

THE WORLD IN 2030
Data Taxation

TAX+



Data Taxation

Digital business models make it almost impossible to pin down where multinationals make money and where they pay tax. Regulators use new taxes to ensure organisations are more accountable for the data they own or access.

Annual tax lost to society (2019)¹

\$240bn

Effective US tax rate for Alphabet Inc (2018)²

8.8%

Adam Smith said that taxes should be efficient, certain, convenient and fair. We are a long way away from this today. Many of our tax systems are outdated and awash with complexity and loopholes. Some not only clash with government priorities but they also make it easy for multinational companies to ensure the amount of money paid to the state is kept to a minimum.

Public resentment in several regions has risen about this and there is widespread acknowledgement that that principles that tie tax to physical presence are no longer appropriate for a world in which California-based tech companies can sell services in Spain through a Dublin-registered subsidiary and so pay little or no tax. A move to a fairer system would not only help to share prosperity and create a more egalitarian environment, but it can also support the long-term competitiveness of firms and nations. Unsurprisingly governments around the world are keen to address the problem.

Companies that do business in more than one country have long been a challenge for tax authorities, because they can, quite legally, structure their business in a way that minimises their tax bills. Hugely profitable organisations are able to book profits against intangible capital in havens such as Ireland and Luxemburg, and as a result are not obliged to pay much tax elsewhere. In particular the winners here are those that rely on monetising data. In previous generations, where manufacturing was the dominant industry, the production of goods, sales, and associated taxation was largely national. Even within the services sector, the co-location of human resources and much of the corporate activity has supported regional tax income. Today, with customers in different countries to the employees that service them, and intellectual property sometimes assigned to different national jurisdictions, data-rich organisations have been able to reduce effective tax rates. For example, in 2018, compared to a standard US tax rate of 21%, Apple paid an effective tax rate of 18.3%, Amazon 15.0%, Facebook 13.1%, and Alphabet only 8.8%.³ Although it is easy to point to tech

giants in this regard, an increasing range of other companies are also saving significant sums. Starbucks is, for example, one company that gains considerable advantage from licensing its brand and business processes from the Netherlands to other markets. By one recent estimate, close to 40% of multinational profits are shifted to low-tax countries each year. In 2019 the OECD conservatively calculated that the annual tax lost as a result of this was around \$240bn.⁴

In addition to the inadequacy of current tax systems, there is a strong aversion to the payment of tax by many in California, home to many of the world's biggest tech companies. In a 2018 San Francisco workshop the prevailing view was that the payment of tax is a necessary evil rather than a responsibility; indeed, one individual suggested that all tax was "basically theft". This was in stark contrast to conversations held elsewhere, in Frankfurt, London, Jakarta and Johannesburg where we heard a sense of growing frustration that some of the world's most profitable companies are deliberately distancing themselves from what others see as their social obligations. Authorities, they argued, need to raise revenue for public services and the infrastructure that many digital companies currently use for free.

As more companies shift to data-centric business models, there are bids to change the tax systems away from ones based on a physical presence to ones that reflect a digital presence. In recent discussion three regulatory levers were considered - taxes on digital revenues, tax on the value of data and the use of data dividends.

Digital Revenues Tax

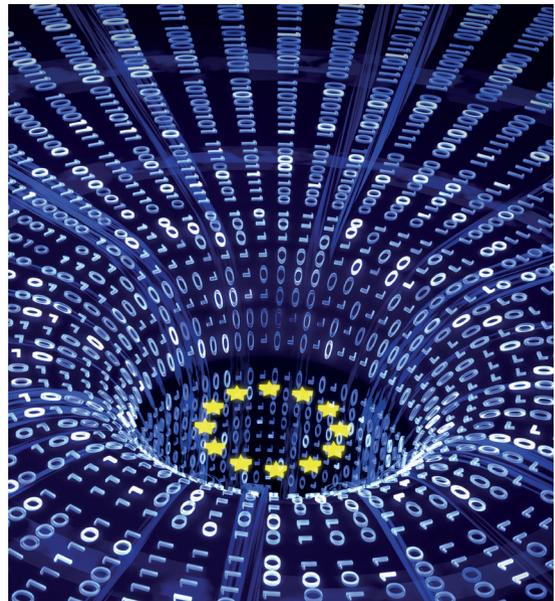
The EU is leading in the area of taxing revenues. They suggest giving governments a “tax right” over the profits of consumer-facing businesses depending on the share of sales within their territory. This would ensure that small tax havens including Ireland, the Netherlands and Luxemburg would no longer be able to undermine the global tax system in tandem with multinationals. The OECD is also in support and sees that poor countries would gain significantly from this reform. Many companies sell in the developing world yet pay local companies for distribution and do not locate headquarters there.

