Comments by NERA Economic Consulting on the Australia's Treasury Discussion Paper "The digital economy and Australia's corporate tax system" dated October 2018

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We are pleased to respond to the invitation to provide comments regarding the Treasury Discussion Paper published in October 2018 titled "The digital Economy and Australia's corporate tax system" (the "Discussion Paper"). The comments presented in this letter express the views of the authors, and not of NERA Economic Consulting as a firm. As NERA is not in a business of providing legal or tax advice, our comments address only the questions posed in the Discussion Paper that can be analyzed using the principles of economics.

Question 1: Is user participation appropriately recognised by the current international corporate tax system? If not, how should value created by users be quantified and how should it be taxed?

Comments:

Is user participation unique to the digital platforms?

The Discussion Paper in Chapter 4.2 names three aspects of the "user-created value." These are: user data, user-generated content, and network effects. The paper also notes variances in the value of user participation among several types of digital business models (e.g., social media, search engines, booking websites, online marketplaces) and observes that features of digital business models often cited as reasons for applying different taxation rules to the digital economy (namely, "scale without mass," reliance on intangible assets, and "user created value") are not unique to digital businesses (Chapter 1.1).

We agree that the commonly stated features of digital business models are not unique to them, and would like to provide a few more examples of the economic sectors where user engagement is among the critical value drivers for the business.

Data collection and analysis are at the core of value creation in numerous sectors of the economy. In fact, one could argue that, without an efficient analysis of "big data", many "bricks-and-mortar" companies

[1] The authors thank other reviewers from NERA Economic Consulting who provided helpful comments during preparation of this letter.

would not be able to compete effectively. For instance, big data and the information obtained from it are a significant value driver in the retail industry.[2]

The *deep and interactive relationship with "users"* is not limited to the digital business universe. For instance, sustained engagement between customers and a business is the norm in many B-to-B transactions. Typically, the buyers make the sellers aware of their specific needs and the product (or software, or service) is developed by the seller in close cooperation with the buyer. In some B-to-B transactions, the role of the users may be even more complex than the one users play in a multi-sided digital platform.

It is hard to accept the Discussion Paper's premise that the *"network effect"* has a special place in the digital economy as there are many examples of "bricks-and-mortar" companies whose business success critically depends on the networks developed by them (e.g., franchised businesses).

Further, the impact of the users' actions on the value of the brands may be quite direct and strong in non-digital sectors of the economy, such as the fashion industry, where some users (known as the "influencers") have a significant impact on brand perception.

These similarities between the features of the digital economy business models and the features of "traditional" business models suggest that the approaches developed to analyze (and tax) the value chains of the "traditional" enterprises may be readily applicable to the analysis (and taxation) of digital enterprises as well. Therefore, we recommend that the Australian Treasury respect the existing taxation methods and not consider the value created by user participation in isolation from the other value drivers of digital businesses.

Does the user participation have a constant value to digital platforms?

Despite the similarities to the "bricks-and-mortar" businesses, digital businesses employ rather distinct business models and utilize similarly named types of intangibles differently (e.g., relationships with advertisers, user data, brands, etc.). Therefore, our comments, which are based on our knowledge and experience, should not be assumed to be applicable to all digital businesses but only to a subset of "multi-sided" digital platforms, i.e. businesses that deliver certain digital content to users, encourage users to post their own content online, collect and analyze users data, and derive revenue from contracts with unrelated advertisers. Although our discussion of this subject is not comprehensive, we understand that "multi-sided platforms" are among the business models included in the scope of the Interim Measure as described in the Discussion Paper.

In our experience, when it comes to digital platforms, the value of users for the business can *change over time*. Often, in early stages of the platform development, the initial (usually small) population of its users can be instrumental in aiding the platform developers with refining the business model, testing the platform algorithms, including those designed for the user data collection and analytics, and developing the methods for the platform monetization. As the stage when the user data may play a critical role for development of the platform IP, platforms tend to have small revenues, which will not subject them to taxation on the user-created value under the proposed Interim Measure. Those platforms that become

[2] See, for example, Forbes, "Big Data: A Game Changer in the Retail Sector," November 10, 2015.

successful in serving their initial user populations tend to attract more users and advertisers whose payments provide revenues to the digital business (what is known as the "network effect").

