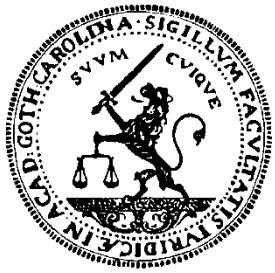

FACULTY OF LAW
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Income taxation at the right place at the right time

An analysis of the need for a virtual permanent establishment

JURM02 Graduate Thesis

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Contents

Summary

In the last couple of years, taxation of the digital economy has become a subject that is on everybody's mind. This has given rise to attempts from OECD and EU, amongst others, to solve this dilemma. For a company to be taxed in a state it must be a resident in that state or be attributed a permanent establishment that requires that the company has a physical presence in the state. This makes taxing digital companies that conduct business in states a challenge since no physical presence is required.

The digital economy consists of different characteristics that defines the way companies do business in the digital market. These are: direct network effects, Indirect network effects, economies of scale, switching costs and lock-in effects, and complementarity. The direct and indirect network effects are about the benefits of users, and the size of the user bases. Economies of scale relate to the marginal cost when it is practically zero. The lock-in and switching costs effects is the effect when users benefit from staying with the same company or would lose by changing company for the service they want. Complementarity is when the user derives more use from using two or more complementary goods together. These characteristics play their role in the single- or double-sided market. The single-sided market is when sellers engage with only one type of customers, and multi-sided markets are the opposite, when there are more than one set of customers acquiring different products and services from a company.

In the digital economy there are different types of digital businesses operating. In the thesis, four different models are presented, the multi-sided platform (e.g. Social media), Resellers (e.g. Amazon and Netflix), input-suppliers and vertically integrated firms (e.g. cloud computing services). Due to the effectiveness of digital environments, these kinds of digital companies hold an advantage when generating revenue compared to more traditional businesses. The reliance on technology and algorithms are big in these companies, and some of these models have a big use of huge amounts of data and user generated content. It is hard to pinpoint exactly how much value can be attributed to data and users, but they to have a role to play in the value generation of these digital companies. It is, however, clear that these companies have no need for a physical presence to conduct their business.

To solve the issue of taxation of these companies, OECD and other organizations has presented a so called virtual permanent establishment. Instead of relying on a physical presence of the companies, the virtual PE presents other factors to connect the company to the state. The OECD has presented three different factors that may be used when defining the virtual PE; revenue factors, digital factors, and user factors. The revenue factor is based on a revenue threshold. The revenue looked at should only include digital transactions with residential customer through the company's digital

platform. The digital factors try to conclude if the company aims to target residents in its ongoing business, and could be a local website, local payment options or a local domain name. The user-based factor consists of a threshold of monthly active users, online contract conclusions or data collected. Both India and the EU has chosen to implement the revenue factor and user factor in their suggestions for a virtual PE.

For attributing profits to the virtual PE, the OECD has presented two "new" methods, the fractional apportionment method and the deemed profits method. The fractional apportionment method basically means that the incomes and expenses connected to the transactions of the virtual PE would be split between the virtual PE and other parts of the company, depending on how much of the income and expense that can be attributed to each part. The deemed profits method is based on a fictional profit, depending on which type of industry the company belongs to. Instead of looking at the real expenses, a presumed expense is used to calculate the income of the virtual PE. The OECD suggests the deemed profits method, since the fractional apportionment method could result in different taxation between traditional and digital companies. However, the EU has concluded that the fractional apportionment method is sufficient and are using a "profit split method".

There is some debate on the real value of data and users, and if these really should be factors that could connect a company to a state. Since the question of digital taxation is best solved internationally, it might be best to use a method that is not as criticized, since we are many states that will have to agree to a solution.

Sammanfattning

De senaste åren har beskattning av den digitala ekonomin hamnat i focus. Det har gett upphov till att bl.a. OECD och EU har kommit med förslag på hur man ska kunna lösa detta dilemma. Traditionellt blir ett företag beskattat i den stat där detta har hemvist eller i den stat där företaget har ett fast driftställe för vilket det är angivet flera olika anknytningspunkter. Dessa anknytningsfaktorer bygger på en fysisk närvaro i staten i fråga. Detta är anledningen till varför det är en utmaning att beskatta digitala företag, då dessa sällan behöver en fysisk plats i en stat för att bedriva sin verksamhet där.

Den digitala ekonomin har blivit attribuerad vissa karaktärsdrag som definierar sättet bolag bedriver sin verksamhet på. Dessa karaktärsdrag består av: direkta och indirekta nätverkseffekter, storskalighetsfördelar, inlåsnings- och byteskostnadseffekter, och komplementerande produkter. Direkta och indirekta nätverkseffekter handlar om fördelarna med många användare och hur dessa samspelar med varandra. Storskalighetsfördelar rör situationer när marginalkostnaden för en vara i princip är noll. Inlåsnings- och byteskostnadseffekten handlar om när en användare gynnas av att stanna kvar på en viss plattform, eller att ett byte av plattform skulle innebära svårigheter för användaren. Komplementerande produkter är helt enkelt produkter eller tjänster som gynnas av att användas tillsammans och ökar nyttan för varandra. Dessa karaktärsdrag spelar sin roll i den ensidiga eller mångsidiga marknaden. Den ensidiga marknaden innehåller företag som gör affärer med enbart en typ av kund, medans den mångsidiga marknaden är motsatsen, att flera olika kundgrupper konsumerar olika produkter och tjänster från ett företag.

I den digitala ekonomin kan man se olika typer av företag vara verksamma. I denna uppsats är fyra olika affärsmodeller presenterade; den mångsidiga plattformen (t.ex. Facebook), återförsäljare (t.ex. Amazon och Netflix), inmatningsleverantörer och vertikalt integrerade firmor (t.ex. molntjänster). På grund av effektiviteten i den digitala världen har dessa företag en fördel gentemot andra mer traditionella bolag när det handlar om att generera värde. Dessa digitala företag är beroende av teknik och algoritmer, och vissa av modellerna har även stor nytta av användarproducerat innehåll och deras data. Det är en utmaning att helt klart säga vilket värde data eller en användare har, men de har en definitiv roll att spela i värdegenereringen i dessa företag. Det är helt klart att ett digitalt företag inte behöver en fysisk närvaro i en stat för att bedriva verksamhet där.

För att försöka lösa frågan om beskattning av den digitala ekonomin har OECD och andra organisationer presenterat förslag på att skapa ett så kallat virtuellt fast driftställe. Istället för att förlita sig på fysiska anknytningsfaktorer försöker man nu hitta andra anknytningsfaktorer att luta sig på i det virtuella fasta driftstället. OECD har presenterat tre olika

anknytningsfaktorer som kan tänkas användas; intäktsfaktorn, den digitala faktorn och användarfaktorn. Intäktsfaktorn baserad på en intäktströskel. De intäkter som ska räknas ihop är de från digitala transaktioner genom företagets digitala plattform. De digitala faktorerna handlar om att företaget har planerat att sälja till en specifik stat och man kollar på om företaget har en lokal websida, lokalt domännamn eller lokala betalmöjligheter. Användarfaktorn innehåller en tröskel baserad på antalet aktiva användare per månad, digitalt ingångna kontrakt eller insamlade data. Både Indien och EU har föreslagit att använda sig av intäktsfaktor och användarfaktorn i deras förslag kring ett virtuellt fast driftställe.

För att kunna knyta en vinst till det virtuella fasta driftstället har OECD presenterat två ”nya” metoder, vinstfördelningsmetoden och uppskattningsmetoden.[1] Vinstfördelningsmetoden innebär att man delar inkomster och utgifter mellan företagets alla delar och försöker utröna hur stor del av inkomsterna och utgifterna som ska attribueras vilken del av företaget. Uppskattningsmetoden innebär att man presumerar utgifterna istället för att se till de faktiska utgifterna. Utgiftens storlek bestäms utifrån vilken typ av affärsverksamhet företaget bedriver och resulterar då i en vinst för det virtuella fasta driftstället. OECD föreslår att man använder sig av uppskattningsmetoden, men EU har ansett att vinstfördelningsmetoden är tillräcklig och använder sig av denna.

Det försiggår en debatt om data och användare kan anses ha något värde och om dessa verkligen ska användas för att knyta ett företag till en stat. Eftersom frågan om en digital beskattning löses bäst på internationell nivå kan det vara bäst att använda en metod som inte är så kritiserad, då vi är många stater som ska samsas om en och samma lösning.

[1] Fractional apportionment method samt deemed profits method.

Preface

This is the thesis that will complete my four-and-a-half-year journey on the Master of Laws program on Lund University. There has been ups and downs, but most definitely most ups. During this time, I have gotten the chance to meet many lovely and intelligent people that has helped me evolve both as a legal practitioner and a person.

This term, when I have written my thesis, I've had immense support from my mom, dad, brother, sister, extended family and friends. I would like to thank them for their patience with my constant complaining. Your support has been a big reason as to why I managed to finish writing this. A special thanks to my study-buddy Johan, who has sat with me many hours and made the days a lot easier.

Finally, I would like to thank my instructor, Mats, who has been very supportive and shown a great interest for my writing. To be able to have a supervisor that you can feel understand you and your situation have been meaningful to me. Thank you Mats, your flexibility, support and kindness has helped me a lot. And I do appreciate a fellow folk-music enthusiast.

Abbreviations

PE	Permanent establishment
OECD MC	OECD model tax convention 2017
The OECD report	OECD interim report on taxation of the digital economy
Infrastructure-as-a-service	IaaS
Platfom-as-a-service	PaaS
Software-as-a-service	SaaS
ITA	Israeli Tax Authorities

1 Introduction

In the last couple of years, the question about fair taxation of the digital economy has grown and are now on the mind of everyday citizens that otherwise would normally not care particularly about corporate income taxation. This may be due to several high-profile cases regarding tax avoidance by large multinational digital companies, like the Amazon Luxembourg state aid case.[2] Whatever the reason, more interest from the public will result in more interested politicians. This is probably the reason why we in the last years have seen reports and proposals being presented by OECD and EU, but also other states like India, Israel, Slovakia and the UK.[3]

In 2015, OECD presented the delayed BEPS action 1 report, where they stated that more work needed to be done to be able to pinpoint a way to best tax digital companies. Since then, we have had several implementations of the intermediary suggestions presented in the report, and a proposal from the EU for a virtual permanent establishment.

Today, we allocate the right to tax a company either by the company having residence in the state or by attributing the company a permanent establishment which then will be seen as "its own business" and will be taxed on profits that can be allocated to this permanent establishment. The factors that may determine a company's status are all based on a physical presence, either through having stores, personnel or even a server based in a specific country. As one might suspect, these factors does not include digital companies like Google or Facebook who has no need to have a physical presence to be able to have users or customers in a certain jurisdiction.

One of the suggestions, and most likely the most popular, is to expand the definition for a permanent establishment and create, what is called, a virtual permanent establishment. The digital companies, that do have a virtual or digital presence, will then maybe be included within the permanent establishment definition and states allowed to tax them. In the EU right now, the average tax rate for traditional international companies is 23,2% while digital international B2C companies pay an average tax rate of 10,1% (B2B is 8,9%), so it's clear that states may want to correct this.[4]

This thesis will therefore look at the characteristics of the digital economy and digital companies to give an understanding of the business that we strive to include in permanent establishment, and later on present some of the different measures taken or proposed to combat the problem that is digital taxation.

[2] Commission decision on state aid SA.38944 (2014/c) implemented by Luxembourg to Amazon.
[3] A. Unnikrishnan and M. Nagappan (2018).
[4] Communication from the commission (2017), p. 6.

1.1 Method and material

Since this thesis do not aim to describe the law as is, but rather the law as it should be, material has been gathered from different scholars and institutions rather than court cases and domestic law. The material has been processed and presented in a way that aims to describe different opinions and views on the subject of digital taxation. A lot regarding this subject is just that, opinions and theories, and not much can be said to be purely factual as there may be no to little real-world implementations. The main source for the description of the characteristics of the digital economy, business models and value generation has come from the OECD interim report on digital taxation. The reason why I have decided to use this as a base for the thesis is that they have comprised an understandable report based on established principles from scholars gathered from a long period of time. The models they use have evolved from one another, and has been accepted, at least to some degree, by a lot of scholars. However, this does not mean that the report presented by the OECD is free from criticism, why I also present, albeit short, some views that may differ from the OECD model.

Other work that are central to the thesis are the BEPS action 1 report on the taxation of digital economy and the proposal from the EU to combat digital taxation. This is because it is relevant to present the views from two of the biggest participants in this question. Other that that, view of other authors has been presented, but due to the area being rather new and uncertain, not a lot of books has been written on the subject. Instead the information has come from white papers and articles, where the authors has presented their views. The authors span over different nationalities, which gives different perspectives.

First of all, the thesis will lay out the playing field that is the digital economy. Two different market structures will be presented. This will be followed by an explanation of different business models that may operate in the digital economy, and how they conduct their business. The last piece in the first part of the thesis is the value generation process within the confines of the models presented in the previous part.

The second part will first describe the virtual permanent establishment and the other suggestions presented in the BEPS report. The other suggestions are presented to show what some alternative measures may be, even though the thesis focus on the virtual PE. To shine light on the difference between different authors view on the virtual PE concept, a short presentation of an alternative is presented. The alternative measures will not be discussed in dept but fill the function of making the reader understand that there are other options. Right after, two different implementations of the significant digital presence test (virtual PE) are presented, the Indian implementation and the EU implementation. Why I did not showcase other implementations of the virtual PE is first, there are not that many, and second, a lot of the provisions share similarities between suggestions.

Lastly, the attribution of profits to the virtual PE is presented. This is to shine more light on the problems that surround the virtual PE, and to present that there are two questions regarding the subject, “where to tax?” and “what to tax?”. The importance of how much to tax is equal to the importance of if states have the right to tax.