As a first step, the EU has proposed a digital service tax of 3% on the income from all commercial activities.⁵ This will give countries the rights to tax the largest companies based on a proportion of their global sales, and not just on profits declared in selective jurisdictions. The UK set a precedent by announcing its intention to introduce a 2% Digital Services Tax on companies with revenues over £25m in 2020 so that multinationals “with profitable UK businesses pay their fair share.”^{6,7} The comparable French system was agreed by its parliament in July 2019 and is set at the 3% rate.⁸ The aim of these initiatives is to shift taxation away from profits, which are usually declared where the company bases its intellectual property or has its head office, towards revenues.

Initial modelling suggests that digital services taxes would increase the amount of local corporation tax paid by digital companies (currently averaging 9.5%) towards that of the typical business (23.3%) but may decrease the amount of profit they generate in their home market. This, the argument goes, will ensure that more tax is paid in the countries where commercial activities are undertaken, rather than those where the profits are booked. Initial expectations are that this ‘levelling of the playing field’ could raise £4.4bn a year across the EU.⁹

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Although there is strong support for a global agreement on this via the OECD, it is less popular in the US, home to a large number of technology companies. Concerned about the impact of the 2019 French legislation on American business, the US government has threatened to impose retaliatory tariffs on French cheese and wine. Elsewhere, some also worry that these initiatives give licence for other countries to follow suit. Nevertheless, several key governments across Africa and Asia are keen to introduce similar approaches.¹⁰



Taxing Data Value

One suggestion we heard was that if a company's future value includes an appraisal of the data that it owns, stores, manages, analyses or accesses, then the way data-based businesses are valued and, significantly, can then be taxed, will be transformed. Data will itself be measured as an asset. The possible implications of this, for business, and indeed national GDP, are considerable. Consider, for example, the advent of transparent, multi-dimensional data marketplaces, regular assessments of an organisation, or the data liabilities of government and the introduction of a fully digital and data taxation.

Several see that the adoption of digital services tax will not only help correct current tax and accounting practices but could also be a precursor to a wider tax on data – and in particular on an organisation's data assets. Just as several European countries and some Canadian provinces apply an annual wealth tax based on the market value of individual assets above a set level, if a company's data has an agreed value then, it is argued, governments could exact a regular data asset tax on top of, or as part of, corporation tax.

The big problem here is of course how to value to data. Whether derived from personal information or based on machine and IoT interactions, global bodies such as the IMF, EU and OECD are wrestling with this. Digital information is unlike any previous resource; it is extracted, refined, valued, bought and sold in different ways. This changes the rules for markets, and it demands new approaches. However, if, and currently this is a big 'if', we can agree how to better value data from an economic perspective, then there are significant organisational, industry and national trade implications. These range from how companies are valued by markets to country GDP calculations.

Different sectors are trying to come up with an agreed way to value their own specific datasets. The oil industry is beginning to align around its seismic analysis datasets; in the automotive sector efforts are underway to find a way to value the data generated by connected and autonomous vehicles; and the value of IoT data within smart cities is a mounting area of attention. Governments are also keen to understand the value of their data assets and are trying to establish

common standards. In 2018, for example, a UK Parliament Select Committee¹¹ discussion suggested that the annual value of the aggregated NHS patient data set could be around £10bn.¹² Exploiting this is now part of government policy.

In several recent workshops, many across the globe concurred on the need for consensus about how to value data. The IMF, among others, is leading the dialogue; researchers at a November 2018 conference explored how measuring economic value needs to recognise the impact of data. One paper, for example, estimated that Amazon's data was worth \$125bn and was growing at 35% per annum – so data accounted for 16% of the total market value of the company.¹³ Google's data was worth \$48bn at the time.¹⁴ If a value can be put on every organisation's data then, as well as opening the door to multiple new innovation opportunities for the companies involved, it can also help progress the way regulators can act.

