

KEY POINTS

- Despite its promise, the global digital economy poses many challenges, including tax base erosion and profit shifting.
- Solutions are yet to emerge at a global level. In the meantime, countries are adopting unilateral measures to respond to the challenge. The People's Republic of China (PRC) has implemented a value-added tax on e-commerce transactions.
- The PRC should also consider continued participation in the International Taxation Forum, adoption of unilateral measures, improvement of its tax registration system to address untaxed consumer-to-consumer transactions, and strengthening of its tax administration capacity.

Taxation Challenges in a Digital Economy—The Case of the People's Republic of China**Akiko Terada-Hagiwara**Principal Economist
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The digital economy is growing rapidly across the globe, and among developing countries, the People's Republic of China (PRC) is a leader. Despite its promise, the global digital economy also poses many challenges. Among these are tax base erosion and profit shifting (BEPS). While BEPS has been discussed intensively at a global level, solutions are yet to emerge. In the meantime, countries are adopting unilateral measures to respond to the challenge. The PRC is making progress in tax reform and has implemented a value-added tax (VAT) on e-commerce transactions. The country's next steps should include continued participation in the International Taxation Forum, adoption of unilateral measures, improvement of its tax registration system to address untaxed consumer-to-consumer transactions, and strengthening of its tax administration capacity.¹

OVERVIEW OF THE DIGITAL ECONOMY AND TAXATION

The digital economy relies on digital knowledge and information as key production factors, and has been continuously driven by innovative information and communication technology. While all countries are advancing in their adaptation of digital technology, their readiness and underlying infrastructure, both soft and hard, vary. The Digital Economy and

¹ The brief benefited from valuable comments provided by Ying Qian and Yuji Miyaki.

Society Index² shows that New Zealand, Iceland, and the Republic of Korea are the best performers in adopting digital technology in economic and social activities, while some developing countries, such as the PRC, are catching up rapidly.

A series of new businesses are emerging at an unprecedented speed and scale. In particular, online transactions of goods and services, or e-commerce, have been exponentially increasing, both domestically and internationally. While these new businesses are benefiting many people, new global challenges are emerging in such areas as consumer policy, science, technology and innovation, industry and entrepreneurship, insurance and private pensions, financial markets, fiscal affairs, and taxation (OECD 2017). Among these, the tax implications of a digital economy are perhaps the most urgent issue for governments, international organizations, and civil societies.

Key features of a digital economy can exacerbate the risks of BEPS. These features include mobility, reliance on data, network effects, spread of multisided business models, a tendency toward monopoly or oligopoly, and volatility (BEPS Action 1 in OECD 2015). In-depth analysis of how enterprises are profiting from new or transformed business models is essential to identify and address these risks.

The business models and value creation processes of highly digitalized enterprises share three common characteristics: (i) cross-jurisdictional scale without mass; (ii) heavy reliance on intangible assets, especially intellectual property; and (iii) importance given to data and user participation, and their synergies with intellectual property. Conventional taxation systems often rely on “physical presence” for brick-and-mortar companies. These systems become irrelevant in the digital economy context as they cannot capture value creation and profit making. Thus, issues such as tax avoidance emerge.

The challenges are present in both international and domestic taxation, and in both direct and indirect taxation. Direct taxation, for example, poses exacerbated BEPS risks mainly related to double nontaxation. Digitalization also raises broader challenges such as the fair allocation of taxing rights in a globalized world. These challenges stem from the tax rules of nexus, the nature and value of data, and characterization of income (BEPS Action 1 in OECD 2015). In indirect taxation, the challenges are more straightforward and primarily related to the sound collection mechanism of VAT.

The existing tax system does not adequately capture the value creation and profit making of enterprises in the digital economy. It needs to be transformed to make it both fair and efficient in a digitalizing world.

IMPLICATIONS OF DIGITALIZATION FOR TAXATION

Several specific issues related to taxation arise as the digital economy grows in size and complexity.

