

## CHAPTER 6

# International Taxation and the Complex Case of Digitalisation

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## Takeaways for Leading Change

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When there is a change so fundamental as digitalisation, no part of society is left unaffected. The transition from the brick and mortar economy to the digital economy has dramatically transformed the setting of international business taxation and basic principles of the international tax system have become outdated. This chapter demonstrates how digitalisation and the transformation of the global economy affect international taxation and discusses how to restore the integrity of the international tax system. It also argues that managing complex and systemic changes requires understanding a multiplicity of fields and leadership beyond institutional boundaries. This kind of leadership is now more necessary than ever due to the increased complexity of the global economy and divergent interests of key players.

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The Leadership for Change (LFC) approach is comprised of three core elements: a complex world, relational leadership and dynamic change. Complexity is the feature of the approach that best describes the phenomenon discussed in this chapter – the effects of digitalisation on the international tax system. The international tax system is a multidimensional structure which combines various fields of society and discipline: law, business, politics and economics. The ongoing transformation of the international tax system is also a prime example of a change process where leadership is far from clear. The challenges caused by digitalisation for international tax regulation cannot be resolved by any single actor but require wide-ranging solutions and cooperation. At the same time, the transformation of the international tax system in the digital age is neither linear nor easily predictable.

From the perspective of international taxation, the key feature of the global megatrend of digitalisation is that economic activity no longer requires a physical presence. This aspect of the information and communication technology (ICT) driven modern economy erodes the fundamental concepts of international tax law that determine which country has the jurisdiction to tax cross-border business income. The result has been the widespread phenomenon of international double non-taxation of multinational enterprises. This is a pressing global concern in terms of financing public expenses, competition neutrality, incentives for economic activity and fairness.

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We begin by looking back to the early 1900s, when another transition in technology and the economy led to a fundamental re-evaluation of the basic principles of international taxation.

## Key Principles of International Business Taxation

In early 1900s industrialisation, powered by revolutionary technological innovations such as the internal combustion engine, modern power grid and the assembly line, was well underway. More and more capital, including an increasing number of labour, was invested in industrial manufacturing. The structure of society was beginning to change from agrarian to industrial. Consumer products and industrial goods were now beginning to be mass-produced. It became necessary, and increasingly possible due to the advances in transportation and communication technologies, for manufacturers to look abroad for new opportunities for growth.

One of the potential major obstacles for the emerging expansion of cross-border trade was the awkward and outdated construction of the international tax system. Each country had its own rules on who and what to tax. This often resulted in overlapping and simultaneous taxing claims of two or more states (Gadžo, 2018, p. 203–209). The basic setting was as follows:

The taxing claim of State A was based on its understanding that the whole existence and operations of Company X were ultimately made possible by the public goods (physical and legal infrastructure, educated and healthy workforce, etc.) provided by State A. State B based its taxing claim on a somewhat similar idea that the money used for buying the products from Company X was generated by the resources provided by State B. Or, it may be that both states simply needed the tax revenue. From a legal perspective, there is little difference why a state looks to tax certain income. Under international law states have full discretion to decide what they want to tax as long as there is a reasonable connection between the state and the income or between the state and the income recipient (Gadžo, 2018; Martha, 1989).

This problem of *international double taxation* desperately needed to be resolved to facilitate the expansion of international trade. The difficulty was that no state was unilaterally willing to give up its taxing claim in favour of other states. International co-operation was required. The body to take up the task was the League of Nations – the predecessor to the United Nations. Its Economic and Financial Commission on 5 April 1923 released a pioneering report on double taxation. The report laid down the



FIGURE 1. Company X made leather bags (hand bags and suitcases). State A was the “home” state of the company where it was founded, registered, managed and where the manufacturing of its products took place. Company X also owned the trademark that distinguished its products from other similar products. State B was the “target” state where the company looked to expand to sell its products to local consumers. Company X had in State B a retail store where it displayed and sold the leather bags made in State A. The problem for Company X was that the income it received from selling leather bags in State B was taxable both in State A and State B under the domestic tax law rules of these states. In other words, the company was taxed twice. In state B it would have paid a 30 percent corporate income tax (CIT) and in State A 35 percent CIT. Of its net profit the company would therefore have paid a total of 65 percent income taxes. This would hardly encourage Company X to expand internationally.

basic structure of the international income tax system as it exists today, almost a century later (League of Nations, 1923; Devereux & Vella, 2014; Whittaker, 2016; De Melo Rigoni, 2017).

