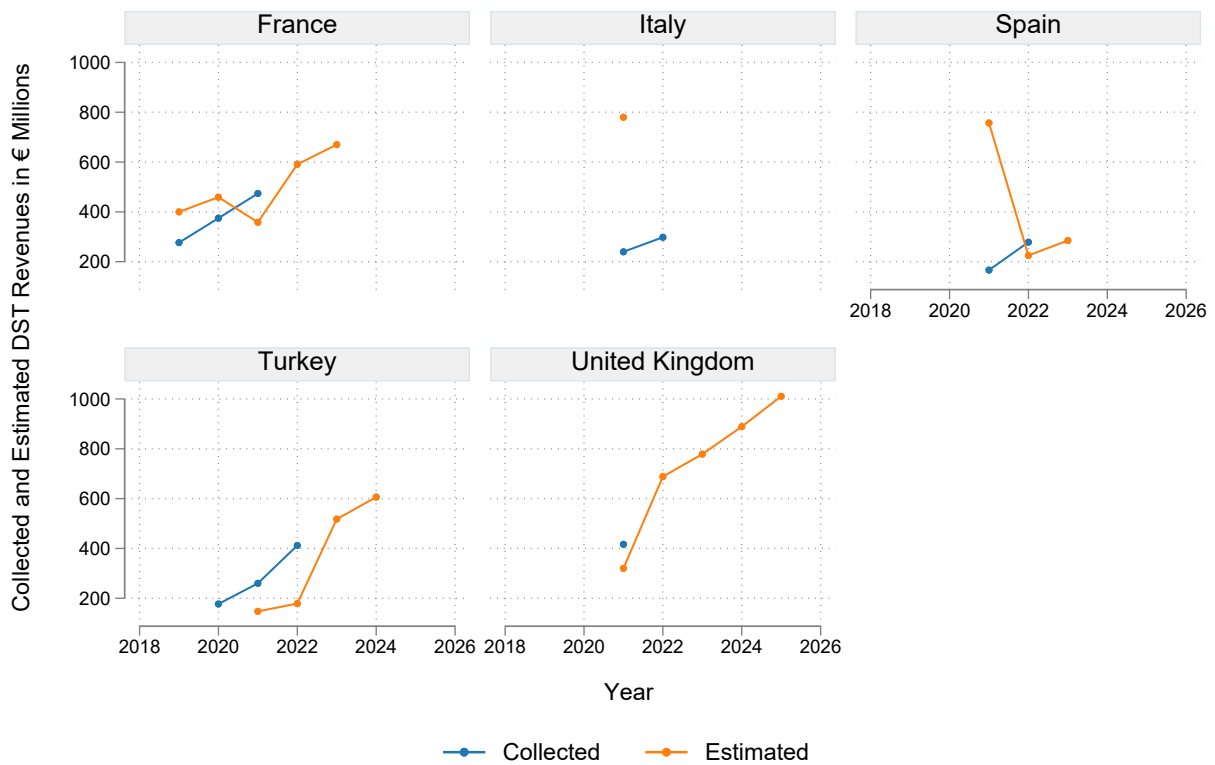
FIGURE 6**Collected Revenue Amounts for Countries With an Advertising DST**

Note: The Austria data is from an official source, while Indian data is from journalistic sources. An advertising DST only covers online advertising. The Indian advertising DST is still currently active, but our revenue data combines the 2016 advertising DST and the 2020 full DST starting in 2021. Indian advertising DST revenues are therefore only shown until 2020. The Indian fiscal year is not on the calendar year: the year on the graph corresponds to the fiscal year starting the year before (ie. 2020 corresponds to April 2019 to April 2020). No revenue data found for Portugal which implemented an advertising DST in February 2021.

5.2 Estimated Revenues

Certain countries provide revenue estimates for their DST. Figure 7 shows the collected and estimated revenue amounts for the countries that provide both. For all countries, revenue projections suggest a substantial increase in DST collected. The UK estimates an increase of 143% by 2025, Turkey an increase of 47% by 2024 and France an increase of 40% by 2023.