1. Tax Revenue Loss

Digitization of business operations can facilitate BEPS, and can result in double nontaxation and reallocation of taxable income. Multinational companies in the PRC can avoid tax liabilities in several ways, including (i) avoiding local permanent establishment, (ii) minimizing the scope of operations and assets to reduce taxable income, and (iii) exploiting the PRC's tax treaty network with developing countries that impose generally lower tax rates.

2. Missing Taxable Matters

Current international tax rules allow the source country to tax the nonresident's business profits only if its local presence constitutes a permanent establishment, whether it is a substantial physical presence or a dependent agent. However, in a digitalizing world, business can be conducted through a website in the market jurisdiction without any physical presence; even the website servers need not be set locally. Typical examples are online advertising and social network platforms. Furthermore, the digital transformation of business models also challenges the exception clause of permanent establishment rules. Activities traditionally considered as preparatory or auxiliary may become the core business model in the market country. In addition, with advancing digital technology, in-person services can be delivered online, allowing a business to avoid creating a permanent establishment in the market country. In summary, the current nexus rules capture only physical presence, with the “digital presence” out of reach, even when it is significant.

3. Unclear Income Characterization

The tax laws in general rely heavily on the categorization of income to determine the rate and means of taxation. With digitalization, it is difficult to clearly distinguish some types of income, especially among royalties, service fees, and business profits. A typical example is 3-D printing, where it is unclear whether the payment is for royalties, service fees, or business profits if the buyer is licensed to use the

² The Digital Economy and Society Index (DESI) is a composite index and presents the weighted average of five main dimensions, namely: connectivity, human capital, internet use, integration of digital technology, and digital public services. The DESI summarizes relevant indicators on digital performance and tracks the evolution of digital competitiveness (see <https://ec.europa.eu/digital-single-market/en/desi>).

design and print the product locally. If the producer is a nonresident, the implication is more significant because international tax law does not allow the source country to tax business profits without a local permanent establishment. Other examples include payments for cloud computing services, rental of cloud space, and other technical services.

The issue of income characterization is not limited to direct taxation; it also has implications for VAT. In the VAT system, the categorization of transactions and incomes determines the tax rate. Digitalization also challenges traditional tax practices with new business models. Typical examples are the sales of software, e-books, and 3D printing.

4. Ineffective Value-Added Tax Collection

Digitalization raises issues of VAT collection, particularly in business-to-consumer (B2C) and consumer-to-consumer (C2C) transactions. First, the cost of collecting VAT on low-value transactions of goods may be higher than the tax revenue collected. Second, the complexity of VAT collection on service and intangible transactions makes taxation of cross-border, online transactions difficult. C2C transactions, which account for an important part of e-commerce, are different from business-to-business (B2B) and B2C markets, where a tax registration and administration system is already in place. Suppliers in C2C are generally individuals and households. When the existing VAT system does not include a specific registration and collection regime for individual suppliers, C2C suppliers are not subject to VAT.

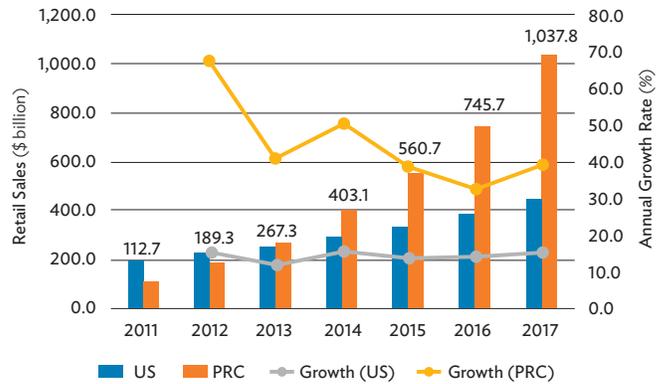
THE DIGITAL ECONOMY OF THE PEOPLE’S REPUBLIC OF CHINA

The PRC is the largest market, and one of the fastest growing, for electronic sales. In 2017, retail sales of e-commerce in the PRC were more than double those of the United States, and nearly 10 times higher than in 2011 (Figure 1). In terms of mobile payments, both the number of users, as well as amount of transactions, are the highest in the world, and still growing fast (Figures 2 and 3). The PRC’s cross-border e-commerce has also been steadily increasing (Figure 4). Furthermore, the PRC is also in the global top three destinations for venture capital investment in key technologies, including fintech, autonomous driving, 3-D printing, and artificial intelligence (McKinsey Global Institute 2017).

