

SHOULD EXCISE TAX BE COLLECTED ON MOBILE SERVICES? : EXPERIENCE IN THAILAND

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Abstract:

Nowadays, it cannot oppose that mobilephone is necessary in daily life, particularly, smartphone. However, some people have more than one mobilephone that may be extravagant. From the telecommunication market report of the Office of the National Broadcasting and Telecommunications Commission in the third quarter of 2017, it was found that there are 119.50 million mobilephone numbers in Thailand or 171% of Thai population. In other words, the average of mobilephone per person is 1.71. Thus, if government realises that mobile services are too much consumed and luxurious, government should reconsider to levy excise tax on mobile services as excise tax collection in 2003-2008. This article shows tax base, taxpayers and experiences from overseas on mobile tax, revenue collection, advantages, disadvantages and economic impacts on tax on mobile services.

Keywords: Tax on mobile services, Telecommunication tax, Excise tax collection, Mobilephone tax

1. PRINCIPLE OF EXCISE TAX

Excise tax is indirect tax collected from goods or services that government realises it should be collected in higher rate than general products both domestic and overseas. The objectives are to reduce consumption that may be harmful towards health and moral, extravagant and affect towards environment. Cnossen (2005) defines the objectives of excise taxation are to raise revenue for general purposes, reflect external costs associated with consumption or production but not accounted for in price (smoking, drinking, driving and polluting), discourage consumption that is deemed undesirable (smoking, drinking, gambling, carbon emissions), charge road users for government-provided services (particularly roadways), increase the progressivity of the tax systems (luxury goods). Similarly, Giertz (1999) says there are a wide range of rationales for excises. Excise taxes are used as a means of implementing an ability to pay approach to taxation. For example, USA levies an excise tax on high value automobiles, particularly, tax on vehicles that imports more expensive than domestic automobiles. Moreover, excise taxes may be levied as a technique for negative externalities, relating with sumptuary excises such as imposing excise tax on automobiles and gasoline to reduce the divergence of the private and social costs, relating to pollution and congestion. Finally, excise taxes may be implemented by a benefits-received approach to taxation. Motor fuel taxes for highways and taxes on airline tickets are imposed for air traffic control and facilities expansion.

Globally, excise tax rate can be calculated in three types. Svetalekth (2016) mentions it consists of Ad valorem tax rate, specific tax rate and mixed tax rate. Ad Valorem tax rate is based on value of products or services such as excise tax on liquors and motor vehicles are collected from percentage of suggested retail prices. Specific tax rate is based on quantity which levies same values on the same quantity. For example, tax on one pack of cigarette is levied the same value even though it will be different retail price. In other words, one pack of cigarette equally discourages health. That's why they are collected with the same amount. In addition, a mixed rate system is a mix between the ad valorem tax rate and specific tax rate. For example, cigar is levied 10% of suggested retail price plus 1.2 baht¹ per gram. Nowadays, Thailand collects excise tax from 10 products and 4 services. Products consist of oil and petrol products, motor vehicle, battery, motorcycle, perfumery and cosmetics, liquor, tobacco, playing card, non-alcoholic beverages and ozone depleting substances. Services consist of golf course, horse racing, nightclub and discotheque and bathing, sauna and massage. However, there are some products and services that are exempted for excise tax such as electronic appliances, marble and granite products, carpet, yacht, glassware and telecommunication business.

2. Background of mobile services tax in Thailand

Excise Department began to collect excise tax from telecommunication business in 2003. Telecommunication business is issued as a business under permission or concession of the state and is collected by 10% of revenue of mobile phone service provider and collected 2 % of revenue of home phone service provider. However, the cabinet has resolution to deduct the excise tax that mobile phone service providers, private sector, pay for revenue sharing to Telephone Organisation of Thailand (TOT) and Communications Authority of Thailand (CAT). It reduces burden of mobile phone service provider and prevent them to push tax burden towards consumers. Later in 2007, the cabinet abolished to bring excise tax deduction from revenue sharing of mobile phone service providers to TOT and CAT. Furthermore, telecommunication business had the exemption of excise tax since 2007. It causes decrease of excise tax revenue collection about 15,000 million baht (384.61 million euro).