1.2 Purpose

This thesis aims to showcase the problematics with taxing digital companies and try to determine if the suggestions presented are feasible, and if one is to prefer against the others. To be able to fulfil the purpose, the following questions are asked:

- What is the digital economy and how do businesses conduct their business within these confines?
- How is value generated within a digital company?
- Is there a need for a virtual PE?

1.3 Limitations

This thesis will be about the virtual PE and will not go in dept on other suggestions for taxing the digital economy. Therefore, the thesis will not talk about the current taxation of digital companies, such as state aid, and will instead focus on describing the current definition of a PE to showcase the differences.

2 The digital company in a digital economy

Today, a company will need some sort of physical presence to be attributed a permanent establishment, and therefore to be taxed in the state which is not their domicile. Under the current definition of permanent establishment, a digital company may be taxed by being attributed a server PE. The problem is that it is not required for a company to have a server in each state that they do business, and the company can conduct their business without any physical presence in that state. More on this in chapter 4.

The technological advancements of mankind have changed the playing field of doing business, and new characteristics has formed which creates a possibility for these digital companies to exist. But what are the characteristics of the digitalized economic world that makes such a business practice possible, and how has the companies conducting business in this world adjusted their way of doing business?

2.1 Characteristics of the digital economy

The OECD report has put down five characteristics that defines the digital economy. However, these are not exclusive to the digital economy and can be attributed to the non-digital markets as well.[5] Defining these characteristics makes it easier to understand the business models under which the digital companies conduct their business and defining the markets in which these companies conduct their business.

Direct network effects are described as the utility from the consumption of a good or service is derived from the number of other end-users consuming the same good or service. The larger the network, the larger the end-user utility.[6]
Indirect network effects arise when a specific group of end-users benefit from interacting with a different group of end-users via, for example, an online platform. This can range from a variety of different businesses, for example accommodation rental where the person interested in renting accommodation are connected with the person interested in renting out their house or apartment.[7]
Economies of scale occur when the marginal cost of distributing or selling of the good or service is practically zero. In a digital company the initial cost of developing the software might be high while the cost for making the product available to the public will be done with very low marginal cost.[8]

[5] OECD report on digital economy p. 27.
[6] Ibid. p. 26f.
[7] Ibid. p. 27.
[8] Ibid.

Switching costs and lock-in effects is the effect when a user has acquired a specific device which comes with a pre-determined operating system. Once they have acquired the device, they are locked-in to a particular operating system. This is due to the fact that psychological and monetary switching costs occur when changing from one system to another. This effect can occur, for example, in social-media platforms where the user has all their activity and contacts stored on a particular site and a change of site would result in a loss of data, but also when purchasing a smartphone with a specific operating system.[9]
Complementarity means that the user derives more utility from consuming two or more complementary goods together. A laptop will be more useful to the user when paired with an operating system, and the utility from spending time on social media platforms will increase when paired with a smartphone with application that makes it possible to share more content.[10]

The fact that digital products and transactions has taken a bigger role in our economy has magnified the relevance of these effects, and the way they reinforce each other have led to a structural change of the economy.[11] The global reach of the internet together with a low marginal cost will allow digital businesses to quickly increase their scale of operation.[12] Larger user bases translate into more utility through direct- and indirect network effects, which in turn results in an increase of the economic value. [13]

2.1.1 Single- and multi-sided markets

As the digitalization has transformed the structure of the economy, the significance of different types of markets has increased. Digital markets, as well as more traditional markets, can be divided in to so called single-sided or multi-sided markets. In single sided markets, sellers engage with only one set of customers.[14] A retailer that sells it goods directly to the consumer will fall into the single-sided market. Multi-sided markets are the opposite, when there are more than one set of customers acquiring different products and services from a company.[15]

Digitalization has changed the effectiveness of conducting business in these markets, communication time has lowered which lead to a possibility to reach large specific sets of customers, suppliers and users globally. It has also led to the possibility to create user networks across different states through platforms, websites and applications. The concept of multi sided

[9] OECD report on digital economy, p. 27.
[10] Ibid.
[11] Ibid.
[12] Ibid.
[13] Ibid.
[14] Ibid. p. 28.
[15] Ibid.

markets has been introduced to be able to study the way digitalized business models has created opportunities of the ability to create vast networks. [16] A multi-sided market can be defined as one when the volume of transactions between users depend on the structure and not only the level of fees charged by the platform.[17]

Indirect network effects together with non-neutral pricing strategies are the characteristics that defines the multi-sided market. By indirect network effects, one set of users benefit from an increase of users on the other side and vice versa. In a accommodation-rental situation, the hosts would directly benefit from a larger base of guests while the guests would benefit from a larger base of hosts. The company that provides the platform that connects these different user bases is essential in the possibility for these groups to interact and find each other. Without the company, most of these transactions would never have taken place.[18]

The key element is to reach a critical mass of users, which is allowed because of the digitalization. Companies has the possibility to build these global platforms that enable users to deal with each other. The company in turn, can impose different prices, or different fees, depending on which user base the customer belongs to. This is the non-neutral pricing strategies, which in turn leads to the company having their optimal pricing be below marginal costs of provision on one side of the market, while being above the marginal cost of provisions on the other side of the market.[19]

2.2 Business models in the digital world

What many of us think of when we talk about a digital business is social media networks like Facebook and Twitter. These types of businesses are a typical example on a multi-sided platform, where indirect network effect and non-neutral pricing strategies plays a central role in the way these companies conduct their business. Other multi-sided business can range from accommodation rentals, as Airbnb, to food delivery services like Foodora.

These are not the only types of companies operating in the digital economy. The OECD report considers multi-sided platforms, resellers, input suppliers and vertically integrated firms (VI). As there are differences between the different types of business models, there might also be a difference in where and how value is generated, and different approaches might be needed to reach a fair taxation of all types of businesses.

[16] OECD report on digital economy p. 29.
[17] Rochet-Tirole (2005), p.2.
[18] OECD report on digital taxation, p.29.
[19] Ibid.

2.2.1 Multi-sided platforms

The multi-sided platform types of companies benefit from larger user bases on both sides of the market and can use non-neutral pricing strategies to maximize this effect.[20] However, Hagiu and Wright has later on attributed the multi-sided platform two further requirements.[21] The multi-sided platform should also enable direct interactions between two or more distinct sides, and each side should be affiliated with the platform. They define "direct interaction" as the two sides having control over the key terms of the interaction.[22] These terms could, in a trade, involve pricing, bundling, marketing etc. "Affiliation" is described as that users on each side make platform-specific investments for the two sides to be able to interact with one another.[23] These investments can range from paying monetary fees to spending time on the specific platform.

For instance, a social media platform is free in the way that you as a user on one side does not pay any monetary fees to use this platform. Instead of charging fees of the user, the company can instead collect data connected to the specific user from the time the user has spent on this platform. This data will then be used to attract advertisers to the platform with the possibility to create very personalized and targeted ads that will reach the user on the other side of the market. The advertisers will pay the company that owns and operates the platform, so they can better market their product to a more relevant target group.

The advertisers will, in this example, benefit from a larger group of users on the other side of the market, which leads them to better be able to reach a large group of target user for their product or service. The benefit for the user in this scenario is that they will be able to see ads for more relevant products than they would without this platform exchange.[24]

Similarities can be found between the social media platforms and online search-based ads. Companies such as Google and Yahoo are thought of as search engines, but they also use the search feature to sell relevant ad-space to advertisers. These platforms use a "keyword bidding system" where advertisers bid on search query terms or keywords such as "hotels" or "luxury hotels London".[25] The price is based on the charge for each time a user clicks on the ad and for a higher bid, the advertisers will usually get better placement of the ad.[26]

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[20] OECD report on digital economy, p. 30.
[21] Hagiu and Wright (2015), p. 5.
[22] Ibid. p. 5
[23] Ibid.
[24] The benefit of seeing ads might be debatable, but it is the advertisement that makes the platform free to use – and seeing personalized ads might be more preferable than more random ads. Also, ads might play a bigger role in the enjoyment of the user, see Evans (2011) p. 6.
[25] Evans (2011), p. 200.
[26] Ibid.

At first glance, it might seem like the indirect network effects are insignificant for search-ad platform. An advertiser only pays when a searcher clicks on the ad, and as long as the value exceeds the cost of each click the advertiser gets, they should be indifferent to the number of searches. Searchers on the other hand don't seem to benefit from other searchers and should be satisfied if they receive the information they were searching for. However, this does not account for one of the key features of a transaction platform. A search-ad platform holds similarities to other transaction-based platforms that seeks to match buyers with sellers. With more buyers, the seller will be more likely to find a match for their ad, and with more sellers the buyer will be more likely to find a match that will lead to a beneficial purchase.[27] In the case of search-ad platforms the advertisers are the buyers of access to users of the search engine while the searchers are selling the access through use of the search engine. More advertisers and more searches increase the chance of finding profitable matches and will so benefit both sides of the platform.[28] As an example, if a searcher made a search on google for "German sim-cards" in 2007, the search would show ten ads, of which eight are directly relevant to the inquiry. If they instead would type the same query into a smaller search engine, MSN, the search would show eight ads, where only two is relevant to the inquiry.[29] So, more advertisers will generally deliver more relevant ads to the searcher and will in doing so benefit the searcher.

As we can see from these descriptions, some value seems to come from the data that the social media platforms and search ad platforms collect from the user. In the social media business, the more data they collect on the user, the more specific the ads can be and will in so increase the value for advertisers to advertise on the platform. A social media platform will therefore be able to attract more advertisers and will indirectly be able to create more value from the data they collect.

2.2.2 Resellers

A reseller is described as a business that acquires products and control rights from a supplier and resell these to buyers. The reseller will be the one controlling the prices and has the liability towards the consumer. Contrary to the multi-sided platform, the reseller will not allow for the direct interaction between the different sides (suppliers and customers) and do not generally make user affiliate with the platform. Some examples of resellers

[27] Evans (2011), p. 207.
[28] Ibid p. 208.
[29] Ibid.

are Alibaba.com, Amazon e-commerce, Spotify and Netflix (when they purchase content).[30]

It is not uncommon for a digitalized business to take elements from several different business models for different sectors of activity. For example, Alibaba.com is a reseller for products where demand fluctuation is expected to be low, while AliExpress is a multi-sided platform where suppliers and consumers integrate directly with one another and also caters to products with a more volatile demand.[31] Spotify is another example with their divide between "free" subscription service, entirely financed by advertising (multi-sided platform) and the regular paid subscription service (reseller).[32]

Since the reseller also acquires control rights to the product provided by the supplier, the reseller also has the opportunity to advertise the product as best suited.[33] A reseller that collects data on their users might be able to better figure out which way of advertisement is best suited and can suggest certain products to users that has previously bought certain other products or are looking to buy a certain product. The direct and indirect market effect will increase the information advantage of the reseller over the supplier, and the collection and analysis of data may result in an added value for the reseller.[34]

Economics of scope across products and customers favors the reseller.[35] As an example, if the company provides only one type of service such as accommodation or transportation they will typically operate as a multi-sided platform. This is because each transaction matches very specific supplies and demands it is more beneficial to leave the control rights and liabilities with the supplier.[36] In contrast, if the product is more standardized, it will be easy for the reseller to adapt to include a wider range of products at a lower average cost. As the reseller might have a global customer base, this will only improve the effect since users are more likely to return to a specific reseller when they have already created an account.[37] If the economies of scope are higher, it therefore seems more beneficial to operate as a reseller.

As a third and last factor dividing the choice of reseller or multi-sided market business model there is the marginal cost advantages. As an example, if the marginal cost is low, e.g. providing digital copies of a product in a reseller model, the risk for demand fluctuation is not as high as if the marginal cost would be higher.[38] If instead the marginal cost is higher, it will result in a higher risk over fluctuation of demand. An idle car in a

[30] OECD report on the digital economy, p. 30.
[31] Ibid p. 31.
[32] Ibid p. 32.
[33] Hagiu and Wright (2015), p. 8.
[34] OECD report on the digital economy. p. 33.
[35] Ibid.
[36] Ibid.
[37] Ibid.
[38] Ibid.

transportation service will still cost the company capital and labor costs, and it will therefore be more suitable conducting their business as a multi-sided platform where the supplier stands the biggest risk.[39]

2.2.3 Input suppliers

Input suppliers will, in contrast to the reseller or the multi-sided platform, never interact with the end customer, nor will they act as intermediaries. Instead, they produce or possess inputs required for a specific production process which they then sell to others. Intel can in one area of business be seen as an input supplier. This will be when they sell processors to PC-manufacturers for use in these personal computers, when they have no direct contact with the final customer.[40]

2.2.4 Vertically intergrated firms

A vertically integrated firm will have control over the production of a good as well as the sale of the good to the final consumer. There are several factors that may make a company to conduct their business via the vertically integrated firms instead of as a reseller. For starters, since the company is in control of the whole chain from production to sale, it creates co-ordination benefits when the company can control and manage operations themselves.[41] This allows for the company to exploit economics of scale due to the increase in production efficiency. However, there is also a rise in costs of additional employees and the costs of production that these employees carry out.

