# E-commerce as the Tax Potential Revenue in Indonesia

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**要　　旨**

この論文では、電子商取引からの税収の可能性を考察している。従来の研究に基づくと、インドネシアの政府は大きな利用されてない税収を持っている。電子商取引に関する他の事例および調査を比較することによって、税務当局は電子商取引ビジネスからの税収可能性に注意を払うべきである。更に、巨大な人口を持ったインドネシアは今後電子商取引の潜在市場になる。この避けられない現実は、税務当局を電子商取引課税の準備が出来ている状態にさせるべきである。最も重要なことは、一方で税収を増加させることができ、またもう一方では適切なインターネット開発を行なうことができる租税政策を如何に作るかである。その結果、税収および電子商取引開発は並んで進展し、またそれぞれに利益をもたらすかもしれない。

**Keywords: E-commerce, Tax Potential Revenue**

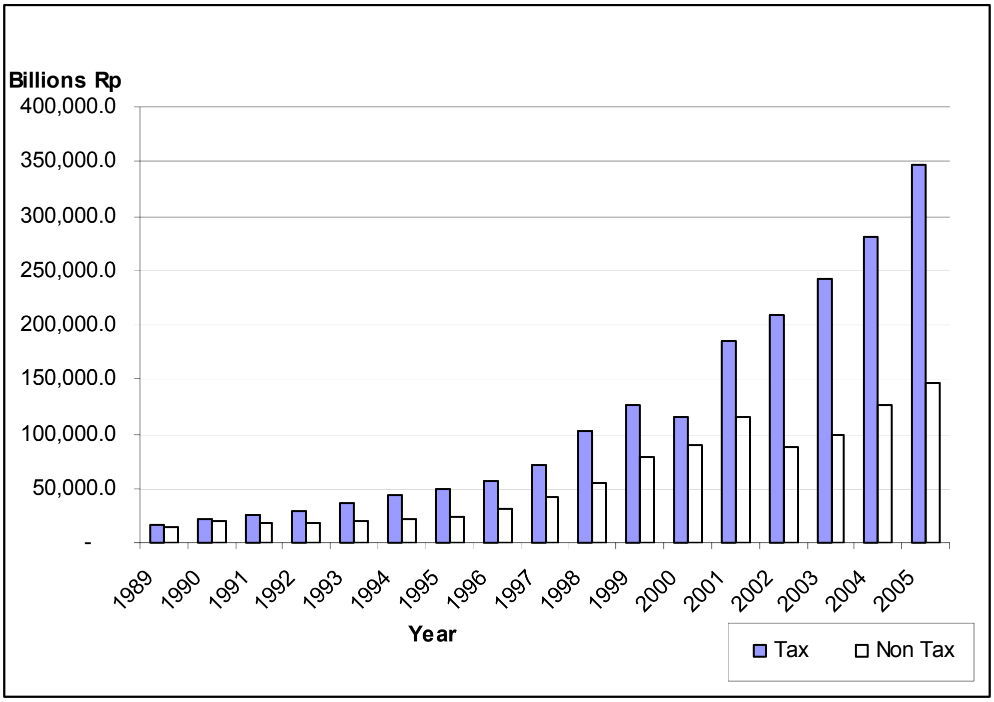
## 1　Introduction

Before 1990's, Indonesian government had relied on oil as its main revenue. During the oil boom in that era, the state enjoyed the revenue mainly derived from oil. When the oil market collapsed in the middle of 1980's, the government started to look for other fund resource in order to finance its development. As result, in 1984, tax reform with the purpose of generating more revenue from tax as substitution of oil was established. The two big steps in the 1985 tax reforms were the introduction of Value Added Tax and Self Assessment System in income tax.

Prior to 1985, Indonesia adopted sales tax. In order to reduce cascading effects on the sales tax, improve resource allocations and raise additional tax revenue for financing government expenditure, Indonesia applied Value Added Tax from April 1, 1985. The impact of this reform showed in the following year, tax revenue from VAT increased fantastically from 873.5 billion Rupiah to 2190.8 billion Rupiah (150.81%). It was the year that the Indonesian government gained revenue from VAT for the first time. From 1986 to 1999 the VAT growth was 31.35 per year. The ratio of the VAT to total tax revenue also rose significantly to 38.0% in 1997/98 from 18.7% in 1983/84.

The same impact of tax reform in 1985 also occurred in income tax. The tax reform has succeeded in making significant increases in income tax revenue; thus ever since 1989, tax had become the main source of Indonesian revenue in the national budget. As seen in the following graph, the role of tax compared to non tax revenue as the domestic state revenue has been increasing over the years.

**Graph１.** Indonesian Domestic Revenue 1990 - 2005




Source: Ministry of Finance, Republic of Indonesia

The tax reform at that time had realized tax potential revenue from income and value added tax. The other success factor from tax reform was the introduction of modern tax system[1]. The main goal of tax reform was to decrease the complexity of tax system during that time. Because of uncertainty of the tax law and poor tax collecting procedure before the tax reform, Indonesian government received low tax revenue. Tax ratio to GDP was also very small. Therefore, some other goals of tax reform were to increase tax ratio to GDP, to simplify the tax law and administration, to decrease the economic distortion and lastly to give fairness to the taxpayers[2]. The tax reform then led to a dramatic increase in the revenue derived from the non oil gas sectors. The non oil/gas revenues rose from 5.5 percent of GDP in 1982/1983 to 11.2 percent in 1993/1994, substantially offsetting the fall in oil and gas revenues.

