**Papers on Selected Topics in Protecting the Tax Base of Developing Countries**

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# Protecting the Tax Base in the Digital Economy

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## 1. INTRODUCTION

Action 1 of the BEPS Action Plan addresses the challenges of the digital economy.[1] The reason is simple: "International tax rules, which date back to the 1920's, have not kept pace with the changing business environment, including the growing importance of intangibles and the digital economy."[2] Existing tax rules are rooted in clear-cut jurisdictional boundaries designed for businesses selling goods and services in bricks-and-mortar, physical locations. Today, virtually all commerce is digital. Data, digitized goods and services can be generated and monetized without physical or territorial limitations.

The digital economy is characterized by an unparalleled reliance on intangible assets, massive use of data (notably personal data), widespread adoption of multi-sided business models capturing value from externalities generated by free products, and the difficulty of determining the jurisdiction in which value creation occurs.[3]

The tax challenges raised by the digital economy include, but are not limited to base erosion and profit shifting (BEPS). BEPS is the result of tax planning designed to take advantage of gaps in the interaction of different tax systems to artificially reduce taxable income or shift profits to low-tax jurisdictions in which little or no economic activity is performed. The targeted BEPS structures are "artificial" in that they are undertaken primarily for tax reasons, not business reasons. The separation of profit and profit-generating activities in the digital economy is different from BEPS because the relocation of profits may be intrinsic to the business models used in the digital economy. As such, "relocations" of profit in the digital economy may not always amount to tax avoidance. Further, the location of core business functions in low-tax jurisdictions takes advantage of outdated rules (which represented deliberate policy choices about 100 years ago) rather than gaps in the existing system. In other words, the digital economy may exacerbate the

problems of BEPS, but the BEPS issues are not exclusive to digital companies. As such, addressing BEPS will not address the more profound issues raised by the digital economy, that is, "how enterprises in the digital economy add value and make their profits, and how the digital economy relates to the concepts of source and residence or the characterization of income for tax purposes."

The income tax base of market countries is under greater threat from the digital economy for reasons such as the following: (a) MNEs have greater opportunities to sell goods and services to customers in a country without having a significant presence in that country that meets the threshold under current tax rules for a taxable presence (e.g., the permanent establishment (PE) test under tax treaties); (b) the attribution of zero or nominal value to marketable location-relevant data generated by customers in the market country; (c) allocation of profit to the factor of risk according to contractual arrangements and not the location of people and actual business functions; and (d) the avoidance of withholding tax as a result of transforming rent or royalty into service fees taxable as business profits.

Developing countries are generally market countries and "net digital importers". The digital economy raises the stakes for those wishing to protect their tax base from not only base erosion due to artificial tax planning structures, but also base disappearance into the Cyberspace or "base cyberisation" due to new ways of doing business in a digital economy.

The OECD published a Discussion Draft on 24 March 2014 regarding BEPS Action 1 (the "Discussion Draft"). The Discussion Draft was prepared by the Task Force on the Digital Economy, a subsidiary body of the Committee on Fiscal Affairs (CFA). [4] The Task Force issued a public request for input on 22 November 2013. The Draft reflects the input received and the thinking of the Task Force on the evolution and pervasiveness of the digital economy, as well as the key features and tax challenges raised by the digital economy. It also describes the core elements of BEPS strategies in the digital economy and discusses how the measures envisaged in the BEPS Action Plan and the OECD will

address indirect taxation. Further, it identifies the broader, more fundamental tax challenges and provides options for addressing these challenges. The Task Force invited public comments on the Discussion Draft by 14 April 2014. Public comments received were published on the OECD Website. The voice of developing countries is largely absent.

This paper seeks to examine the tax challenges raised by the digital economy from the perspective of developing countries. After a brief overview of the key features of the digital economy and the threat to the tax base, this paper will critically assess the options suggested in the OECD Discussion Draft, suggest alternative solutions that can better protect the tax base of developing countries without impeding the growth of the digital economy, and urge developing countries to contribute to the development of measures to address both BEPS and broader tax challenges arising from the digital economy.

The scope of this paper overlaps with that of other papers, particularly the paper by Brian Arnold, "The Taxation of Income from Services", and the paper by Adolfo Martfo Jimmfo, "Preventing Artificial Avoidance of PE Status"**.** To the extent possible, this paper will defer to these other papers on general issues and principles and focus on digital services and unique PE issues arising from the digital economy. Because the digital economy issue cuts across all sectors of the economy and all forms of BEPS, the scope of this paper can potentially be very broad. It will focus on common business models, such as e-commerce and cloud computing, and BEPS issues that undermine the tax base of source (market) countries. Since it is unlikely that solutions to BEPS can address the fundamental problem of base cyberisation, this paper will offer some thoughts on addressing this problem.

## 2. DIGITAL E CONOMY IN DEVELOPING COUNTRIES

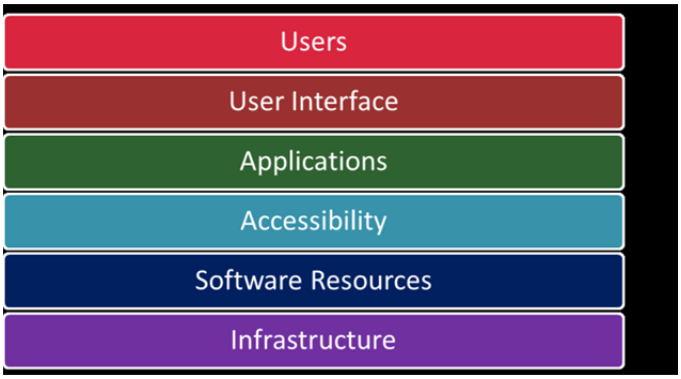
### 2.1 The "Digital Economy"

What is the digital economy? The OECD Discussion Draft does not define it. In fact, the term digital economy has been in use since the 1990s, but there is still no

authoritative definition. It is often understood to include the Internet economy (economic value derived from the Internet) and economic and social activities resulting from other information and communication technologies (ICT).[5] For example, the Australian government defined the Digital Economy as "the global network of economic and social activities that are enabled by platforms such as the Internet, mobile and sensor networks".[6] The OECD Discussion Draft seems to accept this definition.

Parts II and III of the OECD Discussion Draft provide good background information on the development and influence of ICT, and how the digital economy has become an increasingly large part of the global economy. The growth of the digital economy is largely attributable to the drop in ICT (hardware and software) prices caused by advances in technology and the pressure for constant innovation. Key ICT include personal computing devices (e.g. personal computers, smartphones and tablets), and telecommunications networks that form the Internet and software (such as the World Wide Web). Content production, consumption and indexation appear to drive the digital economy's growth. Collecting, analysing and monetising personal data is key to digital businesses. The "Internet of Things" refers to the Internet as a network connecting individuals, content, and things in everyday lives. 7 It includes everything from smartphone apps that control your home's lights and temperature from afar to real-time analytics that help ease traffic congestion and city parking woes.

The ICT sector features interactions between different layers, each characterized by a mix of hardware and software. The OECD Discussion Draft provides the following chart to illustrate the interactions:



- The infrastructure of the Internet consists of the cables, tubes, routers, switches, and data centres that are designed and manufactured by firms specialised in network interconnection, and operated by Internet service providers (ISPs), carriers, and network operators. Content providers pay ISPs, carriers, and network operators for hosting servers in their data centres. IP addresses and domain names are managed at this level.
- Immediately above the base of infrastructure are the core software resources, stored in servers that are located in data centres and organisations all around the world. Software resources enable organisations to create applications, which can consist of raw data, digital content, or executable code.
- The layer of accessibility includes tools providing the fundamental accessibility necessary to allow software resources to be combined on top of the infrastructure to create applications useable by individuals or business end users. The accessibility can be provided in many forms. For example, one form is the core higher-level protocols that allow communication of data between applications, such as the Hypertext Transfer Protocol (HTTP) that forms the foundation of data communication on the World Wide Web, or the Simple Mail Transfer Protocol (SMTP) that provides a standard for email transmission. An application is a combination of software resources creating value for the end user through the provision of goods or services. Examples are a web browser and an app store.
- The interface lawyer is the machine-to-human interface. It represents the user experience and is displayed through a physical point of contact that can be either a device or a whole place (such as a store). Generic devices include computers, smartphones or tablets, which support many applications. Non-generic devices include a connected thermostat, connected cars, which run one application.
- Users sit at the top of the chart. They interact directly with the interface layer to access applications directly or through the services of another application acting as a gatekeeper.

The interconnection of these layers is described in paragraph 50 of the Discussion Draft as follows:

> "Each layer is provided with hardware resources, software resources, and network connectivity. Resources can be stored at multiple levels: in data centres at the infrastructure level; in virtual servers located in the cloud; on user devices (a computer or a tablet for instance). The business relationships between the layers are generally relationships between clients and providers: a company that operates a business in only one layer is generally paid by a company operating a business in the lawyer above. For instance, cloud computing operators that provide accessibility make payments to infrastructure operators and are paid by application developers. A company operating at the top lawyer derives payments directly from its interactions with end-users, either by charging them money or through generation of value that can then be monetised by the company to derive income from another customer or business. The organisations that are paid at the top level are those operating connected devices, gate-keeping activities or an application that is tethered neither to a device nor to a gate-keeping capacity."

The spread of ICT across business sectors leads to the growth of the digital economy. "All sectors of the economy have adopted ICT to enhance productivity, enlarge market reach, and reduce operational costs".[8] In addition to companies that operate at each layer of the ICT system described above, traditional businesses have adopted ICT and "digitised". As such, all MNEs are part of the digital economy.

The Internet contribution to the GDP in the UK was more than that of construction and education; the Internet economy ranks among the top six industry sectors in China and South Korea. In G20 countries, it is expected to double between 2010 and.[9] The digital economy has been growing faster than the GDP for several reasons: ICT converges with and improves the efficiency of traditional industries; the production function of the ICT industry shows increasing returns to scale; and the development of ICT stimulates not only demand and supply but the entire expansive reproduction system, resulting in faster-accelerating economic growth.[10]

### 2.2 The "digital divide"

The spread of ICT (e.g., broadband connectivity) is not even. In almost all OECD countries, broadband connectivity is universal for large enterprises, and 90% or more for smaller enterprises.[11] In developing countries, the connectivity is much lower. According to *Global Information Technology Report 2013,* [12] the digital divide" measured by a Networked Readiness Index (NRI) (including features related to access and usage that cover not only affordable ICT infrastructure but also digital resources, including software and skills), two groups of economies dominate the top ten: Northern European economies (Finland, Sweden, Norway, and Denmark) and the "Asian tigers" (Singapore, Taiwan, the Republic of Korea, and Hong Kong SAR). OECD countries rank in the top one third while developing countries universally ranked in the bottom two thirds.[13]

Although lagging behind developed countries, many developing countries appear to have invested in developing the ICT infrastructure and to make ICT one of the key national industries in their attempt to diversify and transform their economies. [ibid] Significant growth is expected in developing countries. For example, the Asia-Pacific region will continue to be the largest regional mobile phone market, with 3.9 billion subscriptions in 2020 (up from 2.4 billion in 2010). China will continue to be home to the world's largest number of mobile phone subscriptions, with 1.3 billion subscribers in 2020 (up from 839 million in 2010). However, India – currently the world's second largest mobile phone market – will have significant growth potential not only in the Asia-Pacific region but globally, with the number of mobile phone subscriptions forecast to grow at an average annual rate of 5.7 per cent during 2011-20, to reach 1.1 billion in 2020. From a luxury product used primarily in developed countries, mobile telephony has become universally available. It is now an integral part of life for many.[14] According to "E-commerce in Developing Countries," a 2013 report from the World Trade Organization, "the commercial deployment of next-generation technologies and devices will increase usage of advanced mobile services, which in turn will open up many new, e-commerce business opportunities in developing countries."