In the report, the two basic principles for cross-border business taxation were established: *the residence state principle and the source state principle*. These principles mean that both the so-called residence state (State A in the above example) and the so-called source state (State B in the above example) have, as a rule, the right to tax income generated by cross-border business operations. The residence state has *worldwide* or *unlimited tax*

*jurisdiction*, meaning it may tax any income regardless of where it originates. The source state has a *territorial* or *limited tax jurisdiction* under which it may tax business income received from its territory.

However, the source state can tax cross-border business income only when the foreign company has a so-called *permanent establishment* (PE) in its territory and to the extent the income is generated by the operations of that permanent establishment. What is important to understand about this legal concept is that, in general, there cannot be a permanent establishment without some level of physical presence; for example, a factory, store, office or warehouse. Grasping this feature of the permanent establishment concept is essential in understanding the current challenges of the international tax system.

From the perspective of the residence state's taxing powers the importance of the existence of a permanent establishment is not, in principle, as significant as it is for the source state. The residence state has under its worldwide tax jurisdiction the right to tax cross-border income anyway. However, in practice, whether there is a permanent establishment or not in the source state is also important for the residence state. If there is a permanent establishment the residence state is usually able to tax only "what is left" after the taxation in the state of source due to its obligation to credit the taxes paid in the source state (credit method). Alternatively, the residence state may be obligated to exempt foreign sourced income altogether (exemption method).

Following the principles set in the 1923 League of Nations report, in our example scenario the taxing rights between State A and State B are allocated as follows:

By allocating the taxing rights of business profits between the source state and the residence state, overlapping taxing claims of the two states were effectively avoided, international double taxation was eliminated and the most important tax-related obstacle for international trade was removed. In the following decades, more and more states adopted the principles laid down by the League of Nations report by concluding bilateral tax treaties with other states. These tax treaties were based on the Model Tax Convention of the Organisation for European Economic Co-operation (OEEC) that later became the Organisation for Economic

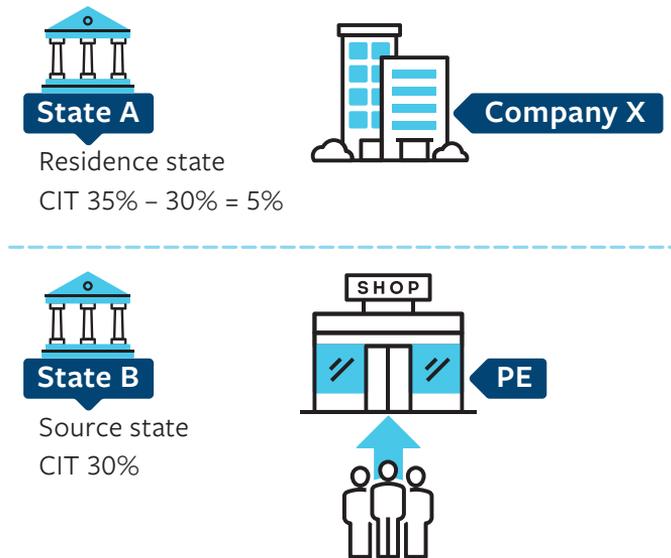


FIGURE 2. Because Company X has physical presence (retail store) in State B, there is a permanent establishment of company X in State B. Accordingly, State B has the jurisdiction to tax the business profits of Company X to the extent they are connected to that permanent establishment. State A as the residence state also has the right to tax the business income Company X receives from State B. However, State A is obligated to credit the taxes paid in State B. This effectively means State A can only tax 5 percent of the income received by Company X from State B. Of its net profit Company X would therefore have to pay a total of 35 percent income taxes. This is much more encouraging for Company X compared to the 65 percent described in Figure 1.

Co-operation and Development (OECD). By the 1950s the OECD had a leading role in managing the development of the international tax system (OECD, 1963).

In summary, the international business tax system worked reasonably well through the twentieth century because the expansion of business to other states usually required some kind of physical presence. This ensured the taxing rights of the source state through the concept of permanent establishment. At the same time the key functions and the worldwide tax liability remained in the company's residence state. Cross-border business income was taxable either in the source state or in the residence

state or in both states, in which case tax treaties ensured international double taxation was effectively eliminated.

