Electronic Taxpayer Services in Asia and the Pacific

By Satoru Araki[1]

This paper aims to present an overview of the use of information and communication technology (ICT) in tax administration in Asia and the Pacific. A particular focus is given to interaction between tax administration bodies and taxpayers through electronic taxpayer services.

The Asian Development Bank (ADB), in cooperation with the Organisation for Economic Co-operation and Development (OECD), has conducted a survey on tax administration, including electronic taxpayer services, to obtain an overview of the functions and performance of tax administration bodies in Asia and the Pacific. Country information provided in this Governance Brief is based on OECD publication, Tax Administration 2013, and responses to an ADB tax administration survey conducted in 2012–2013.[2]

ICT and tax administration

All tax administration bodies are driven toward the introduction of ICT for more efficient tax administration, as ICT helps to improve every aspect of tax administration, i.e., taxpayer services, tax audit, tax collection, and other internal management processes.[3] The benefits of ICT in tax administration can be explained through the following elements:

(i) improving the performance of tax administration bodies,
(ii) reducing tax administration costs,
(iii) reducing taxpayers' compliance costs, and
(iv) enhancing interactions between taxpayers and tax administration bodies.

First, with ICT, tax administration bodies are enabled to improve their business operations including audit and arrears collection. A tax information management system can deal with a huge amount of data related to taxpayers, not simply for storage but also for analysis. It allows more efficient information sharing across and between internal departments, for example, between audit section and arrears collection section, and between the headquarters and regional offices. In addition, some tax administration bodies may be able to access information collected by other government institutions such as the customs, land and company registration bureaus and municipal governments, while the provision of taxpayer information to these other government bodies

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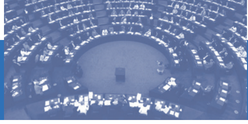
[2] OECD. 2013. *Tax Administration 2013: Comparative Information on OECD and Other Advanced and Emerging Economies.* Paris.

[3] Tax administration bodies mean government organizations in charge of assessing and collecting tax. They can be autonomous agencies or internal departments in the ministry of finance.



Electronic tax filing systems are arguably the most visible among ICT-based taxpayer services.

can be more restrictive due to the confidentiality of taxpayer information. With the tax information management system, tax auditors and collectors can cross-check and analyze a large amount of information from different sources and, as a result, strengthen enforcement performance.

Second, ICT reduces tax administration costs from the perspectives of both enforcement and taxpayer service delivery. Human and other resource costs can be reduced by the application of ICT for (i) reducing face-to-face taxpayer services such as tax return filing, payment receipt, and consultation; (ii) taxpayer account and information management, which would be done manually without an ICT system; and (iii) enforcement operations including audit and arrears collection, in particular, data analysis and target selection.

Third, ICT-based tax administration also helps taxpayers to reduce compliance costs. Electronic tax filing system saves taxpayers' time to prepare tax return forms, and together with electronic tax payment system, taxpayers no longer have to visit tax offices or send tax returns by post.

Fourth, ICT-based media ease interactions between taxpayers and tax administration bodies. Information can be provided to taxpayers through tax administration bodies' websites and other internet-based social media, and taxpayers can more easily access information needed to fulfill their tax obligations. The details of electronic taxpayer services, including electronic tax filing and payment systems, will be discussed in the following sections.

These four elements are interrelated. From tax administration bodies' perspective, a well-established ICT system, together with good employment of ICT-based media, will bring smooth information collection from taxpayers and other government institutions; and within tax administration bodies, the collected information can be used efficiently for different tax administration functions such as taxpayer management, audit, and arrears collection.

In-house ICT function

With respect to institutional arrangements for the ICT function, some tax administration bodies operate a full in-house ICT function. Other bodies, especially those with an internal department in the ministry of finance, may not have an independent ICT function for tax administration purposes. In developed economies, the ICT functions may be outsourced to the private sector to improve cost effectiveness.