### 2.3 Business models

In a digital economy, knowledge and information (data) is included as a main production factor, besides the three major production factors of an industrial society – labour, capital and land. Another main feature of the digital economy is the digitalization of core economic activities including production, distribution, and consumption of goods and services. [15] *Digitization*—the mass adoption of connected digital services by consumers, enterprises, and governments— is regarded as a fundamental driver of economic growth in developed and emerging markets.

The OECD DD notes that the digital economy has given rise to a number of new business models and acknowledges that some of the new models are actually traditional business activities that are enhanced through the use of ICT. [60] For example, online payments, media, auctions, logistical solutions have offline analogues in the form of money transfer services, publishing and broadcasting, auction services, and logistical services. The Discussion Draft also notes that "modern advances in ICT have made it possible to conduct many types of business at substantially greater scale and over longer distances than was previously possible". [60] These advances benefit not only enterprises that are considered part of the digital economy, but also enterprises in manufacturing, distribution and other traditional industries. Among the new business models discussed in the Discussion Draft are electronic commerce, app stores, online advertising, cloud computing, payment services, high frequency trading, and participative networked platforms. Some of these models that may be more relevant to developing countries are discussed below.

#### 2.3.1 Electronic commerce

Electronic commerce, or e-commerce or Internet-commerce is perhaps the best known business model. The OECD defines this term as "the sale or purchase of goods or services, conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders".[16] E-commerce can be used either to facilitate the ordering of goods or services that are then delivered through traditional channels (offline e-commerce) or to order and deliver goods or services completely online (online e-commerce).

### *B2B dominates e-commerce*

Depending on the parties to e-commerce transactions, there are business-to-business (B2B), business-to-consumer (B2C), consumer-to-consumer (C2C), and business-to-government (B2G). At present, more than 90% of e-commerce is B2B.[17] According to research conducted by the US-based International Data Corporation (IDC), it is estimated that global B2B e‑commerce, especially among wholesalers and distributors, amounted to US$ 12.4 trillion at the end of 2012. If the expansion in e-commerce continues at this rapid pace in developed markets as is expected, B2B and B2C e-commerce transactions will account for about 5 per cent of all inter-company transactions and retail sales by 2017. [WTO brochure, at 3]

B2B transactions include online versions of traditional transactions, such as trading and services, and online services. The OECD Discussion Drafts lists the following as examples:

> "(i) logistics services such as transportation, warehousing, and distribution; (ii) application service providers offering deployment, hosting, and management of packaged software from a central facility, (iii) outsourcing of support functions for e-commerce, such as web-hosting, security, and customer care solutions; (iv) auction solutions services for the operation and maintenance of real-time auctions via the Internet; (v) content management services, for the facilitation of website content management and delivery; and (vi) Web-based commerce enablers that provide automated online purchasing capabilities."

B2C e-commerce refers to businesses selling goods or services to individual consumers. The OECD Discussion Draft lists several categories of B2C models, such as "the so-called "pureplay" online vendors with no physical stores or offline presence, "click-and-mortar" businesses that supplemented existing consumer-facing business with online sales, and manufacturers that use online business to allow customers to order and customize directly."[18] B2C models were among the earliest models of e-commerce. Examples include:

- Etailers: Online version of traditional retailer, including variations such as virtual merchants, bricks-and-clicks, catalog merchants, and manufacturer-direct
- Service Provider: Online services providers, such as Google: Google Maps, Google Docs, and so on;
- Content providers: providing digital content on the Web, such as news, music, video;
- Transaction Brokers: process online transactions for consumers, e.g., financial services, travel services, and job placement services
- Market Creators: create digital environment where buyers and sellers can meet and transact, such as Priceline and eBay
- Community Provider: provides online environment (social network) where

people with similar interests can transact, share content, and communicate (e.g., Facebook, Twitter, LinkedIn).

The potential benefits of e-commerce can be illustrated by the Dell business model.[19] Dell relied on e-commerce to support a virtual company. Orders for computers are placed with Dell by telephone or through the Internet. Through the process of just-in-time (or lean) manufacturing, waste is reduced and productivity improved by only having the required inventory on hand when it is actually needed for manufacturing. This reduces lead times and set up times for building a computer. Dell only orders the parts for a computer when it has a firm order. Dell operates with little in-process and no finished goods inventory. Products are shipped as soon as they are manufactured. This approach also enables Dell to forego having brick and mortar store fronts with inventory that must be kept on the books or that might become obsolete, thereby significantly reducing overhead. Items that are not built by Dell are shipped directly to the customer by the manufacturer. These features help Dell to reduce the costs of production and sales. This process allows Dell to custom design systems for its customer within certain parameters as well as to offer a range of items rather than a single system.

### *B2C*

In 2012, the estimated value of global B2C e-commerce exceeded US$ 1 trillion and B2B e-commerce was approximately US$12.4. [20] According to eMarketer's latest forecasts, worldwide business-to-consumer (B2C) e-commerce sales will reach US$1.5 trillion in 2014. Growth will come primarily from the rapidly expanding online and mobile user bases in emerging markets. [21] E-commerce in developing countries, especially BRIC (Brazil, China, India and Russia) has been growing rapidly. China was ranked number 1 for e-commerce retail index in 2013, Brazil was ranked number 8, and Russia number 13. [22] Emerging countries hold enormous potential for e-commerce growth. According to A.T. Kearney's *2013 Global Retail E-commerce Index Report*, the online retail industry has grown at 17 percent CAGR globally over the past five years, with growth particularly strong in Latin America (27 percent) and Asia Pacific (25 percent). Many developing countries, however, still lack adequate infrastructure to enable businesses to achieve the full potential of e-commerce.[23]

### *C2C*

C2C transactions are becoming more and more common. Businesses involved in this model play the role of intermediaries, helping individual consumers to sell or rent their assets by publishing their information on the website and facilitating transactions. An example of this would be eBay.

## 2.3.2 Other models

Other than e-commerce models, App stores, online advertising, cloud computing, payment services are also likely relevant to developing countries. The growth of Internet access through smartphones and tablets has caused the rapid increase in applications stores. In 2013, downloads from app stores reached 102 billion, up from 64 billion in 2012. Total revenue from app store purchases was expected to exceed $26 billion in 2013, an increase of 31% over the total in 2012.[24] Internet advertising reached US$100.2 billion in 2012, representing 17% growth from 2011, and a 20% share of the total global advertising market.

A newer kind of e-commerce is the so-called social e-commerce or F-commerce or M-commerce. It refers to commerce conducted via social networks, such as Facebook,

Twitter, LinkedIn, Instagram, etc. Facebook, or commerce conducted using mobile devices. It has been growing as a result of the growing popularity of social networks. ,This trend is particularly notable in developing countries where people increasingly use smartphones, tablets and other mobile devices to gain access to social networks.

### 2.4 Revenue models

There is a variety of revenue models in the digital economy. The OECD Discussion Draft describes these models to include: advertising-based revenue, subscription-based revenue, selling of goods and services, licensing content and technology, selling of user data and customized market research, etc.[25] A company may charge a fee for enabling or executing a transaction. Examples are eBay.com and E-Trade.com. The main revenue models can be summarized as follows:

- Under the advertising revenue model, the company offers content, services and/or products and also provides a forum for advertisements and receives fees from advertisers. An example is Yahoo.com.
- Under the subscription revenue model, the Web site that offers users content or services charges a subscription fee for access to some or all of its offerings. Examples are Consumer Reports Online.
- Under the sales revenue model, a company derives revenue by selling goods, information, or services to customers. Examples are Amazon.com and Gap.com. Licensing content and technology model may typically include access to specialist online content (e.g., publications and journals), algorithms, software, cloud based operating systems, etc. or a specialist technology such as artificial intelligence systems.
- The selling of user data and customized market research models are used by ISPs, data brokers, data analytics firms, telemetrics and data gained from non-personal sources.

### 2.5 Developing countries

There is no reliable data on the developing countries' share of global e-commerce. There is evidence that emerging markets, such as the BRIC countries, are playing an

increasing role in global e-commerce. Brazil, China, India and Russia are emerging e-commerce markets, and in some cases, exporters. For example, the OECD Discussion Draft notes several recent important shifts in the provision of ICT services: India has quickly become the leading exporter of ICT services, followed by Ireland, the United States, Germany, and the United Kingdom; China also became one of the major exporters; these six countries together represent about 60% of total exports of ICT services.[26] The level of development varies greatly from country to country and region to region.[27] A general trend in developing countries is the rapid growth of "m-commerce" (commerce conducted over mobile devices) and "F-commerce" (social media e-commerce) due to the increasing use of mobile devices.

### 2.5.1 BRIC Countries

Emerging countries hold enormous potential for e-commerce growth. According to A.T. Kearney's *2013 Global Retail E-commerce Index* report, the online retail industry has grown at 17 percent over the past five years, with growth particularly strong in Latin America (27 percent) and Asia Pacific (25 percent). In most emerging markets, the infrastructure needed to support e-commerce is still at the development stage, though great progress is being made. According to the previously cited A.T. Kearney report, China, Brazil, and Russia lead the next generation markets. In those countries, consumer online practices are well developed, and great advancement is being made in areas including Internet accessibility, logistical infrastructure, and/or financial systems. "Developing these capabilities (as each of these markets is working hard to do) will quickly make these countries critical e-commerce targets for global retailers."