The PRC’s “big four”—JD.com, Baidu, Alibaba, and Tencent (BAT)—are now among the 10 biggest companies in the world in terms of market capitalization. Total market capitalization serving consumers exceeded \$1 trillion in 2016, suggesting that the PRC is already a global leader in e-commerce and digital payments. Dominant players vary depending on the types of transactions.

In recent years, the B2C market has taken a more dominant role in the PRC’s e-commerce sector. This trend reflects the PRC’s accommodative policy and changing consumer preferences (Figure 5).

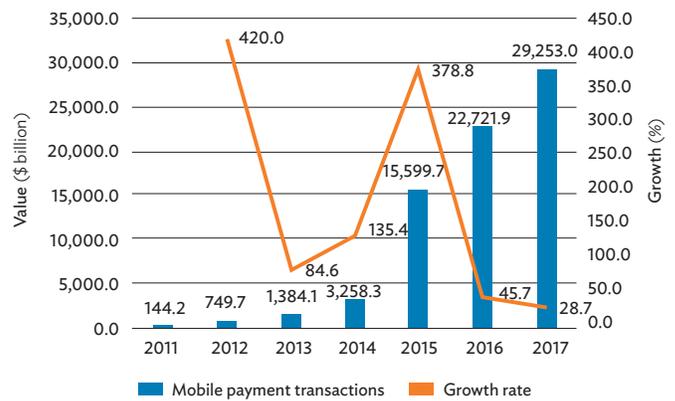
Figure 1: E-commerce Retail Sales, People’s Republic of China versus the United States



PRC = People’s Republic of China, US = United States.

Sources: Ministry of Commerce of China, <http://dzsws.mofcom.gov.cn/article/ztxx/ndbg/201805/20180502750562.shtml>. US Bureau of the Census. <https://fred.stlouisfed.org/series/ECOMSA>

Figure 2: Mobile Payment Transactions in the People’s Republic of China

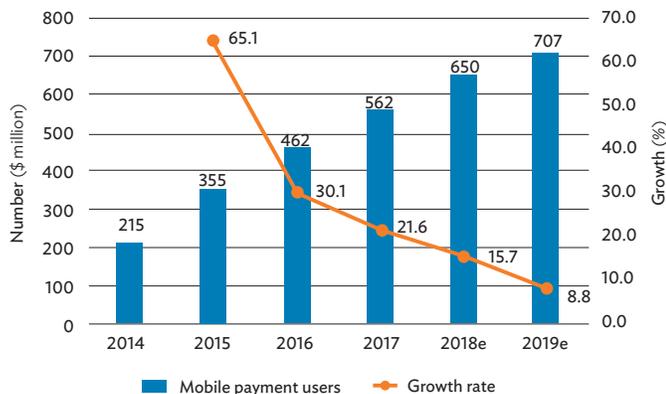


Source: iiMedia Research. <http://www.iimedia.cn/61209.html>

B2C e-commerce sales more than doubled in the PRC from 2016 to 2022. This may be due to the development of e-commerce platforms that allow individuals to easily register as business establishments that sell goods.