For some organisations, there is a clear downside on a data tax. Many see that it could stifle innovation as information is dumped off the balance sheet in order to minimise costs. On the other hand, others think it would herald the end of the data land-grab of recent years. They argue that a tax on data is simply a sign of a growing maturity in the tech sector and a realignment of power and money.¹⁵ Others see that a more transparent and fair system could open the door for wider data sharing especially by social innovators and NGOs. Whichever view is taken, researchers are now looking at the broader implications of the extra value creation and the impact on national and global GDP if digital revenues, data taxes and other data assets were included in calculations. As one workshop participant stated, *"when data capital gets combined with digital tax, then it will become really interesting."*

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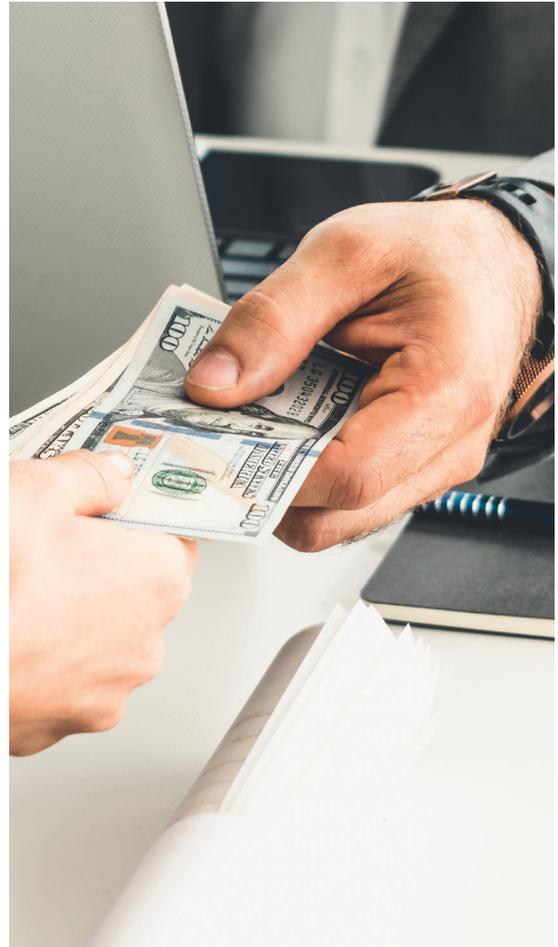
Data Dividends

There is a third option also being considered. Providing a 'data dividend' paid to all citizens would mean that they are remunerated by companies for the use of their data. It could also encourage more personal data sharing and even help set standards for IoT data. Chris Hughes, a Facebook founder, is one of those at the fore of the idea that every US citizen should receive a data dividend from the largest tech companies as a royalty on the use of their data.¹⁶

There is precedent. In Alaska the state, not individual landowners, owns the rights to minerals and so in the 1970s a savings account was created for all citizens to share the profits from the oil boom. Each year around \$1500 is paid directly to each citizen as a thank you from the likes of BP, ConocoPhillips and Exxon.

Adopting a parallel approach, would mean that, say, \$1000 should be paid by the companies that gain from the creation and use of consumer data - tech, retailers and finance companies - to every US citizen to compensate for how their personal data is being monetised. Advocates see that "a data dividend would be a powerful way to rebalance the American economy," and create a universal benefit.

This also would require less detailed assessments of specific revenue and data values than the other two options as it could simply be set by cities, states or national governments as an annual fee. Again, looking at parallels with other resource extracting companies in the mining and energy sectors, several have proposed that a digital dividend is formally made a requisite as part of the social licence to operate in any country or city.