#### *Brazil*

Brazil has the sixth largest economy, over 90 million Internet users, and one of the highest Internet penetration rates among developing countries: 45% compared with China's 38%, India's xx% and Russia's xx% (A.T. Kearney report). B2C e-commerce grew with the growth of the middle class in Brazil and the increasing Internet penetration. In 2013, Brazil boasted 50 million online shoppers. The B2C e-commerce market grew by a two-digit percentage in 2012 and 2013. Household appliances, fashion and accessories were among the top products bought online. Among the noticeable trends on

the growing B2C E-Commerce market in Brazil are m-Commerce and cross-border shopping. In the first half 2013, the mobile channel almost tripled its share on total B2C E-Commerce sales, and the penetration of smartphones and tablets continues. Mobile is on the rise as well, with 2.5% of purchases made via mobile devices in January 2013 and 4.8% by December – double. Moreover, cross-border online shopping was popular in Brazil: computer hardware and personal electronics were among the popular items, and US and China were the most popular countries to shop from.[28] The main reasons for cross-border shopping are the lack of selection of products in local traditional stores and cheaper prices online.

B2B e-commerce is emerging in Brazil. Alibaba, one of the world's largest B2B companies recently established itself in Brazil.[29]

### *Russia*

Russia's e-commerce situation is largely similar to Brazil. In 2012, the sales volume of online retail in Russia was similar to that in Brazil. Only about 15% of the adult population shopped online, which was primarily due to the relatively low level of Internet penetration. With the increase in the Internet penetration rate and more Internet users shopping online, B2C e-commerce increased in 2013 and is expected to continue growing. [30]

Cross-border sales to Russia are soaring: The market is developing fast (with between 50% to 100% growth each year). Amazon, eBay, Asos and a number of Chinese websites were among the top vendors. Russian consumers appreciate foreign retailers' diversified assortment and enjoy virtually tax-free purchases. Foreign vendors, such as Amazon and eBay, as well as a number of Western fashion brands in the clothing segment, enjoy high trust and popularity among Russian customers, but Chinese retailers are gaining strong traction but in different product categories. Apparel and accessories, consumer electronics and gadgets, as well as automobile parts are the most in demand product categories. Even taking into account delivery costs, many products are still cheaper if bought abroad than on the domestic market. One of the reasons for the price advantage in the concerned categories is that parcels received by inhabitants of the

Customs Union (including Russia) are not subject to customs taxation if they do not exceed 31 kg in weight and 1,000 euros in value each month per recipient. In case of intangibles (such as computer programs, e-books, music or video content), there is no concept of electronic import in Russia. Often with no Russian-source taxation, offshore-based e-commerce is more lucrative and preferred over domestic structures.

B2B e-commerce in Russia has grown, especially in the IT and telecoms, banking and financial services industries.[31] There are regulatory and other barriers that impede the growth of B2B. For example, in the B2B sector the Russian customer must have a duly executed agreement to be able to deduct outbound payments for tax purposes and to open a "transaction passport" with the bank in order to wire the payments. Electronic digital signatures cannot be used for such agreements, and such signatures would in any case require special software provided by accredited certification centers in Russia. Some companies manage to circumvent this inconvenience by sending executed originals by mail in advance and building in such extra paperwork and shipment costs into their business models.[32]

### *India*

India's e-commerce was in its infancy for the larger part of the previous decade. Since 2010, it has grown 150 percent.[33] As in Brazil, B2C dominated the sector with a 56.0 per cent share in 2010–11, but B2B's acceptance is on an upward trend due to its rising awareness amongst Small and Medium Enterprises (SMEs), which are close to 13 million in number. The m-commerce market is expected to grow rapidly, with 200 million users currently accessing the Internet only via mobile device.[34]

Indian companies, especially SMEs, are using cross-border e-commerce to expand into foreign markets. Over 15,000 sellers export a variety of Indian handcrafted products to 112 million customers in over 190 countries – that is "just the tip of the iceberg". [35] Many small businesses still do not have their own website and are looking to the third party B2B exchanges/ marketplace platforms to gain access to new markets.

Although many factors support the growth of e-Commerce in India, the fledgling industry is faced with significant hurdles with respect to infrastructure, governance and regulation. Low internet penetration of 11 percent (compared to world average of 34 percent) impedes the growth of e-Commerce in India. High drop-out rates (25-30 percent)10 on payment gateways, consumer trust deficit and slow adoption of online payments are compelling e-Commerce companies to rely on costlier payment methods such as COD (Cash on Delivery). India's internet market is about five years behind China.[36]

### *China*

China's e-commerce is more developed compared to many other developing countries. China was ranked number 1 in AT Kearney's *2013 Global Retail E-Commerce* report. Five of the top fifteen world's websites are Chinese: Baidu, Tencent QQ, Taobao, Sina Corp. and Hao123.com.[37] JD.com has recently launched an initial public offering in the United States.[38] Alibaba, which operates Taobao, is expected to follow suit soon.

In the 12th five-year plan on e-commerce (2011-2015), the Ministry of Industry and Information Technology unveiled policies to make China a global e-commerce leader, in line with China's transition from an investment-heavy growth model, towards a more consumption-driven model. By the end of 2013, China led all other countries in B2C and C2C purchases.[39] The President of Alibaba was quoted as saying: "in other countries, e-commerce is a way to shop, in China it is a lifestyle".[40] China's social media platforms have become an important additional driver or facilitator of e-commerce activity. Tencent's We Chat reported over 600 million subscribers, up from 300 million in January 2013. M-commerce is also rising; in the space of a few years, China has emerged as the country with the largest number of mobile-based e-commerce transactions.[41] In 2012, mobile transactions represented 3.7 percent of all e-commerce transactions in China; by 2015, it is forecasted to reach 8 percent. The trend towards 'smarter' and more functional phones and tablets, coupled with the rising use of social media platforms to inform and connect consumers, is expected to fuel the continued rise in 'm-commerce'.[42]

In 2013, the gross merchandise value of e-commerce represented by B2B e-commerce and traditional e-retailing was almost about RMB 10 trillion. For the next 5 years, the growth rate of online shopping, B2B e-commerce of large enterprises and SME B2B e-commerce is predicted to be 22%, 12% and 25% respectively.[43] And yet, with further Internet penetrating into service industry and traditional industries, and growing use of mobile devices, continuing growth is expected for the near future. China's e-tail (B2C) market was the second largest in 2012 and 2013[44] and was forecasted to surpass the United States in 2014. In particular, the proportion of m-commerce is expected to grow from 8.5% in 2013 to 24% in 2017.[45] B2B is the dominant e-commerce segment, making up 80% of total e-commerce, 50% of which was SME B2B.[46]

Cross-border e-commerce has been a main focus of China's e-commerce policy. Alibaba's top three foreign markets are the U.S., the U.K., and Australia. It has entered Brazil and is looking into the Middle East and Russia.[47]

### 2.5.2 Asia Pacific

In 2014, Asia-Pacific is expected to claim more than 46 per cent of global digital buyers, spend more on e-commerce purchases than those in North America, and the potential to grow remains huge as Internet users currently account for only 16.9 per cent of the region's population. In comparison, in North America and Western Europe, a majority of residents make purchases via digital channels.[48] Growth will come primarily from the rapidly expanding online and mobile user, advancing shipping and payment options and the push into new international markets by major brands.

In Thailand, for example, e-commerce is booming, especially in m-commerce, thanks to the 131 percent mobile penetration rate and about 52 million internet users in the country.[49] E-commerce is expected to grow by 30% in 2013.[50] This boom was boosted by "social e-commerce". Thailand has 24 million Facebook users who take advantage of the crowded social network for things other than sharing. F-commerce sellers often focus on women's products, ranging from accessories to clothes, skincare products to make-up.

This new trend, which is across Asia, not just Thailand, also provides a chance for startups to offer services dedicated to building solutions for F-commerce vendors.

Instagram-commerce is booming in Thailand as "Thai people love Instagram as much as Facebook."[51] In 2013, there were over 1.4 million Instagram users in Thailand, and the most Instagrammed location in the world is a shopping mall in Bangkok. Vendors embraced the photo sharing app and made it into a popular marketplace, turning Instagram accounts into shops selling everything from clothes to vitamins.

M-commerce is a big trend across the region, which "exploded in Thailand" in 2013. One app, Line, alone had over 18 million users in Thailand. Local companies as well as global brands, such as Maybelline, participated in m-commerce.[52]

### 2.5.2 Africa

Africa's e-commerce has been defined and accelerated by mobile phones. Many African countries have leapfrogged fixed-line Internet and adopted cellphones and networks. To promote e-commerce, entrepreneurs are reportedly contemplating circumventing the barriers of road transportation by opting for air transportation, even drones.[53]

Kenya and Nigeria are among the leading countries in adopting e-commerce. Nearly 30 percent of Kenya's population is between 20 and 40 years old. People with greater access to credit and regular earnings are also better equipped with mobile devices, and thus ideal customers for B2C e-commerce or m-commerce.[54] Nigeria, especially the city of Lagos, has an emerging e-commerce sector.[55] Even in the face of inaccessible traffic in the city, e-commerce companies are proliferating, some guaranteeing delivery of products across the city within 24 hours.

The potential for growth in Africa is phenomenal. Africa's middle class has reportedly tripled over the last 30 years, and the current trajectory suggests that the African middle class will grow 3.2 billion by 2020, 4.9 billion by 2030, and 1.1 billion in 2060, making it the world's fastest growing continent.[56] This growth, coupled with the

forecasted GDP growth of over 6%, is expected to drive the growth of e-commerce as businesses seize upon opportunities arising from the growing number of digitally-empowered consumers, who are opting to purchase goods via e-commerce channels. Local and global companies (e.g. Wal-Mart and DHL) are expanding in Africa.[57]

### 2.5.3 Latin America

Internet penetration rate in Latin America has been increasing in recent years. By mid-2012, over 48% of the population was online.[58] Other than Brazil, other countries in the region are experiencing growth in e-commerce. B2B interactions are being driven by the easing of regional tariffs and an understanding that companies must seek likeminded partners to succeed. Online advertising approached 15% of all marketing budgets in Latin America, climbed from 10.4% just a few years ago.

As in Asia, social networks are propelling the boom in e-commerce. 74% of internet users in Latin America regularly use social media sites such as Facebook or LinkedIn. It is not limited to B2C e-commerce. LinkedIn has become a fertile area for corporate communications in the area. M-commerce has been growing as the region had over 390 million mobile phone users. B2B marketing may still be in its relative infancy in Latin America, but it is growing swiftly.

## 2.6 Key Features of the Digital Economy

The OECD Discussion Draft describes the key features of the digital economy to include mobility, reliance on data, multi-sided business models, tendency toward monopoly or oligopoly and volatility.[59] It captures the changing dynamics and impacts of the digital economy on value creation and globalization. However, as suggested by the BEPS Monitoring Group,[60] these features may be better explained in terms of: (1) dematerialization of what is being traded; (2) mobility and connectivity and its impact on where income-earning activities or functions are located; (3) role of customers in value creation or paradigm shift in how value is created. This section discusses these three key features as well as special issues related to developing countries.