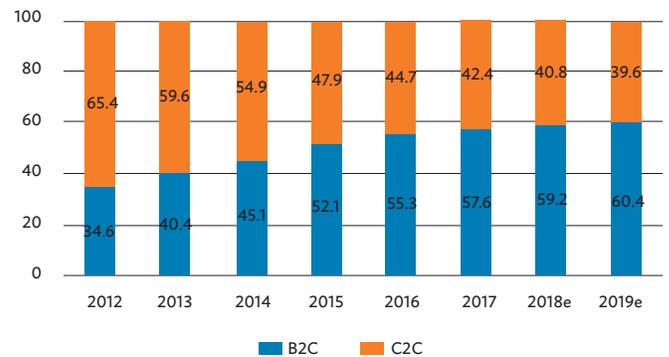
In urban areas, cashless payments are becoming the norm through platforms such as Tencent Holdings’ WeChat and Alibaba Group

Figure 3: Mobile Payment Users in the People’s Republic of China



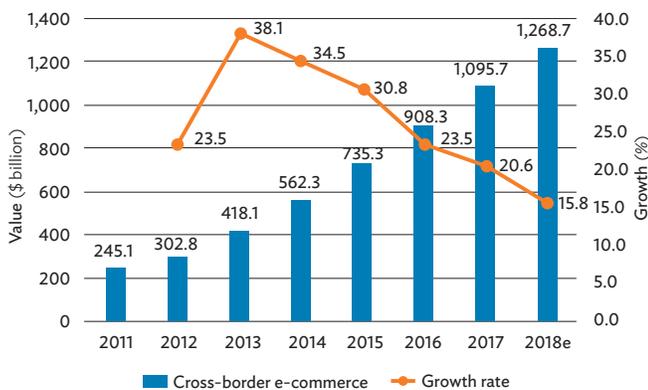
Source: iiMedia Research. <http://www.iimedia.cn/61209.html>

Figure 5: E-Commerce Market Share of the People’s Republic of China (%)



B2C = business-to-customer, C2C = customer-to-customer. Sources: EU SME Centre. 2017; Ministry of Commerce of China. 2017.

Figure 4: Cross-Border E-Commerce in the People’s Republic of China



Sources: iiMedia Research. <http://www.iimedia.cn/47588.html>, and Qianzhan Database. <https://xw.qianzhan.com/xnews/detail/541/180410-66db130e.html>.

PROPOSED MEASURES FOR THE DIGITAL ECONOMY TO COUNTER TAX BASE EROSION AND PROFIT SHIFTING

From the perspective of countering BEPS, the suggested measures for the digital economy cannot be differentiated from other measures, for the digitalization of the economy does not raise unique BEPS issues. Therefore, measures such as revision of transfer pricing rules, modification of permanent establishment, and the controlled foreign corporation rules are all relevant to address the challenges posed by a digital economy. For the broader challenges of nexus, data, and income characterization, the Organisation for Economic Co-operation and Development (OECD) has suggested a new concept of “significant economic presence” as an alternative to current permanent establishment rules. The OECD has also suggested a withholding tax on digital transactions and the introduction of “equalization levy” (BEPS Action 1 in OECD 2015).

Digital companies have significant presence in Europe. In March 2018, the European Commission released two proposals: (i) a permanent solution through reformed corporate tax rules that would allow European Union member states to tax profits that are generated in their territory, even if a company does not have a physical presence within the economy; and (ii) an interim solution through imposition of a digital services tax of 3% for large multinationals with total worldwide revenue exceeding 750 million euros (€), and European Union digital revenues of €50 million.

Holding’s Alipay. However, there is an urban–rural divide: internet users are still limited in rural areas. Urban internet users reached 563 million by December 2017, compared to only 209 million users in rural areas. In regions such as Beijing, Guangdong, and Shanghai, usage grew strongly, while provinces and autonomous regions such as Guizhou, Tibet, and Yunnan have lagged behind (Herrero and Xu 2018).

Taxation Challenges in a Digital Economy—The Case of the People’s Republic of China

The OECD (2018) reports that 110 economies have agreed to form an international consensus by 2020 on how to tax digital businesses across borders. These economies have agreed to review the old or traditional tax system that does not fit the digital economy. While these suggested options are good starting points toward an international standard for taxing the digital economy, the details are yet to be developed and finalized.