Income tax administration in Indonesia is divided into three big groups: individual tax, corporation tax and withholding tax. The proportion of revenue from corporation tax is the biggest among the three. When the Indonesian economy was hit by fiscal crisis during 1997-1998, income tax revenue was saved by withholding tax. With very high interest rates and many losses reported by companies caused by the differences in exchange rates of foreign currencies, the construction and financial businesses were very badly damaged. On the other hand, saving and money deposit in the bank increased and withholding tax revenue from interest also increased. Learning from that experience, the Indonesian government then tried to extend tax potential revenue such as the 1980's tax reform case. Other reason was because tax had been the main revenues over the past decades.

To optimize the tax potential can be done by intensive and extensive way. The intensive way means that taxpayer should pay tax properly to the object tax by increasing taxpayers' tax compliance. Some examples are by enhancing the tax administration system and also simply by increasing the number of audits. Meanwhile, the extensive way tries to enlarge the number of subject taxes in the tax system. An example is by expanding the tax basis or increasing the tax rate. One of the options of expanding tax basis is from ecommerce. As the information and technology emerged in the 21st century, ecommerce should be considered as a very potential source for tax potential revenue for the Indonesian government.

Ecommerce as one of the methods of commerce has been established since the beginning of Internet era. With the gigantic numbers of Internet users worldwide, the possibilities of ecommerce as the potential tax revenue is inevitable. There are still many pros and cons for the taxation in ecommerce. In the mean time, tax authorities should examine in-depth existing tax law effects on e-commerce, identify those areas where tax laws are unclear or nonexistent and review the possible alternatives for tax laws that may be written in the future.

With very big population, Indonesia becomes a big market for e-commerce transactions. Therefore, tax authorities in Indonesia should consider the revenue from these transactions. In order to increase tax revenue, taxation on ecommerce is one of the options. Until now, there has been only one regulation concerning

Internet business and activities. According to the Directorate General of Tax Decision, the services by Internet Services Provider (ISP) are not included in the businesses that are exempted from VAT.

According to United Nation Conference on Trade and Development (UNCTAD), Internet users in Indonesia were increasing four times in 2000 - 2003. Revenue estimated from e-commerce in 2001 was US$ 200,000,000. Another data of Indonesia from UNCTAD showed that the sales volumes of music (Compact Disc and Music Cassettes) in 2003 were 37 millions units.

This paper observes the possibilities of ecommerce as the tax potential revenue in Indonesia. Following this introduction, the second chapter will review the taxation in Indonesia. This part is divided into an outlook of taxation in Indonesia and the readiness of tax authority towards the global age. Chapter three discusses the development of ecommerce in Indonesia especially through small and medium enterprises point of views. This chapter also reviews some surveys and researches done by private institutions about the profile of Internet users in Indonesia. As the main part of this paper, chapter four explores ecommerce as the tax potential revenue in Indonesia corresponding with the profile of Internet users. The last chapter then will conclude this paper. Research method for this paper employs descriptive analysis using secondary data from many sources such as Ministry of Finance, Directorate General of Tax, Center Bureau of Statistic and The Asia Foundation.

## 2 Taxation in Indonesia

### 2.1 An Outlook of Indonesian Tax

The Republic of Indonesia taxes income on the basis of both the source of the income and the residence of the person earning that income. A non-resident taxpayer who derives certain types of income from Indonesia is subject to income by way of a withholding tax of 20 percents or lower rate under tax treaty. It means that for resident taxpayers, Indonesia adopts residence principle. They are subjected to tax on all income received or earned both from a source in Indonesia and abroad, known as worldwide income concept. On the other hand, foreign tax subjects or non residents subject only subjected to tax on income from sources in Indonesia, known as source of income concept. The income tax law does not give different tax treatment based on nationality or citizenship status.

According to the law, the definition of a resident taxpayer includes the following: any individual who resides or stays in Indonesia for more than 183 days within any twelve month period, or any individual who, during a taxable year, stays in Indonesia and intends to reside in Indonesia, statutory bodies established or domiciled in Indonesia and undivided inheritance as a unit in lieu of the beneficiaries. While the definition of non-resident taxpayers include any individual who does not reside nor stay in Indonesia for more than 183 days in any twelve month period, or statutory bodies not established and not domiciled in Indonesia which undertake business or activities through permanent establishments in Indonesia.