### 2.6.1 Dematerialisation

The dematerialization of a product literally means less, or no material is used to deliver the same level of functionality to the user.[61] In the context of digital economy, dematerialization refers to the transformation of any material object into something of virtual or digital. Digitization has been keen to the development of e-commerce.

The goods sold in e-commerce can be tangible (books) or intangible (e-books received by consumers in an electronic format). Through digitization of information, including text, sound, images, an increasing number of goods and services can be delivered digitally. Advances in the ICT have brought about the transformation of tangible goods into intangibles. An example is an e-book.

Advances in 3D printing technologies have the potential to transform manufactured goods (guns and machines) into intangibles (such as license plans and specifications) when the customers actually need the physical goods. 3D printing is defined as "additive manufacturing techniques to create objects by printing layers of material based on digital models".[62] It has been used to print a variety of things, ranging from hearing aid earpieces to firearms. It is conceivable that customers may be able to assemble products themselves by using 3D printers; instead of buying the products they will buy a license for the software or specifications from the "manufacturer".[63]

Even when a product remains tangible in form, such as a car or phone, its function and value is driven by its artificial intelligence. Smartphones have rendered conventional phones obsolete. Cars are "computers on wheels".

Goods can also be transformed into services, deliverable online. For example, in the "old" days, computer software took the form of a disc or CD. A website is essentially a software application providing a service delivered over the Internet rather than provided locally or on-site. The service can be about providing access to content (as a portal), or about providing access to executable code performing certain features.[64]

Conventional services can now be slapped with an "e" as an affix and delivered online. Examples are advertising, auction, banking and finance, broadcasting and publication, education, entertainment, health care, insurance, logistics services (such as transportation, warehousing, and distribution), and travel. E-commerce is dematerialized in that the services were delivered digitally as opposed to face-to-face.

New services arising from the digital economy are largely virtual or digital. Examples are the services of information technology (IT), Internet service providers (ISPs), application service providers (ASPs), network operators and telecommunications, web-hosting, and cloud computing. For example, through cloud computing, software, data and other resources are transformed into services, known as "X-as-a Service (XaaS). Customers are granted access to resources that are not stored on a single computer, but instead on many networked computers that are available to everyone who has access to that "cloud" of computing resources. Could computing often provides customers with a cost effective alternative to purchasing and maintaining their own IT infrastructure, since the cost of the consumer resources is generally shared among a wide user base. The OECD Discussion Drafts describes the following as the most common examples of cloud computing services models:[65]

- Infrastructure-as-a-service (IaaS) providers offer computers – physical or (more often) virtual machines – and other fundamental computing resources.
- Platform-as-a-service providers provide a computing platform and programming tools as a service for software developers. Software resources provided by the platform are embedded in the code of software applications meant to be used by end users. The client does not control or manage the underlying cloud infrastructure, including the network, servers, operating systems, or storage, but has control over the deployed applications.
- Software-as-a-service providers allow the user to access an application from various devices through a client interface such as a web browser (e.g., web-based email).
- Content-as-a-service: where rights are obtained and software is provided to allow content to be embedded by purchasers, content can be purchased as a service.

- Data-as-a-service: data from multiple sources can be aggregated and managed by a service provider, so that controlled access to that data can be granted to entities that may be geographically and organizationally removed from each other, without each entity needing to develop or acquire the infrastructure necessary to prepare and process that data.

Dematerialisation in the digital economy does not mean that everything is digital or virtual. People remain important as producers and consumers. Physical delivery of physical goods remains a significant part of e-commerce. Some people may still want to smell the fish or kick the tires before ordering online.

### 2.6.2 Connectivity (mobility)

The Internet virtually connects everybody who has access to it using a computer or mobile device. Such connectivity diminishes the relevance of distance or physical barriers. Digitized information (voice, text, image or video) can be communicated and delivered instantly from anywhere to everywhere. Digital technology increases the speed at which information can be processed, analysed and utilized.

Connectivity enhances the ability of companies to carry out activities remotely and to expand the number of potential customers that can be targeted and reached.[66] It enables companies to generate revenue from customers located in foreign jurisdictions without having any old-fashioned business presence in those jurisdictions. The OECD Discussion Drafts notes that such connectivity also increases "the flexibility of businesses to choose where substantial business activities take place," and as a result, "it is increasingly possible for a business' personnel, IT infrastructure (e.g., servers), and customers each to be spread among multiple jurisdictions, away from the market jurisdictions."[67] In short, it enhances the mobility of a firm's business functions, customers, and intangible assets.[68] The more "virtual" of a business model, such as cloud computing and "Pureplay", the more mobility. Digital businesses are, thus, intrinsically global. The "where" issue is neither here nor there.[69]

### 2.6.3 Consumers' Role in Value Creation

In a digital economy, consumers are empowered! Compared to traditional shopping, they have more choices, more convenience, more bargains, and more say in how they want to be "served". Why not? After all, Internet users who shop online tend to be middle class, more educated, younger, and more autonomous. The rise of social media has offered an instant global platform to share ideas, manage natural disasters, or build momentum for revolution (e.g. in the case of the Arab Spring). There has been a recent shift in the balance of power "from developed markets to the developing world and from institutions such as governments to individuals, who exercise their new power as consumers to gain information to their advantage."[70] "Consumers are more empowered than ever before." [71]

Unbeknown to them, consumers of the digital economy are also contributors to the value creation process. They seem to create value in at least two ways: First, as part of an "ecosystem enabling a continuous, symbiotic and reciprocal relationship of value exchange"; [72] and second, as a source of big data.

#### *Part of the ecosystem*

As explained by the BMG in its comments on the OECD Discussion Draft, the relationship between suppliers and customers is no longer one of a passive, discrete nature as it is in the conventional economy. Rather, in the digital economy the relationship is symbiotic andcontinuous. It also creates real economic value. Such a relationship may be cultivated through the supply of a bundle of hardware, a stream of services, and new products or enhancements. An example of this is, Apple, who have bundled the sale of hardware (e.g., iPhones) and software or services (e.g. App store).

These symbiotic relationships can also be the product of participative networked platforms, such as Wikepedia and YouTube. These platforms allow users to generate user-created content, such as product reviews, creative or how-to videos, and social media sharing, which add value by attracting an audience and provoking interactions

between users and businesses. More content updated more frequently increases a Website's visibility in search results, which drives the value of advertisement. [73]

Consumers play a more important role in multi-sided business models or platforms, which are the modern versions of the ancient village market and matchmakers.[74] [75] They are particularly prevalent in IT industries and are playing an increasingly important role in the global economy (e.g. Alibaba, Amazon, eBay, Facebook, Google). This business model "is based on a market in which multiple distinct groups of persons interact through an intermediary or platform, and the decisions of each group of persons affects the outcome for the other groups of persons through a positive or negative externality".[76] The OECD Discussion Draft points out that "[i]n a multi-sided business model, the prices charged to the members of each group reflect the effects of these externalities. If the activities of one side create a positive externality for another side (for example more clicks by users on links sponsored by advertisers), then the prices to that other side can be increased."[77]

### *Source of data*

The digital world is complex, hyperconnected, and increasingly driven by insights derived from big data.[78] Customers are a source of the big data.[79]

> "Every second of the day, a wealth of data stream from a global maze of social networks, smartphones, point-of-sale devices, medical records, financial transactions, automobiles, energy meters, and other digital sources. Such big data, fueled largely by personal data about all of us, represent an asset class every bit as valuable as gold or oil."[80]

In the digital economy, "Data have swept into every industry and business function and are now an important factor of production, alongside labor and capital."[81] The value of data lies in its quantity and quality.[82] Companies use the data collected to gather insights for product development, marketing, and customer service. More potential value lies in using social tools to enhance communications, knowledge sharing, and collaboration within and across enterprises. It was estimated by McKensey Global

Institute that by fully implementing social technologies, companies have an opportunity to raise the productivity of interaction workers—high-skill knowledge workers, including managers and professionals—by 20 to 25 percent.[83]

The concept of "big data" is big. The amount of data in the world has been exploding.[84] "Big data—large pools of data that can be captured, communicated, aggregated, stored, and analyzed—is now part of every sector and function of the global economy."[85] Big data creates value by, among other things, creating transparency, improving performance management, developing more precisely tailored products or services, improving decision-making, and improving the development of new business models, products, and services.[86]

### 2.6.4 Implications for developing countries

The key features of the digital economy have some special implications for developing countries. Firstly, as relatively "later comers" to the digital world, customers in developing countries are leapfrogging to the newest technologies and embracing mobile-commerce and "social e-commerce" or "F-commerce". Social networks (Facebook, LinkedIn, Pinterest, Twitter, and Instagram) are fertile grounds for producing data.[87] The growing number of social network users in developing countries accounts for an increasing share of the population on Facebook and other social networks (which is currently over 1.5 billion).

The digital economy in developing countries tends to be dominated by foreign Websites, such as Google, Facebook, Youtube, Yahoo, Wikipedia, Linkedin, Twitter, Instagram, Amazon. As pointed out in the OECD Discussion Draft, there is a tendency toward monopoly or oligopoly in the digital economy: "In some markets, particularly where a company is the first actor to gain traction on an immature market, network effects combined with low incremental costs may enable the company to achieve a dominant position in a very short time."[88]

While the "intangibles" (the software and ICT infrastructure) enabling a website to operate in developing countries are located out of the jurisdiction, the goods and services sold may be locally procured. For example, Amazon.cn sells goods that are made in China, including foreign brands, such as iPhone, which was designed in the US and made in China. Dell manufactures products in India, and its Dell International Services provides support for customers around the world. Indian customers shopping online at Dell.com or Compuindia (a partner of Dell)[89] can be buying Indian-made computers sold through the websites and serviced by people located in India.

## 3. TAX CHALLENGES FOR DEVELOPING COUNTRIES

The digital economy poses two kinds of tax challenges for developing countries: base erosion through exacerbating BEPS; and base Cyberization due to dematerialization and connectivity features of the digital economy. The digital economy does not seem to raise any unique BEPS issues as BEPS structures aim at taking advantage of mismatches or gaps in the existing international tax system. The base cyberiszation issue, on the other hand, is unique to the digital economy. Both kinds of challenges are not exclusive to developing countries. However, as market countries, developing countries tend to be "net losers" in tax revenue.

### 3.1 Base erosion risks exacerbated

In the digital economy, companies have opportunities to use tax planning structures to "artificially" segregate income from the activities that generate it. In fact, because of the heavy reliance on intangibles and data, enhanced mobility and globally integrated business models, the digital economy may "exacerbate" risks of BEPS in some circumstances.[90] These risks are extended to indirect taxes (VAT).