With the exception of the first year of implementation in Italy and Spain - where the revenue estimates were well above the collected revenues - the estimates appear to be sensible. Spain has revised its revenue forecast for 2023 downward to €285 million –after collecting only €278 million in 2022. The estimates provided for France, the UK and Turkey are quite close to the collected amounts.

FIGURE 7**Collected and Estimated DST Revenue Amounts**

Note: All data are official estimates: the countries shown are the countries for which we have official collected and estimated DST revenue data. They are all countries with full DSTs. Spain published a lower estimate of 546 and an upper estimate of 968 for 2021: we use the average of these two numbers (757). The UK fiscal year is not on the calendar year: the year on the graph corresponds to the fiscal year starting the year before (ie. 2021 corresponds to April 2020 to April 2021).

5.3 Reasons for the Increasing Revenues

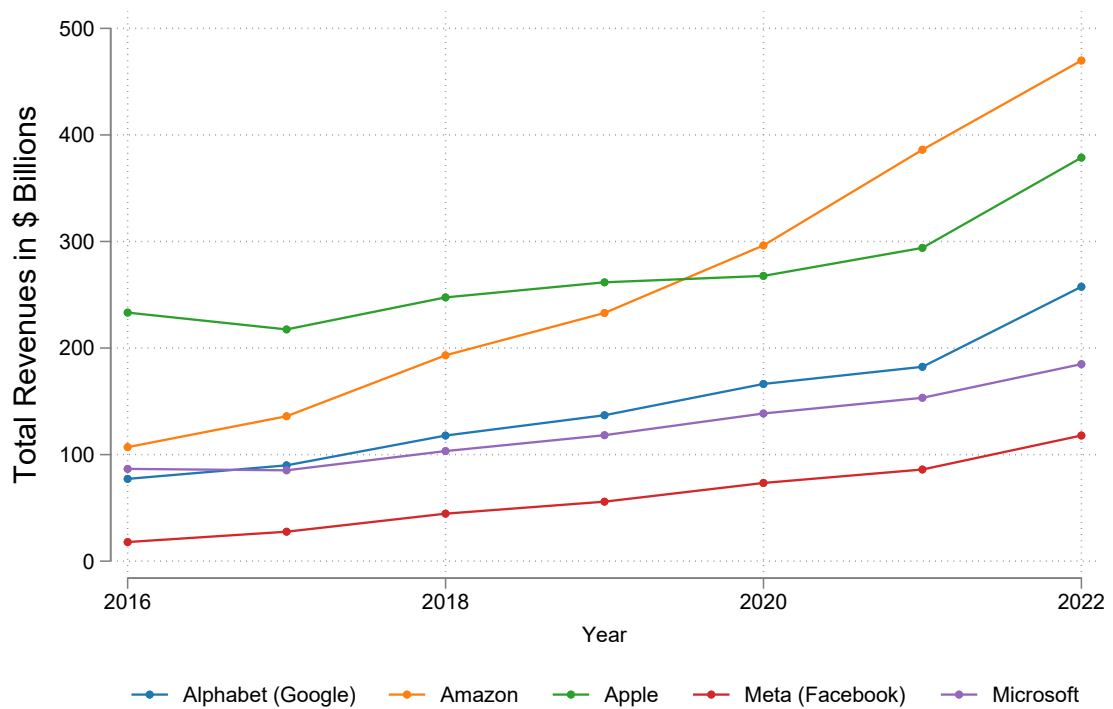
The data collected on DST revenues shows a clear increasing trend in estimated - and collected - DST revenues. There are two main factors that could be driving these trends.

First, the digital economy is growing very rapidly in general. It is estimated that the digital economy (measured by GDP) is growing around two and a half times as fast as the physical economy (UNCTAD, 2019). Moreover, growth of big-tech companies was exceptional. The five largest tech companies - sometimes called the "Big Five" or the "GAFAM" - have been growing at very high rates in the last decade. Figure 8 shows the total revenues of these companies from 2016 to 2022. Revenues have increased by a factor of 1.6 for Apple, 2.2 for Microsoft, 3.3 for Alphabet (Google), 4.4 for Amazon and 6.6 for Facebook.