When the resident has income beyond the annual non taxable income (currently Rp 13.200.000 per year), she/he has the obligation to register as the taxpayer in the tax office and to pay tax for income tax. Sadly, the number of taxpayers in Indonesia is very small compared to the number of Indonesian population. With the population of 220 million people, the total numbers of individual and corporation taxpayers are only 3.67 million. The numbers of taxpayers can be seen as follow:

**Table 1.** The Number of Taxpayers in Indonesia

| Year | Individual | Corporation | Total |
|---|---|---|---|
| 2001 | 1.320.157 | 660.736 | 1.980.893 |
| 2002 | 1.552.816 | 738.326 | 2.291.142 |
| 2003 | 2.312.873 | 886.945 | 3.199.818 |
| 2004 | 2.608.724 | 960.363 | 3.569.087 |
| 2005 | 2.660.898 | 1.060.622 | 3.721.520 |
| 2006 | 2.708.284 | 1.082.486 | 3.790.770 |

Source: Directorate General of Tax, Ministry of Finance, Republic of Indonesia

From this amount, only small numbers of taxpayers pay tax regularly. From those who pay tax, only small number who calculate and report their income correctly. This fact is reflected by the states revenue from tax. From the biggest 1.000 taxpayers, it contributes 61 percent of the total states revenue. This fact has been true for the last two decades. Thus, during the 1990-2000, income tax only contributed in average 23.4 percent from total state revenue. While in the same period, income tax contribution in average was only 4.11 percent of GDP. As comparison, in developed countries like US, the percentage could reach 49 percent.

Tax ratio in Indonesia is also relatively small. Tax ratio is the percentage of tax revenue to GDP It reflects the amount of tax to be collected from the national income or GDP. Considering GDP as the national output and the indicator or people’s welfare, this ratio could be used as the benchmark to value the performance of tax revenue. The increasing of tax ratio indicates the success of collecting taxes because it shows the increasing of tax collected from national output. The tax ratio in Indonesia during 1985-1995 was only 11.31%. From the 2002 data, comparing to other neighbor countries, Indonesian tax ratio was low. The tax ratio of Malaysia, Thailand and Vietnam were 18.5%, 14.5% and 15.3% respectively, while Indonesia was only 13.1%.

Another indicator of tax performance is tax coverage ratio which is the ratio of tax that has been collected to the tax potential revenue that could be collected. This ratio indicates the achievement level of collecting tax. The data from Directorate General Tax from Working Team of Government Policy to Optimize Tax Revenue, it showed that during 1995-2000, the average of tax coverage ratio in Indonesia was only 50.24%, meaning that Indonesia still has big untapped potential tax revenue.

## 2.2 Towards the Global Age

Directorate General of Tax (DGT) as an authority of taxation in Indonesia has a vision to be a public model that performs a world class tax system and management, trustworthy and a pride to the public. A world class tax system and management means a system that can easily adjust the new era combine with professional tax officers and best management system. For that purpose, DGT has begun to implement Tax Information System in 1994. The information system plays the important role of supporting the tax administration process to provide the excellent services to the taxpayers. The implementation of the information technology and sophisticated communication to build a tax information system and standard operating procedure is inevitable for the DGT in order to have the world-class tax system management as well as become the service model that can be trusted and prided by the people.

Basically, the use of IT in DGT has started since 1984 when tax reform had taken place. At that time, the Personal Computer (PC) was used for the taxpayer registration. Then, the use of computer started growing up, not only for taxpayer registration, but also for other activities, such as tax collection, tax return processing, and payroll system. As the computer technology becoming more widely and intensively used, in 1994 DGT then built a computer based tax administration system which is known as the Tax Information System (TIS) which is a standard tax administration procedure of DGT (Head Office/HO, Region Tax Office/RTO and District Tax Office/DTO). In 1997, the HO and all of the RTO's and DTO's have implemented TIS for their routines activities.

In 2002, DGT introduced the tax payment system called e-payment. This e-payment is conducted through collaboration with the banks so that the real-time tax payment can be recognized on-line. The data communication used is host to host connection. It used international standard for financial transaction between the DGT and the bank so that the bank does not have to make changes its existing system in order to run the e-payment system. By this scheme, the taxpayer can make tax payments through the ATM, teller bank, or by private banking services according to the services given by the bank.

From the taxpayer's perspective, the benefit of e-payment is the elimination of the obligation to report the tax receipts to the DGT (because the tax receipt has been electronically sent to the DTO through the HO. It is easy and comfortable since it can be done all over Indonesia and can be done at anytime (specifically for payment through ATM). While the benefits for the DGT is: to reduce or even to eliminate the fictitious tax receipt and to speed up the report of tax revenue because the DGT has not to input the tax receipts (done in the DTO) as the existing procedure. In the previous procedure, the DGT receives the tax receipts from the taxpayer (3rd copy) and from the treasure (2nd copy), both are inputted in by DTO.

After e-payment, DGT then introduced e-filing. This system simply uses the network connection between taxpayers and HO to submit the tax return. Concept of e-filing would benefit for the taxpayer because the taxpayer could submit the tax return without having to print tax invoices. For corporate taxpayers, generally they have already used computer for their bookkeeping, including tax return.  With e-filing, the taxpayer could copy a few 'field' of data into a diskette or tape and submits it to the DTO, or directly uses transfer file via modem to the DGT.

Before the introduction of e-filing, tax return are mostly reported in the form of paper documents. For taxpayers who have a lot of transaction such as supermarket and consumer's good industrial company, submitting the tax return in the form of paper document will be costly and bothersome. Every month the taxpayer has to submit the tax return with the attachment of tax invoice (for VAT, it could be thousands of invoices).  The DTO faces the same problem, that is, those documents should be converted to the electronic data through key-in process. It consumes lots of time and energy.