## Digitalisation Eroding the Taxable Base

In recent years, the term digital economy has emerged in the language of international taxation. The digital economy is an overarching concept referring to the entire modern economic system. It describes a wide range of activities, from buying a train ticket online to the worldwide operations of a multinational technology company (OECD, 2015). From the perspective of international taxation, the main feature of the digital economy is that economic activity no longer requires physical presence, the phenomenon of “scale without mass” (OECD, 2018a). This is important because without physical presence no permanent establishment is created in the source state. This means the source state has no taxing right over the business income received by a non-resident company. Figure 3 illustrates the effect of digitalisation.

This example demonstrates how the fundamental concept of international business taxation, the permanent establishment, and by extension the entire source state principle, is compromised in the digital world. The absence of taxable presence in the source state has become an all-encompassing issue as more and more goods and services can be delivered to customers (consumers or other businesses) in other states without a physical presence. Source states in many cases no longer have the jurisdiction to tax outbound business income. This is problematic in two ways.

First, and most obviously, the source state loses tax revenue. For example, when a Finnish company buys advertising services from Google, the payments for those services go untaxed in Finland. From the Finnish perspective tax revenue “leaks” abroad. This, of course, is a concern for the financing of public expenses in Finland.

Second, not having to pay taxes in the source state easily results in not being taxed at all. The phenomenon referred to as *international double non-taxation* refers to a case where a multinational corporation is not taxed for its profits by any state or is taxed with a very low effective tax rate.

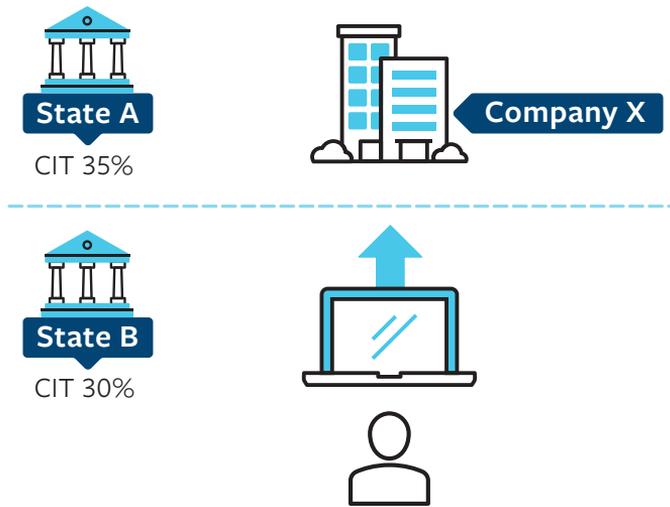


FIGURE 3. In this case Company X sells leather bags to customers in State B just like it did in the previous examples. The only difference is that Company X no longer has physical presence (retail store) and, thus, no permanent establishment in State B. Instead, consumers residing in State B can purchase the products of Company X through a website maintained by Company X in State A. Company X pays taxes, namely a 35 percent corporate income tax, only in its residence state (State A).

This occurs because the residence state principle is also being eroded as will be discussed below.

The main problem with international double non-taxation is that it distorts competition neutrality between global and local or “big” and “small” businesses. If the effective tax rate is 20 percent for one company and 1 percent for another, it is clear their chances of success are far from equal. The fact that multinational enterprises are in many cases subject to zero or close to zero taxation also creates pressure for states to compensate tax revenue losses by tax increases in other areas, particularly payroll taxes and value added tax. This reduces incentives for economic activity in general. There is also the issue of fairness. If one company does not pay its fair share others will have to pay more (Burgers & Valderrama, 2017; Lamberts, 2017).

International double non-taxation does not occur simply through the lack of taxable presence in the source state. It also requires income to go untaxed in the residence state. For a growing number of multinational companies this has become reality. Technological developments not only erode the source principle but are also compromising the functioning of the residence principle. Due to the abundant possibilities provided by modern ICT and logistics, key functions of a multinational enterprise can be allocated to any jurisdiction depending, among other things, on tax considerations. For example, the central management (board meetings), advertising, financing, manufacturing and research and development operations can, and typically are, situated in different jurisdictions. Most importantly, the possession of intangibles, such as, trademarks or brands, copyrights, patents, knowhow and goodwill can be allocated almost anywhere.