A vertically integrated firm decides what technology to use, where to locate production and number of employees to hire. The decisions over output level will in turn drive the average cost per unit of production. On the other hand, a reseller will acquire the goods directly from the producer or intermediary and the average cost will therefore be driven by producer prices. However, if marginal costs of production are close to zero, the cost might be very low.[42]

On the consumer side of the market, vertically integrated firms and resellers face similar strategic choices. Selling goods via an online-platform will allow for both types of businesses to reach a global consumer base. In case of very low marginal costs, which is true for digital goods, the vertically integrated firm can adjust prices to attract demand from digital or non-digital substitutes like in the case with books.[43] When selling goods via an

[39] OECD report on the digital economy, p. 33.
[40] Ibid.
[41] Ibid. p. 34.
[42] Ibid.
[43] Ibid.

online-platform with a global consumer base, the development of this platform will require a fixed investment cost. This leads to companies with larger product bases will benefit from economics of scope in sense that offering more products via the same website reduces average costs compared to a similar company with smaller product ranges.[44]

2.3 The value creation in a digital company

Having laid the foundation to understand the digital economy in the previous section, this sub-chapter will look at how value is generated in a digital firm that conduct their business according to the business models described in the above section. This section will also take its base in the report of the OECD, since they have pinpointed three different concepts of value creation that are deemed relevant in relations to the previously described business models. The OECD have based their concepts of established views of the different value creation models and the models have evolved in sync with the development of our society and economic systems.

As stated above, three different concepts of value creation are presented by the OECD; value chains, value networks and value shops. The value chain concept describes value being created on the basis of linear production processes as in the way a vertically integrated firm work. It also includes resellers as far as their primary activities follow a sequential or linear pattern.[45] The value network portrays businesses where the value is created by linking users, suppliers or customers using a mediating technology, i.e. multi-sided platforms.[46] The value shop concept describes the case when value is created by arranging resources which consist of hardware and software as well as specialized knowledge to satisfy customer problems/demands.

These concepts are attributed both primary and secondary activities in relation to the business model the value is generated within. Each of these concepts consists of four secondary, or support, activities which are the same for all three of the concepts; infrastructure of the company, human resource management, technology development and procurement.[47] In addition to these support activities, each of the concepts are also attributed some primary activities that varies depending on the business-model chosen and therefore also concept of value creation. These primary activities will be described in the sub-chapters of each concept of value creation.

[44] OECD report on the digital economy, p. 34.
[45] Ibid p. 36.
[46] Ibid.
[47] Ibid. p. 36, 39 and 41.

2.3.1 The value chain

The value chain is a theory that models the conversion of standardized inputs into standardized outputs through a series of related sequential activities – which in turn generate value. The value chain consists of five primary activities that, together with the secondary activities, will determine the profit margin by how effective these activities are carried out.[48] The primary activities are described as followed:

Inbound logistics
Activities related to receiving, storing and disseminating inputs to the product, such as material handling, warehousing, inventory control, vehicle schedule and returns to suppliers.[49]

Operations
Activities related to transforming inputs into the final product, such as machining, packaging, assembly, equipment maintenance, testing, printing and facility operations.[50]

Outbound logistics
Activities related to collecting, storing and physically distributing the product to buyers, such as finished goods warehousing, material handling, delivery vehicle operation, order processing and scheduling. [51]

Marketing and sales
Activities related to providing a means by which buyers can purchase the product and inducing them to do so, such as advertising, promotion, sales force, quoting, channel selection, channel relations and pricing.[52]

Service
Activities related to providing service to enhance or maintain the value of the product, such as installation, repair, training, parts supply and product adjustment.[53]

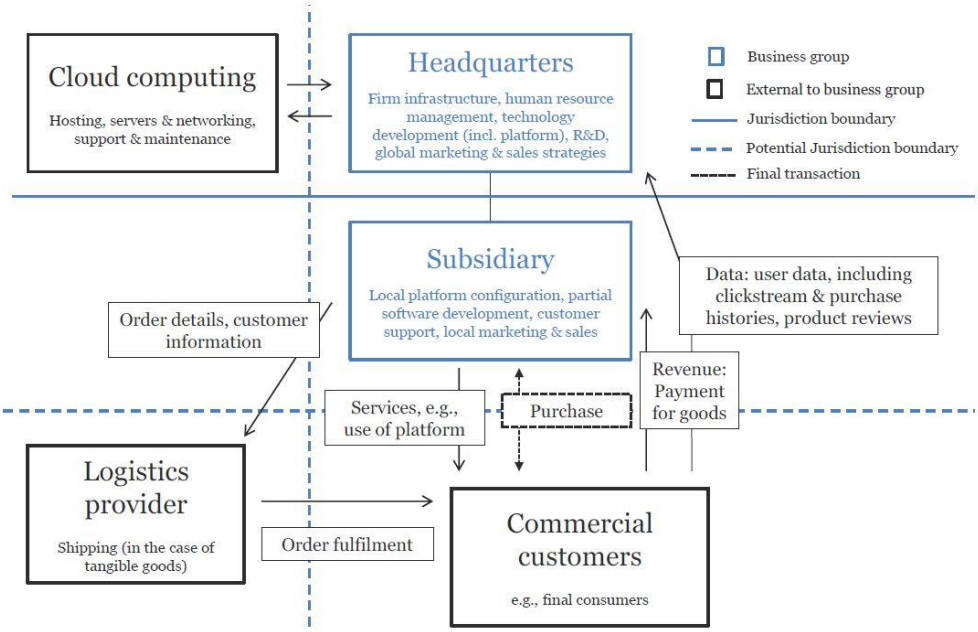
Different types of business will carry out these activities differently depending on the product they offer. For a reseller like Alibaba or Amazon retail, inbound and outbound logistics are the most critical, while the category of operations is most important for manufacturers like Apple, Huawei and Siemens. However, in any business, all the different primary activities will be present to some degree and play some role in the businesses competitive advantage. [54]

[48] OECD report on the digital economy, p. 36.
[49] Ibid. p. 37.
[50] Ibid.
[51] Ibid.
[52] Ibid.
[53] Ibid.
[54] Ibid.

To better illustrate the value creation process, each of the different concepts will be exemplified by applying the activities to a business model. This will be in accordance with the OECD way, and use the examples provided by the report.

2.3.1.1 Reseller and the value chain

As previously described, a reseller will create value by selling good to the final customer through an online store (as to be relevant to the topic of "digital taxation"). The reseller will have the different activities of the company handled at different parts of the company. For example, the HR-management and structural planning of the company will be conducted at the headquarters, while sales might be attributed to a subsidiary for a specific country or region. The model presented below is made by OECD and describes the functions attributed to each part of the business. Of course, this is a general schematic of a reseller business but will give a general understanding of the value chain process in a reseller.



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The headquarter is responsible for the infrastructure of the company, HR-management, development of technology, research, as well as marketing. The headquarter then has a subsidiary located in a different jurisdiction which is responsible for local sales within the jurisdiction, or jurisdictions in the vicinity, of the subsidiary. Local subsidiaries may also engage in software development, as well as local customer support and marketing.

[55] OECD report on the digital economy, p. 61 (Schematic of a general reseller business model).

The primary revenue for a reseller will come from the mark-up of the price when selling goods to the consumer. Some resellers also offer "premium services", such as free shipping, if you subscribe to their service (for example, Amazon Prime). Resellers may also sell the customer data that they gathered to third parties for another source of revenue.[56]

Ownership of IP-rights is central to an online reseller. As a reseller business often will have trademarks, copyrights, patents, domain names, trade dress, trade secrets and proprietary technologies that the business is dependent on to even exist. The platform through which they conduct their business is built up from patents and proprietary technologies. They may also sign confidentiality agreements with employees, customers, partners and others to protect their proprietary rights.[57]

Data collection and uses

As previously stated, an online reseller might sell the data they gather on their customers to third parties, but they may also use this data in their interaction with customers. The customer will provide the data when interacting with the website or app, such as when creating a profile, saves items of interest or makes a purchase. The data the user is providing might also be passive, like when users just browse the website or gives permission to the company to collect their browsing history or geolocation data. If the permissions are given, the company may also collect data from other sites that the user are browsing at the same time.[58]

There are mainly two ways that the company will extract value from the collected data with selling of data to third parties being excepted. Firstly, it may use personalized data to understand the customers preferences and, using these preferences, improve their products and target marketing at the individual level.[59] Second, a reseller may use the data to differentiate pricing between different groups of customers, charging them different prices depending on location. Not much is known to the public of different companies pricing strategies, but three different categories of price differentiation has been pinpointed by the Council of Economic Advisors in 2015.[60] These are as follows; (i) Exploring the demand curve by conducting experiments to learn about demand elasticities, (ii) steering and differential pricing based on demographics, such as showing different products for customers in different locations, and (iii) behavioral targeting and personalized pricing which use customer specific data to target advertisement or tailor pricing for a set of products. By doing this, resellers are able to capture consumer surplus for themselves by using data and thereby maximizing profits.[61]

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[56] OECD report on the digital economy, p. 61.
[57] Ibid.
[58] Ibid. p. 62.
[59] Ibid.
[60] Council of economic advisors (2015), p. 10ff.
[61] OECD report on the digital economy, p. 62.

2.3.1.2 Applying the primary activities of the value chain to the digital reseller model

As stated above, technology is central to the continuation of business for a digital reseller. Technology will support each primary activity, and to clarify in what way I will apply the digital reseller model to the five primary characteristics.

Inbound logistics
In the same way a traditional reseller is dependent on the sourcing of products/suppliers, the receipt and storage of products to sell, and the use of warehouse facilities in which to keep inventory, the digital reseller will also be dependent of these activities (if the digital reseller is selling intangible goods, the warehouse activity will be less relevant).[62] However, there are some key differences between the possibilities for traditional vs. digital resellers.

The first difference, and the one that most people might think of, is the geographical reach of the reseller. A traditional reseller will more likely keep their sales to one jurisdiction while a digital reseller, operating through the web, will be able to reach a global consumer base. Inbound logistics will also be able to perform activities globally, such as sourcing of suppliers of final goods may be performed on the local level by the subsidiary to cater to local customer preferences.[63] Warehouses for storing products being shipped to consumers may also be placed locally. A digital reseller will also not have the same need for traditional brick-and-mortar stores, which in turn will allow them to save on fixed costs connected to renting or owning a location, as well as employee costs.[64]

Operations
The technological aspects will be important in the operations of a digital reseller. First, the technological inputs that underlie the platform, such as computer hardware and software, software engineers, web designers, algorithms and intellectual property, are each a key investment for a digital reseller. The digital reseller may undertake these capital investments themselves, but it is also common to outsource these functions to a cloud computing company.[65] The digital reseller will also handle all payments through electronic payment options. There is therefore no need for physical transportation of cash to the bank, which in turn saves the company money.[66]

[62] OECD report on the digital economy, p 63.
[63] Ibid. p. 63f.
[64] Ibid. p 64.
[65] Ibid.
[66] Ibid.

Outbound logistics
Since the digital reseller have no need for physical locations to sell their product, they will neither have the need for transport between a warehouse and the retail stores. Furthermore, there is no need to keep the retail store stocked. Instead, goods are sold online and delivered straight from the network of warehouses the digital reseller possesses.[67]

As the digital reseller receives orders from all over the world, there will still be no need for physical stores for customers to purchase their product. The digital reseller will be able to sell to non-headquartered jurisdictions without having a physical presence, but they will still be required to have warehouses, if not in the same jurisdiction as the customer, close to the end consumer.[68] Warehouses do require personnel to function, but as we move closer to an automated society, a lot of warehouse work is made by robots and this will only increase in the future.[69]

Sales and marketing
As internet browsing leaves a digital trail of information, there is better possibilities for a digital reseller to acquire and sort the data of each individual consumer than for a more traditional reseller. This digital data is more expansive in its scope and can be gathered in real time in vast quantities, than what was ever possible to achieve with more traditional means.[70] The data is also of higher quality, since it will reveal the patterns and preferences of individual consumers.[71]

This allows for the digital reseller to use this data in ways that are not as available to traditional resellers. Firstly, a digital reseller will be able to use data on product supply and consumer demand to price differentiate. This will allow the reseller to transact at the maximum price that consumers are willing to pay for a given product.[72] The digital reseller will also have the ability to price differentiate at an individual level, and since the prices can be adjusted in real time, the company may be able to capture more consumer surplus then a traditional reseller by price differentiating with greater frequency.[73]

Secondly, the digital reseller will be able to better tailor marketing and targeting by analyzing consumer information that reveals the behavior of the individual consumer.[74] The ads can then be shown at specific websites that one type of consumer may frequent and can therefore be targeted at a more general level but still reaching mostly people that might be interested in the product. This allow for the digital reseller to target their advertising funding

[67] OECD report on the digital economy, p. 64.
[68] Ibid.
[69] Ibid.
[70] Ibid. p. 65.
[71] Ibid.
[72] Ibid.
[73] Ibid.
[74] Ibid.

with greater precision, and the "pay per click" method for online advertising makes sure that the company only pays for the ad when it has been noted by an interested consumer.[75]

Through the capture of data, the digital reseller can monitor each product that the consumer browses without necessarily purchasing the product. To the extent that the company can analyze this data, it can use the data to promote or offer the "browsed-but-not-purchased" products to lower prices and will by doing so be able to transact the maximum price the consumer is willing to pay. This can all happen in real time, which leads to a more tailored experience for each user and a more targetable ad strategy.[76]

Service
Since the interaction the customer has with the digital reseller is mostly via the website of the company, the customer will most likely also be comfortable with a consumer support handled online. A digital reseller won't have the retail stores that provide customer support but will instead do so via e-mail or a chat on the website. A common practice is also to house forums on the website, which allows customers to help one another with problems regarding recent purchases.[77]

2.3.2 The value network

In contrast to the value chain, the value network will provide a model for value creation from providing services instead of goods. The value network applies to the most digitalized companies and especially platform-based businesses such as the multi-sided platform described above. Mediating technology is therefore a central part in the value network, where platforms connect user with one another for them to be able to engage in a transaction or relationship.