In its development, e-filing uses Internet connection through the third party as mediator. Thus, the network connection from taxpayers to DGT which had been a problem in the early stage of development could be fixed. Once taxpayers connect to the Internet, they can submit the tax return anywhere and anytime.

Other than information and technology, in order to increase tax compliance and tax officers' productivities, DGT had also established administrative reforms since 2002. This reform included organizational, system and procedure, service and audit aspects. It was initiated by the establishment of Large Taxpayers Regional Office (LTRO) and Large Taxpayers Office (LTO) which administered 200 biggest taxpayers except state-owned companies (starting 2007 state-owned companies are added). Companies' sale and amount of tax paid were the criteria to become big taxpayers. Using new organization structure, system and procedure, and new kinds of service, this tax office became the first model that would be implemented nationwide around 2008.

One of the differences between this new tax office and the old ones is that the organization in this new tax office is not based on taxes but based on function of services given to the taxpayers. The old office used tax categories as the section in that office. For example, a tax office would consist of Corporate Income Tax section, Individual Income Tax section, Value Added Tax Section and Withholding Tax section. Meanwhile, in the new model, tax office consists of section such as: supervision and consultation, taxpayer's service, tax audit and tax collection. This new office model also introduces tax officer with certain qualification who has the responsibility of taxpayers' compliance called: Account Representatives (AR). One AR is responsible from 1 to 15 taxpayers.

They can be considered as the *front-liners* of this tax office. Aside from monitoring the taxpayers ' compliances, AR also give tax consultation to the taxpayers. To become AR, some examinations and tests are given in order to select the best employees among tax officers. Training and education concerning tax, human relationship and other subjects have been conducted regularly to maintain the service capability of AR. They are supposed to give effective response on questions and problems asked by taxpayers as immediately as possible.

The implementation of LTRO and LTO are supported with the e-payment and e-filing system. Thus, management information system in that office is designed by using work-flow concept and paperless. In this concept, every activity dealing with the taxpayer could be monitored by the staff at all levels, executing level, the top level (manager), so that, if there is a delay in certain process, it can be detected as soon as possible.

## 3 Development of Internet and Ecommerce in Indonesia

Like many other countries, the development of Internet is also happening in Indonesia. According to the data from UNCTAD, Internet users in Indonesia had increased from 2 millions into 8 millions users from 2000 to 2003. Thus, there are 377 Internet users among 10.000 people in Indonesia. This increasing number showed that the prospect of Internet becomes the need of Indonesian people. As we can see bellow, the number of Internet users and subscribers published by Indonesian Internet Service Provider Association (APJII) are also increasing year by year:

**Table 2.** The Number of Internet Subscriber and Internet User in Indonesia

| Year | Internet Subscriber | Internet Users |
|---|---|---|
| 1998 | 134.000 | 512.000 |
| 1999 | 256.000 | 1.000.000 |
| 2000 | 400.000 | 1.900.000 |
| 2001 | 581.000 | 4.200.000 |
| 2002 | 667.002 | 4.500.000 |
| 2003 | 865.706 | 8.080.534 |
| 2004 | 1.087.428 | 11.226.143 |
| 2005 | *1.500.000 | *16.000.000 |

*) prediction until the end of 2005

Source: Indonesian Internet Service Provider Association

The Indonesian connection to the global Internet was started in 1994. Initiated by academic and research community, the first link to the US opened in May 1994 by Indonesian Science and Technology Network (IPTEKnet). The first Internet Service Provider (ISP) was called RADNET which was opened in May 1995[3]. By the end of 1995, there were 16 ISPs and 20.000 users connected to the Internet. Ten years after that, the number of ISP had reached 232 ISPs.

The high development of Internet Kiosk (Warnet) in Indonesia also supports the increasing number of Internet users and Internet subscribers. The survey in 2001 showed that over half of Indonesia's Internet users access the Internet from a Warnet. In 2003, there were around 2,500 Warnets nationwide, operated by private entrepreneurs[4]. This Warnet helped the growth of access for those who cannot afford individual Internet access from their home. Based on the research, one of the best ways to increase the number of Internet users in Indonesia is by providing Internet kiosks.

The Internet users' profile in Indonesia, according to a survey by the Indonesian Internet Industry (2000) from 1500 respondents in 10 big cities:

- Gender: 65% were men and 35% women
- Age: 14-25 year old (32%), 26-35 year olds (38%), followed by and 36-55 year old (30%)
- Education: High School (34.5%), Bachelor Degree (39.6%), undergraduate (20.1%), Master Degree (5.2%) and Doctoral Degree (0.5%)
- Occupation: employees (43.0%), students (25%), civil servants (11%), entrepreneurs (10%),

professionals (3%), housewives (1%) and miscellaneous (6%)

- The purpose of using Internet (multiple choices): E-mail (90%), entertainment (62%), surfing (52%), business (44%), academic research (19%), business research (8%), shopping (5%) and others (6%)
- Access points: Internet Kiosks (Warnets - 42%), office (41%), home (12%)

Another survey conducted by Castle Asia in 2002 from 227 small (5 - 25 employees) and medium (26 – 300 employees) enterprises from 12 big cities in Indonesia[5], showed that:

- Monthly Internet usage time: more than 50% of Internet user access email services for more than 20 hours a month and nearly 25% use it over 40 hours a month. And 60% use at least other function of the Internet , over for up to 20 hours a month
- Time usage for business research: 81% of companies use the Internet for research. From this percentage: 25% use it every day, 20% several times a week and 13% once a month or less.
- Online purchasing: 7% of the respondents have purchased goods or services online. The goods that they bought were: 73% IT-related items and 36% books for company use. The origins of goods or services purchased were United States, Germany, Australia, China and Indonesia. From other countries website were bought by online payment and for domestic using offline payment.
- Internet Banking: 69% correspondents had used Internet Banking which were 69% used it less than one year, 22% 1-2 years and the rest 9% 2-3 years.
- Website: most companies had a website for 2-3 years. The reasons of building a website mostly because of promotion and marketing followed by increasing sales and customers' suggestion. 25% of companies maintain and update the website's contents regularly (once a month or more often). Website owners claimed that their websites are very important for the promotion (60%) and for the sales (24%)
- Online selling: from 43% of companies with websites, 96% show their goods online, 56% set up to received orders online (through email) and 4% can receive online payments. Some companies (48%) reported that less than 20% of their total turnover comes from online sales, while 16% of companies derive more than 80% of their sales from the Internet
- Ecommerce site: 18% companies had joined ecommerce site, of which: 61% use one ecommerce site, 26% use two ecommerce sites and the rest use three ecommerce sites.

From the data mentioned above, it shows diversities of Internet users in Indonesia. During the time of survey, there were many new beginners of Internet users. It was the peak time of increasing number when the numbers were almost double from the previous year. The first introduction of Internet mostly was the usage of email as the alternatives tools of communication. Since the telecommunication infrastructure and computer equipment for the Internet in Indonesia was still considered expensive for some people at that time, many users using Internet from Warnet or their office when connected to the Internet. Warnet is comparably cheaper compared to ISP subscriber fee and the cost of phone communication.

The use of Internet in companies has been also greatly increased since 5 years ago. The data above demonstrates the emerging awareness of entrepreneurs to use Internet as a tool of promoting and selling their product. By creating website, the companies can introduce and reach their targeted market in all over world. The importance of increasing companies' brand image is also shown by the willingness to join the ecommerce website. The more they promote the more people know the product sold. The increasing number of companies using a website can be seen from the table below:

**Table 3.** The Number of Internet Domain in Indonesia

| Year | New Domain | Total Domain |
|---|---|---|
| 1998 | 1.479 | 1.479 |
| 1999 | 2.126 | 3.605 |
| 2000 | 4.109 | 7.714 |
| 2001 | 3.433 | 11.147 |
| 2002 | 3.146 | 14.293 |
| 2003 | 3.628 | 17.921 |
| 2004 | 3.841 | 21.762 |

Source: Indonesian Internet Service Provider Association

Regarding online purchasing and selling, according to UNCTAD, Internet users in Indonesia has joined the online commerce since 2001. The survey's result is also connected with the study from UNCTAD. Individual mostly have experiences only in buying online, while companies tend to do the online buying and selling. This is especially true when it comes to the IT related companies. From the survey, companies had experiences in online transactions either buying or selling and also using the Internet banking.

One of the factors of Internet boom in Indonesia during early 21st century was the issuing of new Telecommunication Law (law Number 36/199) altogether with the launching "The Blue Print of Government Policy on the Telecommunication Development Strategy". The most strategic point from the new law was the ending of monopoly of the incumbent operator by letting new entrants and stimulating competition in all level of telecommunication provisions. In their blue print of telecommunication sector, Indonesian government will act only as a policy maker and no longer play both roles as operator and regulator. Another strategy is to give the same right for all private sectors to participate in the provision of telecommunication networks and services.

On the other hand, despite the potential number of parties in ecommerce, there are still many problems in order to provide more favorable condition for ecommerce to grow faster. The fact that many Internet users utilize Internet kiosk / Warnet instead of connecting from their own home showed the expensive cost of Internet connection and small number of telephone lines. The teledenisty (phone lines per 100 inhabitants) in Indonesia is relatively low, 3:100, with a wide disparity between urban and rural areas. Internet access is also quite low. This is due in part to the high cost of PCs and charges for Internet use relative to the gross domestic product per capita[6].

Another issue about ecommerce in Indonesia is the cyber law. The law certainty in conducting ecommerce is needed to create an environment that would support and promote ecommerce. There are two drafts of cyber laws prepared by academician for the government. The first was arranged by University of Indonesia (Bill of the Utilization of IT) and the second was prepared by Pajajaran University of Bandung ((Bills of Electronic Information and Electronic Transaction). It has been discussed since 1999 in the National Parliament but still unknown when the bills will be passed. This is mainly caused by the still on-going disputes about the bills.

In its early stage, the initiative of making cyber law is to give the umbrella for the electronic transaction that can be the basic for other law and rules regarding ecommerce. The main target at that time is the admitted of digital signature equal with traditional signature to give some rooms for law certainty in ecommerce and other electronic transactions. But on the the way, many comments and participation to include many things regarding the cyber activities such as cyber crime, electronic banking, e-government in the bill had made the bills more complicated. Up till now, there are still many debates and arguments about the bill and it is still not known for sure when it will be passed by the parliament.