After platforms surpass a certain threshold of users, the addition of new users may not provide much new information that could be utilized to improve the platform's algorithms themselves. At this stage, the data collected from the additional users contributes mostly to the growth of the potential targets for the advertisers and, if the digital enterprise's advertising business model is successful, the additional users may attract additional advertising revenues. It is at this growth stage when users from the countries in which the platform does not have any physical presence tend to join the platforms. The advertising revenue earned at the growth stage provides return on the platform's operating activities and, in the form of profits (or losses), remunerates the capital invested in the enterprise, including the intangibles utilized by the platform in this phase. The contribution of users into development of the enterprise intangibles may have been important in the initial stages of platform development, however new users added to the platform at the expansion stage may provide only a limited benefit for enhancement of those "core" intangibles. Notably, it is often the case that users from the countries with no physical presence by a given digital enterprise will not be participating in the activities of that enterprise in its initial development stages.

What is the economic ownership of the different components of "user-created value"?

The Discussion Paper names three potential drivers of the "user-created value": user data, user-generated content, and network effects (Chapter 4.2). The question we address in this section is whether any of these value drivers may create taxation rights in a jurisdiction where a digital platform has users but has no other type of presence. For simplicity of reference we will refer to such a jurisdiction as "Country A" in this section.

Digital enterprises may utilize **users' data** for several purposes, most typically (1) to improve the platform's algorithms and (2) to facilitate more precise targeting of advertisements to specific user groups to generate advertising revenue.

If all business operations of a digital enterprise are conducted outside of Country A (other than the availability of a digital platform to the Country A users), the current profit attribution rules do not allow taxation of any value arising from utilizing Country A users' data for either platform improvement or for earning advertising revenues. We understand that this provides an impetus for initiatives to change the profit attribution rules to define a mere fact of presence of users in a Country A and collection of data from these users as an activity that gives rise to a PE (i.e., the "Digital PE" concept). Although our comments on the Digital PE are presented below in more detail, we would like to state that the Digital PE idea that effectively treats user-generated value as an asset that belongs to a digital enterprise may be inconsistent with the arm's length principle, because the users are, typically, engaged in arm's length transactions with digital enterprises.

User-generated content attracts current and new users to the platform and creates a **network effect**. The network effect is, among other factors, responsible for growth in revenues, which, as mentioned above, allow the digital enterprise to cover direct and indirect costs of its operations, and any remaining profits (or losses) provide returns on the capital invested in the enterprise, including self-developed intangibles not recorded on the balance sheet.

Since the users deal with digital enterprises at arm's length, the theory that some value is "left on the table" in jurisdictions where only users are located but the digital platform has no physical presence seems to depart from the arm's length principle.

This definition of the object of taxation should be consistent with the definition of the intangible in the *OECD Transfer Pricing Guidelines* as an asset that is capable of being owned or controlled, and would be compensated if transferred among unrelated parties.[3] *The value to the enterprise derived from the user's participation should be economically owned at the locus of the enterprise's activities responsible for development, enhancement, maintenance, protection and exploitation of these intangibles*.

In our opinion, the proper application of this principle would involve separating the value of the "raw" user data (i.e., data economically and/or legally owned by users) from the value of the data created by digital enterprises by means of collecting "raw" user data, systematizing these data, aggregating them across many users, and producing analytics based on these data.

Why the Digital PE concept might not be consistent with value creation

The authors are of opinion that the answer to the magnitude of the "user-created value" and the economic ownership of this "value" can be obtained only by performing a rigorous analysis of the respective roles that users and digital enterprises play in creating the user intangibles for a *particular* digital business, i.e., not for a sector as a whole.

For instance, for multi-sided digital platforms, the fact that users are willing to participate in the digital enterprises on the terms these businesses offer to them, including cases when the users' participation does not involve monetary compensation, provides the evidence that the transactions between users and digital enterprises occur at arm's length terms. Under the arm's length principle, it cannot be assumed that the users, who are independent of the digital business, are entitled to any additional compensation than they already receive.[4] Therefore, any value user data creates for the digital business (through the actions of the digital enterprise) will *be economically owned by the digital enterprise*.

The term "user data" is sometimes used in the digital industry to denote organized data collected by recording specific user's actions over time and often aggregated across many users (e.g., purchasing history, location data, medical records, etc.). These types of "user data" take some effort and cost to obtain, categorize, store, and analyze, thus it is likely that most of the value for this type of "user data" has been created by the digital business that undertook the efforts to create these data.

Moreover, there are indications that user data may be declining in importance, at least for some businesses, as some of the information and analytics that used to be developed by analyzing the user data is being generated through employing the "artificial intelligence" algorithms.