Even though value networks have existed in a non-digital world as well, like employment agencies and bank mediating capital between borrowers and investors, the internet has greatly increased the effectiveness of mediating technology.[78] Internet-based value networks include social networks that bring individuals together and allow for advertisers to target specific user groups, search engines that provide the service for free while generating revenue from targeted advertising and the use of user data.[79]
Value in a value network is generated through the action of linking different groups of users together. The linking between users can be direct, as in a social network where user which otherwise would not have been in contact is brought together, or indirect when the users is not linked directly to

[75] OECD report on the digital economy, p. 65.
[76] Ibid.
[77] Ibid.
[78] Ibid. p. 38.
[79] Ibid.

another party, but instead a group of customers is linked through a common pool of funds like in retail banking or insurance.[80]

As the value chain, the value network is attributed primary and secondary activities. The secondary activities are the same as in the value chain, but the value network consists of three different primary activities in contrast to the value chains five. The three primary activities are defined as follows:[81]

Network promotion and contract management
Activities related with inviting potential users to join the network, selection of users that are allowed to join and the initialization, management and termination of contracts governing service provisioning and charging.

Service provisioning
Activities related with establishing, maintaining, and terminating links between users and billing for value received. The links can be synchronous as in a telephone service or asynchronous as in e-mail service. Billing requires measuring users use of network capacity, both in volume and time (time for a telephone service where you are billed by the minutes, and volume for data usage).

Network infrastructure operation
Activities related with maintaining and running a physical and information infrastructure. The activities keep the network in an alert mode, ready to service user requests.

The secondary activity of technology development will be close to a primary activity for an internet-based value network since they are reliant on the technology to be able to mediate between different users. The development of the platform, and the algorithms behind them will be a major part to generating value from a value network business.

As in the case with the value chain, the way that a business carries out each activity will depend on the type of products or services the company is offering. In contrast to the value chains linear arrangement of activities, the activities of a value network will be performed concurrently.[82]

The revenue in a value network may be generated either through a subscription fee, as in the case with LinkedIn premium, a pay-as-you-go fee as Airbnb or ad revenue from collecting user information and offer advertisers the possibility to target specific groups or individuals as in the case of Facebook, Twitter and similar businesses.[83] The non-neutral pricing strategies, described in a previous section, is typical of businesses operating in a multi-sided market.

[80] OECD report on the digital economy, p. 38.
[81] Stabell and Fjedstad 1998, p. 429, OECD report on the digital economy, p. 39.
[82] OECD report on the digital economy, p. 39.
[83] Ibid.

2.3.2.1 The multi-sided platform as a social network and the value network

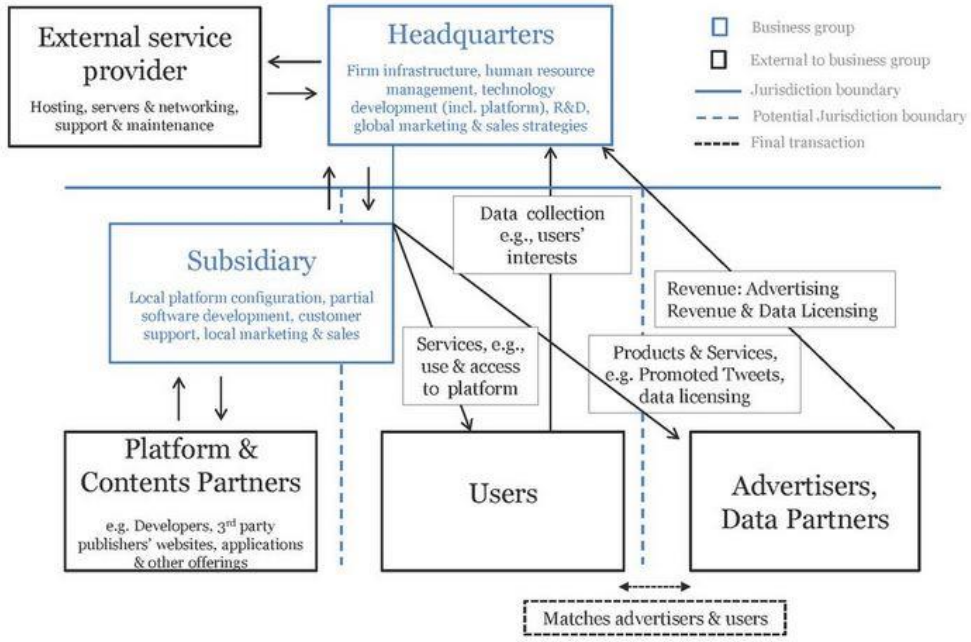
The multi sided platform consists of highly digitalized businesses. As a way to illustrate the value network, I will use the multi-sided platform as a social media network due to its highly digital presence. It is probably what most of us think of when we are talking about digital company, why it will be a more interesting read.

The social network in this section is a multi-sided platform that relies on collecting user data and provides advertising services. This type of business model will on one side of the market provide a platform for users to connect and share content with one another. From the user perspective, the social network operates by collecting the content generated by users that an individual is linked to and present this in form of a news or web feed, which will provide the user with updated content.[84]

On the other side of the market, the social network will enable customers who wish to advertise on the platform to reach their target group. Advertising space will be purchased by the company that wish to advertise their product, service or idea and social networks have several means to offer advertising space on the platform. This can vary from ads that will show up in an user's news feed to promotion of trends that cater to specific user groups or individual users.[85] The placement of the ads is based on factors such as geography, demography, interests, content keywords, events and device type.[86]

The two different objectives of linking users and providing advertising services are complementary; the fulfillment of the first objective is providing market research data for the second. The data the users are providing allows the social network to learn about their users and from the perspective of the company the users are of value since their activity will attract the main customers; advertisers.[87] As for the value chain, the model below will illustrate the general social network business model and it is gathered from OECD:s report.[88]

[84] OECD report on the digital economy, p. 44.
[85] Ibid.
[86] Ibid.
[87] Ibid.
[88] Ibid. p. 45.



The revenue for a social media network will typically be generated by selling advertising space to third parties and potentially selling licenses to user data collected to third parties. It is common for social network companies to generate most of their revenue from the selling of advertising space.[89] The social network will also be dependent on IP-rights, just as an online reseller described in the previous chapter. Algorithms are instrumental for data analysis, which will allow the social network to maximize the user experience while at the same time provide targeted and effective advertising.[90]

Data collection and uses

The social network will typically use the collected data in two main ways. The first way is to improve the user experience to maximize the number of users that will be attracted to the platform, the size of the network and the amount of time that users will spend on the platform. The second way is to better be able to help advertisers to target their advertisement to more relevant user groups.[91]

The data generated from user activities such as posts, demographic and geographic data, and browsing history or current browsing will form the basis of targeting strategies. The larger the amount of data collected and the more refined the data is will generate a larger potential profit. The more information the social network has on a specific user, a more specified profile containing keywords can be created. This will in turn make the social

[89] OECD report on the digital economy, p. 46.
[90] Ibid.
[91] Ibid.

network more attractive to advertisers who can push their advertisement to profiles that matches the customers the advertiser would like to reach.[92]

2.3.2.2 Applying the primary activities of the value network to the social network

Network promotions and contract management
As described above, the social network will foster their community to be more attractive to the commercial customers, the advertisers. A part of this is to recruit influential people to the platform to attract more users to the platform.[93] The more users and the more time they spend on the platform, the more content they create and the more they will be attractive to advertisers. This will in turn increase the value of the advertising business side of the social network.[94]

In turn to attract users, social network will often offer their services to the user without any financial compensation. They can also have low barriers for joining the platform, such as Twitter where no confirmation of real identity is required to create an account.[95] This is to increase the rate in which users visits the platform and the time they spend there. Although this is not applicable to all social networks other benefits might follow with a confirmed identity. In the case of Facebook, the user can use their account with Facebook to confirm their identity on other sites.[96]

The recruitment of advertisers will require sourcing of businesses to which the social network can sell advertising space. As the social network is spread globally, they can, in contrast to more traditional businesses, attract businesses from all over the world and are not bound to operate on a local market exclusively.[97]

Service provisioning
The service provisioning activities of the social network is similar to the way a traditional tv-broadcaster would conduct their advertising business. However, a clear difference is that the social network resides online with a global reach and advertisements can be targeted at the individual level.[98]

The way that the social network measures user engagement with advertisement allows the social network to be more precise in its placements of ads relative to a traditional tv-broadcaster. This is due to the networks ability to collect specific data of the individuals browsing on the internet,

[92] OECD report on the digital economy, p. 46.
[93] Ibid. p. 48.
[94] Ibid.
[95] Ibid.
[96] Ibid.
[97] Ibid. p. 49.
[98] Ibid.

and, from this data, create profiles for each individual user describing their preferences and interests.[99]

In both the case with a television broadcaster and the social network, the viewers or users are attracted to platform by the content made available. While a television broadcaster has to either produce or purchase the content, the content on the social network is generated by users without any financial compensation.[100] It is this content that allows the social network to be more precise in their placement of ads, and the content available will directly be tailored to each individual user.[101]

Network infrastructure operation
Both television broadcasters and social networks has a network infrastructure business model that is comprised of; (i) gathering data about target audiences for advertising purposes, (ii) forming strategies through these target audiences can be reached, and (iii) setting rates depending on different advertising characteristics. However, the way they go about these activities will differ between the two companies.[102]

Since social networks has access to the gathered data and a good knowledge of each users preferences in real time, they will be able to identify trending topics and tailor the promoted products to each users preference.[103] The way they go about selling this advertisement space is usually by auction and will therefore extract the maximum amount businesses are willing to pay for this space. Ultimately, prices of advertisement are therefore linked to the engagement of each user.[104]

2.3.3 The value shop

The value shop operates in a single-sided market where one type of customer is in focus. The use of extensive technology to solve user demand or problems characterizes the value shop. Extensive technology is the combination of hardware, software and knowledge used to change a specific outcome, and the type of problem or demand to be solved will determine the intensity of the shop's activities.[105]

Customer problems are defined as differences between an existing state and an aspired state. For example, non-digitalized business operations could be the existing state and the digitalization of the operations, like a cloud computing alternative, could be the aspired state. Value creation is therefore

[99] OECD report on the digital economy, p. 49.
[100] Ibid.
[101] Ibid. p. 49f.
[102] Ibid. p. 50.
[103] Ibid.
[104] Ibid.
[105] Ibid. p. 40.

the change from one state to another, where the extensive technology is the means to the solution.[106]

The value shop is often born out of a strong asymmetry of possession of information between the business and the customer, and the asymmetry is the reason why the customer approaches the business.[107]

As the value chain and value network, the value shop is comprised of the same secondary activities. In addition, the value shop is attributed five primary activities that are defined as follows:[108]

Problem finding and acquisition
Activities related to recording, reviewing, and formulating of the problem to be solved and choosing the overall approach to solving the problem.

Problem solving
The process related to generating and evaluating alternative solutions.

Choice
Activities related to choosing among alternative solutions

Execution
Activities related to communicating, organizing, and implementing the chosen solution.

Control and evaluation
Activities related to measuring and evaluating how well the implementation has solved the initial problem.

The value creation from a value chop stems from the solutions to customer demands, rather than services offered at low prices. Businesses that may be included in this category is input suppliers of computing power to other business (cloud computing services) and vertically integrated professional services business.[109]

2.3.3.1 Cloud computing services as an input supplier and the value shop

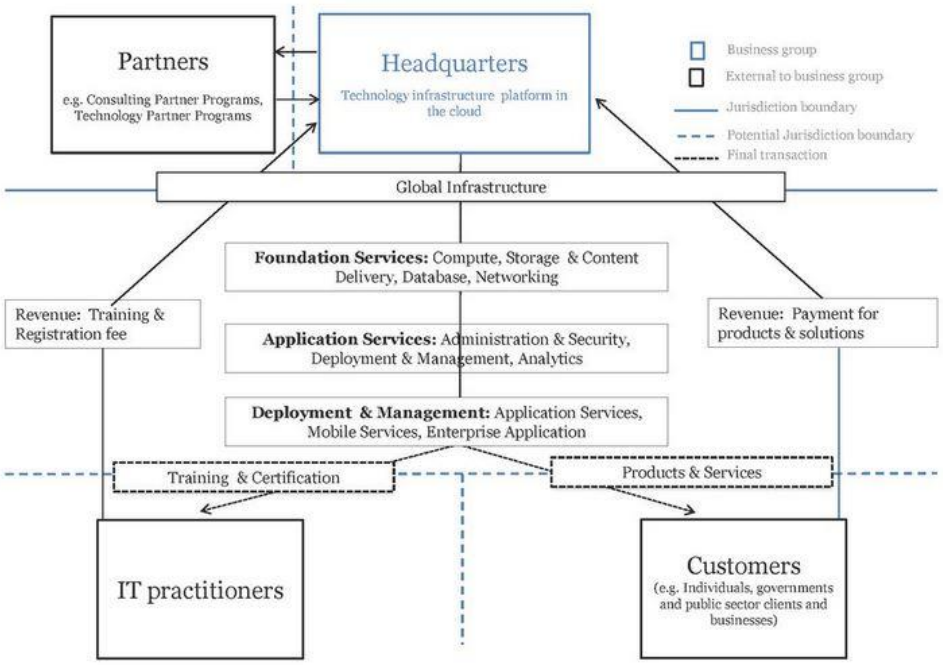
The cloud computing business creates value by providing a set of computing services to the customers. Typically, these services are supplied in a standardized and highly automated way and can be classified as infrastructure-as-a-service, platform-as-a-service and software-as-a-service, which will be defined further on.[110]

[106] OECD report on the digital economy, p. 40.
[107] Ibid.
[108] Stabell and Fjeldstad, 1998, p. 423, OECD report on the digital economy, p. 41.
[109] OECD report on the digital economy, p. 41.
[110] Ibid. p. 73.