## 4 Ecommerce as Tax Potential Revenue

This chapter will discuss about the researches and studies about the tax potential revenue in Indonesia.

This will be discussed in the first section which then will be followed by the second section about the ecommerce as tax potential revenue. This section combines the previous discussion about ecommerce in Indonesia with the first section.

## 4.1 Indonesia Potential Tax Revenue

A study by Institute of Economic and Social Research, Faculty of Economic, University of Indonesia in 2005[7] about tax potential in Indonesia showed that individual and corporate tax in Indonesia has great potential revenue source in the future. This result was not surprising since we know that the number of taxpayers in Indonesia is relatively small compared to the number of population.

For individual income tax, based on the National Socioeconomic Survey (Sussenas), from the 52.6 million households inferred from the sample, it was estimated that there should be 63.1 million taxpayers. The study focused on the income potential and the allocation of tax in the individual income tax system in Indonesia and referred to the calculation of taxpayer incomes from ten thousands of families from Sussenas in 2002. This analysis is studied by comparing the GDP, national income and household consumption with aggregate total household income. As describe in Table I, the total number of corporate and individual taxpayers is still below 4 million. This huge gap of fact and estimation is amazing. Many tax experts and economists say that tax authority in Indonesia is like "hunting in the zoo". It means that the tax authority only dig for tax revenue from the registered taxpayers and limited tax object and subject without making effort to enhance the new resources from new tax potential.

Another fact is that from the total income calculated (878.7 trillion), tax revenue should reach 114.3 trillion while the real tax revenue in the same year was only 49.1 trillion which means only 43% obtained. If non oil and gas income from business included, the total income reached 78.7 trillion or 68% of the potential tax revenue from individual income tax estimated from the survey. Similar to number of taxpayers, tax revenue had also the wide space to be extended.

For corporate income tax, based on the same data combines with corporate tax based GDP estimation by Central Bureau of Statistic, the company's total profit in 2003 was 603.14 trillion. From this total profit, the corporate income tax potential was about 130.26 trillion or 6.24 of GDP. For Value Added Tax potential revenue, it still could be raised 52.13% of the actual revenue in 2003. This potential tax revenue increased 3.6% of GDP compared to the tax potential in 2000.

A study by Mark in 2003[8] showed another interesting fact about Value Added Tax (VAT) in Indonesia.

The study focused on the impact of tax exemption on revenue potential and effective tax rate. In Indonesia, there are a large numbers of tax exemptions in VAT. Some reasons are given for VAT exemption, which are:

- The difficulties of assessment for VAT in special factors such as: financial services or sectors in which there are many small producers
- Political or economical reason, especially connected to the impact for the poor, for example: basic food products like rice and corn are exempted from the VAT and also electricity for low-income households
- Meritorious reason; such as health care, religious, or educational services and radio and television broadcasting
- Already tax by local government, such as: hotels, restaurants and entertainment industries
- For some sectors, the motivation for exemption is less clear. In Indonesia, these include electricity for industrial users, oil and gas mining, and other mining sectors

The result of this research is that the VAT exemptions reduce revenues relative to the theoretical potential revenues if no sectors were exempted from the VAT. The second finding is if the current VAT system were administered perfectly, it would yield revenues equal to 5.83 percent of GDP, despite the various exemptions in effect. Meanwhile, the revenues generated in reality by the VAT system in Indonesia, only at 3.2 percent of GDP. It means that even with the current structure of exemptions taken into account, recent VAT revenue realizations are 45 percent below their potential.

Another study[9], tax potential was calculated by using the household survey data and the estimation based on the Pareto[10] distribution. From the research, it showed the low number of tax compliance rate in Indonesia. The tax revenue in 1996, 2000 and 2002 only covered 11%-20% from the potential revenue. There was an increasing trend in the compliance rate in 2000, mainly caused by the economic recovery after a severe crisis that happened in previous two years.

The three researches illustrate the potential tax revenue in Indonesia. There are still many untouched tax revenue both from income tax and VAT. The number of registered taxpayers can also be increased due to the big income from the average household in Indonesia. Despite the effort of tax authority in Indonesia in enhancing national tax revenue, there is still a huge gap in the tax potential that should be focused on. As mentioned before, there are two ways to fill in the gap, which are intensive and extensive way. By looking at the result of the studies, DGT as tax authority in Indonesia need to do both ways.

DGT also has internal problem for tax compliance in Indonesia. It can be seen from the table of tax return ratio. For the past five years, the filing ratio has never reached 50%. This tax filing ratio is also affecting national tax revenue in Indonesia. Tax return reflects the economic activities of taxpayers for the tax purpose, such as: sales, cost, income and tax due.