The "Big Five" are most likely the largest tax payers for any DST: about 90% of the total revenue in the UK DST came from just five companies (which do not necessarily correspond to the "Big Five") (National

Audit Office, 2022).¹³ The names of these companies are not given, but it is likely that at least several - if not all - are the big five tech companies given their size, market dominance and global reach. A contribution rate as high as 90% for only five companies is partly related to a specificity of the UK DST - the first £25 million of revenues earned in the UK are exempted from the DST. Nevertheless, it is likely that France, Italy and Spain will have similar collection trends given their market similarities.

FIGURE 8
Total Revenues of the Big Five Tech Companies From 2016 to 2022



Note: All data from the Forbes 2000 Ranking. These companies are called the "Big Five" because they are dominant players in their market and are some of the largest companies in the world by market value.

The second possible reason driving these trends is the number of companies paying the DST. In France this number of companies has been steadily increasing: 29 paid in 2019, 35 in 2020 and 37 in 2021. In the UK, only 18 companies - partly due to the exemption on the first £25 million of UK revenues - paid the DST for the 2020-2021 fiscal year. However, the UK is evaluating the potential liability of 101 additional companies (National Audit Office, 2022).¹⁴

¹³The UK is the only country that has published detailed information - without any company names - on the payment trends of their DST.

¹⁴The main factor that slows down the process of evaluating liability of companies is the calculation of the global revenues by activity. Some companies do not have this data available and therefore require time to provide this information to the UK.

6 Efficiency of DSTs: the UK Experience

The main objective of a DST is to tax digital companies that have been engaging in profit shifting and have therefore managed to reduce their effective tax rates to a significantly lower level than national companies or companies in other sectors. The UK is the only country that has published a post-implementation report on its DST. This report provides some initial evidence on the efficiency of DSTs (National Audit Office, 2022).

18 companies paid the UK DST in the 2020-2021 fiscal year and £358 million (€416 million) was collected. 90% of DST revenues have been collected from five companies. These 18 companies had the following tax burden breakdown: 66.4% for the VAT, 18% for the employer national insurance contributions, 7.4% for the DST, 7.3% for the corporate income tax (CIT) and 0.9% for other taxes. Overall, the revenues collected from the DST and the CIT were about equal for these 18 companies. However, there is significant heterogeneity: three companies paid no CIT and four paid more than ten times more DST than CIT. Overall, 13 of the 18 companies paid more DST than CIT.

The implementation was smooth and costs were quite low: His Majesty's Revenue & Customs' (HMRC) implemented the DST for £6.3 million (€7.25 million).¹⁵ The HMRC considered the implementation easier than expected as no DST tax avoidance was observed (their hypothesis is that the reputation risk outweighs the potential gains).

This report provides some preliminary evidence that the UK DST was both successful from a targeting perspective - the majority of the targeted companies pay little CIT - and from an implementation perspective.

7 Comparison with Pillar 1

7.1 Main Characteristics

The repealing of many countries DSTs is contingent on the adoption of Pillar 1, but DSTs and Pillar 1 are very different proposals. Table 2 shows their main characteristics. DSTs are unilateral and only apply to specified digital services, while Pillar 1 is a multilateral proposal applying to all sectors except extractives and regulated financial services. DSTs apply to global revenues and have a maximum global revenue threshold of €750 million and a maximum national revenue threshold of €30 million. Pillar 1 applies to global residual profits for multinationals with global revenues above €20 billion and a profitability threshold above 10%. Pillar 1 also has a double taxation elimination mechanism, while DSTs do not. Therefore, DSTs have a limited scope but include companies of different sizes, while Pillar 1 has a global scope but includes only very large and profitable companies.

¹⁵The report provides a slightly more detailed breakdown of the implementation costs: £3.5 million (€4 million) for staff costs and £2.8 million (€3.2 million) for information technology (IT) costs.