In the meantime, various countries have taken unilateral measures. These are not coordinated, and they vary in content and timetable. However, they share the following aspects: (i) they are designed to be implemented through domestic or regional laws, rather than rely on international cooperation; (ii) they aim to preserve or expand the source taxation of online business activities generally performed by multinationals; and

(iii) they draw upon certain elements of the above options originally proposed by the OECD for international standards (Table 1).³

In Asia, countries such as India, Malaysia, and the Philippines have taken measures to broaden the scope of withholding tax or introduce new turnover taxes. However, the major tool to respond to the development of the digital economy has been through VAT. For example, economies in Southeast Asia acknowledge the importance of e-commerce taxation in order to take advantage of growth and level the playing field between online businesses and those that operate offline. But their actions have been mostly limited to imposing VAT on various transactions. Table 2 lists current practices where VAT has been the major tool to respond given the current state of businesses and capacity of tax administrations.

Table 1: Existing Unilateral Measures to Respond to the Digital Economy

Measures	Content	Countries or Jurisdictions	Status	Revenue Collected	Features
Amendments of permanent establishment threshold	Incorporating digital or online factors into permanent establishment threshold	Israel	Active from 2016	Not known	A comprehensive test of SEP
		Slovak Republic	Active from 2018	Not known	Expanded definition of permanent establishment to include certain online platforms
		India	To be effective from 2019	N/A	Introduction of an SEP test on nonresident enterprises to create direct India tax liability
		European Union	Uncertain	N/A	Introduction of the concept of taxable “digital presence” or virtual permanent establishment in the European Union
		Saudi Arabia	Active from 2016	Not known	Incorporation of “furnishing of services” in the definition of permanent establishment
Broadening the scope of withholding tax	Expanding royalties	Greece, Philippines, Malaysia	Active from, respectively, 2016, 2003, and 2017	Not known	Recognition of payments for the right to use software, visual images, or sound transmissions as royalties
	Withholding tax on technical service fees	An increasing number of countries	Active from 2010	N/A	Specific provisions in tax treaties to tax technical services fees as passive incomes
Introducing sectoral turnover taxes	Equalization levy	India	Active from 2016	\$47 million in 9 months	A 6% charge on gross consideration paid for online advertisement services supplied by nonresidents
	Levy on digital transactions	Italy	Effective from 2019	Estimated \$235 per year	A 3% levy on the value of digital services
	Interim digital services tax	European Union	Uncertain	Estimated €5 billion per year	An interim tax on certain revenue from digital activities

N/A = not available, SEP = significant economic presence.

Sources: OECD. 2018; Law. 2010.

³ The OECD–G20 BEPS Interim Report 2018 (OECD 2018) also includes a fourth group, “Specific regimes targeting large multinational enterprises.” This policy brief excludes it because the regimes are not specific to digitalization even though broadly relevant.

Table 2: E-Commerce Tax Rates and Regulations in Selected Southeast Asian Economies

Economies	Type of Indirect Tax	Rate	Regulations
Indonesia	VAT	10%	<ul style="list-style-type: none"> In 2017, the government stated its intention to add 10% VAT to the price of goods purchased online. The e-commerce tax, when implemented, will cover four types of platforms: online marketplaces, classified ads, daily deals, and online retail. The Indonesian E-Commerce Association is considering a 0.5% VAT for each marketplace seller. However, nothing has been implemented.
Malaysia	SST	6%, reduced to 0% effective 1 June 2018	<ul style="list-style-type: none"> SST replaced the 6% GST in September 2018. Extension of SST to B2B and B2C digital suppliers with introduction dates of 1 January 2019 (for certain B2B suppliers) and 1 January 2020 (for certain B2C suppliers). Malaysia to introduce a digital tax to be applied to both local and international players, for implementation by 1 January 2020.
Philippines	VAT	12%	<ul style="list-style-type: none"> The Philippines is the only market in the region with an e-commerce taxation applied to local players. Since 2016, a 12% VAT is imposed on the total value of online transactions of more than \$37,310. A 3% VAT is levied on online transactions lower than the threshold.
Singapore	GST	7%	<ul style="list-style-type: none"> Currently, any online purchase under 400 Singapore dollars (S\$) (US\$290.17) is exempt from GST. Starting 1 January 2020, consumers will pay GST when buying online services from overseas.
Thailand	VAT	7%	<ul style="list-style-type: none"> Cabinet approved a proposal to collect 7% VAT from foreign e-commerce platforms with annual income exceeding THB1.8 million (\$56,000). Companies with an overseas presence and earning income from advertising and/or website space rental from Thailand are subject to a 15% withholding tax. Currently, vendors outside of Thailand are liable for 7% VAT only if value exceeds THB1,500 (\$45.76).
Viet Nam	VAT	10%	<ul style="list-style-type: none"> Foreign e-commerce firms must have a local representative office registered in Viet Nam and pay a VAT of 10%. Individual residents without an established e-commerce company in Viet Nam are subject to tax if they have annual sales revenue over \$4,300.