The location of intangibles has become essential. Their importance in the global value chain has significantly increased due to the expanded scope of digital services (OECD, 2013). Manufacturing goods is now easier and cheaper thanks to, among other things, the technological process of *automation* (production without human assistance). Automation is evolving fast and goes hand in hand with digitalisation. Indeed, technological innovations such as 3D printing may make manufacturing of everyday goods so simple that literally anyone can do it. This means the real value is less where the manufacturing takes place and more where the intangibles are located. And this brings us back to tax considerations.

In the previous examples, Company X, resident in State A, owned the trademark that distinguished its products from similar products of other manufacturers. The example below demonstrates what happens from a tax perspective if the ownership of a trademark is transferred from Company X to another group company, Company XX, which is located in a low tax jurisdiction.

As demonstrated above, the issue of international double non-taxation is not something concerning only modern ICT companies. It is also relevant in the case of more traditional businesses that sell, under a global brand, tangible goods (e.g. furniture or clothes) or services (e.g. coffee shops and fast food restaurants). It is also worth pointing out there are various other *tax planning* techniques besides the one described above that may result

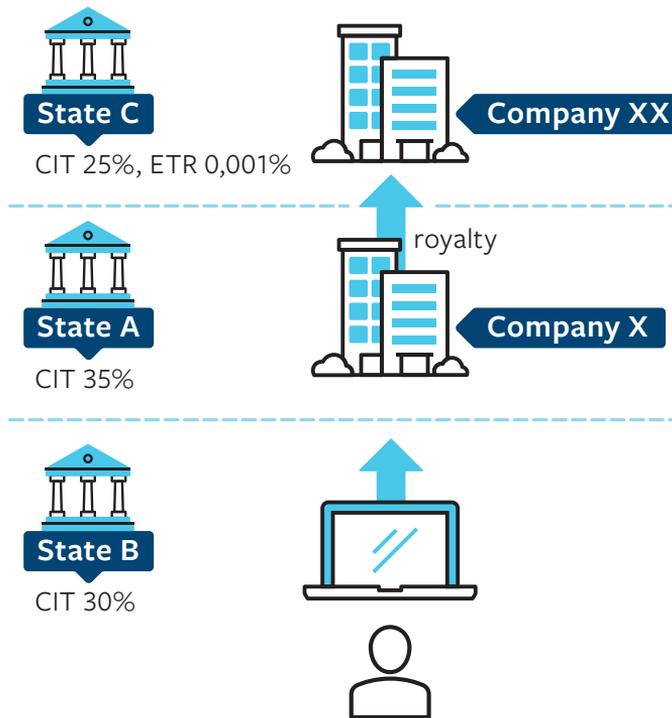


FIGURE 4. Company X still sells leather bags to consumers in State B via its web store just like it did in Figure 3. However, the ownership of the trademark or brand of X group is now transferred to another group company, Company XX, located in State C. The general corporate income tax rate in State C is 25 percent. But due to a special regime that is applied to income from intangible property the effective tax rate (ETR) for Company XX is only 0,001 percent. 95 percent of the profits made by Company X in State A is offset by tax deductible intragroup royalty payments to Company XX. Of the profits it made from selling leather bags to consumers in State B, the X group (Companies X and XX) now has to pay a combined taxes of little over 1,75 percent.

in international double non-taxation. They may be based either on other types of intragroup payments besides royalties (e.g. interest payments or service fees) or technical mismatches or “loopholes” in international tax legislation (e.g. so-called hybrid arrangements). The important point is that the phenomenon of international double non-taxation is relevant in any area of the economy where international corporations operate. The

potential magnitude of the issue is highlighted by the fact that more than 80 percent of all worldwide trade takes place within the global value chains of multinational enterprises (United Nations, 2013).

## Discussion

There are various ways to confront current issues in the international tax system and to restore the integrity of the international tax system. There are short term solutions or “quick fixes”, such as a particular digital tax outside the scope of the existing tax treaty rules limiting the tax jurisdiction of the source state. There are also medium term solutions such as the introduction of a “digital permanent establishment” not based on physical presence, but other indicators such as use of bandwidth or collection of user data (see e.g. Brauner & Pistone, 2017). A more far-reaching option would be to discard the source and residence principles altogether and base tax jurisdiction on other factors; for example, the location of consumers (Devereux & de la Feria, 2012). The greatest challenge is not the designing of a tax system suitable for the digital age. The real issue is how to deliberate on and implement the required modifications.