TABLE 2**Comparison of Main Characteristics of DSTs and Pillar 1**

Main Characteristics	DSTs	Pillar 1
Implementation	Unilateral	Multilateral
Scope	Specified digital services	Most sectors
Tax Base	Global revenues	Global residual profits
Global revenue threshold	0 - €750 million	€20 billion
National revenue threshold	0 - €30 million	€250,000 or €1 million
Profitability threshold	None	10%
Double taxation elimination	No	Yes

Note: 142 countries have signed the Pillar 1 agreement as of December 2022. Pillar 1 applies to all sectors except extractives and regulated financial services sectors. The national revenue threshold is €250,000 for jurisdictions with less than €40 billion in GDP and €1 million for all other jurisdictions. The global residual profits are a group's profits in excess of 10 percent of its revenues. 25 % of the residual profits are allocated to market jurisdictions.

7.2 Number of Liable Companies

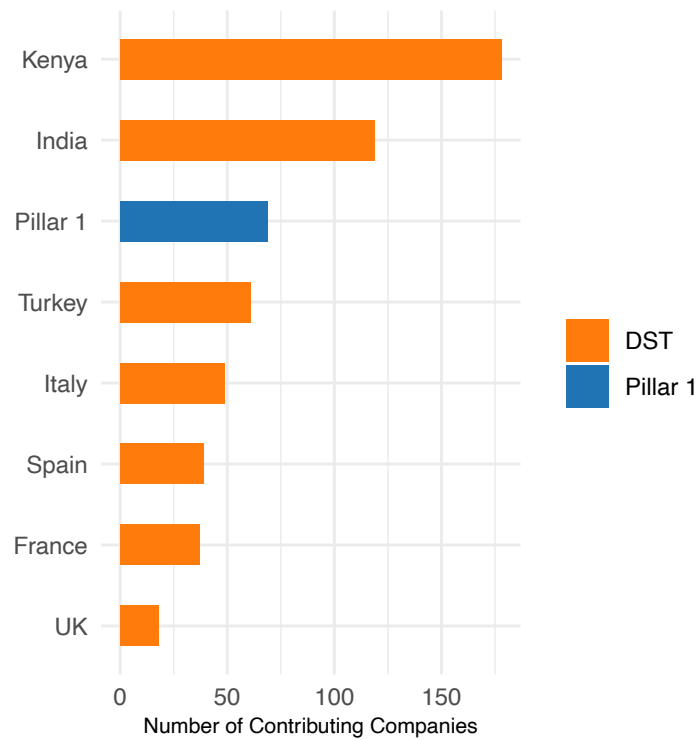
These different approaches lead to a similar magnitude of companies that are liable. Figure 9 shows the number of liable companies for several countries. This is the number of companies that actually pay the DST in each country after all of the different restrictions. 178 companies paid the Kenyan DST in 2022, 49 companies paid the Italian DST in 2021, 37 companies paid the French DST in 2021 and 18 companies paid the UK DST in 2021. The United States Trade Representative estimates that 119 companies paid the full Indian DST, 61 paid the Turkish DST and 39 paid the Spanish DST. Kenya has the highest number of companies since it does not have revenue thresholds. The UK has the lowest number of paying companies since it has the highest national revenue threshold (€30 million) and excludes the first €30 million from DST liability.

Figure 9 also shows the global number of estimated liable companies for Pillar 1 after all different restrictions are applied. It is estimated that 69 companies will be required to pay Pillar 1.¹⁶ This number is higher than for the European DSTs, but significantly less than the Kenyan and Indian DST. Since the Kenyan DST has no revenue thresholds, many of the contributing companies are likely smaller companies that are too small for Pillar 1. The Pillar 1 program and the DSTs have a number of contributing companies of about the same magnitude despite very different program designs and scopes.

7.3 Revenues

Figure 10 compares estimated Pillar 1 revenues for 2020 and DST revenues collected for 2020 (or the closest available year). Pillar 1 estimates are lower than collected DST revenues for India and Turkey.

¹⁶For Pillar 1, Barake and Le Pouhaër (2023) estimate that 677 companies have revenues above €20 billion. This number drops to 437 after excluding companies in the extractives and regulated financial services sector. Finally, this number is 69 after applying the revenue and profitability thresholds.