[3] *OECD Guidelines* 2017 ed., para. 6.6.

[4] If there is a monetary exchange between a platform and users (e.g., intermediation between service providers and service seekers, intermediation between product sellers and buyers, etc.), such transaction, in principle, should be taxed under the existing taxation system (e.g., VAT, income taxes). If there is no monetary transaction between the users and the platform (e.g., provision of platform services in exchange for access to user's data), such interaction can be viewed as a barter transaction.

Since the value derived from the user's participation may vary widely from one digital business to another, a tax on revenues of specific types of digital businesses that is typical for the current "interim measures"[5] may not be the most equitable way to tax the user-created value.

Question 2: Is the value of intangible assets including 'marketing intangibles' appropriately recognised by the current international corporate tax system? If not, how should value associated with intangibles be quantified and how should it be taxed?

Comments:

In our opinion, the arm's length principle applied consistently with widely recognized and agreed-upon guidelines, such as those provided in the *OECD Guidelines*, offers the most adequate mechanism for valuing marketing (and other) intangibles and attributing returns to those intangibles to their economic owners.

On the other hand, the notion that the value of marketing intangibles is "inherently" linked to the market in which the sales take place expressed in Chapter 4.3 of the Discussion Paper seems to contradict provisions of the *OECD Guidelines* that ownership of any returns from intangibles should be established after conducting a DEMPE analysis (*OECD Guidelines*, 2017 ed., Chapter VI.B)

Question 6: From a tax perspective, do you consider that the digitalised economy is distinguishable from traditional economy? If yes, are there economic features of the digitalised economy that present special challenges in the context of taxation? How are these features relevant for assessing the costs and benefits of various models of taxation?

Question 7: Can and should any changes to the international nexus and profit attribution rules be ring-fenced to apply only to highly digitalised businesses? If so, how?

Comments:

Certain features of the "digitalized" economy are often referenced to justify taxing these "digitalized" businesses differently than other businesses. Such features as summarized in the *OECD Interim Report* are: cross-jurisdictional scale without mass; the heavy reliance on intangible assets, especially intellectual property (IP); and the importance of data, user participation and their synergies with the IP.[6] At the same

[5] See, for example, the U.K. DST as outlined in the HMT Budget 2018 and the DST proposal presented to the European Commission (*Proposal for a Council Directive on the common system of a digital services tax on revenues resulting from the provision of certain digital services*, March 21, 2018).

[6] OECD. *Tax Challenges Arising from Digitalisation – Interim Report 2018: Inclusive Framework on BEPS*. March 2018, OECD Publishing, para 32.

time, as the Discussion Paper notes, none of these factors are unique to the digitalized businesses as such, and can be found in certain businesses traditionally considered to be "bricks-and-mortar."[7]

Our experience in conducting the value chain analyses for diverse types of businesses (both those traditionally considered "bricks-and-mortar" and those considered "digitalized") allows us to offer the following observations:

(1) many of the value drivers important to the "digitalized" business models are not distinct from those that play an important role for certain types of businesses traditionally considered "bricks-and-mortar" (e.g., importance of digital technology for the companies in sectors such as telecommunications, finance, life sciences, transportation, etc.),

(2) the relative contribution of any particular value driver into success of a business may vary widely among businesses in the same industry (e.g., businesses in retail or fast food industries may utilize their brand-related intangibles in significantly different ways), and

(3) businesses traditionally considered "bricks-and-mortar" are using tools similar to those relied upon by "digitalized" businesses (e.g., retail businesses rely on big data to study and predict consumers' behavior).

We also would like to mention that as the business models in many sectors of the "traditional" economy rapidly adopt digitalization, which involves organizing their operations to gather and process digital information, analyze "big data," study patterns of customer engagement with products or services, and designing products or services using the input from the analysis of these data. Even at present time, drawing a line between "digitalized" and other types of businesses involves a large degree of subjectivity, but as business models will continue to evolve, this will become even more so. Thus, in our opinion, "ring-fencing" of the digital economy may lead to inequitable outcomes. We provide additional comments on "ring-fencing" of the digital businesses as part of the response to Question 11 below.

In our opinion, the *value chain analysis* discussed in the comments to Question 11 below is an effective analytical approach to align taxation of any multinational enterprise with the value created by different value drivers and in different geographical jurisdictions in accordance with the arm's length standard, fulfilling the maxim of "aligning taxation with value creation" that was the driving force behind Action 1 of the BEPS project.