3. Mobile Service Tax in Overseas

3.1 Tax Burden

Mobile Service Tax in overseas is not directly collected excise tax. Global mobile tax review (2011) studied tax in telecommunication business from 111 countries. Tax burdens are in VAT, Customs tax, excise tax, tax on mobile handsets and airtime cost as follows:

1. Tax on total costs of mobile ownership: TCMO

Total costs of mobile phone users consist of mobile handset cost, connection cost, rental cost, call and SMS message. From investigation 111 countries, average tax burden per TCMO is 18.14%. Highest

¹ 1 euro = 39 baht.

tax burden per TCMO is 48.23 % in Turkey, following by Gabon, Pakistan and Greece at 37.20 %, 31.61 % and 30.44 % respectively. However, Thailand has tax burden per TCMO is 7.10 %.

2. Tax on total cost of mobile usage: TCMU

Total costs of mobile usage consist of connection cost, call and SMS message costs excluding mobile handset cost. From investigation 111 countries, average tax burden per TCMU is 17.97%. Highest tax burden per TCMO is 47.61 % in Turkey, following by Gabon, Pakistan and Greece at 36.00 %, 31.00% and 30.40 % respectively. However, Thailand has tax burden per TCMO is 7.00 %.

3. Tax on mobile handset costs: TCMH

Tax on mobile handset costs (TCMH) is significant component of tax on total costs of mobile ownership (TCMO). Taxes consist of import duties or special customs duties based on retail price of mobile handset costs and copyright fees that are levied from some countries. From investigation 111 countries, average tax burden per TCMH is 23.29%. Highest tax burden per TCMH is 79.86 % in Gabon, following by Niger and Argentina at 65.99 % and 62.21 % respectively. However, Thailand has tax burden per TCMH is 12.00 %.

3.2 License Fees

Deloitte (2011) revealed most countries collected license fees. For EU countries, average license fees are about 2% of revenue of enterprises whereas developing countries are about 7.5% of revenues of enterprises. However, most countries have not revealed concession revenue.

3.3 Tax on telecommunication business

Global mobile tax review (2011) mentioned that most countries did not specify tax for telecommunication business because it may affect towards economy growth. However, some countries, particularly, developing countries collected tax on mobilephone. Without VAT effect, only mobile specific taxation and customs duties on imported are included. Some countries collected a specific taxation are shown as Table 1.

Table 1 shows tax rate on mobilephone services in some countries

Countries	Tax on mobilephone services
Chad	9.6 % of special tax applies on all handsets
DR Congo	10% airtime excise applies on SMS and call usages
Dominican Republic	12% special telecom tax applies on SMS and call usages
Egypt	Mobile VAT is 15%, higher than standard VAT rate is 10%
Gabon	18% airtime excise tax is applied plus % 5\$ special tax for imported handsets
Italy	Post-paid mobile services for non-business consumers are taxed at 5.16 Euro
Kenya	10% airtime excise tax is applied
Malaysia	6 % airtime excise tax is applied
Nepal	5 % airtime excise tax is applied
Pakistan	11.5% excise applies on postpaid bill amount and on prepaid calling cards plus 19.5 % of VAT (Higher than normal rate at 3.5%)
Sri Lanka	20 % special tax applies to rental, usage and connection rates
Turkey	25 % of special communication tax for mobile services, 15 % for fixed telecommunication services and 5 % for internet services. In addition, 20 % of special consumption tax on mobile handsets
Uganda	5 % airtime excise tax is applied
Zambia	10 % airtime excise tax is applied plus 5 % of special handset tax
Thailand	10 % excise tax on mobile service and 2 % of fixed line (All exemptions)

Comparatively, reason of collecting tax on mobile services of overseas are increase of government revenue and receiving privilege from government whereas Thailand collects tax on mobile services because of decrease unnecessary consumption, enlarging excise tax base and free competitions in telecommunication business and receiving concession from government. However, government in overseas does not provide concession to private sector so collecting tax on mobile services does not prevent new rivals (Deloitte, 2014).