Sixteen of 22 economies' tax administration bodies have full in-house ICT function (Table 1). For example, the National Tax Agency of Japan has a centralized ICT system called the KSK System (national tax comprehensive management system), which was started as a pilot operation in 1995 and introduced nationwide in 2001. In 1997, the National Tax Service of the Republic of Korea started the operation of its Tax Integrated System, a key system for tax information management. The Australian Taxation Office has been enhancing the outsourcing of its ICT infrastructure since the late 1990s; currently, the mainframe, network, and communications hardware and support are outsourced.

In most of the six economies without full in-house ICT function, a tax administration body is an internal department in the ministry of finance. These institutional arrangements may be a factor hindering the development of a purpose-built ICT system, which is required to have the capacity to process large amounts of taxpayer information and to maintain strict confidentiality.

Electronic tax filing systems

Electronic tax filing systems are arguably the most visible among ICT-based taxpayer services. For most taxpayers, the submission of annual income tax returns is the most significant contact with the tax office, and a system enabling taxpayers to submit tax returns electronically benefits taxpayers as well as tax administration bodies. First, an electronic tax filing system greatly reduces taxpayers' time and labor to visit a tax office or to send a tax return by post. At the same time, it also reduces tax officials' time and labor to receive and process stacks of tax returns on a paper basis. Second, the electronic inputs of data improve the quality of tax returns. Automatic calculation functions will prevent miscalculations, and "help" function available on the screen will provide taxpayers with information to understand tax regulations correctly. Third, as a benefit for tax administration bodies, data provided by an electronic tax filing system can be directly inputted into a tax information management system. Otherwise, data are inputted into a tax information management system manually by tax officials, or through an optical character recognition system, both of which are less efficient and have more risk of input errors.

Table 2 shows the penetration rates of electronic tax filing for personal income tax, corporate income tax, and value-added tax (goods and services tax). An electronic tax filing system is

Table 1 In-House ICT Function in Tax Administration Bodies

Economy	Is there a separate substantial in-house ICT function?
Australia	Yes[a]
Brunei Darussalam	No
Cambodia	No
People's Republic of China	Yes
Hong Kong, China	Yes
India	Yes
Indonesia	Yes
Japan	Yes
Republic of Korea	Yes
Kyrgyz Republic	No
Lao People's Democratic Republic	No
Malaysia	Yes
Maldives	Yes
Mongolia	No
Myanmar	No
New Zealand	Yes
Papua New Guinea	Yes
Philippines	Yes
Singapore	Yes
Taipei,China	Yes
Tajikistan	Yes
Thailand	Yes

ICT = information and communication technology.

[a] In the Australian Taxation Office, part of hardware and support are outsourced.

Sources: OECD. 2013. *Tax Administration 2013: Comparative Information on OECD and Other Advanced and Emerging Economies.* Paris; and ADB's tax administration survey.

available in most economies, and its availability is increasing. In Brunei Darussalam, an internet-based tax filing and payment system for corporate income tax called STARS (which stands for System of Tax Administration and Revenue Services) was introduced in April 2012.

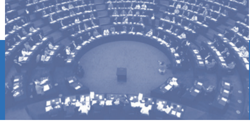
Penetration rates of electronic tax filing vary among economies. Australia; India; the Republic of Korea; Mongolia; and Taipei,China record more than 90% use for some of the tax items. In Singapore, electronic filing for goods and services tax is mandatory, according to the Goods and Services Tax (General) Regulations.[4] In India, since 2009–2010, electronic filing has been mandatory for corporations and individuals whose income exceeds a certain amount.[5] In Indonesia, the Kyrgyz Republic, and the Philippines, while electronic tax filing is at least partially available, its usage is still limited. Possible reasons include the limited availability of internet access particularly for individuals and the high cost of digital signature, which ensures the authenticity of taxpayer's identity.