B2B = business-to-business, B2C = business-to-customer, GST = goods and service tax, SST = sales and service tax, THB = Thai baht, VAT = value-added tax.

Sources: Summarized from Chew. 2018; and Taxamo. <https://blog.taxamo.com/insights/malaysia-digital-tax-announcement>.

POLICY RECOMMENDATIONS FOR THE PEOPLE'S REPUBLIC OF CHINA

1. Active Participation in International Discussions

The PRC has been participating actively in the BEPS Actions, and cooperating with the OECD and G20 in various international tax matters. Yet the PRC currently does not have digital economy-specific tax measures to cope with the challenges, nor have any special tax plans been proposed. The next step is to either enact domestic and unilateral measures, or wait for a global agreement on coordinated multilateral measures. The PRC should keep playing an active role in the formation of international consensus.

2. Unilateral Interim Measures

While internationally coordinated measures are being discussed and finalized, the PRC can also explore domestic measures to address the issues arising from digitalization, such as a turnover tax on online advertising. However, any unilateral measures taken should avoid introducing distortions, uncertainty, and complexity; as well as potential conflicts with treaty obligations (OECD 2018, pp. 178–192). The OECD suggests that the interim measures should be compliant with the country's international obligations, both temporary and targeted. They should minimize overtaxation; impact on start-ups, business creation, and small businesses more generally; and cost and complexity.

3. Value-Added Tax for Customer-to-Customer Transactions

In response to its growing digital economy, the PRC has been revisiting its tax system. In 2016, the PRC implemented major VAT reforms, with VAT replacing business tax across the service industry. The PRC is one of the few countries to apply VAT to most financial services and real estate transactions. Nonetheless, issues remain, such as achieving the right balance in the efficiency and effectiveness of tax collection. For example, the PRC eliminated the VAT-exempt threshold for cross-border e-commerce imports in 2016. This means that small transactions are taxed even when the tax revenue falls below the cost of collection.

Furthermore, the PRC’s VAT system does not include a specific registration and collection regime for individual suppliers; thus, VAT is not levied on most of the PRC’s C2C suppliers. Under the Law of E-commerce, which became effective in January 2019, the PRC will develop and implement a tax registration system for individual suppliers.

4. Improvements in Capacity of Tax Administration

The challenges posed by the digital economy, as identified by the OECD, are determining the extent of activities, information collection and verification, and identification of customers. For the PRC, these are relevant to both cross-border and domestic e-commerce transactions. These challenges should be addressed in the context of the PRC’s ongoing reform of tax administration. Among others, the following characteristics of the PRC’s tax administration system should be addressed in the reforms:

- (i) reducing reliance on paper tax invoices, which have become incompatible with the digital economy in almost all aspects;
- (ii) creating a uniform, nation-centric tax administration system to replace the current decentralized system in which the location of taxpayers and businesses generally determines the means and levels of taxation following a subsystem of tax registration and administration (Brondolo and Zhang 2016); and
- (iii) introducing risk-based management, self-assessment, and tax audits, to improve collection of tax information and reduce compliance costs for taxpayers (Cui 2014).

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