4. WHO SHOULD PAY MOBILE SERVICE TAX?

Thai excise tax is collected from producers that are industrialist and service provider. Service providers can be divided into 2 groups: Mobile Network Operators (MNOs) and Mobile Virtual Network Operators (MVNOs). MNOs consist of 5 large organisations, Advanced Info Service Company (AIS), Total Access Communication Company (DTAC) and True Corporation Company (True), CAT Telecom and Telephone Organisation of Thailand (TOT). MVNOs, has no their own networks consist of Real Move, 168 Communication, Sim penguin, I-Kool 3G, I-Mobile 3G, IEC 3G and MOJO 3G.

Thus, if Thai government collect tax on mobilephone service from service revenue, taxpayers would be five large service providers that are Advanced Info Service Company (AIS), Total Access Communication Company (DTAC), True Corporation Company (True), CAT Telecom and Telephone Organisation of Thailand (TOT). From report of The Office of The National Broadcasting and Telecommunications Commission (NBTC) of quarter 3 in 2017, market share of AIS, True and DTAC is 43.94 %, 28.77 % and 25.25 % respectively followed by CAT Telecom at 1.94% and Telephone Organisation of Thailand (TOT) at 0.10%. However, if Thai government collects tax on mobile handset, taxpayers would be Apple, Samsung, Sony Ericsson, LG, I-Mobile, Huiwei and so on.

Table 2 illustrates market share of mobilephone service providers

Market Share of Mobilephone Service Providers (%)	1Q2016	2Q2016	3Q2016	4Q2016	1Q2017	2Q2017	3Q2017
AIS	45.04	45.00	44.77	44.66	43.86	43.90	43.94
DTAC	29.40	28.50	27.87	26.64	26.23	25.60	25.25
TRUE	23.50	24.60	25.38	26.69	27.80	28.41	28.77
CAT	1.62	1.64	1.77	1.87	1.98	1.98	1.94
TOT	0.44	0.26	0.21	0.14	0.13	0.11	0.10

5. REASONS FOR MOBILE SERVICES TAX COLLECTION

5.1 Control and decrease extravagant using mobile phone

One of significant reasons for mobile services tax collection is decrease using mobilephone that is unnecessary. From report of The Office of The National Broadcasting and Telecommunications Commission (NBTC) of quarter 3 in 2017, mobilephone users in Thailand are 119.50 million numbers. With 70 million people in Thailand, it shows that Thai people has 1.71 mobilephone per person. In addition, National Statistical Office (2011) found that Thai people began to access technology since 6 years old. Thai people who aged 15-24 years old access internet 51.9 % and 42.2% of them access mobilephone for playing games. Moreover, it found that Thai teenagers access internet via computer and mobilephone about 3.1 hours per day that is the first rank in Asia and play electronic games for the first rank of Asia about 60.7 minutes per day. It is higher than teenagers in many Asian countries such as Singapore (59.4 minutes / day, Hong Kong (56 minutes / day, South Korea (46 minutes / day) and China (42.3 minutes / day).

Moreover, teenagers use additional services from service providers such as sending short messaging Service (SMS) and Multimedia Messaging Service (MMS) to television programmes to show opinions or vote in singing contests. Moreover, additional services include download application from appstore, ringtones and sport betting. These are extravagant for mobilephone users.

5.2 Harmful effect towards health

Thivavej (2007) said that damages from using mobilephone in the short-term are earache, headache, bleary, vertiginous, stressful and sleepless because energy system in body is interfered. In the long run, it causes many diseases such as weaken remembrance, brain cancer and white blood cell cancer. EU Reflex Project Report (2004) researched in the laboratory for reflex project and found that signal wave from mobilephone may permanently damage DNA. Damage can not repair by natural or own cells and it is one of causes of cancer.