Electronic tax payment

The payment of the amount of tax due is no less important an interaction between taxpayers and tax offices than the filing of tax returns. For taxpayers, carrying cash to a tax office has an obvious risk, and tax payments will require time and labor. Business hours at tax offices and banks are limited, and corporations may be required to pay value-added tax every month. For tax administration bodies, handling cash at tax offices is not only labor and resource intensive, but also invites a risk of corruption. The provision of tax payment methods that are convenient for taxpayers will facilitate smooth

4 Regulation 53(1) of the Goods and Services Tax (General) Regulations provides that "every taxable person who is first registered under the (Goods and Services Tax) Act shall make and submit through the electronic service every specified return which he is required to furnish."

5 Rule 12(3) of Income-tax Rules, 1962. Beginning in April 2013, individuals whose income exceeds Re500,000 are required to furnish income tax returns electronically.



Electronic tax payment is widely used, and has the potential for further expansion.

tax payments to the treasury, and reduce the risk of tax arrears. Therefore, it is beneficial for both taxpayers and tax administration bodies to introduce electronic tax payment methods that reduce the costs associated with tax payments, such as internet banking and direct debit where a tax administration body is authorized to withdraw tax amounts from a taxpayer's bank account.

Table 3 shows the availability of tax payment methods, both nonelectronic and electronic. The most basic nonelectronic means are direct payment at tax offices (accepted in just a little more than half of the jurisdictions) and payment through checks sent by mail (available only in eight jurisdictions). This may reflect factors such as the reliability of the postal service, corruption risk involving checks and cash, and labor resources at tax offices. In relatively developed economies such as Australia; Hong Kong, China; New Zealand; and Singapore, taxpayers cannot pay directly at tax offices and instead send their checks to tax offices. These arrangements may help tax offices reduce human resource costs for face-to-face interaction with taxpayers. In turn, in developing economies, the relatively low availability of traditional nonelectronic payment means may be derived from concern for corruption risk. In the Philippines, a taxpayer can directly pay to tax collection officers only if there are no authorized agent banks in his or her district.

The next category of payment methods is in-person payment at agents such as banks and post offices, and telephone banking service. This payment method helps mitigate the burden on tax offices, as payment transactions are dealt with by financial institutions. It is the most widely available method of payment, employed in 19 jurisdictions. Brunei Darussalam, one of two countries where in-person payment at agents is not available, has no personal income tax. On the other hand, the usage of telephone banking service as tax payment is relatively limited, available only in nine jurisdictions.

Table 2 Use of Electronic Tax Filing in 2011 by Tax Items

Economy	Personal Income Tax (% of all returns electronically filed)	Corporate Income Tax (% of all returns electronically filed)	Value-Added Tax (% of all returns electronically filed)
Australia	92	92	54
Brunei Darussalam	NA	…	NA
Cambodia	…	…	…
People's Republic of China	…	…	…
Hong Kong, China	14	<1	NA
India	26	100	NA
Indonesia	…	…	…
Japan	44	58	53 (corporations)
Republic of Korea	87	97	79
Kyrgyz Republic	0.6	3	37
Lao People's Democratic Republic	…	…	…
Malaysia	69	49	NA
Maldives	NA	…	…
Mongolia	…	76	96
Myanmar	…	…	…
New Zealand	71	80	28
Papua New Guinea	…	…	…
Philippines	0.3	6	7
Singapore	96	63	100
Taipei,China	82	98	94
Tajikistan	…	…	…
Thailand	45	10	14

… = data not available: data have not been provided or electronic tax filing has not been introduced, NA = not applicable. A tax item, such as value-added tax, has not been introduced in a country.

Sources: OECD (2013) and ADB's tax administration survey.