Question 11: What indicators could be used to identify businesses that benefit most from user-created value? Would an interim measure applied to digital advertising and/or intermediation services accurately target that value? How broadly or narrowly should 'digital advertising' and 'intermediation services' be defined?

[7] Discussion Paper, Chapter 1.1.

Comments:

The *OECD Interim Report* expressing a consensus of many observers states that the business models employed by digital enterprises are characterized by "cross-jurisdictional scale without mass", reliance on a broad array of intangibles, user participation, network effects, and non-linear nature of value creation.[8]

The process of value creation in a business involved in provision of digital services can be characterized by a high degree of integration of different activities, nearly simultaneous process of making decisions at different functional areas, and feedback loops of information flows that allow to refine the problem-solving capabilities of the business and execute control and evaluation functions.

Due to the differences between the business models employed by the "traditional" vertically-integrated firms and those used by digital businesses, certain observers suggest that some of the traditional approaches to transfer pricing are not applicable to the analysis of multinational digital enterprises.

The authors hold the view that analysis of any complex enterprise, not just a digital one, indeed requires a departure from the oft-used algorithm of characterizing various legal entities within a group as either "routine" or "entrepreneurial" with direct implications for their respective profits and, instead, calls for an application of a more detailed and holistic approach described as the "value chain analysis" in prior literature.[9]

The value chain analysis or "VCA," as described in the literature referenced above, represents a four-step procedure that involves (1) analyzing the process of value creation within a group, (2) linking the group's functions, risks and assets with the value creation process, (3) mapping the relative positions of individual legal entities within a joint process of creating value within the group, and (4) developing the transfer pricing model for the group that reflects responsibilities of the various legal entities within the group, their contributions into the value creation process, and relative bargaining positions. We believe, the VCA approach is ideally suited for the analysis of the integrated business processes, such as those deployed by the companies running digital businesses, as well as for the analysis of other types of business models.

An application of the VCA to different digital businesses will likely demonstrate that the contribution of users into their business models (a.k.a. "user-created value") varies dramatically among businesses.

Further, a design of an Interim Measure that levies tax on revenues of digital enterprises instead of profits associated with the users' contribution will depart from its stated objective of taxing the value created by users. Since methods of estimating the value created by users have not yet been developed even in the academic literature, we would advise the Australian Treasury to refrain from imposing a revenue-based Interim Measure until methods for computing the user-created value based on the arm's length principle and understanding of the digital businesses' value chains will be proposed.

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[8] OECD. *Tax Challenges Arising from Digitalisation – Interim Report 2018: Inclusive Framework on BEPS*. March 2018, OECD Publishing, Chapter 2.1.

[9] See, for example: (1) Fris, P. and Gonnet, S. "ReAL Transfer Pricing: A New Paradigm for Transfer Pricing in Europe?" *Tax Planning International*, BNA International, Inc., June 2006, (2) Fris, P., Gonnet, S., and Meghames, R. "Understanding Risk in the Enterprise: The Key for Transfer Pricing for Today's Business Models," International Transfer Pricing Journal, v. 21, No. 6, 2014, and (3) Gonnet, S. "Risks Redefined in Transfer Pricing Post-BEPS," Transfer Pricing in a Post-BEPS World, *ed. Lang, M., Storck, A., Petruzzi, R.* Wolters Kluwer, 2016.

In addition, the proposed design of the interim measure seems to target only certain categories of digital businesses (i.e., internet advertising and intermediation services), but not other types of businesses that may be heavily reliant on digital business models (e.g., booking websites operated by hotels or airlines). The Discussion Paper does not make it clear why the user-created value would *a priori* be different for an intermediation service that matches sellers of goods and services with users (i.e., buyers) than for an online service that represents a vertically integrated combination of a supplier of goods or services with an online matching service. We believe that such artificial "ring-fencing" of certain digital businesses for taxation under the Interim Measure will not be equitable. Further, digital businesses will have an ability to relatively easily mitigate the effect of such tax by vertically integrating with suppliers of goods or services.

Finally, we wish to express our opinion that the arm's length principle, as commented in the latest draft of the OECD Transfer Pricing Guidelines is a robust and powerful framework, able to result in a fair allocation of multinational enterprises' combined profit across jurisdictions. Further refinements to the interpretation of the arm's length principle, including a more explicit definition of terms used, remain possible, which should enable a fairer international taxation.

For the reasons stated above, we would recommend the Australian Treasury not to implement the Interim Measure as outlined in the Discussion Paper.