5.3 Effect towards environment

Office of fiscal policy of Thailand amended law to collect environment tax as well as polluter pay principle. As can be seen, new mobilephone has launched continuously from mobilephone producer such as Apple, Nokia, Samsung, LG, Sony Ericsson and so on. As a result, old mobilephone that are bought in recent years became electrical waste. So, collecting tax from mobile handset is considered as principle of environment tax and it may reduce waste from unused mobilephone.

5.4 Increase government revenue

From report of The Office of The National Broadcasting and Telecommunications Commission (NBTC) of quarter 3 in 2017, revenues of mobile services are 67,900 million baht. They consist of voice revenue (19,300 million baht), non-voice revenue (41,700 million baht) and other revenues (6,900 million baht). So, approximately annual revenue of mobile services will be 268,900 million baht. If government collects revenue from mobile service in the tax rate between 5-30%², annual tax revenue will increase 13,445 – 80,670 million baht (344.74 – 2,068.46 million euro).

Table 3 presents revenue of mobile services in each quarter

Revenue of mobile services (Million baht)	1Q2016	2Q2016	3Q2016	4Q2016	1Q2017	2Q2017	3Q2017
Voice	25,200	24,000	23,300	22,800	21,100	20,300	19,300
Non-Voice	30,500	32,600	34,400	36,200	38,200	40,200	41,700
Others	7,800	7,700	7,700	7,800	7,200	7,200	6,900
Total	63,700	64,300	65,400	66,800	66,500	67,700	67,900

Table 4 show annual revenue from mobilephone services (Ad Varolem Rate)

Percentage of service revenue of mobilephone (Excluding gray market)	Annual excise tax revenue (Million Baht)
5	13,445
10	26,890
15	40,335
20	53,780
30	80,670

From international data Corporation (IDC), annual sale of mobilephone in 2015 was 30 million handsets. Thus, if government collects excise tax from mobile handset as specific rate between 100 and 500 baht, annual excise tax revenue will increase around 3,000 – 15,000 million baht (76.92 – 384.61 million euro).

Table 5 shows annual revenue from mobilephone services (Specific Rate)

Tax per handset	Excise Tax Revenue (Million baht)
100	3,000
300	9,000
500	15,000

6. ADDITIONAL CONSIDERATION IF MOBILE SERVICES ARE COLLECTED

Excise tax is collected to decrease reduce consumption that may be harmful towards health and moral, extravagant and affect towards environment. Most developing countries tend to use excise tax as a tool for increase of revenue more than developed countries. One main reason is that population in developing countries consume goods and services that are more extravagant and be dangerous for health than developed countries. In addition, excise tax can be collected easier than personal income tax (Cnossen, 2005). Tax on mobile services should be collected because mobilephone is too much used. Entrepreneurs have sale strategies to stimulate consumer behavior. Service providers had continuous new products. Consumers bought new mobilephone despite current mobilephone can be operated. Moreover, consumers tend to access additional services from service providers such as ringtone download, short messaging service (SMS) (perhaps, it is non-request SMS) and multimedia messaging service (MMS) and so on. Finally, data from EU Reflex Project Report (2004) and Thivavej

² The ceiling excise tax rate of telecommunication business is 30%

(2007) identified that using mobilephone cause many diseases. However, there are some issues to consider if mobilephone services will be taxed.

6.1 Push burden towards consumers

Whenever government collects tax revenue on mobile services, service providers will push tax burden towards consumers. As a consequence, mobilephone bills will rise up automatically. Actually, it is the objective of excise tax that decreases undesirable consumption.

6.2 Restrict consumer rights

Nowadays, mobilephone is essential thing for life. From report of The Office of The National Broadcasting and Telecommunications Commission (NBTC) of quarter 3 in 2017, mobilephone users in Thailand are 119.50 million numbers that is 170.71 % of Thai population. In other words, it shows that Thai people has more than one mobilephone. If government collects tax on mobilephone from revenue of service providers, consumer expenditure will increase. Many consumers will against that government restricts consumer rights. Mobilephone facilitates communication, particularly, searching information, finding shortest route for destination, contacting via social media. Moreover, in the emergency case, mobilephone is very significant such as earthquake, Tsunami. Nevertheless, the main objective of excise tax collection is to decrease undesirable consumption, and reduce effects towards environment. Therefore, tax on mobilephone will not restrict consumer rights but it may be collected for decrease unnecessary consumption.