In the context of income taxes, the OECD Discussion Draft identifies four areas of base-erosion: (1) eliminating or reducing tax in the market country through: avoiding a taxable presence, minimizing functions, assets and risks in market jurisdictions or

maximizing deductions in market jurisdictions; (2) avoiding withholding tax; (3) eliminating or reducing tax in the intermediate country; and (4) eliminating or reducing tax in the country of residence of the ultimate parent.[91] In the context of VAT, it identifies BEPS risks due to remote digital supplies to exempt businesses and remote digital supplies to a multi-location enterprise.

As market jurisdictions, developing countries' tax base is more susceptible to base erosion as a result of BEPS strategies that manipulate the PE status, transfer pricing, and withholding taxes.

### 3.1.1 Avoiding a PE while maintaining physical presence

Many businesses in the digital economy use some form of physical presence to reach customers, deliver goods, or provide support. As identified by the OECD BEPS Action Plan, the supplier may adopt measures or structures to "artificially" avoid having a permanent establishment in the market country. Examples include the use of limited-function distributors or "commissionaire arrangements", the use of toll-manufacturing or contract manufacturing contracts to avoid having a PE or full-fledged manufacturing subsidiary, and "artificial" fragmentation of activities to avoid the temporal requirement of a PE or to qualify for the exceptions to PE status for preparatory and ancillary activities under Article 5(4) of the OECD Model.[92]

### 3.1.2 Transfer pricing manipulation

The digital economy does not eliminate the need for local presence in significant markets. For example, Google has offices in more than 60 countries, supports more than 130 languages or dialects and offers a personalized version of the search engine for more than 115 countries. Amazon has subsidiaries and/or fulfillment centers in over 22 countries in North America, Africa, Asian, Australia, Europe, and Latin America.[93]

The OECD Discussion Draft provides the following examples of BEPS structures that may be used by digital companies:[94]

- Typical examples of digital company structures that minimize assets and risks in market jurisdictions include using a subsidiary or PE to perform

marketing or technical support, or to maintain a mirrored server to enable faster customer access to the digital products sold by the group, with a principal company contractually bearing the risks and claiming ownership of intangibles generated by these activities.

- A company may, for example, limit risk at the local company level by limiting capitalization of that entity so that it is financially unable to bear risk. In the case of a business selling tangible products online, a local subsidiary or PE may maintain a warehouse and assist in the fulfillment of orders. These subsidiaries or PEs will be taxable in their jurisdiction on the profits attributable to services they provide, but the amount they earn may be limited.
- Alternatively, functions purported to be undertaken by local staff under contractual arrangements may not correspond with the substantive functions performed by the staff. For example, staff may not have formal authority to conclude contracts on behalf of a non-resident enterprise, but may perform functions that indicate effective authority to conclude those contracts. If purported allocations of assets, functions, and risks do not correspond to actual allocations, or if less-than-arm's length compensation is provided for intangible property of a principal company, these structures may present BEPS concerns.

The above transactions are not unique to digital companies (such as Google or Facebook) or e-commerce companies such as Dell. All MNEs have adopted business models that incorporate ICT or e-commerce. Some MNEs are becoming hybrids. The *Economist*[95] reported that Yihaodian, a Chinese company owned by Walmart, the world's largest retailer, has used an app to let phone users visit 1,000 "virtual stores" accessible only at specific sites. Amazon has flirted with the idea of opening physical stores. Walmart has 1,500 employees in Silicon Valley "trying to out-Amazon Amazon in areas such as logistics and making the most of social media."[96] However, the global platforms used by digital companies or e-commerce companies and the reliance on data and intangibles presumable create more opportunities for transfer pricing manipulation and

make it more difficult to apply the existing transfer pricing methodologies. Google is designing and making cars (driver-less).

### 3.2 Base Cyberization

The OECD Discussion Draft summarizes the main policy challenges raised by the ditial economy to fall into four broad categories:

- Nexus. The continual increase in the potential of digital technologies and the reduced need in many cases for extensive physical presence in order to carry on business raises questions as to whether the current rules are appropriate.
- Data. The growth in sophistication of information technologies has permitted companies in the digital economy to gather and use information to an unprecedented degree. This raises the issues of how to attribute value created from the generation of data through digital products and services, and of how to characterize for tax purposes a person or entity's supply of data in a transaction, for example, as a free supply of a good, as a barter transaction, or some other way.
- Characterisation. The development of new digital products or means of delivering services creates uncertainties in relation to the property characterization of payments made in the context of new business models, particularly in relation to cloud computing.
- VAT collection. Cross-border trade in both goods and services creates challenges for VAT systems, particularly where such goods and services are acquired by private consumers from suppliers abroad. This is partly due to the absence of an effective international framework that would allow economic actors, and in particular small and medium enterprises, to register and manage payments to a large number of tax authorities, as well as to the need to manage tax liabilities generated by a high volume of low value transactions, which can create a significant administrative burden but marginal revenues.

From the perspective of market countries, advances in digital technologies make it possible for MNEs and other companies to "legitimately" take the tax base (income tax as well as VAT) into cyberspace. The current rules were not designed for the digital economy. The cyberisation of the tax base can be accomplished in several ways, including:

(1) Carrying on business through a website in the market country without the use of any physical presence. For example, a digital business can locate its Website on servers outside the market country and deliver digital goods and services online. Social networks providers may not need any physical presence in the market country to reach its users.
(2) Replacing conventional sales outlets in the market country with online licensing of software or specifications if the products can be produced through 3D printing.
(3) Taking advantage of the exceptions under Article 5(4) of the OECD Model Convention by tasking the local office with "preparatory and ancillary" functions, such as warehousing and delivery;
(4) "Migrating" services that used to be provided in person to Cyberspace and keep in-person services to a minimum that gives rise to no PE in the market country;
(5) Converting traditional royalty into services fees and avoid withholding tax by transforming technical services or provision of software or other technologies into services delivered online;
(6) Monetising location relevant data created by local customers without any compensation.

The problem of cybersization affects both income tax and consumption tax. Collecting VAT on B2C transactions is virtually impossible if the foreign online vendor has no physical presence and does not register for VAT in the market country. In the case of B2B transactions, if the purchased goods or services qualify for input tax credit to the local business purchaser, the VAT revenue loss may be insignificant.

### 3.3 Supporting the development of digital economy

There seems to be a clear consensus that the growth of the digital economy is important to the overall economic growth of a country. The growth of the digital

economy has been faster than the general GDP in developed countries. There is reason to believe that the same is true for developing countries. However, the growth of the digital economy requires both ICT infrastructure and regulatory modernization in many developing countries. As such, collecting tax revenue from this emerging form of business must be balanced with the need to stimulate the growth of this economy. It will be short-sighted "to dry the pond in order to catch the fish" or "to kill the goose in order to take the egg". [97]

Meanwhile, developing countries may wish to consider tax policies that can stimulate the growth of the digital economy, including tax incentives for start-ups or investment in ICT infrastructure, and/or providing tax certainty and predictability to businesses and consumers. The existing tax treatment of e-commerce transactions, cloud computing services, and other digital transactions is unclear. For example, the Russian tax rules do not provide for any special tax treatment of transactions concluded over the Internet. A "cloud sale" transaction may fall into one of several categories: goods, works, services or licenses. For example, data collection and/or processing, engineering, and some other limited categories would be subject to 18 percent Russian VAT if the customer is located in Russia. Software sales under a license agreement are exempt from Russian VAT, but software as a service (SaaS) would not normally enjoy such beneficial tax treatment (unless legitimately structured as auxiliary to principal VAT-exempt software use licenses). Technical maintenance and support could also be exempt from VAT if they resemble licensing of updated software, but separate help-desk services would be VAT-able consulting services. Overall, while the reverse charge VAT that must be withheld by Russian customers can be contractually grossed up and is normally recoverable, it frequently carries a substantial cash flow disadvantage and should be minimized where possible.[98]

# 4. PROTECTING TAX BASE

## 4.1 OECD's Work

### 4.1.1 BEPS Issues distinguished from Fundamental Policy Issues

The OECD Discussion Draft distinguishes tax challenges raised by the digital economy between those arising from BEPS structures and "broader" issues arising from the special features of the digital economy. The former is the result of taking advantage of mismatches in the existing tax system. The latter is the result of "mismatch" of deliberate policy choices made over a century ago and today's digital economy.

Section V of the Document explains that "the work on the actions of the BEPS Action Plan will take into account the features of the digital economy in order to ensure the proposed solutions fully address BEPS in the digital economy." [143] These solutions require some revisions to the existing rules and reducing gaps or frictions between national tax systems. Parts Sections VI and VII of the Document discuss the broader tax challenges and potential options to address these challenges. These potential options include new rules.

### 4.1.2 Addressing BEPS

The OECD Discussion Drafts discusses measures that will: (a) restore taxation of stateless income in the market jurisdiction, such as Action 6 (treaty abuse) and Action 7 (PE status); (b) restore taxation in both market and ultimate parent jurisdiction, such as Action 2 (Hybrid Mismatch Arrangements), Action 4 (Interest Deductions and Other Financial Payments), Action 5 (harmful tax practices), and Actions 8-10 (transfer pricing); and (c) restore taxation in the jurisdiction of the ultimate parent, such as strengthening CFC rules. It also discusses BEPS issues in the area of consumption taxes.

The BEPS measures are expected to "effectively address the BEPS concerns that arise in the digital economy." If that turns out to be the case, addressing the broader issues "may become less pressing". [99] However, "if BEPS issues are not addressed fully in the context of the digital economy and extremely low effective tax rate continue to be

norm, then addressing the broader tax challenges of the digital economy becomes a more pressing issue."[100]

### 4.1.3 Broader issues

#### *General Principles and policy framework*

The Discussion Draft states that the Task Force has not yet reached any conclusions about any of the proposals discussed in Part VII. However, the Task Force seems to be clear that the Ottawa framework principles of neutrality, efficiency, certainty and simplicity, effectiveness and fairness, and flexibility continue to be a good starting point for a framework for evaluating options for addressing the tax challenges raised by the digital economy.

Administrative challenges are noted in respect of identification of businesses, determination of the extent of activities, information collection and verification, and identification of customers. "There is a pressing need to consider how investment in skills, technologies and data management can help tax administrations keep up with the ways in which technology is transforming business operations."[101]

#### *Nexus: modifying Article 5(4) of the OECD Model*

Under Article 5(4) of the OECD Model, a PE is deemed not to include: (a) the use of facilities solely for the purpose of storage, display or delivery of goods or merchandise belonging to the enterprise; (b) the maintenance of a stock of goods or merchandise belonging to the enterprise solely for the purpose of storage, display or delivery; (c) the maintenance of a stock of goods or merchandise belonging to the enterprise solely for the purpose of processing by another enterprise; (d) the maintenance of a fixed place of business solely for the purpose of purchasing goods or merchandise or of collecting information, for the enterprise…".