As noted above, a century ago the world was facing a somewhat similar situation, where technological innovations had changed the structure of the global economy and the new reality had become fundamentally incompatible with the prevailing international tax system. It was also discussed how individual countries were not in the position to effectively confront these challenges. This was ultimately achieved through international cooperation. But what is the case today? Can there be sufficient international consensus on the international tax system in the digital era?

International bodies with the capacity to implement all-encompassing solutions to the prevailing challenges of the international tax system are the United Nations and the OECD. Both organisations have a long history of issuing supranational tax law regulation. However, the purpose of the United Nations in the field of international taxation has diminished over time to a more observatory role. The main emphasis has been on safeguarding the interests of the developing world. For this reason, the

OECD and the associated G20 forum is, in practice, the only international operator able to provide worldwide solutions in the field of taxation.

The OECD has in recent years successfully introduced instruments within its Base Erosion and Profit Shifting (BEPS) project to mitigate international double non-taxation (OECD, 2018b). However, there is

one issue yet to be resolved that makes the situation today somewhat more challenging compared to the time when the elimination of international double taxation was in everyone's interest. The problem is that even within the OECD countries, that is the developed western economies, there are persistent conflicts of interest. Some countries, for example the Benelux countries and Ireland, may not see international double non-taxation as such a pressing concern as do Australia, Germany, France and the Nordic countries. Also, and most importantly, there are the fundamentally different positions of the European Union countries and the United States on how and whether the source state taxation of digital businesses should be modified. The European Union

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is looking for ways to tax the United States -based technology giants, such as Google, Apple, Microsoft and Facebook. The United States, understandably, sees the situation differently.

Reaching global solutions is, not only in this case but also generally, difficult and time-consuming. New players and levels of decision-making have emerged in the field of international taxation which take a regional instead of a global perspective. The EU Commission, for example, has stated that if the OECD cannot provide an effective and timely solution to the erosion of the source state principle, the European Union will proceed with its own solutions (European Commission, 2017; European Commission 2018a; European Commission 2018b). However, if the process concerning the Common Consolidated Corporate Tax Base initiative (European Commission, 2018c) is any indication, even reaching a common understanding in the EU may be difficult to achieve. The CCCTB approach would not be based on classic concepts of source and residence but on

a so-called formulary apportionment method where states' jurisdiction to tax would depend on the location of three equally-weighted factors: assets, labour and sales. This would represent an innovative and up-to-date approach to international taxation. It would however result in a loss of tax revenue in individual countries – at least in the short term.

As the OECD and European Union have so far been unable to resolve the source tax issue, countries have begun to take unilateral actions. For example, India has recently introduced a plan for a new digital tax that would make multinational digital entities operating in the country liable for taxes. Similar considerations have taken place also in the United Kingdom and Italy (Agarwal, 2018; UK Government, 2015; Reuters, 2017). Although relatively simple to implement, the problem with such unilateral solutions is that they make the particular country less attractive for foreign investments compared to competitor countries (Olbert & Spengel 2017). They may also be in violation of existing tax treaties and trade treaty law. This may erode the political capital of states in relation to countries which suffer tax revenue losses and whose companies are affected or would prefer a coordinated solution.

Besides political and legal measures, there is also another possible approach to address the current issues of international taxation. That is the so-called corporate social responsibility approach (CSR), whereby companies, either of their own volition or due to pressure from non-governmental organisations, traditional and social media, the general public and consumers, modify their behaviour to better meet the requirements of good corporate citizenship, including paying their taxes (European Commission, 2011). However, so far there is very little evidence of any real effects of the CSR approach to the most pressing global tax concerns.