6.3 Effect towards economic growth

Deloitte (2014) mentioned that mobile service business directly influences towards economic growth and generate innovation and increase labour output. Tax policy should help service providers and consumers to relieve tax burden. From investigation in 19 countries, tax burden in mobile service business is calculated as 30% of revenues. Furthermore, some developing countries collect extra tax for mobilephone. In addition, Deloitte (2014) said that 1 % of decreases tax burden, it will generate GDP growth rate 0.7%. So, if government collects tax on mobile service, mobilephone market may be have a recession. As a result, technological investment may reduce and it may affect towards less GDP growth.

6.4 Effective tax administration

OECD (2001) guided that good tax administration should not concern on maximise tax revenue collection. Government should concern on gathering or processing the information of taxpayers efficiently, interacting with tax organisations in other countries, paying or refunding taxes and verifying the clients' taxation status and decreasing tax avoidance and tax evasion. Moreover, Smith (1776) mentioned that good tax administration consists of equity, certainty, voluntary tax compliance and economy. So, if government needs additional tax revenues, government should concern on the principle of good tax administration. With all reasons above, it can be summarised in table 6 as below.

Table 6 illustrates advantages and disadvantages of tax on mobile services.

Advantages	Disadvantages
1. Decline non-essential using mobile phone and additional services	1. Increase burden of service providers
2. Reduce effect towards health	2. Increase expenditure of consumers from push burden of service providers
3. Decrease waste from unused mobilephone that destroys environment	3. May restrict consumer rights

4. Increase tax revenue	4. Consumers may be reluctant to use mobilephone and additional services
	5. Decrease GDP growth rate
	6. Technological investment may shrink.

From examining both advantages and disadvantages, researcher realises that Thailand should collect excise tax revenue from mobile services whereas fixed line services should not be collected. The main reason is that trend of using mobile services increases dramatically while trend of using fixed line services is continuously reduced. In quarter 3 of 2017, registered fixed line number was 3.69 million numbers whereas quarter 4 of 2016 and 2015, registered fixed line number was 4.71 million numbers and 5.37 million numbers respectively. In addition, using mobilephone has negative effect towards health while it has no report about any diseases from using fixed line. Moreover, government has many personal tax income incentives such as allowances from buying long term mutual fund, flooding donation, shopping in December and so on. As a result, the Ministry of Finance lacks of revenue. Furthermore, collecting excise tax revenue from mobile services will decrease unnecessary using mobilephone and additional services. Taxpayers will be mobile network operators: MNOs, 5 large organisations: Advanced Info Service Company (AIS), Total Access Communication Company (DTAC) and True Corporation Company (True), CAT Telecom and Telephone Organisation of Thailand (TOT). Tax base should be service revenue both domestic and overseas. In terms of tax rate, it depends on government that nowadays ceiling rate is 30%.

7. CONCLUSION

Since 2007, telecommunication business had the exemption of excise tax. It causes decrease of excise tax revenue collection about 15,000 million baht (384.61 euro million). Nowadays, government still needs tax revenues to compensate government expenditure and tax incentives. Excise tax on mobile services is one of the significant alternatives that will generate increase of revenue. Excise tax on mobile services from service revenue both domestic and overseas in the tax rate between 5% and 30% will enhance tax revenue between 13,445 million baht and 80,670 million baht per year (344.74 – 2,068.46 million euro). However, if government collects tax revenue from handsets in the specific rate, government will have additional tax revenue between 3,000 million and 15,000 million baht per year (76.92 – 384.61 million euro). Furthermore, researcher believes that consumer will decrease using mobile phone and reduce unnecessary additional services. As a result, it may reduce harmful effects for health. However, government may concern about additional tax burden that service providers will push towards consumers, argument about restricted consumer rights. Finally, Thai government should consider meticulously and make a big decision if excise tax on mobile services will come back again.

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