The cloud computing company provides a possibility for technology-based business activity to take place on a network of remote severs, instead of a local server or a personal computer. Because of this, a possibility opens for business to outsource certain activities and will by doing this save money by not having to invest in local hardware. This makes cloud computing services especially attractive to small businesses or startups that lack the financial and technological ability to build their own infrastructure.[111]

Through the cloud, companies will also be able to access the latest technology as these services can be constantly updated remotely. This allows for the companies using these services to have a rapid growth and become more and more digitalized.[112] Two such examples are Airbnb and Spotify. Airbnb migrated its computing to Amazon Web Services one year after Airbnb launched in order to gain flexibility in server usage. This enabled Airbnb to achieve scale very quickly, and the number of users went from 4 million in January 2013 to 15 million in July 2014.[113] Spotify relies on Amazon Web Services to store the vast music collection they stream to their customers and to deliver the Spotify application and software updates to users.[114]

The model of a general cloud computing business below is presented by the OECD and illustrates the general structure.[115]



[111] OECD report on the digital economy, p. 73.
[112] Ibid.
[113] Ibid. p. 74.
[114] Ibid.
[115] Ibid. p. 75.

As shown in the model, the cloud computing company can group their activities into three categories; Foundation services, application services and deployment and management services. The cloud computing company may also run programs with additional support and consulting for certain customers to get high profile customers to develop and promote the service. The customers may also be offered training and certification programs to develop knowledge and technical skills in exchange for a fee.[116]

In the cloud computing company, revenue is generated through the global sales of services. While prices may vary between different providers, a key appeal to the customer is that the services often can be consumed as a pay-as-you-go service. This allows the customers to pay for what they actually use and need without upfront expenses or long-term engagements.[117]

The creation of computer hardware, network infrastructure, software and algorithms are a key source for competitive advantage for a cloud computing company, and they own various IP assets.[118] The cloud computing company will not rely on collection of customer data, and the confidentiality of data is central to customer concern. The exception is when companies help their customer better insight through analyzing customer data where the customer provide their consent.[119]

2.3.3.2 Applying the primary activities of the value shop to the cloud computing company

Problem finding and acquisition
Problem finding and acquisition have a lot in common with the marketing and sales activity in the value chain; identifying the customer need and choosing the solution approach. Generally, the cloud computing company maintain regional or global sales forces with the aim to acquire customers, which include governments and other public sector, individuals and corporations.[120]

Some cloud computing companies has stated that their sales strategy is to gain market share by keeping prices low to boost volume.[121] Another mean to attract customers is the pay-as-you-go model, which will allow smaller business or startups to acquire an extensive computing network and the opportunity to achieve a rapid increase in scale without taking the risk of large investments.[122] It will also allow for the customer to conduct business

[116] OECD report on the digital economy, p.75.
[117] Ibid.
[118] Ibid.
[119] Ibid.
[120] Ibid. p. 76.
[121] Ibid. p. 75.
[122] Ibid. p 76.

across jurisdictions since most cloud computing services have a global reach, and the only necessity is an internet connection.[123]

Problem solving
As stated previously, the cloud computing company offer services to the following main categories:[124]

- **Infrastructure-as-a-service** refers to infrastructure, such as computing capacity. IaaS includes all physical computing resources that support delivery of applications as a service. This can include computing services, database storage and networking capabilities.
- **Platform-as-a-service** is a method that allows for an entire computing platform to be accessed via cloud computing. PaaS includes a broad collection of application infrastructure, application platforms and database services. This makes it possible for customers to outsource their platform infrastructure needs and therefore avoid purchasing and implementing a new platform.
- **Software-as-a-service** incorporates the delivery and management of a software application to a remote client. SaaS relies on the centralized hosting of a application to a remote client that is typically accessed through a web browser application.

Choice
Depending on the type of service, the choice may be entirely digital, such as the lease of computing power or running of code on a remote server or may involve physical steps such as transporting data from the location of the customer to a cloud computing companies' facility for upload to the cloud.[125]

Execution
The customer purchasing the service can select availability zones and may choose to be hosted in specific availability zones to be closer to their intended market or to meet legal requirements. These availability zones are often located in different jurisdictions but are connected through fiber-optic cables to allow the provider to ensure continuity of customer service in the event that computing power in one availability zone fails by switching over to another availability zone automatically. This implies that a customer may rely on a multitude of availability zones across regions and jurisdictions.[126]

Control and evaluation
As stated previously, control and evaluation describe the category of activities related to measuring and evaluating how well the solution has solved the initial problem. The cloud computing companies also work together with their customers to devise custom solutions to their problems

[123] OECD report on the digital economy, p. 76.
[124] Ibid. p. 77.
[125] Ibid.
[126] Ibid. p. 78.

and ensure that they provide sufficient support to key customers.[127] They would also provide conferences or webinars to provide insight into operations and new product, and also provide training programs to develop the skills and knowledge for the customer to better be able to make use of the companies' services.[128]

2.3.4 Critisisms of the OECD value creation view

Even though the OECD view on value creation is based on literature and opinions from renowned authors, there is criticisms towards the way that value is attributed to data and users. Aleksandra Bal has stated her views on the value creation process presented in the interim report on digital taxation from OECD and has put forward some arguments toward the way OECD view towards data and users and their relation to value creation.[129]

Data

According to Bal, data is to be seen as a raw material in need for processing and would mean little to the company's value creation process unless coupled with technologies and algorithms that are made by people in another jurisdiction than that of the user. There will therefore only be companies that can properly use the data to accelerate innovation and improve customer experience that will be able to improve their competitive position. Ultimately, the value from data is created by the use of data and data analytics tools by individuals.[130]

Even though data can positively transform a business, it may also have the opposite effect if not processed and handled properly. 49% of data inaccuracy can be traced back to human error, which therefore is the biggest single contributor to data inaccuracy.[131] This will lead to organizations having to implement technologies to ensure rules are being followed and to help identify and prevent errors that are present during entry of transformations of data. This shows that the human element is a very important value driver, even in the data domain.[132]

As data is seen as a raw material input in business processes, according to Bal, it should also be treated as such. Without skilled people the data will therefore be of no value, since you will need the algorithms and technologies to analyze and process the data to gain insights about customer behavior. Bal states that no attempt to tax business inputs has been made,

[127] OECD report on the digital economy, p. 78.
[128] Ibid. p. 78.
[129] Bal, (2018).
[130] Bal, (2018), Paragraph 4.
[131] Ibid.
[132] Ibid.

and that inputs has to be converted into outputs, the outputs has to be marketed, sold and if it results in a profit, these are the profits that should be taxed. The aim should instead be on tightening loopholes rather than shifting taxation to the input side.[133]

Users

Even if there is a commonly held view that user participation is an important contributor to value generation in certain types of businesses, but there is also an admittance to the complexity to come up with a suitable approach to measure the value generated from user engagement. The first issue is that not all user contributions are equal, and that the value generated from different users varies greatly. If a user has an account on a platform, but never visits the platform and therefore does not contribute to the content on the platform, they cannot be said to create any value. As the ability to create networks and their engagement with the platform is the key value contributor, these factors should be accounted for in determining the user value for tax purposes.[134]

The second issue is how to determine a user's location. Several indicators can show the location of the user, such as IP-address, billing address or payment details. To avoid conflicts with the VAT location basis, the user location definition should apply a similar system as to the VAT system. If not, a company could end up having the same customer in different jurisdiction for VAT and income purposes, which goes against common sense.[135]

Bal also questions the absence of a differentiation between "good" user contribution and user contribution that may actually hurt the platform. A user that posts offensive statements to a social media platform may cause reputational damage to the platform provider and will require the provider to take steps to ensure that these types of contributions are trackable and then delete these contributions. No such distinctions are made in any of the international taxation proposals when calculating the value generated by users, and it would be logical to expect that since positive user contribution is taxed, the negative user contribution should reduce the tax bill.[136]

[133]Bal (2018), paragraph 4.
[134] Ibid. Paragraph 5.
[135] Ibid.
[136] Ibid.

3 Conclusions

It would seem easy to conclude that the digitalization of the economy has had a major impact on the different characteristics of the economy and the way that businesses conduct their business. But in what way has that effected the taxation of these companies and where is the value generated? As we could tell from the criticisms from Bal, there is complex issues when attributing value to users and data.

Multi-sided platforms
In the multi-sided market, users on both sides seem to have a vital role in the marketplace. Focus lies on the users on the "free" side of the market. The "free" side will be described by the social media company, and the userbase consist of users sharing their interests and preferences via posts and messages on this social network. This relates to the multi-sided platform and, as described above, the users affect the way that the companies conduct their business and where the value can be said to be generated.

The indirect network effects are also of major importance to the multi-sided platform, whether they are a social media network or an accommodation rental service that matches people that need to rent accommodation with people wanting to rent out their place. A large sized user base will benefit the business by the possibility to connect more users (and by doing that, increase the attractiveness for both the people wanting to rent a place and the people wanting to rent out their place) and selling more attractive advertising space to the advertisers by having more data to present. Even though some user may contribute negatively to the profits of the platform, most users will be contributing in a way that actually generates value. The offensive posters may also have followers that support them and may therefore also contribute in some way to the value generation on the user side of the spectrum.

As a lot of the focus is aimed towards the users and the data they produce in the multi-sided platform, data is definitively a large contributor to the profit these businesses are able to generate. The data is central to the customization of the website to attract users and make them spend more time on the platform, and also central to attracting the commercial customer, the advertiser. By no means should this undermine the importance of intangible assets owned by the company, as the use of technologies and algorithms is necessary to be able to use the data collected in its intended way. The importance of the processing of data is central in the arguments of Bal, but she does think from the perspective of a reseller model, where value is generated through converting inputs into outputs, and that the profit generated from this is the profit that should be taxed. The data may have some attributes of a raw material that needs processing but is still a different kind of raw material than for example oil or wood. The data itself will be the

same or similar to when it first was collected, and it will rather be the reorganizing and analyzing of the data that contributes to its value generating properties. It will therefore be a value contributor that is split between jurisdictions, and no value generation can be made without the other part of the equation.

The value in a multi-sided platform can therefore be said to be created in two separate jurisdictions, partly in the jurisdiction of the user and partly in the jurisdiction of the development of technologies to be used in relation to this data. It is obvious that the jurisdiction of the user will contribute in big part to the profits, and that there is no necessity to have a physical presence in that jurisdiction for the company.

Resellers

The digital reseller will be able to reach a global customer and supplier base and will by doing so increase their chances to acquiring the right type of product and customer. The value that is created will stem from the mark-up of the price from the supplier when selling the good to the final customer. But as we can see above, the digitalization has given possibilities to increase the value generated from this mark-up.

One big factor in this increase of value creation is, as with the multi-sided platform, the possibility to collect and analyze data. Firstly, the data itself can be a product this reseller offers, but to third parties rather than the customers themselves. The data can be of value for other businesses when targeting certain customers or building up their platform. The data will therefore also be of value to the company collecting the data itself and will contribute on its own to the profits of the company.

Second, the data can also be used within the reseller business itself when determining the interest of a particular customer and when determining the highest price the customer is willing to pay for a certain item. The use of data will be used together with the algorithms and technology developed or used by the company to create added possibilities to market certain products and adjusting the platform in real time to maximize the will of the customer to consume.

The resellers high reliance on intangible assets will also be a part of the value traded within the company. Royalty payments may be made from a subsidiary for use of these intangibles, but the taxation of these royalty payments may not reach the user jurisdiction. The activity that takes place in the user jurisdiction will instead be the exercise of the businesses core activity, which in this case will be the selling of products to the final consumer. As stated above, the collection of data will also happen at the user jurisdiction but not necessarily the development of the algorithms and technology that will use this data. This will of also generate added value for the company.

Input suppliers and vertically integrated firms

In the chapter of the value shop, the cloud service will be described both as an input supplier and a vertically integrated firm. I will focus on the cloud service as such in this conclusion as a description of the value creation that may occur in these types of businesses.

The cloud computing service is one of the most highly digitalized models of conducting business that exists, and the activity of the company can for each separate user span over multiple jurisdictions, while the company itself may be based in a completely different jurisdiction.

These cloud services will often have servers spread across regions and these are connected through a fiber optic network. The servers that are placed may be defined as a permanent establishment under the server definition, but this might still not give the user jurisdiction a right to tax the company if the servers themselves are not located within the same jurisdiction.

The value itself will be created by locating the problem of the user and providing a solution to said problem. The problem and solution for a cloud computing business can consist of the digitalization of the customer business and give them resources to develop their business without investing in infrastructure.

Summary
As we can see, there is definitely a problem with the way we are able to attribute profits to the end user jurisdiction. Some of the value can be said to be generated from the collection of data in most kinds of digitalized businesses, but this will also be dependent on the use of technologies and algorithms that process and analyze this data.

The data will act similar to a raw material that has the need to be processed for it to be of any use to the company, but the data will still be a big contributor to the value generated due to its properties. The data is dependent on the technologies and the technologies will be dependent on the data to provide a use.

The way intangible assets play a big role in these digital businesses opens up possibilities for taxation of payments of royalties from the subsidiary to the headquarters within the company, but a lot of times the payment of these royalties cannot be attributed to the end user jurisdiction.

There may also be a lot of advantages to conduct your business as a digital company in comparison to the more traditional company. These advantages range from more freedom in which customers you want to provide your service to due to the global aspect of the internet, to better be able to collect relevant data to increase your sales and attract more customers. Not only can they use the scope of the internet and data, but a digital company will, according to the EU, pay less in tax than a traditional company, due to the

lack of defining a taxable entity in the user jurisdiction.[137] This combined with a larger revenue growth and the expansion in the share of market cap the digital companies enjoy, will create a great advantage for the digital company compared to the traditional company. From the taxation standpoint, this can be said to be an unfair taxation between companies.