FIGURE 9**Number of Liable Companies for Pillar 1 and DSTs**

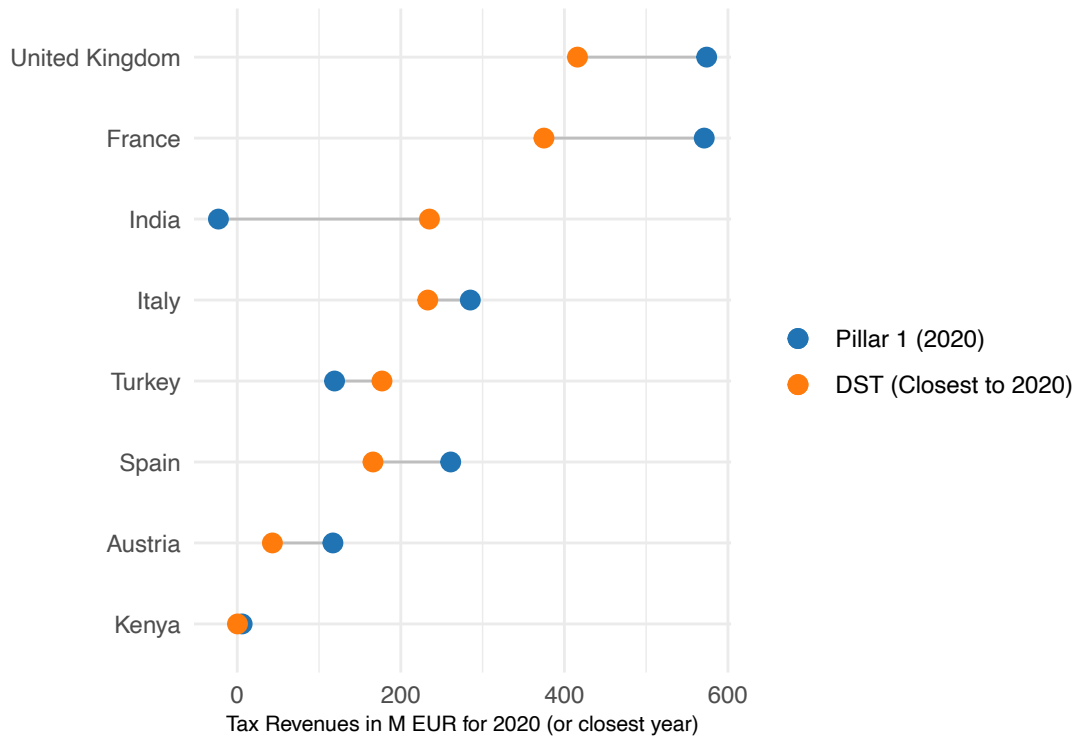
Note: This shows the number of companies that pay the DSTs and the estimated number of companies that would pay Pillar 1. For France, the UK and Italy, the data is for 2021 and from official sources. For Kenya, the data is for 2022 and from journalistic sources. For Spain, Turkey and India, the data are estimates from the Office of the United States Trade Representative. No year is given for these estimates. The Pillar 1 data is an estimate from Barake and Le Pouhaër (2023) for 2020.

The difference is particularly large for India that collected €235 million in DST revenues and has estimated Pillar 1 revenues of €-23 million. This partly supports the recent criticisms from developing countries that Pillar 1 is less beneficial for them.¹⁷ Estimated Pillar 1 revenues are slightly higher than collected DST revenues for the other countries.

Overall, the magnitudes of revenues - except for India that gained significantly more from the DST - are quite similar for most countries. This is insofar surprising given that DSTs only tax digital companies, while Pillar 1 is a global reform not limited to any sector.¹⁸ The small difference in these numbers can likely be explained by the much more restrictive targeting of Pillar 1, which only applies to companies that have at least €20 billion in global revenues and a profitability above 10%. The highest global DST revenue thresholds (€750 million) are significantly lower and many countries have no global revenue threshold for their DST. Pillar 1 also has a double taxation elimination mechanism, while DSTs do not.