Table 3 Methods Available for Tax Payment

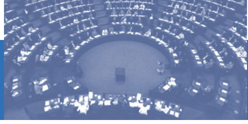
Economy	Mailed Check	In-Person at Tax Offices	In-Person at Agents, e.g., Banks	Phone Banking	Internet Banking	Direct Debit via Bank	Payment Kiosk Facility	Others
Australia	Yes	No	Yes	Yes	Yes	Yes	No	
Brunei Darussalam	No	Yes	No	No	No	Yes	No	
Cambodia	No	Yes	Yes	No	No	No	No	
People's Republic of China	Yes	Yes	Yes	Yes	Yes	Yes	No	
Hong Kong, China	Yes	No	Yes	Yes	Yes	Yes	No	
India	No	No	Yes	No	Yes	No	No	
Japan	No	Yes	Yes	No	Yes	Yes	No	
Republic of Korea	No	Yes	Yes	Yes	Yes	No	Yes	
Kyrgyz Republic	No	No	Yes	No	No	No	Yes	
Lao People's Democratic Republic	No	No	Yes	Yes	Yes	Yes	No	
Malaysia	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Maldives	No	Yes	Yes	No	No	No	No	
Mongolia	No	Yes	Yes	No	No	Yes	No	
Myanmar	No	No	Yes	No	No	No	No	
New Zealand	Yes	No	Yes	No	Yes	Yes	No	
Papua New Guinea	Yes	Yes	No	No	No	No	Yes	
Philippines	No	Yes (if no agent banks)	Yes	No	Yes	Yes	Yes	Mobile phone payment
Singapore	Yes	No	Yes	Yes	Yes	Yes	Yes	
Taipei,China	No	No	Yes	Yes	Yes	Yes	No	
Tajikistan	No	Yes	Yes	No	Yes	Yes	Yes	
Thailand	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

Sources: OECD (2013) and ADB's tax administration survey.

The third category is electronic tax payment, which consists of internet banking, direct debit via bank accounts, and payment kiosk facility. Payment transactions through these methods are self-service and do not require personal contact with tax officials nor bank tellers. Internet banking and direct debit are available in 14 jurisdictions, which make these two electronic tax payment methods the second most widely adopted after in-person payment at agents (19 jurisdictions). Electronic tax payment is widely used, and has the potential for further expansion. For example, while electronic tax payment is currently not available in Cambodia, its General Department of Taxation has a plan to expand tax payment options to include electronic tax payment. Tax payment kiosk is a self-service machine, often operated by banks, and can be located in bank branches, shopping centers, and train stations. Its usage, however, is relatively limited and available only in eight jurisdictions.

As these electronic tax payment methods, in principle, require a taxpayer to have a bank account, it may become an obstacle for promoting electronic payment in places where many individuals do not have a bank account. In the Philippines, individual taxpayers can pay tax through an electronic cash service provided by a mobile phone company.[6] Under this electronic cash service, consumers without a bank account can deposit electronic cash at mobile phone shops or shopping centers. This method can enhance tax payments among small taxpayers in developing economies.

[6] According to a *Consumer Finance Survey* released in April 2012 by the Bangko Sentral ng Pilipinas, eight in 10 households (78.5%) surveyed did not have a deposit account.



Social media platforms—such as Facebook, Twitter, and YouTube—are increasingly employed as means to extend reach to taxpayers, particularly the younger generation.

Other electronic taxpayer services including social media

Tax administration bodies also employ various electronic media to enhance convenience for taxpayers and increase awareness about tax issues. For example, legal and practical information provided in the websites of tax administration bodies will enhance taxpayers' access to tax-related information. It not only helps taxpayers understand tax issues, but also saves tax administration bodies' resources as taxpayers can have most of their questions answered by tax information provided online. This, in turn, will reduce staff time needed to address queries through telephone services or tax offices.

In addition, social media platforms, such as Facebook, Twitter, and YouTube, are increasingly employed by tax administration bodies as means to extend their reach to taxpayers, particularly the younger generation. A 2011 OECD study on social media technologies and tax administration indicates that, while tax administration body's experience with social media is still relatively limited, social media is an effective tool for better tax administration since it helps promote more effective dialogue between tax administration bodies and taxpayers as well as enhance the image of tax administration bodies.[7]

Table 4 shows whether tax administration bodies are providing tax-related information with taxpayers through their internet websites and other social media platforms such as Facebook, Twitter, and YouTube. All economies surveyed are providing, to a certain degree, information and forms on tax laws, regulations, tax return preparation, payment, and appeal procedure via their internet websites. In terms of comprehensiveness, some economies recognize that there is still room for improving the coverage of information provided via internet websites.