[137] Communication from the commission (2017), p. 6

4 Permanent establishment – Current definition

Traditionally a company will be physically present in a state that they want to conduct business in, and therefore the taxing of said companies has been done by attributing profits to a physical presence in a state, via a permanent establishment, and then taxing said profits. The current definition of permanent establishment, in the OECD model tax convention 2017, establish the different ways a company can be said to be physically present in a state, and range from a more traditional branch through which the company does business to a server which a company has placed in a specific state.

Permanent establishment is defined according to article 5 in the OECD MC, and the article states that the term "permanent establishment" means a fixed place of business through which the business of an enterprise is wholly or partly carried on. We can by this definition already suspect there are some problems including companies that do their business only in the digital world in this definition, although some of them might be included via the server permanent establishment.

4.1 Fixed place of business

Paragraph 1 in article 5 gives a general definition of the term permanent establishment and brings out its essential characteristics in the sense of the convention. The second paragraph specifies a list of examples of places of business which can be regarded as constituting a permanent establishment, but the list is to be read in context to paragraph 1.

As stated in paragraph 1, the business must be conducted from a fixed place. As stated by the commentaries to the article some conditions must be met. First, there must be a place of business, facility such as premises or, in certain instances, machinery or equipment. The place of business also must be established at a distinct place with a certain degree of permanence, and lastly the business has to be carried on through this fixed place.[138] The term place of business covers any premise that are used to carry on the business of the enterprise, whether or not they are exclusively for that purpose. The central definition is that the company has a fixed place at their disposal, and there is no need for the company to own said premise. With that said, it is important to be clear with the fact that the mere presence of a company does not necessarily means that that location is at the disposal of the company. The business of the company also has to be carried on in this fixed place.

[138] OECD MC, p. 117

This will depend on the company having the effective power to use the location as well as the extent of the presence of the company in that location and the activities it performs there.[139]

When a company has an exclusive right to use a location which is used to carry on the activities of the company, it is clear that the company has the location at their disposal. This can also be the case when the company is allowed to use a location belonging to another company or is used by a number of different companies and conducts its business activities at that location during an extended period of time. This will not be the case when a company's presence is so incidental that the place cannot be seen as a place of business of the company, for example where employees of a company regularly visits a premise without working in these premises for an extended period of time. A salesman can regularly visit a customer at their office, but in that case the customers premise is not at the disposal of the company that the salesman represents. On the other hand, this situation can constitute a permanent establishment, but not under the "fixed place of business" requisite.[140]

If this salesman conducts the business of the company through a home office, the home office might constitute a fixed place of business for the company.[141] This requires the salesman to use the home office in a continuous way for carrying on the business of the company. It must also be clear that the company has required the salesman to use that location to conduct the business of the company, for example by not providing an office to the employee, when the nature of employment requires an office.[142]

As stated above, it is not enough that the company has permission to use a location, but it has to be a location through which the company conducts business. The words "through which" has been given a broad definition to apply to any situation where business activities are carried on at a particular location. For instance, a company engaged in paving a road will be considered to carry on their business through the location where the activity takes place. That the place of business has to be fixed does not necessarily mean that the equipment must be fixed to the soil. It is enough that the equipment remains on a particular site.[143] However, the nature of a construction project can be such that the activity has to be relocated continuously as the project progresses. The activity may be moved to another location within the same state, but still be part of the same project. In such cases, the project itself can be regarded as a permanent establishment, if it lasts more than twelve months.[144]

[139] OECD MC, p. 118f.
[140] Ibid p. 119.
[141] The Swedish tax agency, Dnr: 131 160469-15/111.
[142] OECD MC, p. 120.
[143] Ibid. p. 119f.
[144] OECD MC art. 5(3) and p. 132.

A permanent establishment may also exist if the business of the company is carried on through automated equipment, while the activities of the personnel is restricted to setting up, operating, controlling and maintaining the equipment. If a permanent establishment can be constituted by automatic equipment depends on whether or not the company carries on a business activity besides the initial setting up. A permanent establishment does not exist if the company leases the automated machines to another company. A permanent establishment may exist if the company that sets up the machine also operates and maintain them for its own purpose.[145]

4.1.1 Server PE – Taxing of e-commerce businesses

As stated above, an automated machine can constitute a permanent establishment if used by the company. A distinction must be made between the physical machine which is set up at a location and the software and data which is used by, or stored, on that machine. A web site that is stored on a server, does not itself constitute intangible property and can therefore not be said to have a location that constitutes a place of business as far as the data and software that the website constituting that website is concerned.[146] On the other hand, the server on which the website is stored and accessed is a machine that has a physical location and can therefore constitute a fixed place of business of the company that operates the server.[147]

Keep in mind that it is the server that constitutes the fixed place, and not the website itself. Therefore, it's important to make a distinction between the two, as the operator of the server might not be the same company that has its website stored on the server. If a company is hosting their website on a server at, for example, an ISP (internet service provider), the contract may be based on the amount of space it takes to host the company's website. These types of contracts do not typically mean that the company with the website has the server at their disposal in such a way that it could constitute a fixed place of business, since the company itself is not physically present via the server, but only present via the software and data stored on that server. If, however, the company carrying on their business via the website also has the server at their disposal, if they own and operates the server which hosts the website, the place where the server is located may constitute a permanent establishment of the company if the other requirements of the article is fulfilled.[148] The possibility of moving the server is not relevant for the server to be such a fixed place as required, but instead it is relevant if the server, in fact, are being moved. The server will have to be placed at a certain place for a sufficient period of time to fulfill the requirements of a fixed place according to paragraph 1 in article 5.[149]

[145] OECD MC, p. 126.
[146] See for example Swedish case HFD case no. 4890-13.
[147] Ibid. p. 152.
[148] Ibid.
[149] Ibid.

The importance of the automated machine is clarified by the non-requirement of personnel in the vicinity of the server. If the carrying on of business does not require personnel to be present at the site of the server for operating it, the server will, on its own, be enough for the company to conduct their business.[150] However, if the server is used only for such preparatory or auxiliary activities covered by paragraph 4, it might not meet the requirements for being a permanent establishment. Whether an activity is considered to be preparatory or auxiliary has to be examined on a case by case basis and is dependent on the various functions performed by the company through the server.[151] If the functions performed by the server is deemed to be an essential and significant part of the business activity of the company as a whole, or if they are a part of the other core functions of the company, these activities would not be covered under paragraph 4, and if the server is deemed a fixed place of business, a permanent establishment would be attributed to the server.[152]

For example, some ISPs are operating their own servers for the purpose of hosting web sites or other software for other companies. For these ISPs, the operation of their servers for providing services to their customers will be considered an essential part of their business activity and will not be considered as a preparatory or auxiliary activity. Another example is a retailer that sells its goods via a website. Even if the company operates its own server at a specified location is not enough to conclude that the activities performed at the location are more than preparatory or auxiliary.[153] For the server to be concluded a permanent establishment in these cases, one will have to examine the activities performed at that location in light of the business carried on by the company. For example, if the server is used for hosting a web site which is used exclusively for advertising, like a product catalog for the product the company sells, the activities will be deemed preparatory or auxiliary in relation to the main business activity of the company and will therefore not constitute a permanent establishment. If, however, the contract with the customer is concluded through the web site, the payment and the delivery of the product are performed automatically through the web site, the activities cannot be considered to be preparatory or auxiliary, and a permanent establishment will be attributed to the company.[154]

[150] OECD MC, p. 153
[151] Ibid.
[152] Ibid.
[153] Ibid.
[154] Ibid.

5 The virtual PE – Where to tax?

Having laid out the basic characteristics of the digital economy and the digital companies, I will in this chapter describe the different measures taken by the world to combat the aggressive tax planning that these digital companies have undertaken. Some of them stem from the OECD BEPS project, and have been implemented as temporary solutions while the OECD will continue working on a global solution to the problem, while the EU have tried to lay out a proposal for taxing these companies.

As stated above, several states have provided different solutions to the taxation of these companies, but can these be said to work as a permanent solution to the taxation of these companies? As the company tax will be a small portion of the taxation income of a state, this question is of a more principal matter, and is about one of the most important aspects of the taxation system – fairness.[155] For the taxation of these digital companies to happen, we will have to reevaluate the way we conduct taxation today where everything is based on the production jurisdiction.

5.1 Significant economic presence

In 2015, the BEPS action 1 report was presented by the OECD addressing the tax challenges of the digital economy. Three different options were developed to combat the challenges of taxing the digital company, and these may be used individually or together. One of the options presented was to create a taxable nexus based on significant economic presence.[156] The basis of a significant economic presence is that revenue will be generated on a sustained basis from a country, and by this form a significant economic presence if combined with other relevant factors.[157] This is more of a qualitative economic presence test, rather than a quantitative based test which other scholars have proposed.[158] These factors are presented in the BEPS report and consist of revenue factors, digital factors and user factors.

Revenue factors
As a way to define a significant economic presence, the revenue factor may be the clearest indicator to that such a presence exists. Even in multi-sided businesses the two markets are likely to be strongly interrelated and will

[155] Around 5% of the total income from taxes in Sweden during 2017, see: https://www.ekonomifakta.se/fakta/skatter/skattetryck/skatteintakter-per-skatt/.
[156] OECD BEPS action 1, p. 107.
[157] Ibid.
[158] Avi-Yonah (2014), p. 15.

most likely be situated in the same country.[159] Because of the way user data enhances the value of the services the company offers, it would imply that a revenue based factor would be helpful in determining if the company has a significant economic presence since the data collected in the jurisdiction would have an impact on the revenue earned in the same jurisdiction.[160] The revenue based factor should not by itself create a taxable nexus, but should rather be combined with one of the other factors to determine the significant economic presence. The revenue factor will, however, be a base in the determination and is required to establish a significant economic presence.[161] The attributes for the revenue-based factors are; transactions covered, level of the threshold and administration of the threshold.

- **Transactions covered** would include only digital transactions concluded with residential customers though the company's digital platform. The transactions would include the conclusion of a contract for the sale of a services or goods where the conclusion primarily relies on an automated process. To include taxpayers in similar situations, but where the conclusion may not be done on the platform itself, the OECD recommends defining the factor to include all revenue generated by transactions between a resident and a non-resident company remotely.

- **Level of the threshold** would include the gross revenues generated from remote transactions. The amount should be absolute and presented in local currency to avoid manipulation. The factor should also be applied on a related-group basis to prevent the risk of fragmentation of remote-selling-activities within the same country among several foreign affiliated entities. There should also be a possibility for the taxpayer to demonstrate that it did not artificially fragment the remote-selling-activities in order to manipulate the threshold.

- **Administration of the threshold** relates to the actual identification and measuring of the remote sales activities of the non-resident company. This won't connect directly to defining the significant economic presence a company may have, but will still be an important tool to make sure that the thresholds can be followed in a fair way.

Digital factors

The digital factors presented by the BEPS package all focus on the local presence of the company in a particular state. This is to determine whether the company focus on providing a certain service or product to residents in this state, and therefore motivate a value attributed to this state. The factors

[159] Avi-Yonah (2014), p. 15.
[160] OECD BEPS Action 1, p. 107.
[161] Ibid.

consist of three different attributes – a local domain name, a local digital platform and a local payment option.[162]

- **The local domain name** is described as a "substitute" for a local address that the company occupy, where they establish their store front in the form of a localized domain name. While the company's home domain name may be .com the site targeting a country might end in for example .se if targeting Sweden. Even if the company would not use the domain per se they would have an interest of securing it to protect their own trademark.[163]

- **A local digital platform** is something that is practiced quite frequently by non-resident businesses. This platform may be in the local language and cater more specifically to the local preferences of the users due to cultural norms. Examples of what could constitute a local platform is; local language, local marketing with special promotions and discounts and local terms of service for users and customers. It is important to note that local platforms do not necessarily represent the political boundaries.[164]

- **Local payment options** cater to the need for a seamless purchasing experience for the local user. The prices will also be reflected in local currency, local taxes, duties and fees with the option of using a local form of payment for the purchase. Since the company will invest a lot of time and resources in such a system one can assume that they willingly have targeted the users in the specific country and by doing so participating in the local economic life.[165]

User-based factors
The importance of network effects makes the user-based factors an important indicator of a purposeful and sustained participation in the economy of a country.[166] As with the digital factors, the user-based factors consist of three different attributes. The attributes consist of monthly active users, online contract conclusions and data collected from the users.

- **Monthly active users** refer to the number of registered users logging in to and visited the company's digital platform in the 30-day period ending on the date of the measurement. A factor based on the number of monthly active users gives the opportunity to measure the customer base in a country in size and level of engagement.[167]

[162] OECD BEPS action 1, p. 107.
[163] Ibid p. 109.
[164] Ibid.
[165] Ibid.
[166] Ibid p. 110.
[167] Ibid.

- **Online contract conclusions** will also help with indicating the participation of a company in a local economic life. Similarities can be found with the "dependent agent" PE test in article 5 of the OECD MC.[168] This contain a requirement that the contract conclusion will be carried out by a person acting on behalf of the non-resident company. Instead of a person, the digital company will instead conclude the contracts online without the need of interference by local personnel or dependent agents. For example, one such conclusion of contracts may be when the user accepts the terms of service when signing up to a free service.[169]

- **Data collected** is, as described in the previous chapters, also a good indicator of the level of participation in a local economy by a company. The focus would lie on the origin of the data collected and not take into account where the data is stored or processed. The range of data would not be confined to only personal data, but would also include user generated content, product reviews and search history. This information could be coupled with a proportionality test where we see how the separate data collected measures in comparison to the total amount of data stored by the company.[170]

The qualitative nature of the BEPS test is not new, and in the U.S the supreme court has developed a facts and circumstances test to determine whether sub-federal laws passed the constitution. The Supreme Court later stated that in the context of sales and use taxes, the facts and circumstances test created uncertainty that is not acceptable, due to companies with interstate commerce would never be certain whether a state would be able to include the company in its tax jurisdiction.[171] The uncertainty in law is usually solved by the higher courts in a jurisdiction, but on the international tax level there is no ultimate court to define uncertainty within the law.