The use of a fixed place of business to purchase, warehouse, and deliver merchandise may be an activity of preparatory or auxiliary nature for conventional businesses, but "core" activities for e-commerce. The Discussion Draft lists several options to modify Article 5(4), including: (1) eliminating Article 5(4) entirely; (2) eliminate paragraph (a)

through (d), or make them subject to the overall condition that the character of the activity conducted be preparatory or auxiliary in nature, rather than one of the core activities of the enterprise in question. [102]

### *New Nexus based on significant digital presence*

This proposal addresses situations in which businesses are conducted wholly digitally. "Such a proposal would determine that an enterprise engaged in certain "fully dematerialized digital activities" would have a permanent establishment if it maintained a "significant digital presence" in the economy of another country".[103]

The Discussion Draft suggests a number of factors to determine when a fully dematerialized digital activity was conducted.[104] These include the facts that online or Internet sale of digital goods or digital services is the core or considerable part of the business of the enterprise, requiring no physical stores, agencies or assets (except servers and IT tools). Interestingly, another factor is "The legal or tax residence and the physical location of the vendor are disregarded by the customer and do not influence its choices".[105]

According to the Discussion Draft, an enterprise engaged in a fully dematerialized business is deemed to have a significant digital presence in a country when there is a significant number of contracts concluded with customers in that country, or the enterprise's goods or services are "widely used or consumed" in that country, clients in that country make substantial payments to the enterprise, or an "existing branch" of the enterprise in that country offers secondary functions such as marketing and consulting targeted at clients resident in the country that are strongly related to the core digital business of the enterprise. [106] Alternatively, an enterprise engaged in a fully dematerialized digital activity is deemed to have a significant digital presence if it "does a significant business in the country using personal data obtained by regular and systematic monitoring of Internet users in that country through the use of multi-sided business models."[107]

### *Virtual PE*

The Discussion Draft includes several potential options for alternative PE thresholds that were considered by the OECD Business Profits TAG "for the sake of completeness" only.[108] These alternatives regard a website to be a virtual PE, a technological means to enable contracts to be "habitually concluded on behalf of an enterprise with persons located in the market country" as "virtual agency PE". A foreign enterprise providing on-site services or other business interface at the customer's location would be deemed to have to an "on-site business presence PE".

### *Creation of a withholding tax on digital transactions*

This option would impose a final withholding tax on certain payments made by residents of a country for digital goods or services provided by a foreign provider. It is presumably intended to deal with the characterization issue. The Discussion Draft indicates that the Task Force will need to consider consistency with trade obligations and practical challenges of withholding in the case of transactions with individual consumers. One option to deal with the practical challenge would be to require withholding by the financial institutions involved with credit card payments or electronic payments.[109]

### *Consumption tax*

The Discussion Draft identifies two issues related to VAT in the case of B2C transactions. One issue addresses the exemptions for imports of low valued goods and another addresses remote digital supplies to consumers. On the basis of past work carried out by international organisations, including the OECD and the European Union, and country experience, the Discussion Draft suggests that "the most effective and efficient approach to ensure an appropriate VAT-collection on such cross-border B2C services is to require the non-resident supplier to register and account for the VAT on these supplies in the jurisdiction of the consumer."[110] In light of the challenges in enforcing compliance from non-resident suppliers, it was suggested that countries consider the use of simplified registration regimes and registration thresholds to minimize the potential compliance burden on businesses.

### 4.1.4 Public comments

The Task Force invited public comments on the Discussion Draft. A large number of submissions were posted on the OECD Website, most of the comments came from associations, groups or MNEs in developed countries. A quick review of these comments indicates that there is strong support to the following points: (1) the digital economy should not be ring-fenced from the rest of the economy as the entire economy is digitized or being digitized and ring-fencing would violate the principle of neutrality; (2) the Ottawa Framework remains a good starting point; (3) the digital economy does not create BEPS challenges that are exclusive to the digital economy; (4) the broader tax challenges raised by the digital economy should be addressed after the BEPS measures are developed; and (5) requiring non-resident digital vendors to register for, charge, collect, and remit VAT on B2C transactions is a viable option for the market country to address the broader policy challenges.

## 4.2 Options for developing countries regarding BEPS

### 4.2.1 Active Participation

The tax challenges raised by the digital economy are global, and global solutions are needed. Developing countries are part of the digital economy and will suffer from tax revenue loss due to base erosion or base cyberisation. In addition to the loss of tax revenue, if the tax base is not adequately protected from these challenges, there will be uneven playing field for local and remote businesses.

The time to act is now. Back in the 1920s, developing countries did not participate in developing the current international tax system. Although developing countries have strived to modify the international tax system to give more taxing rights to capital-importing countries through the work of the United Nations, these modifications are generally modest. The recent international alliance in combating BEPS provides an historical opportunity for developing countries, some of which are part of G20, to actually have a real say in how international tax problems are resolved. Because the digital economy brings about a fundamental shift in how business is conducted and value is created, it is necessary to investigate whether there should be a fundamental shift in

thinking about the basis for allocating taxing rights. Developing countries should play an active role in the process of reshaping the international tax system.

The United Nations is the ideal institution to lead this important initiative and to coordinate with the OECD, which has better expertise and resources and the mandate from G20 to deal with the BEPS problems.

### 4.2.2 Additional principles and policy concerns

In addition the Ottawa Framework principles, developing countries should consider some additional principles. One additional principle was suggested by the BMG: "Profit-value alignment: International tax rules should ensure that profits are taxed where economic activities occur and value is created; in particular, the location of real activities should take precedent over legal constructions."111 This profit-value alignment principle is consistent with the purpose of the BEPS Action plan, that is "international tax rules on tax treaties, permanent establishment and transfer pricing will be examined to ensure that profits are taxed where economic activities occur and value is created." (St. Petersburg G20 Leaders Declaration).

An obvious policy concern for developing countries is the right to tax services and royalties. The dematerialization in the digital economy highlights the importance of this issue. The current OECD position generally favors characterising payments as "services" as opposed to "royalty" or "technical fees".112 The Discussion Draft floats the idea of levying a new withholding tax on digital transactions as an alterative for addressing the lack of physical presence in the market country. Since the UN Model has always allowed withholding tax on royalty, payment for ICT services, cloud computing, and usage of data, etc. may be more akin to royalty or technical services.

From the perspective of developing countries, developing new rules to apply ONLY to digital business transactions does not make much sense. Firstly, ring-fencing the digital economy is very difficult. Secondly, it violates the tax neutrality principle without any apparent policy or principled justifications. Third, the digital economy exposes the

weakness in the fundamental design of the existing PE test and transfer pricing rules and addressing these fundamental design issues would be more effective in the long run.

In thinking about developing appropriate international tax rules to allocate taxing rights between countries in a fair manner, it may be helpful to revisit the fundamental theories and principles underlying the existing system. The digital economy may involve a shift in how business is done, how value is created, but it does not shift the reasons why countries need to impose taxes, nor does it shift the basic function and purpose of international tax law. Therefore, the digital economy may require new "tax tools" to allocate the global tax base among nation-states. It is important to keep in mind the fundamental theories and policy justifications in designing the new tools.

### 4.2.3 Revising or reinterpreting the permanent establishment test

Modifying Art.5(4) of the OECD Model in the manner suggested in the Discussion Draft is a sensible first step in addressing the BEPS problem and the base cyberiszation problem. The rationale for the existing exceptions is that the activities conducted by the fixed place in the market country are of preparatory or auxiliary in nature. If the exceptions which were designed for the conventional economy were literally used for the digital economy, the rationale would be defeated.

Another possible modification can be made to Article 5(3) of the UN Model by reducing the period of time required to give rise to a permanent establishment in respect of construction, assembly or installation or supervisory services and consultancy services. Even with further dematerisation, these types of services still need to be provided with some physical presence in the client's country. However, dematerialization will reduce the amount of time required for physical presence. The current six months or 183 days can be reduced significantly, especially in cases where a portion of the project is implemented in the service provider's home country or a third country.

Some BEPS structures designed to circumvent the PE status rely on a highly technical, legalistic interpretation of the PE definition and the taxpayer's contractual arrangements. Examples are the commissionaire arrangements and limited-function distributorship with a subsidiary in the market country. Developing countries can protect

their tax base from erosion by adopting a purposive interpretation of the PE definition and a substance-over-form construction of the taxpayer's contracts, or invoking domestic general anti-avoidance rule. Through such interpretation approaches, it is possible that to regard a non-resident online seller of tangible goods or online provider of services to have a PE where the non-resident uses the sales force of a local subsidiary to negotiate and effectively conclude sales with prospective large clients (i.e., B2B transactions).

### 4.2.4 Replacing the PE test with a "significant business presence" test

The "significant digital presence" proposal in the OECD Discussion Draft is a welcoming step in the right direction – rethinking about the relevance of fixed base in a dematerializing economy. However, it is problematic as it amounts to "ring-fencing" the digital economy and difficult to administer. The number of factors described in the Discussion Draft speaks to the difficulties in even defining the scope of "fully dematerialized digital activities" presence and the level of activities to constitute "significant digital presence".

A better option is the "significant presence" test suggested by the BEPS Monitoring Group.[113] The criteria for applying this test include:

> "(a) relationships with customers or users extending over six months, combined with some physical presence in the country, directly or via a dependent agent;
> (b) sale of goods or services by means involving a close relationship with customers in the country, including (i) through a website in the local language, (ii) offering delivery from suppliers in the jurisdiction, (iii) using banking and other facilities from suppliers in the country, or (iv) offering goods or services sourced from suppliers in the country; (c) supplying goods or services to customers in the country resulting from or involving systematic data-gathering or contributions of content from persons in the country."

This proposal is not limited to digital businesses and emphasizes economic presence as opposed to physical presence. The BMG explains that this proposal would still exclude many businesses involved in the digitalized economy. For example, a software designer which supplies a program in digital form to customers

all over the world from a single website in the language of its residence country would not be covered.

Developing countries can also consider combining the current PE test with the BMG's "significant presence" test into a "significant business presence" test. A "significant business presence" test encompasses a fixed base PE, an agency PE, as well as a website or other methods of value creation in the market country. Its goal is to ascertain the level of a non-resident company's engagement in the economy of the market country and benefiting from the infrastructure and business environment created by that country.

### 4.2.5 4.2.5 Attribution of profit

Revising the PE test is not enough to protect the market country's tax base. The current profit attribution rules must also be revisited so that "meaningful" profit could be attributable to the PE. Under the current rules, no or minimal profit could be attributable to a PE if the non-resident supplier has no people functions, assets, or risks would be present in the market country. The value of data needs to be taken into account. It remains an open question as to how data create value.