The problem of filing tax return compliance is more to law enforcement problem. The penalty for the late filing of tax return currently is relatively small. It is only Rp 100.000 (US$ 10) for the late annual tax return and Rp 50.000 (US$5) for monthly tax return. This table describes the tax filing ratio in Indonesia:

**Table 4.** Tax Filing Ratio

| Year | Individual Taxpayers | Individual Tax Return | Ratio | Corporate Taxpayers | Corporate Tax Return | Ratio |
|---|---|---|---|---|---|---|
| 2001 | 1,320,157 | 507,961 | 38% | 660,736 | 281,023 | 43% |
| 2002 | 1,552,816 | 670,374 | 43% | 738,326 | 288,896 | 39% |
| 2003 | 2,312,873 | 744,932 | 32% | 886,945 | 306,575 | 35% |
| 2004 | 2,608,724 | 846,687 | 32% | 960,363 | 330,708 | 34% |
| 2005 | 2,660,898 | 867,612 | 33% | 1,060,622 | 317,107 | 30% |
| 2006 | 2,708,284 | 851,401 | 31% | 1,082,486 | 332,927 | 31% |

Source: Directorate General of Tax, Ministry of Finance, Republic of Indonesia

If we compare it with the previous study, the percentage of tax filing ratio is almost the same with the percentage number of the real tax that could be received by Indonesian government. Of course, due to several other economic factors, it could not be claimed that higher number of tax filing ratio also means a higher tax revenue. It needs a further study to match the connection of those numbers. In fact, this low number explains that DGT needs to do the intensive way to increase the filing ratio which could be done by increasing the law enforcement of taxpayers. Meanwhile for the extensive way, in order to increase tax revenue, ecommerce could be one of the alternatives.

## 4.2 Potential Tax Revenue from Ecommerce

As the ecommerce emerges and becomes the economic boom in 21$^{st}$ century, Indonesia as one of the developing countries has also enjoyed the ecommerce development. Many people or corporations initiated to transform business from brick and mortar into ecommerce. Though there are many predictions about the end of this Internet booming, this trend has not ended yet and still in development stage, particularly for the small and medium enterprises in Indonesia.

Starting with the use of email as tools of communication followed by the use of Internet as the central of information and market research, the Internet has become the necessity for conducting business in Indonesia. This is especially true based on the surveys that said many businesses start to develop their company's website to comply the request from their customers. The website has also become the social status for corporation with the purpose of approaching more valuable customers in the Internet era.

When it comes to ecommerce, there are many advantages compared to traditional commerce. The company's website (as virtual office) could be accessed 24 hours and 7 days a week from everywhere, cutting the chain of distribution and paperless work are some of the advantages among many of them. Online selling and buying for some particular items are also common practice nowadays. With the user friendly combines with high security of online banking, Internet users in Indonesia believe that buying and selling online are not difficult and safe.

Regarding the *"Internet literacy"*, APJII (Indonesia ISP Association) have been coordinating Internet awareness in school since May 1999. The "School 2000 Program" aims to introduce the use of Internet to schools with the assistance from the Department of National Education. Their target is to enable 2000 schools of having their own homepage with their own domain names. In 2002, there were already 647 registered domains for schools. The Internet literacy for student had also made the new potential users for ecommerce in the future.

For the easier and cheaper Internet connection, Indonesian government, through Directorate General of Telecommunication, will establish infrastructure which could be the international backbone in Indonesia[11]. International Internet backbone is the Internet connection with huge capacity functioning as "main pipe" of international Internet traffic. Currently, Indonesia connected through the international Internet backbone in Singapore which is one of the biggest internet traffic beside USA, France, Canada and Australia. A cheaper and easier Internet connection will automatically increase the number of Internet users who are most of them currently connected through the Warnet.

This increment has created new potential tax revenue for Indonesian government. The big disparity of potential tax and current state revenue describe that there is still a chance for tax authority to increase their revenue. Ecommerce becomes one of those potentials. From the survey, the characteristic of Internet users in Indonesia are mostly those who have a good education and more than 50% are employees, professionals and entrepreneurs. This kind of users is estimated as those who have a high awareness of taxation. It would be easier for tax administrator to include them as registered taxpayers. A momentous tax campaign of taxation could be done to invite them contributing their income tax. One of the ways is the tax campaign within the Internet.

From the corporations point of view, small and medium enterprises has experienced in doing online selling and buying using the online banking. The prediction by APJII, in 2006, the business value of Internet Service Provider could reach 200 billion rupiah[12]. It means that one ISP could have income between one to two billion rupiah. In Indonesia, in order to establish a corporation, one needs a Tax Identification Number (TIN). Consequently, it is assumed that the corporation doing ecommerce business has already registered as taxpayers. The task of tax authority for this kind of potential is to deepen their business transactions. It is not difficult to do tax evasion when the transactions are done paperless and electronically. It needs the readiness and professionalism of tax authority to catch up with the electronic transaction.

In national policy, tax on ecommerce should not put the stone in the gear of ecommerce development. Ecommerce should be protected from the tax situation that can create an economic distortion and thus hinder its development. Tax authority should take careful steps for the beneficial condition for ecommerce taxation to grow. One mistake could make the whole condition becomes unclear.

An example is the debate between APJII and tax authority on bandwidth tax proposed by government in the tax bill. In the new draft of the tax law, the government plans to tax income derived from the transfer of data using satellites, optical cables and fiber optics. The data is transferred through bandwidth, a term the ICT industry uses to define a range within a band of wavelengths, frequencies or energies. APJII claimed that the use of bandwidth should not be taxed like a royalty, as it only provides the connection access for internet users and is not a technology[13]. Moreover, taxing the use of bandwidth is just like imposing a tax on the use of satellites that are not even owned by the government. Finally, tax authority had released the Internet bandwidth as one of the components of royalty. One big lesson learned from this dispute is that not only the big issues need a careful policy but also even the common Internet terminology needs to be learned by tax authority.