The quantitative significant economic presence test

The quantitative significant economic presence test was presented in an article by professor Ruben S. Avi-Yonah in 2014. The article proposes a new model tax treaty, and under article 5 regarding the permanent establishment, we can see a threshold-based revenue factor in paragraph 3.[172] This is specified to only include remote sales and can by this create a permanent establishment were certain profits from digital companies is taxed in the user/end-consumer jurisdiction.

However, this is in contrast with the view of OECD, which relies on the use of an extensive functional analysis in order to allocate profits to a certain

[168] OECD BEPS action 1, p.110.
[169] Ibid.
[170] Ibid.
[171] Cockfield (2003), p. 10.
[172] Avi Yonah (2014), p. 15.

jurisdiction. There are opinions that the quantitative test is more rigid and will be less useful in the future rather than a qualitative test due to changes to businesses and the economic structure. With new developments and business models the quantitative criteria can quickly become outdated and companies can avoid the application by restructuring the business.[173] That might not be a problem if the quantifiable measures are connected to the number of users using the service in a specific state, because it is hard for the company to restructure this part of the quantifiable attributes.

The BEPS suggestion do contain quantitative attributes with the revenue- and user- factors and combine these with the more qualifiable attributes that are presented in the digital factors. The whole idea is that the revenue-based factor could be combined with the digital factors to define a significant economic presence, which may not be as vulnerable to changes of business practices as a purely quantitative test, as if paired with the user-based factor.

5.1.1 Implementations of the significant economic presence test

As of today, no state has implemented all the measures prescribed by the BEPS Action 1 report, but some states have implemented similar solutions and have implemented some of the different measures. But both implementations that we will handle here is rather based on the quantitative test proposed by Avi Yonah than the more qualitative test in the BEPS action 1 report. Or rather, none of the proposals has taken into account the digital factors presented by the BEPS report, but rather the user- and revenue- based factors. One of these states is India, who has implemented a sort of significant economic presence test. India has in the last couple of years introduced several measures to update their tax system to be able to include taxation of digital companies, of which some may result in domestic double taxation.[174]

India

The approach taken by India is to first expand the domestic definition of business connection to harmonize it with existing tax treaties due to the MLI.[175] This is to include situations where a person plays a significant role in the conclusion of contracts in India.[176] If the non-resident company is significantly assisted by the agent in India in either concluding or

[173] Neuvel, de Jong and Uceda (2018), paragraph 2.1.
[174] A. Unnikrishnan & M. Nagappan (2018), p. 528.
[175] The Multilateral Instrument is a multilateral treaty that enables states to modify their bilateral tax treaties to implement measures designed to address multinational tax avoidance.
[176] Ibid. p. 529.

negotiating contracts in the name of the company it would result in a taxable nexus and would so provide a possibility to tax such transactions.[177]

In addition to the expansion of "business connection", the Indian government will also implement a significant economic presence test into their business connection definition. The non-resident company would be deemed to have a significant economic presence if it carries out one of the following activities:[178]

- Transaction of any good, service or property carried out by a non-resident in India if they exceed a certain amount. Digital goods, services and property is also included.
- Systematic and continuous solicitation of business from India from a prescribed number of users through digital means, or systematic and continuous engagement with prescribed number of users through digital means.

As we can see, the Indian government choose to not include the digital based factors from the BEPS project. Instead, we can see that they have implemented the revenue and user threshold. However, it is worth to note that the specified value in the revenue threshold is not based on the value of a single transaction, but rather on an aggregate basis.[179] If the transaction would be covered by a tax treaty, the Indian government has stated that the provisions under the treaty will prevail and the transaction will therefore remain untaxable. The thresholds for the specified value and the number of users will also be determined in consultation with the stakeholders, which may lead to a threshold to be fairer in the eyes of all parties.[180]

Some criticisms have been waved at the Indian proposal, partly for lacking a clarification for the exclusion of activities that falls within the significant economic presence from the regular PE tests under the tax treaties, partly due to there being no time criteria over which continuous and systematic engagement is to be seen carried on with users in India.[181] One of the more general conclusions regarding the taxation of digital companies is that there has to be a world wide solution for it to actually work and give states a benefit from implementing a virtual PE, and this is also the case for the Indian implementation of the significant economic presence test.[182]

EU

One of the more widespread attempts to implement a solution for taxing digital companies has come from the EU. The EU suggestion is to establish a virtual permanent establishment by declaring a company having a

[177] A. Unnikrishnan & M. Nagappan (2018), p. 529.
[178] Union budget 2018, Amendment to section 9(1) of the Income Tax Act of 1961.
[179] A. Unnikrishnan & M. Nagappan (2018), p. 529.
[180] Ibid.
[181] Ibid. p. 530.
[182] Ibid.

significant digital presence. The suggestion had a majority of member states supporting it in the European parliament, but for it to pass through it needed unanimity. As of now, it does not look to promising for the proposal to reach full unanimity amongst the member states since several smaller states has declared their resistance. The Nordic countries are some of the states that are against the proposal.[183]

The significant digital presence test in the proposal aims fully on digital services supplied trough a digital interface (e.g. platform) and states different thresholds that the company will have to reach to have a significant digital presence. In the proposal, there are a revenue factor, a user factor and a conclusion of business contracts factor.[184] There is no requirement for the company to fulfill all three conditions, and it will be enough if only one of the following thresholds are met:

1) Revenues from providing digital services to users in a Member State jurisdiction exceeds EUR 7 million threshold (revenue-based factor);
2) number of users of a digital service in a Member State exceeds 100 000 in a taxable year (user-based factor); or
3) number of business contracts for digital services that are concluded between the company and its users located in the Member State exceed 3 000 (user-based/business contract factor).

There are further definitions of the conclusions of contracts condition to clarify what is defining of a business contract and with whom the contract should be concluded. First, the contract has to be concluded by the user in the course of carrying on business. Second, the user has to either be a resident in the member state or have a permanent establishment in said state.[185] It is also worth to note that a digital service is a service that is delivered over the internet or an electronic network of which the supply is essentially automated and involving minimal human interaction. The sale of goods or services is not regarded as a digital service but giving access, for remuneration, to an online marketplace is.[186] The minimum human intervention is aimed at the supplier side and the level of human interaction on the user side does not matter. Setting up, maintaining and repairing the automated system does not avoid the minimum human intervention provision.[187] Regarding the user-factor, the users are located in the state where they sometime during the tax year used a device to access the digital interface that presents the digital service.[188]

[183] Andersson, Jensen and Orpo (2018) – EU-observer.
[184] EU proposal p. 16.
[185] EU proposal article 4 p. 16.
[186] Ibid p. 7.
[187] Ibid.
[188] Ibid. p. 16.

The thresholds within the EU proposal may be set to low and may hit smaller companies harder due to the high administrative burden of declaring taxable profits and attributing profits to the significant digital presence.[189] Since the thresholds are set in absolute numbers it may also put member states on unequal footing, favoring large states or states which are subject to frequent transits (since the proposal targets user location instead of residency).[190] If the proposals remain, one of the criteria's will be fulfilled in almost any state, and will therefore allow for the taxation of the company in question.

As with the Indian proposal, the EU have stated that a global solution to the taxation of digital companies will be the best way to deal with the problem but at the same time concluded that they cannot afford to wait for a global solution through the OECD.[191] Instead they proposed the significant economic presence test to be implemented as an addition to the OECD MC.

As stated above, the Nordic countries has stated that they will not support the proposal. The finance ministers of Sweden, Denmark and Finland wrote an article together were they stated that even though the efforts made by the EU is admirable, the fact that this is going against the well-established rule that an export company do not pay taxes in the import jurisdiction just because they have consumers there. The taxes should be levied were the value itself is created, and there need to be more research done on the value creation process in a digital company. The authors conclude that if the EU were to go through with the proposal, this could complicate international co-operations and make third countries take measure against EU-companies. They do see a risk that this will lead to a general destination-based allocation of taxing rights, and state that the value should be taxed where it is created.[192]

5.2 Other suggestions

The virtual PE is not the only method that was presented in the BEPS Action 1 report. In addition to the significant economic present test there is also suggestions for a withholding tax on digital transactions and an equalization levy. Even though OECD does not officially recommend any of the suggestions presented in the BEPS project, they are presented as an intermediary measure for states that want to be able to create this new nexus for digital taxation.[193] We can already see that states like India has implemented the equalization levy, which they did in 2016, so we will also have a look at how that has been implemented in the Indian domestic law.

[189] Sinnig (2018), p. 330.
[190] Ibid.
[191] Ibid. p. 3.
[192] Andersson, Jensen and Orpo (2018) – EU-observer.
[193] V. Duhldhoya (2018), Paragraph 2.3

5.2.1 Withholding tax

The withholding tax measure presented in the BEPS action 1 report is presented as either a standalone measure to place withholding tax on certain payments made to non-resident digital company, or as a primary collection mechanism and enforcement tool supporting the new significant economic presence nexus.[194] Whichever way you implement it, the issue will be to define the transactions covered by the withholding tax. The OECD states that this is no easy measure, and that the scope should be defined as simply as possible but must be balanced against the need for similar taxation for similar transactions to avoid creating incentives for or against ways of structuring them.[195]

Instead of listing several transactions that should be covered under the scope of the withholding tax, the OECD recommend a more general definition to prevent disputes regarding the character of transactions and to avoid different treatments between economically equivalent transactions depending on their form. The definition that seems favored by the OECD is an application of tax to all sales operations concluded remotely with non-residents, given the advantage of flexibility and the tax neutrality between similar ways of conducting business.[196]

The withholding tax suggestion is not free from criticism, and since it tries to tax the income in the destination country and not the jurisdiction in which the value might be created it will not ensure a fair income allocation.[197] The way that the withholding tax also aims to tax gross income will also result in no consideration taken to the expenses for the taxpayer.[198] The OECD do recommend a relatively low rate for taxation to reflect typical profit margins, but even this will pose a problem when confronted with other rules, e.g. EU-law may not allow for the application to non-resident suppliers even if the rate is low due to non-discrimination rules between resident and non-resident businesses.[199]

Another issue presented is the eventual incompatibility with the context of existing bilateral and multilateral treaties. To prevent this, an extension of the application of the scope of article 2(2) in the OECD MC is recommended, but if the scope gives rise to disagreement it could result in multiple layers of taxation that might not be levied according to tax treaties.[200]

[194] OECD BEPS action 1, p. 113.
[195] Ibid.
[196] Ibid.
[197] R. Petruzzi and S. Buriak (2018), P Valante (2018), paragraph 4.
[198] P. Valante (2018) paragraph 4.
[199] BEPS Report p. 115.
[200] R. Petruzzi and S. Buriak, (2018) paragraph 3.

It is worth to point out that the OECD states that the best way to use the withholding tax is as a way to enforce the taxation of the new significant economic presence, and not as an independent measure to combat the taxation of digital companies.[201]

5.2.2 Equalization levy

The equalization levy presented in the BEPS action 1 report aims to target the non-residential companies that has a significant economic presence. It is therefore not entirely separated from the test presented in the new digital nexus for taxation. The whole point of an equalization levy is to address a disparity in tax treatment between domestic and foreign companies, but to avoid undue burden on small and medium companies it should only apply to companies having a significant economic presence.[202] This will allow for the scope of transactions covered to be presented in a general way, so that it can target all transactions concluded remotely with in-country customers without targeting non-digital transactions.

If the significant economic presence test is not implemented, the alternative would be to limit the scope of transactions covered to those involving conclusion through automated systems of a contract for the sale or exchange for goods and services effectuated through a digital platform.[203] This could create incentives for conducting non-digital transactions instead but would focus more closely on the types of transaction that has generated concern. However, a narrow scope could also make the equalization levy vulnerable to future developments du to a lack of flexibility, which would result in an effectivity loss in targeting the discrepancies in the taxation between resident and non-resident companies.[204]

If the priority is to tax the value contributed by customers and users, the equalization levy could instead be imposed on data and other factors gathered from in-country customers and users. One option could be to impose a charge based on the average of monthly active users in the country but measuring this may be challenging. The number of monthly active users may also not be directly related to the revenue generated by a foreign company. The same problems will arise if the levy instead would be levied on the volume of data collected from in-country customers or users.[205]

Otherwise, similar criticisms can be found towards the equalization levy as toward the withholding tax in respect to it only targeting gross revenues of the company conducting business and its compatibility with existing tax treaties.[206] There may also be a risk for the company to be imposed double

[201] OECD BEPS action 1, p. 115.
[202] Ibid. p. 116.
[203] Ibid.
[204] Ibid.
[205] Ibid.
[206] R. Petruzzi and S. Buriak (2018) paragraph 3.

taxation if they are deemed to have a taxable nexus in the country. Therefore, if the non-residential company are subjected to pay income tax in the state, the equalization levy should also allow for an exempt from taxation or allow for the levy imposed to be credited against the domestic income tax. The latter would allow for non-resident companies without a nexus to pay the equalization levy, and for non-resident that has a nexus to be imposed the greater of either the levy or the corporate income tax.[207]

India's implementation of the equalization levy

In 2016, India presented an equalization levy that impose a 6% tax for any specified service received or receivable by non-resident persons from Indian residents or non-residents having a PE in India. The levy targets online advertisements, any provision for digital advertisement space or any other facility or service for the purpose of online advertisement and includes any other service that may be notified by the Government in this behalf.[208]

They have also implemented the exemption of equalization levy on companies having a permanent establishment in the country and the specified service is effectively connected with such permanent establishment.[209] The equalization levy will be levied on top of the income taxation in the company's resident jurisdiction, and may lead to an undesirable double taxation of the income derived from "specified services" and will therefore increase the cost of doing business and may have an impact on the number of cross-border transactions.[210] Since the equalization levy falls outside of the scope of India's tax treaties, there will be little to no chance of the taxpayer being able to qualify for a foreign tax credit.[211]

[207] R. Petruzzi and S. Buriak (2018) paragraph 3.
[208] Finance act 2016, chapter 8, 165 (1).
[209] Finance Act 2016, chapter 8, 165 (2).
[210] Unnukrishnan and Nagappan (2018), p. 528.
[211] N.A. Sarfo (2018), paragraph 3.5.