Interestingly, 12 of the 22 economies surveyed have started to use social media platforms to

Table 4 Information Provision via Electronic Media

Economy	Comprehensive tax information provided to taxpayers via the internet	Using social media platforms for interaction with taxpayers
Australia	Yes	Yes
Brunei Darussalam	Yes	Yes
Cambodia	Yes (limited)	No
People's Republic of China	Yes	Yes
Hong Kong, China	Yes	No
India	Yes	No
Indonesia	Yes	No
Japan	Yes	Yes
Republic of Korea	Yes	Yes
Kyrgyz Republic	Yes	No
Lao People's Democratic Republic	Yes	No
Malaysia	Yes	Yes
Maldives	Yes	Yes
Mongolia	Yes	Yes
Myanmar	Yes	No
New Zealand	Yes	Yes
Papua New Guinea	Yes (limited)	No
Philippines	Yes	No
Singapore	Yes	Yes
Taipei,China	Yes	Yes
Tajikistan	Yes (limited)	No
Thailand	Yes	Yes

Sources: OECD (2013) and ADB's tax administration survey.

[7] *Social Media Technologies and Tax Administration.* Centre for Tax Policy and Administration, OECD. October 2011.

provide information and interact with taxpayers. For example, the Australian Taxation Office launched its Facebook account in 2009, its Twitter account in 2010, and its YouTube account in 2011. These social media accounts are used as business-as-usual communication channels with taxpayers. The National Tax Agency of Japan also has accounts on Twitter and YouTube. Tax education video materials enhancing taxpayers' awareness and understanding have been uploaded on the agency's YouTube account. The Inland Revenue Authority of Singapore has a Twitter account with more than 1,000 followers.

On the other hand, some of the tax administration bodies cite ICT security policies as a reason for not using social media platforms. The 2011 OECD study on social media technologies and tax administration has identified breach of security and provision of misleading information as possible risks involved in using social media in tax administration, and suggests setting policy guidelines for employees working in social media as a measure to mitigate these risks.

Conclusion and observations

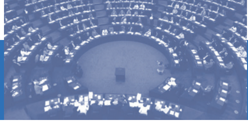
Overall, tax administration bodies in Asia and the Pacific, including those in developing economies, are generally equipped with basic foundations for ICT-based tax administration operations. A majority of economies have an in-house ICT system for tax administration, while all economies surveyed are now providing, to a certain degree, tax information to taxpayers through their internet websites.

With respect to electronic tax filing systems, the picture varies from one economy to another. While penetration rates have reached quite high levels in developed economies, even where electronic tax filing is available, its penetration rates are still low in some developing economies. On the other hand, the trend in tax payment appears to have shifted from in-person payment at tax offices to electronic tax payment such as internet banking and direct debit based on bank systems, which will help reduce corruption risk and resource costs at tax offices.

Experience in social media platforms is still new for tax administration bodies. As these social media platforms have potential as effective communication tools, future developments in developing economies can be expected.

Implications for tax administration bodies in developing economies and international and donor organizations providing assistance to developing economies are as follows. First, a tax administration ICT system should be developed with a dual purpose, i.e., serving for tax administration bodies' operations including enforcement activities, and for the convenience of taxpayers. Second, electronic taxpayer services should be mixed with good policies that enhance taxpayers' use of these services.[8] Third, for economies where small and medium taxpayers' access to ICT and financial services are still limited, measures such as tax payment by mobile phones will facilitate taxpayers' access to tax administration.

[8] For example, in Japan, there was a tax deduction for taxpayers who used an electronic tax filing system for financial years 2007–2012.



 Publication Stock No. ARM136124 December 2013

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