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## References

- Agarwal, S. (2018, February 3). Budget 2018: Foreign digital companies with India user base may have to pay tax. *India Times*. Retrieved from <https://economictimes.indiatimes.com/news/economy/policy/budget-2018-foreign-digital-companies-with-india-user-base-may-have-to-pay-tax/articleshow/62761393.cms>
- Brauner, Y., & Pistone, P. (2017). Adapting current international taxation to new business models: two proposals for the European Union. *Bulletin for international taxation*, 71(12), 681–687.
- Burgers, I. J. J., & Mosquera, Valderrama I. J. (2017). Fairness: A dire international tax standard with no meaning? *Intertax*, 45(12), 767–783.
- Devereux, M. P., & de la Feria, R. (2012). *Defining and implementing a destination-based corporate tax*. Oxford, England: Centre for Business Taxation Working Paper.
- Devereux, M. P., & Vella, J. (2014). *Are we heading towards a corporate tax system fit for the 21st century?* Oxford, England: Centre for Business Taxation Working Paper.
- European Commission. (2011). *A renewed EU strategy 2011–14 for corporate social responsibility* (Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions COM(2011) 681 final).
- European Commission. (2017). *A fair and efficient tax system in the European Union for the digital single market* (Communication from the Commission to the European Parliament and the Council COM(2017) 547 final).
- European Commission. (2018a). *Proposal for a Council directive on the common system of a digital services tax on revenues resulting from the provision of certain digital services* (COM(2018) 148 final).
- European Commission. (2018b). *Proposal for a Council directive laying down rules relating to the corporate taxation of a significant digital presence* (COM(2018) 147 final).

- European Commission. (2018c). *Common Consolidated Corporate Tax Base (CCCTB)*. Retrieved from [https://ec.europa.eu/taxation\\_customs/business/company-tax/common-consolidated-corporate-tax-base-ccctb\\_en](https://ec.europa.eu/taxation_customs/business/company-tax/common-consolidated-corporate-tax-base-ccctb_en)
- Gadžo, S. (2018). The principle of 'nexus' or 'genuine link' as a keystone of international income tax law: A reappraisal. *Intertax*, 46(3), 194–209.
- Lamberts, P.B.W.L. (2017). Fair taxation: Truth is in the eye of the beholder. *Intertax*, 45(1), 49–53.
- League of Nations. (1923, April 5). *Report on double taxation submitted to the Financial Committee* (Document E.F.S.73. F.19).
- Martha, R. S. J. (1989). *The jurisdiction to tax in international law: theory and practice of legislative fiscal jurisdiction*. Deventer, The Netherlands: Kluwer.
- De Melo Rigoni, J.M. (2017). The international tax regime in the twenty-first century: The emergence of a third stage. *Intertax*, 45(3), 205–218.
- OECD. (1963). *Draft double taxation convention on income and capital* (Report of the Committee on Fiscal Affairs).
- OECD. (2013). *New sources of growth: Knowledge-based capital. Key analyses and policy conclusions* (Synthesis report). Retrieved from <https://www.oecd.org/sti/inno/knowledge-based-capital-synthesis.pdf>
- OECD. (2015). *Addressing the tax challenges of the digital economy* (Action 1 – Final Report. OECD/G20 Base Erosion and Profit Shifting Project). Retrieved from <https://doi.org/10.1787/9789264241046-en>
- OECD. (2018a). *Tax challenges arising from digitalization* (Interim Report OECD/G20 Base Erosion and Profit Shifting Project). Retrieved from <https://doi.org/10.1787/9789264293083-en>
- OECD. (2018b). *About the inclusive framework on BEPS*. Retrieved from [www.oecd.org/tax/beps/beps-about.htm](http://www.oecd.org/tax/beps/beps-about.htm)
- Olbert, M., & Spengel, C. (2017). International taxation in the digital economy: Challenge accepted? *World tax journal*, 9(1), 3–46.
- Reuters (2017, December 19). Italian budget commission approves web tax on digital services. Retrieved from <https://www.reuters.com/article/us-italy-tax-digital/italian-budget-commission-approves-web-tax-on-digital-services-idUSKBN1ED14F>

- UK Government. (2015, November 30). *Diverted profits tax: guidance*. Retrieved from <https://www.gov.uk/government/publications/diverted-profits-tax-guidance>
- United Nations. (2013). *Global value chains and development: Investment and value added trade in the global economy* (UNCTAD/DIAE/2013/1).
- Whittaker, D. R. (2016). An examination of the OECD and UN model tax treaties: History, provisions and application to US. Foreign Policy. *North Carolina Journal of International Law and Commercial Regulation*, 8(1), article 4.