Ecommerce tax policy should also proportionate with other national framework such as domestic cyber law and international tax practice. Since the cyber law in Indonesia is still in progress at the parliament, tax authority has to observe its development so that ecommerce tax rules will go side by side rather than opposing one to another. Right now, DGT is also making the new tax law which will be published in 2008.

The tax bill is still in discussion and one of the topics is about ecommerce tax. If the both bills pass by parliament, it should be noticed that the cyber law will become the “mother ship” for all electronic transactions, including ecommerce.

For international tax practice, DGT should apply the wide acceptance principles from OECD in the report by the Committee on Fiscal Affairs, Electronic Commerce: Taxation Framework Condition. There are five principles, which are:

- Neutrality

  Tax should be neutral for all kind of commerce, including ecommerce and traditional commerce. Basically, business decision must be motivated by economic not by tax consideration. All taxpayers in the same condition and doing the same transaction must have the same tax treatment.
- Efficiency

  Compliance cost burdened by taxpayers and administration cost burdened by tax authority should be minimized.
- Certainty and Simplicity

  Tax rules should be clear, simple and easy to understand so that taxpayers could anticipate tax consequence of business transaction. It includes when, where and how the tax due appears.
- Effectiveness and Fairness

  Taxation should produce the right tax amount at the right time. The potential of tax evasion and tax avoidance should be minimized as much as possible and counter-acting measures should be proportionate to the risks involved
- Flexibility

  Taxation system should be flexible and dynamic to ensure that the system could keep the same pace with the development of business and technology

Another issue regarding ecommerce taxation is the readiness of DGT as the tax authority in Indonesia. Once the tax rules and framework are being set up, it would be useless if it is not supported by the readiness of DGT. Three main components; which are software, hardware and brain ware, play important role to develop the readiness of DGT. As mentioned in previous chapter, software and hardware are set up and ready toward the information and technology era. Another component is still in question, brain ware. While education and special training for tax audit are conducted continuously and regularly, the needs of education for computer auditing are also necessary.

Computer auditing is a branch of general auditing concerned with control of information and communications technologies. The real ecommerce business is only a set of buying and selling intangible goods and services within the Internet. Without expertise of computer knowledge, it is almost impossible to audit the tax of ecommerce business. Transactions data are mostly saved in the form of digital or electronic and paperless. Therefore, tax authority needs a more particular and specific tax audit of this kind of business, especially for ecommerce business in the future.

## 5　Conclusion

Since the collapse of oil boom in 1980's, Indonesian government had relied on tax revenue as its main source of development. Tax revenue has continued to increase each year through many tax and administrative reforms in Indonesia. The current reform is the modernization of tax office with a new program to computerize the revenue service and overhaul its administrative structures. Based on the past experience, any kind of modernization or reform in tax administration has the potential to increase tax revenues by between 30 and 40 percent. Meanwhile, due to the increasing tax revenue target given by Indonesian government, DGT as the main tax authority in Indonesia should begin to seek new tax potential. Tax reform is not sufficient enough to enhance the tax revenue. It needs more practical work especially in searching the new tax potential.

Several researches by economists and academics showed that there are huge gap between tax potential and real tax revenue. Despite the hard work of DGT to collect revenue from tax, the study demonstrated that the tax potential is not fully reached. It means that some spaces are still waiting to be searched by DGT. Many people with high income are not registered as taxpayers and consequently they do not pay taxes. This fact can be seen by comparing aggregate income and consumption of GDP. Another result described how VAT potential is still beyond the tax revenue despite many tax exemptions of VAT.

Although those studies did not specifically mentioned about ecommerce potential, another surveys, facts and realities about ecommerce undoubtedly should attract the attention of DGT to enhance revenue from ecommerce business. Internet and ecommerce have changed the way of doing business in several ways. Given many advantageous for buyer and seller, ecommerce becomes a magnet for business communities to transform their form of business transactions from conventional commerce to ecommerce. Nonetheless, DGT should be careful and prudent in drawing the boundary policy. Special framework should be done not to hamper the development of ecommerce. The case of bandwidth tax in tax bill became a phenomenal experience and must not be carried out in the future.

Other issues of ecommerce taxation are commensurability of ecommerce taxation with domestic cyber law and international tax practice. At the moment, cyber law and tax law are in the stage of discussion to pass and become the law in the House of Representatives. Relating to ecommerce, both laws should be in the same way and the tax law should not conflict with the cyber law.

With the characteristic of borderless transactions, ecommerce taxation has to follow the common international rules applied by other countries. Without this, Indonesia would be squeezed out by international tax communities. At present, the standard tax principles of ecommerce tax produced by OECD are commonly used by many countries. Essentially, these principles could also be applied for any kind of taxation.

Lastly, the readiness of DGT to conduct audit for ecommerce taxation is also important. This does not only prevail for the tax auditor but also for the tax officer in all divisions. Internet and ecommerce soon will be the main part of people’s life and it needs more awareness from all tax officer rather than only tax auditor.

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