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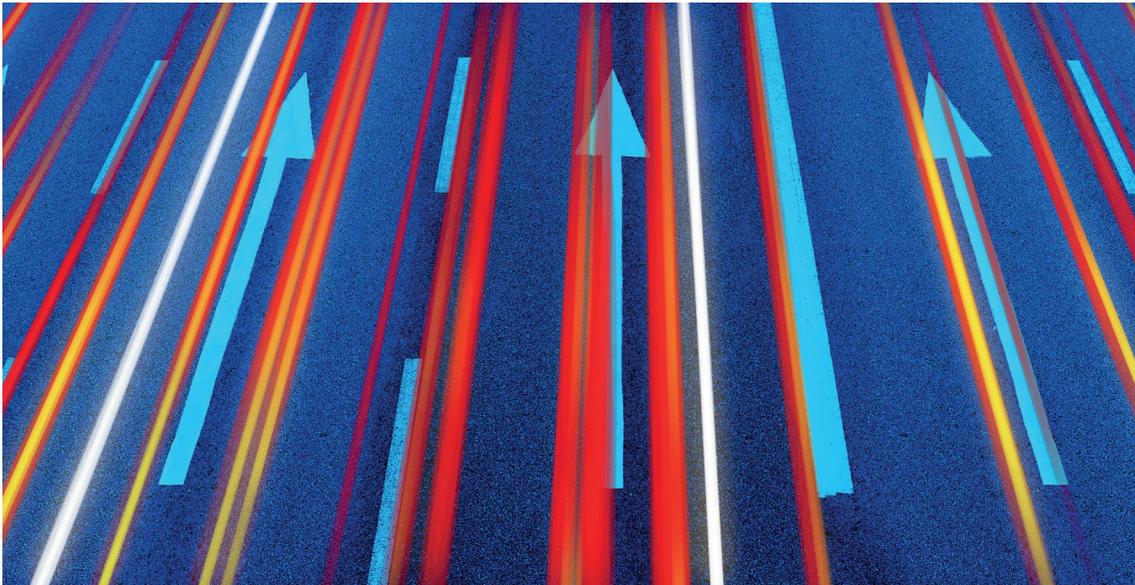
Leading in 2030

It is clear that change is coming. The EU, UK and French regulation on digital services tax is already in sway, the OECD are engaged in debate and many others are supporting the call for action. From our discussions, the interest and momentum behind taxing data value and digital dividends are also manifest. Taking the ten-year view, it can therefore be seen that:

- **Governments** should be collaborating on how best to learn from the initial moves and develop a holistic approach to taxing the monetisation of data that will avoid loopholes, align with data sovereignty concerns, be simple and coherent enough to provide confidence for implementation and, most significantly, demonstrate a rebalance of the current asymmetry. Whether 2030 sees a joined-up, global approach based on common principles, albeit with regional nuances, or a smorgasbord of experiments that create complexity is very much down to how and which regulators are ready to work across borders and jurisdictions.

- **Organisations** should similarly be readying themselves for the increasingly likely shift that will take place in data taxation. While some of the entrenched views of big players will focus on lobbying to stifle progress, more proactive companies will start to map out the future shifts and implications. Foremost here will be qualifying and quantifying the value of the data they own, access or use in order to better understand the potential scale. This can then scope the planning for the options that do indeed gain traction in key locations.

With a fundamental change increasingly probable, the tide is turning, and many see significant opportunity ahead.



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The World in 2030

This is one of 50 global foresights from Future Agenda's World in 2030 Open Foresight programme, an initiative which gains and shares views on some of the major issues facing society over the next decade. It is based on multiple expert discussions across all continents and covers a wide range of topics. We do not presume to cover every change that will take place over the next decade however we hope to have identified the key areas of significance. Each foresight provides a comprehensive 10-year view drawn from in-depth expert discussions. All foresights are on <https://www.futureagenda.org/the-world-in-2030/>

Previous Global Programmes

The World in 2020 was published in 2010 and based on conversations from 50 workshops with experts from 1500 organisations undertaken in 25 countries as part of the first Future Agenda Open Foresight programme. This ground-breaking project has proven to be highly accurate in anticipating future change and the results have been used by multiple companies, universities, NGOs and governments globally. Rising obesity, access not ownership, self-driving cars, drone wars, low cost solar energy, more powerful cities and growing concerns over trust were just some of the 50 foresights generated. For more details: <https://www.futureagenda.org/the-world-in-2020/>

Five years on, the World in 2025 programme explored 25 topics in 120 workshops hosted by 50 different organisations across 45 locations globally. Engaging the views of over 5000 informed people, the resulting foresights have again proven to be very reliable. Declining air quality, the growing impact of Africa, the changing nature of privacy, the increasing value of data and the consequence of plastics in our oceans are some of the foresights that have already grown in prominence. For more details: <https://www.futureagenda.org/the-world-in-2025/>

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