6 Profit attribution – What to tax?

As we have talked about what states are doing to decide the right to tax the companies, it is equally important to know which profits to actually tax when we have established a right to tax. Simply put, the profits who are attributable to the permanent establishments are the profits that will be taxed, but this is already a complex question within the current framework. The current definition for attribution of profits can be found in article 7 of the OECD MC, and since the definition of permanent establishments is closely related to the profit attribution, an impactful change in the former will most likely induce a change in the latter.

Under article 7 of the OECD MC, the profits to be attributed to a PE are those that the PE would have derived if it were a separate and independent company performing the activities that defines its PE-status. The attribution of profits should be determined via an analysis of the amount of revenue and expense that the PE would recognize if it were an independent and separate entity.[212] But when attributing profits of a digital company may not pose as simple. In a digital company, as we have seen above, the value may be generated in different jurisdictions. In one jurisdiction, data is gathered, and users contribute to the network, but the development of technologies and algorithms happens in another jurisdiction. This may pose a challenge when defining how we should define the amount taxed in this new age of digital taxation – why we in this chapter will have a look at the OECD (presented in the BEPS action 1 report) and the EU model for attributing profits (which is built on the OECD model, according to the EU).

6.1 BEPS action 1

The BEPS action 1 report basically presents two "new" suggestions when attributing profits to a taxable nexus. The first approach is a fractional apportionment of the profits connected to the virtual PE. The method would require three successive steps; 1) the definition of the tax base to be divided, 2) the determination of allocation factors to divide that tax base, and 3) the weighting of these allocation factors. The tax base could either be determined by a predetermined formula, or on allocation factors determined by a case-by-case basis.[213]

Not a lot of states use the fractional apportionment as a profit attribution method, but rather a method based on separate account for the PE. The

[212] OECD – Attribution of profits p. 10.
[213] OECD BEPS action 1, p. 112.

fractional apportionment method would also be a departure from the current international methods for attributing profits to a PE.[214] Since an adoption of this new method could result in different taxation depending on whether the business was conducted through a more traditional PE, a separate subsidiary or the new virtual PE, the method has not been pursued further by the OECD.[215]

The other method presented in the BEPS action 1 report is the modified deemed profit method. A deemed profit system is used today to avoid profit calculations based on the taxpayers account in situations where a lot of expenses occurred in another state and can be connected to the revenue in the non-resident state.[216] The OECD presents different approaches to the deemed profit method for a significant economic presence. The first approach would be to see the digital presence to be equal to a physical presence from which the non-resident operates a business. The net income would be determined by applying a ratio of presumed expenses to the revenue of the non-resident company derived from transactions with residents. The ratio would be determined by weighing a number of factors, including the industry concerned, the degree of integration, and the type of product and service provided.[217] This could be done by classifying taxpayers by industry and apply a profit percentage depending on the industry. This approach could be refined by dividing taxpayer in each industry into additional groups based on relevant factors like capital equipment, turnover and employees, and defining a specific profit percentage within each group.[218]

Some issues with the deemed profits method have been pinpointed by the OECD. Even if the method is generally viewed as relatively easy to administer, challenges may arise when trying to apply multiple industry-specific presumptive profit margins to the same taxable nexus which is the case with large MNE's.[219] Margins may also have to be adjusted due do different costs structures between digital companies and more traditional businesses. The departure from the current international standard of allocating profits occurs with this method as well as with the fractional apportionment method and may result in tax liability even if no profits are generated through the significant economic presence. This may be mitigated by creating a rebuttable presumption limited to when the non-resident taxpayer is able to demonstrate that the overall activity results is in a loss-making position at the end of the fiscal year.[220]

[214] OECD BEPS action 1, p. 112.
[215] Ibid.
[216] Ibid.
[217] Ibid. p. 113.
[218] Ibid.
[219] Ibid.
[220] Ibid.

6.2 EU-proposal

The EU builds their proposal for profit attribution on the current framework applicable to permanent establishments.[221]The OECD has recommended that a significant digital presence should be attributed the profits that would be earned through certain significant economic activities performed via a digital interface as if it had been a separate and independent company engaged in the same or similar activities under the same or similar conditions, taking into account the assets used, functions performed, and risks assumed.[222]

The EU proposes the profit split method when attributing profits to a virtual PE, which means that profits will be split based on the elements of a pre-defined formula.[223] In this pre-defined formula, called a functional analysis, activities through a digital interface related to data users should be considered significant economic functions relevant to the attribution of owned assets and risks to the significant digital presence. Factors that should be taken into account are; the development, enhancements, maintenance, protection and exploitation of intangible assets in the performance of activities by the digital presence even if they are not linked to significant people functions in the state.[224]

The functions related to the development, enhancement, maintenance, protection and exploitation of unique intangibles is typical to a significant digital presence. As we have seen in chapter 4, these significant economic activities will contribute to the value creation in a digital company and are very important to the function of these companies. These characteristics are what motivates the choice of the profit split method according to the proposal.[225] Some of the possible splitting factors could include expenses for research, development and marketing as well as the number of users in a member state and data collected per member state.[226] However, the EU states that these proposed rules are only to be seen as laying down general principles for allocating profits, and states that more specific guidelines could be developed either at the EU level or the appropriate international fora (read OECD, according to author).[227] There is also an opportunity for taxpayers to prove that another method is more appropriate than the profit-split method.[228]

It may, however, not be possible to generalize the value drivers behind these digital companies. As described above, the way that digital companies do

[221] EU proposal p. 8.
[222] Ibid. p. 8.
[223] Neuvel, de Jong and Uceda (2018) paragraph 2.3.
[224] EU proposal p. 9.
[225] Ibid.
[226] Sinnig (2018), p. 330.
[227] Ibid.
[228] Sheppard (2018), paragraph 3.

business vary a lot and the importance of data as a contributor to value will also vary between different digital companies – why it may be hard to define common significant economic activities that will allow taxation of these activities. There are also worries that there is not enough knowledge about the way that new business models generate value, such as what is the value of user generated content on a social media platform?[229] However, other authors have concluded that the role of active users should be taken into consideration and should lead to allocation of a portion of this income to the users jurisdiction.[230]

[229] Neuvel, de Jong and Uceda (2018), paragraph 2.4
[230] Hongler and Pistone (2015), p. 33

7 Conclusion

As the world continues to develop, and the economy along with it, we still have not had an international agreement on the taxation of digital companies. States do recognize that it is a problem but disagree on how we should combat this problem. As of today, a digital company in the EU will pay an effective tax rate of 9,5%, compared to 23,2% for traditional businesses. This clearly gives the digital companies an unfair advantage compared to their more traditionally modelled counterparts, and the need to adjust this is clear. But what is fair, and how are we going to ensure a fair taxation?

One of the more popular suggestions is to create a virtual PE, and has been presented by the OECD, the EU and other scholars. But to ensure that the virtual PE will provide a taxable nexus when the company in question really has a presence in the state, we will have to find new connection points in relation to the traditional way of defining a PE. The OECD did present suggestions in the BEPS action 1 report, and these factors that could give rise to a virtual PE, or significant digital/economic presence, consist of revenue, digital and user factors.

When trying to define a significant economic presence, the revenue factor seems hard to avoid including. If the company has no revenue at all from transactions with resident customers or users, there should be no taxation, due to the fact that there are no significant economic activities. According to the BEPS report, the transaction that would be covered should be those between non-residents and residents and the factor would include all revenue from these transactions when determining the fulfilment of the threshold. Why there is no need for the conclusion of the transaction to be made on the digital platform is to be able to include taxpayers in similar situations, but where the conclusion is done in another way than through the platform. This could pose a problem if the revenue factors are implemented together with other threshold factors, and there is no regard taken to the digital part of the company's way of conducting business.

The EU's implementation of the revenue threshold targets revenues generated from the providing of digital services instead of the provision provided by the OECD. Since every factor in the EU proposal could, on its own, create a significant economic presence this could have a wide impact and include a lot of different kinds of businesses in the definition. But what is the revenue of providing a service? Since the EU proposal also provides thresholds for number of users and number of concluded contracts, the logical conclusion would be that revenue aims at monetary transactions, and companies like Netflix and Spotify who use a subscription service may be included in the provision. However, this would exclude companies that provides a service without monetary compensation, like Amazon marketplace.

Companies like Amazon marketplace may instead be included via the user-factor. The EU proposal contains a threshold of 100 000 users during the taxation year, and if the user have used the digital interface once during this period, the user should be seen as located in the member state where the use happened. The EU proposal does not contain any further definition towards the term user and does not set a specific requirement for these users except for the location definition. As we have seen before, there is doubt whether the number of actual users is a valid way to connect a business to a state, due to the uncertainty of the actual value produced from these users.

My view on the user provision is that it can be a valid way to actually create a significant digital presence, but not in the way that it is presented by the EU. Instead of the vague definition provided in the proposal, an average of the number of monthly active users within the tax year would be a better way to present the user provision. There is some value being generated by having a large user base, but as concluded earlier, there are several factors to take into consideration. For example, the mere existence of a user account cannot be said to directly contribute to the value generated, but if that account was active and the user posted content to the platform would generate some value for the company. I do not see a necessity of dividing between "good" and "bad" users, since even the "bad" users will have the ability to attract more people and will most likely do so. Even if they would not, the impact these users would have is questionable. A provision demanding the individuality of users as a factor will most likely have a hard time dividing between these good and bad users to create a user-base that is able to create a significant digital presence and will pose a challenge that is not worth its effort.

The contracts conclusion provision targets B2B transactions, for example a domestic advertiser wanting to publish ads on Facebook. This may be a clearer indication on the company's presence in a state, since it does involve contractual obligations with a resident in form of another company. If domestic advertisers get to deduct the payment for these ads, the company receiving the payment should be taxed for the revenue these payments bring. Since they do present a way for local advertisers to reach local consumers, a connection to the domestic market may be hard to deny, and a taxable nexus may therefore be created.

However, thresholds like these may be clear to the taxpayer and lessen the uncertainty for creating a significant digital presence but are also vulnerable to future developments in technology and the way companies conduct their business. A company could restructure their business to avoid the application. This may not be as easy to avoid with the user provision, but as stated above, it does contain other questions. And since the best way to solve the problem of digital taxation is to do it internationally, it might be best to avoid having factors that are questioned by many since a future proposal has to be implemented in all of OECD.

Instead, I do see advantages to including the digital provision presented by the OECD in a significant digital presence. These factors would more clearly indicate a will from the company to actually be present in the state in question, and would remove the ambiguity of the real value of users etc. On their own, they would exclude digital marketplaces and retailers that exists in the EU but not necessarily in the user's jurisdiction, for example Amazon that exists in Germany, but still sells to customers in for example Sweden. There is no clear indication on their website that they target Swedish consumers, and they would therefore not be included within this provision. This is why it should be combined with the revenue factor presented in the BEPS report. This would allow for companies that actually target a certain country to be included in the provision, at the same time as the companies that sells to a jurisdiction will be included due to the revenue provision.

In my point of view, the hardest part to solve with the challenge of digital taxation is the profit attribution to the significant digital presence. Due to the difference in digital business models, an attribution based on the profit split method may pose unfair to certain companies where for example data has little to no value. There is also uncertainty in how to allow the company to take consideration to expenses when determining a taxable profit, as the expenses may occur before the revenue is brought in, and the marginal costs of presenting a digital good or service is close to zero. As the OECD stated, there may also be a difference in treatment depending if the business was conducted through a more traditional PE or a virtual PE. This makes the profit split method less desirable, even if it at a first glance seems to be fair.

Instead, the deemed profit method is to prefer when attributing profits to a virtual PE. Of course, the method is not free from issues. For example, the trouble of determining a large MNE's profits when it has a lot of different activities that are classified within different taxation groups. This could be solved by allowing for the different activities that occurred to be handled on its own within the correct taxation group, and then allowing for an average percentage to be calculated. The same activity should not be included twice, since that may result in double taxation of the income. I do also believe that the OECD is correct when allowing the tax payer to demonstrate that the overall activity actually results in loss to be able to avoid taxing profits when no profits was made. A deemed profit method will, however, not be based on the factual circumstances and will therefore always provide an uncertainty regarding if the taxation really is fair.

To say that there is an absolute fair way to tax digital companies may be a stretch, but we may be able to strive close with more research about value of users and data. I do believe that a virtual PE is the way forward, since this will actually provide a test as to whether the company has a connection to the state or not by objective factors. It also allow for a fairer distribution of profits, as long as we can figure out what value is contained in users and the information from them. However, no matter what the fairest or best way to solve the problem of digital taxation may be, it has to be done internationally to really have an impact. We might have to accept that it will

not be perfect in every aspect, since we would have to make several countries agree on the same provisions. But I believe that we will be able to find a solution together, as we have overcome other challenges before. As long as the proposals try to view this from a fairness perspective, both in the eyes of the citizens and the companies that are subjected to the proposal, we will be able to find a middle ground that are accepted.

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