### 4.2.6 Deeming B2B Service Fees as Royalties

As observed by Brian Arnold in his paper, "developing countries have become increasingly concerned about the erosion of their domestic tax bases by multinational enterprises through payments by residents for management, consulting and technical services provided by related nonresident companies."[114] The base-erosion occurs where: (a) the services are provided in the market country without giving rise to a PE, or, if there is a PE, little or no profit can be attributable to the PE; or (b) where the services are provided outside the market country and the client, who is resident in the market country deducts the payments and is not required to withhold tax on the service fees. The problem of base erosion in the digital economy is only going to worsen because of dematerialisation and provision of services online.

Base-erosion through avoiding the PE status can be addressed by the options discussed above. To protect the tax base from B2B payment of service fees where the provider has no PE in the market country, several options can be considered: (1) denying the deduction of payment to the resident company – a "draconian" method that could be used in limited circumstances;[115] (2) deeming all B2B service fees as "royalties" for purpose of withholding tax.

Deeming all B2B service fees as royalties has several advantages. First, it is evolutionary. There are many existing treaties concluded by developing countries treat technical fees as royalties. The domestic law of some countries, such as China and India, treat payment of fees for ICT services as royalties.[116] Second, it would be neutral as services delivered online or otherwise would be subject to the same rules. Third, it would be administratively feasible. The existing mechanism of withholding can be used. It would be difficult to characterise transactions in the digital economy in general and related-party B2B transactions in particular. B2C transactions would not be subject to this deeming rule.

The main disadvantages of this option are the following: (1) it would be a shift in the "source rule" for services. Instead of the place of performance, the source rules would be similar to that in UN Model Article 12(5) (residence of payer) or UN Model Article 12(6) (base-erosion); (2) it would be a departure from the current OECD position that e-commerce payments should be characterized as business profits, not subject to withholding tax; and (3) withholding tax might be a poor proxy for a tax on net income and the tax burden would be shifted to resident companies, increasing their cost of doing business.

### 4.2.7 Allocation of global profit based on profit-value alignment

The key features of the digital economy put tremendous pressure on the existing transfer pricing rules which were conceived to function in a different business environment. The Discussion Draft takes the position that "the transfer pricing rules based on the arm's length principle (ALP) are theoretically equipped to address [the BEPS problems]."[117] It does not list transfer pricing as a "broader" tax challenge raised

by the digital economy. Critics of the OECD approach claims that "it is high time to acknowledge this core deficiency of the ALP and adopt tax solutions for the present."[118]

Even the Discussion Draft adequately describes the theoretical and practical challenges raised by the digital economy in applying the transfer pricing rules:

> "With the advent of the development in ICT, reductions in many currency and custom barriers, and the move to digital products and a service based economy, the barriers to integration broke down and MNE groups began to operate much more as single global firms. Corporate legal structures and individual legal entities became less important and MNE groups moved closer to the economist's conception of a single firm operating in a coordinated fashion to maximize opportunities in a global economy."[119]

The separate entity, transaction-by-transaction, comparable approach endorsed by the OECD Transfer Pricing Guidelines are difficult for developing countries to administer. As noted by China and India in Chapter 10 of UN Practical Manual on Transfer Pricing (2012), it is extremely difficult to find comparables. Through BEPS structures, MNEs often treat subsidiaries in developing countries as limited function entities and attribute profit to them for their "routine" functions. Location contribution to the global value chains is ignored. The tax base of developing countries would suffer from not only BEPS but also "base cybersization" as MNEs are becoming single, global firms which defy the assumptions underlying the current transfer pricing rules.

It would be in the interest of developing countries to work with the OECD in designing measures to address artificial transfer pricing manipulation. More importantly, developing countries should, perhaps, advocate a move to the use of a profit-split or other profit apportionment methods based on the value chains used by MNEs. Value created by data, by people as consumers and producers should be appropriately recognized, and value attributable to risks that are within the control of the MNEs should not "inflated" through internal contracts. If MNEs act as unitary business beings, they should be treated as such in tax law.

### 4.2.8 VAT

The option to protect the VAT base seems to be clear: requiring non-resident vendors which have passed a certain threshold to register, collect and submit VAT on sales to customers located in the market country. There are technical issues in setting the threshold and identifying non-resident vendors and resident customers. The so-called "Amazon tax" or "Google tax" offer some insights about what is feasible at the moment. Experience from the EU and States and local governments in the US may offer some useful insights as well.

## 5. CONCLUSIONS

The digital economy raises two kinds of challenges to the tax base of developing countries: base erosion due to BEPS strategies; and base cyberiszation due to the advances of digital technologies. Addressing these challenges require coordination with the OECD. Developing countries have some special concerns that may not be shared by the OECD and may need to develop their own measures, such as the taxation of services and royalties.

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THESE NOTES ARE INCOMPLETE AT THE MOMENT.

[1] Available at http://www.oecd.org/ctp/BEPSActionPlan.pdf. At the request of the G20 Finance Ministers, in February 2013, the OECD prepared a report outlining the BEPS issues, and in July 2013, followed with an action plan, which was to address those issues in a coordinated and comprehensive manner. Specifically, was to provide countries with domestic and international instruments that would better align rights to tax with economic activity. The Plan is organized around 15 actions, which are to be implemented by the specified deadlines during 2014-2015.

[2] G20, TAX ANNEX TO THE SAINT PETERSBURG G20 LEADERS DECLARATION", Saint Petersburg 2013.

[3] OECD, BEPS Action Plan.

[4] OECD, *Action Plan on Base Erosion and Profit Shifting* (OECD 2013), available at www.oecd.org/tax/beps.htm, provides for the establishment of "a dedicated task force on the digital economy" (p. 14), and the European Commission has established a High Level Expert Group on Taxation of the Digital Economy, described at http://ec.europa.eu/taxation_customs/taxation/gen_info/good_governance_matters/digital_economy/index_en.htm. In March 2014, the OECD issued a public discussion draft on digital economy issues. *See* OECD, *BEPS Action 1: Address the Tax Challenges of the Digital Economy* (Public Discussion Draft) (OECD 2014), available at http://www.oecd.org/ctp/tax-challenges-digital-economy-discussion-draftmarch-2014.pdf.

[5] See Infocomm Development Authority of Singapore, at. Global Trends, The Emerging Digital Economy (June 2013) (http://www.globaltrends.com/monthly-briefings/60-monthly-briefings/192-gt-briefing-june-2013-the-digital-economy) defines the term "as social and economic activities that demonstrate the following characteristics: are enabled by internet/mobile technology platforms and ubiquitous sensors; offer an information-rich environment; are built on global, instant/real-time information flows; provide access 24/7, anywhere, i.e. are always-on and mobile; support multiple, virtual, connected networks."

[6] Department of Broadband, Communications and the Digital Ecoomy, Australian Government. What is the digital economy? [Online] Available from: http://www.dbcde.gov.au/digital_economy/what_is_the_digital_economy [Accessed 9th July 2012]. See also P. Collin & N. Colin, *Task Force on Taxation of the Digital Economy* (Jan. 2013), available at www.hldataprotection.com/files/2013/06/Taxation_Digital_Economy.pdf.

[7] Discussion Draft, para. 29.

[8] Ibid., para. 53.

[9] The Boston Consulting Group, Report on the Internet Economy in the G-20 (2012), at 6.

[10] Tai-Yoo Kim et al, "The Faster-Accelerating Digital Economy" in *Economic Growth: The New Perspectives for Theory and Policy* (Springer, 2014), 163-191.

[11] OECD Discussion Draft, para. 53.

[12] World Economic Forum, *Global Information Technology Report 2013: Growth and Jobs in a Hyperconnected World*, http://unsdn.org/?p=5305.

[13] Ibid., para. 11

[14] World Trade Organisation (2013), E-Commerce in Developing Countries: Opportunities and Challenges for Small and Medium-Sized Enterprises (WTO E-commerce Report).

[15] US Department of Commerce 1999.

[16] OECD (2011), OECD Guide to Measuring the Information Society 2011, OECD Publishing. See also World Trade Organization, E-commerce in developing countries: Opportunities and challenges for small and medium-sized enterprises" (2013) (*www.wto.org/english/res_e/booksp_e/ecom_brochure_e.pdf).*

[17] WTO E-commerce Report;. OECD Discussion Draft, para.62: The vast majority of e-commerce consists of B2B transactions.

[18] OECD Discussion Draft, para. 63.

[19] For further discussion of the Dell model, see Kenneth Kraemer and Jason Dedrick, Dell Computer: Using E-commerce To Support the Virtual Company" (2001), at http://digitalenterprise.org/cases/dell_text.html.

[20] OECD Discussion Draft, para.68.

[21]" Global B2C Ecommerce Sales to Hit $1.5 Trillion This Year Driven by Growth in Emerging Markets" (Feb.3, 2014), at http://www.emarketer.com/Article/Global-B2C-Ecommerce-Sales-Hit-15-Trillion-This-Year-Driven-by-Growth-Emerging-Markets/1010575.

[22] ATKearney's 2013 Global Retail E-Commerce Index, at http://www.atkearney.com/consumer-products-retail/global-retail-development-index.

[23] WTO E-commerce Report.

[24] OECD Discussion Draft, paras.73 and 74.

[25] Ibid., a dropbox after para.90.

[26] Ibid., para. 97

27 World Economic Forum 2013 Report; WTO E-commerce Report.

28 BrAzil B2c E-commErcE rEport 2013 - yStats.com
www.ystats.com/uploads/report_abstracts/1051.pdf

29 "Alibaba.com Ready to Samba as B2B Website Aims at Brazil", see http://www.alizila.com/alibabacom-ready-samba-b2b-website-aims-brazil#sthash.WM4BSD5k.dpuf

30 Report

31 Arseny Seidov. "Challenges and Opportunities Facing B2B E-Commerce in Russia" Nov. 28 2012, http://www.themoscowtimes.com/business_for_business/article/challenges-and-opportunities-facing-b2b-e-commerce-in-russia/472136.html

[32] Ibid.

[33] KPMG-IAMAI, "e-Commerce Rhetoric, Reality and Opportunity,"*https://www.kpmg.com/IN/en/IssuesAndInsights/.../KPMG-IAMAI-ES.p...*

[34] http://evigo.com/14101-india-already-booming-e-commerce-market-continues-grow/. As India moves towards becoming a consumption driven economy, growing internet penetration in smaller towns and

rural areas, proliferation of mobile devices and emerging need for convenience, choice and access are acting as prime movers from the demand side. Companies have introduced innovative business models, by offering convenient payment options and by introducing technological innovations and customer friendly policies, including flash sales, India 'Cyber Monday' or the 'Great Online Shopping Festival' to promote online shopping. The government and regulatory bodies are also playing their part by investing in infrastructure and policy support.

[35] Ibid.

[36] Goldman Sachs on India's internet industry. http://evigo.com/14101-india-already-booming-e-commerce-market-continues-grow/.