¹⁷The Ministers of Finance of Columbia and Nigeria have both voiced this opinion in the last year.

¹⁸Except extractives and regulated financial services, which are excluded (OECD, 2021).

FIGURE 10**Estimated Pillar 1 Revenues and Collected DST Revenues for 2020**

Note: The closest year is used if 2020 DST collected revenues are not available. The 2020/2021 fiscal year - April 2020 to April 2021 - is used for the UK, Kenya and India. 2021 is used for Italy and Spain. Pillar 1 estimates are from Barake and Le Pouhaër (2023).

8 The Future of DSTs

The future of DSTs will critically depend on two factors: (i) on the progress on Pillar 1 and (ii) on the position of the US on both DSTs and Pillar 1. These two factors are interrelated because DSTs, like Pillar 1, primarily target US multinationals.

If Pillar 1 is adopted by the end of 2023, the number of countries having a DST will most likely decrease (at least in the short run). All of the OECD countries with implemented DSTs (Austria, France, Italy, Spain, Turkey and the United Kingdom) have signed agreements with the US that they will repeal their DST upon implementation of Pillar 1.¹⁹ Also, non-OECD countries such as India and Kenya are part of the BEPS agreement and are thus generally obliged to abolish their DSTs upon implementation of Pillar 1. For other non-OECD countries with implemented DSTs (Nepal, Tanzania, and Kyrgyzstan) that are not part of the BEPS agreement, the decision to stick with their DST will be heavily dependent on the political pressure from the international state community and the US in particular.

¹⁹These countries also accepted to provide tax credits to US corporations that have paid DSTs if Pillar 1 is implemented. The tax credits will be equal to the difference between the amount of revenue collected by Pillar 1 and by the DST of the country if the amount collected by the DST is higher than the Pillar 1 amount. The Pillar 1 revenue amount will be prorated to achieve proportionality with the length of the DST period when comparing the two amounts.

The main question, therefore, is whether Pillar 1 is expected to be adopted or not. Given that no country has adopted Pillar 1 as of May 2023 and it is not currently on the US legislative agenda, the OECD timeline to implement Pillar 1 by the end of 2023 seems (too) ambitious. Given a world in which Pillar 1 is not adopted, the future of DSTs is likely to be different. First, countries that currently have an active DST are much less likely to abolish it, and second, other countries - in favor of the Pillar 1 reform - that currently do not have a DST might consider introducing one. In such a scenario, the US policy response toward states with DSTs is likely to be critical. Close US allies - Norway, Australia and New Zealand for instance - opened discussions on a DST, but abandoned the idea after US pressure. Canada - also a close ally - has already announced that it will implement a DST in 2024 if there is no progress on Pillar 1 by the end of 2023, but a strong US reaction may change this decision. The situation will be similar for the EU DST that was suspended in July 2021. The EU has announced that they will restart the legislative process if there is no progress on Pillar 1 by the end of this year, but Germany in particular appears to be concerned about US retaliatory measures.

9 Conclusion

The DST is a new fiscal tool to tax digital companies, some of whom previously paid little corporate income tax. DSTs apply to country-level revenues, which are, however, derived from global revenues and the calculated country-level digital presence of each company. Revenue thresholds and tax rates can be tailored to meet country-specific needs. Currently, DSTs are being applied in twelve countries on different continents, and it is expected that the amounts collected will increase substantially in coming years.

DSTs also perform well when compared to Pillar 1. The amounts collected are roughly in the same order of magnitude as the revenue estimates for Pillar 1. India and Turkey have higher collected DST revenue than estimated Pillar 1 revenue, which provides some suggestive evidence that DSTs generate more revenue for developing countries. The number of digital companies subject to DSTs is roughly the same as the estimated number of firms expected to be liable for Pillar 1.

Finally, there is positive preliminary evidence from the UK that the implementation of a DST can be cost-effective: €7.25 million in implementation costs for €416 million in collected revenues. Most importantly, the DST successfully taxes digital multinationals that have paid very little corporate income tax in the past: 13 of the 18 paying companies in the UK paid more DST than CIT in 2021.

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