[37] See http://en.wikipedia.org/wiki/Alexa_Internet. Other top 15 websites are: Google, Facebook, Youtube,Yahoo, Wikipedia, Windows Live, LinkedIn, Twitter, Amzaon, Google India.

[38] http://www.nasdaq.com/markets/ipos/company/jdcom-inc-925884-74521.

[39] KPMG, China 360 - Issue 15 (2014/01) - E-commerce in China: Driving a new consumer culture (Jan.2014), at www.kpmg.com/.../China.../China-360-Issue15-201401-E-commerce-in-...

[40] .He Wei. 'China set to overtake US in e-commerce'. *China Daily*. August 28, 2013; http://usa.chinadaily.com.cn/business/2013-08/28/content_16927926.htm; 'E-commerce in China: Gain entrance into a completely different world'. Group of Companies, June 16, 2013http://www.ptl-group.com/blogs/e-commerce-in-china-gain-entrance-into-a-completely-different-world

41 MPMG, China 360.

42 55 percent ofChina's internetusers have made amobile payment,versus only 19 percentof internet users inthe US. See KPMG, China 360.

43 iResearch Releases China E-commerce Forecast (2014), http://www.iresearchchina.com/views/5584.html.

44 McKinsey & Company, China's e-tail revolution (2013), www.mckinsey.com/.../China%20e.../MGI_China_e-tailing_Full_report_...

45 Ibid.

46 iResearch ,China E-commerce GMV Remarably Rise 2.57 Tn Yuan in Q1 2014" May 26, 2014, http://www.iresearchchina.com/views/5655.html

47 Jim Erickson, Dec 19, 2013 "Alibaba.com Ready to Samba as B2B Website Aims at Brazil" www.alizila.com/alibabacom-ready-samba-b2b-website-aims-br...

48 "India, China to help APAC become largest e-commerce market in 2014" The Financial Times, Internet, PTI Feb 18, 2014, 02.59PM IST http://articles.economictimes.indiatimes.com/2014-02-18/news/47451222_1_e-commerce-emarketer-emerging-markets.

49 Steven Millward, "2013 was a year of booming social e-commerce in Thailand" *Tech in Asia – Fri, Dec 27, 2013 3:00 PM SGT (https://sg.finance.yahoo.com/news/2013-booming-social-e-commerce-070049247.html)*

[50] Ibid.

[51] Ibid.

[52] Ibid. See also Ecommerce in Thailand http://www.thailandinternet.com/ecommerce-in-thailand.html; *Orabhund Panuspatthna*, "The Laws and Policies of Thailand in Supporting Electronic Commerce" http://www.thailawforum.com/the-laws-and-policies-of-thailand-in-supporting-electronic-commerce/.

[53] The African Version of Amazon Will Emerge From Nigeria (18 April 2014) http://mashable.com/2014/03/18/nigeria-ecommerce-drones/.

[54] Eran Feinstein, "The Rise of Entrepreneurship and E-commerce In Africa", January 7, 2014 http://www.ventures-africa.com/2014/01/the-rise-of-entrepreneurship-and-e-commerce-in-africa/

[55] The African Version of Amazon Will Emerge From Nigeria (18 April 2014) http://mashable.com/2014/03/18/nigeria-ecommerce-drones/.

[56] Deloitte, "The Rise and Rise of the African Middle Class" ...

www.deloitte.com/assets/Dcom-SouthAfrica/.../rise_and_rise.pdf; Institute for Security Studies European Union (EUISS), ESPAS, 2011; Grail Research, "The Rising Middle Class of Africa" (2013), http://grailresearch.com/pdf/ContenPodsPdf/Grail-Research-The-Rising-Middle-Class-Africa.pdf

[57] "Potential for retail growth in Africa" 5 May 2014 11:21, http://www.bizcommunity.com/Article/196/394/112923.html

[58] Patricia Maroday, Latin America: B2B Marketing's Biggest Opportunity

May 7, 2013,
http://pulsosocial.com/en/2013/05/07/latin-america-b2b-marketings-biggest-opportunity/

[59] OECD Discussion Draft, paras. 91-118.

[60] BEPS Monitoring Group's response to the OECD Discussion Draft published on the OECD Website (hereinafter "BMG Comments").

[61] Wernick et al, "Dematerialization: Measures and Trends", *Journal of the American Academy of Arts and Sciences*, 125(3):171-198 (Summer 1996).

[62] McKinsey Global Institute, 2013, *Disruptive technologies: Advances that will transform life, business, and the global economy"*.

[63] OECD Discussion Draft, para.38.

[64] OECD Discussion Draft, para.27. Application service providers (ASPs) provide businesses with the service of hosting and managing specialized business applications, with the goal of reducing costs through central administration and through the ASP' specialization in a particular business application.

[65] Ibid., para.82.

[66] OECD Discussion Draft, paras.178.

[67] OECD Discussion Draft, para. 179.

[68] Ibid., paras.92-102.

69 Borrowing from Bill Bryson, Neither Here nor There: Travels in Europe (Perenial, 1993).

70 Gregory Carpenter, "Power shift: The rise of the consumer- focused enterprise in the Digital Age" (2013),
www.kellogg.northwestern.edu/.../Rise-of-the-Consumer-Focused-Enterp... A 2012 survey found that 70 percent of customers use their smartphones to read reviews, 61 percent to compare prices and products, and 42 percent to contact the retailer. More and more, these individuals are doing these activities *while* they're shopping. See Stephanie Clifford and Claire Cain Miller, "The shrewd shopper carries a smartphone on Black Friday," *New York Times*, November 22, 2012.

[71] Insider Whitepaper, "Rise of the Empowered Consumer: How to reach audiences in 2012" www.mediacom.com/.../mediacom%20the%20insider_the%20empowere...

[72] BMG Comment on OECD Discussion Draft.

[73] OECD Discussion Draft, paras.22 and 23.

[74] Andrei Hagiu, Multi-Sided Platforms: From Microfoundations To Design And Expansion Strategies" (2006),
*www.hbs.edu/faculty/Publication%20Files/07-094.pdf*

[75] Andrei Hagiu and Julian Wright, "Multisided Platforms" (2011), *faculty.chicagobooth.edu/workshops/.../MultiSidedPlatformsHagiu.pdf*

[76] OECD Discussion Draft, para.112.

77 Ibid.

78 Mckinsey Iconsumer Research, "The Next Stage: Six Ways The Digital Consumer Is Changing" (2013) By Bertil Chappius, Ewan Duncan, Brendan Gaffey And Kevin Roche, Http://Csi.Mckinsey.Com/Home/Knowledge_By_Region/Americas/Six_Digital_Trends.Aspx

[79] OECD Discussion Draft, para.103. It is common for businesses to collect data about their customers, suppliers, and operations. Data can be personal or non-personal. Personal data can be obtained directly from customers (e.g., when registering for an online service), observed (e.g., by recording Internet browsing preferences, location data, etc.), or inferred based on analysis in combination with other data.

80 David Dean, Carl Kalapesi and John Rose, "Unleasing the Value of Consumder Data" (The Boston Consulting Group, www.bcgtelaviv.com/documents/file124851.pdf).

81 World Economic Forum, "; McKensey Global Institute, "Big data: The next frontier for innovation, competition, and productivity," (2011) http://www.mckinsey.com/insights/business_technology/big_data_the_next_frontier_for_innovation.
82 World Economic Forum, Unlocking the Value of Personal Data: From Collection to Usage" (2013), www3.weforum.org/.../WEF_IT_UnlockingValuePersonalData_Collectio...
83 Mckensey Global Institute, "The Social Economy: Unlocking Value And Productivity Through Social TechnologIES (2012)", WWW.MCKINSEY.COM/INSIGHTS/HIGH_TECH_TELECOMS.../THE_SOCIAL_ECONOMY.
[84] MGI, "Big data: The next frontier for innovation, competition, and productivity" (2011), http://www.mckinsey.com/features/big_data.
[85] Ibid.
[86] Ibid.
[87] Mckensey Global Institute, "The Social Economy: Unlocking Value And Productivity Through Social Technologies (2012)", Www.Mckinsey.Com/Insights/High_Tech_Telecoms.../The_Social_Economy.
[88] OECD Discussion Draft, para.117.
[89] Dell India started Online Ecommerce website with a partner www.compuindia.com.
[90] OECD Discussion Draft, para.120.
[91] OECD Discussion Draft, paras.119-135.
[92] See OECD BEPS Action Plan, Action 7.
[93] http://www.amazon.com/Locations-Careers/b?ie=UTF8&node=239366011.
94 OECD Discussion Draft, para.127.
95 The Economist, "The emporium strikes back: Retailers in the rich world are suffering as people buy more things online. But they are finding ways to adapt" Jul 13th 2013 , http://www.economist.com/news/briefing/21581755-retailers-rich-world-are-suffering-people-buy-more-things-online-they-are-finding
[96] Ibid.
[97] A Chinese proverb – jiehuzeyu.
[98] Cite
[99] OECD Discussion Draft, para. 208.
[100] Ibid.
[101] Ibid, Dropbox after para.201.
[102] OECD Discussion Draft, para.211.
[103] OECD Discussion Draft, para.212.
[104] Ibid, para.213. "The core business of the enterprise relies completely or in a considerable part on digital goods or digital services; No physical elements or activities are involved in the value chain other than the existence, use, or maintenance of servers and websites or other IT tools and the collection, processing, and commercialization of location-relevant data; Contracts are concluded exclusively remotely via the Internet or by telephone; Payments are made solely through credit cards or other electronic payments using on-line forms or platforms linked or integrated to the relative websites; Websites are the only means used to enter into a relationship with the enterprise; no physical stores or agencies exist for the performance of the core activities other than offices located in the parent company or operating company countries; All or the vast majority of profits are attributable to the provision of digital goods or services; The legal or tax residence and the physical location of the vendor are disregarded by the customer and do not influence its choices; or The actual use of the digital good or the performance of the digital service do not require physical presence or the involvement of a physical product other than the use of a computer, mobile devices or other IT tools."
[105] Ibid.
[106] OECD Discussion Draft, para. 214.
[107] OECD Discussion Draft, parar.215.
[108] OECD Discussion Draft, para.217.
[109] OECD Discussion Draft, para.218.
[110] OECD Discussion Draft, para.222.
[111] OECD Website.
[112] OECD Report on E-commerce (Ottawa Framework, etc.)

[113] BMG Comment on Action 1, OECD Website.
[114] Arnold, "The Taxation of Income from Services", at 3.
[115] Ibid, at 50.
[116] Cites.
[117] OECD Discussion Draft, para.156.
[118] BMG Comment on Action 1. See also "BEPS Monitoring Group Critiques OECD Report on Transfer Pricing in Developing Countries" *Tax Notes Int'l*, April 14, 2014, 153.
[119] OECD Discussion Draft, para.166.