Final Report

Study on the Introduction of Income Tax in the Republic of Vanuatu

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제 출 문

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본 보고서를 연구용역과제인 『바누아투 소득세 도입방안에 대한 연구』의 연구용역보고서로 제출합니다.

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1. Introduction

Recently, the need for social welfare has been growing but the dependency on aid and grants does not seem to decline in the Republic of Vanuatu. Most social overhead capital projects have been financed through loans and this has created a financial burden for the government. Thus, if Vanuatu is to graduate from the least develop country (LDC) status, sustainable sources of revenue should be secured. Also, natural disasters and demographic structure changes are other inevitable phenomena.

In this context, there have been active discussions about the introduction of income tax in the Republic of Vanuatu. Introducing income tax is important for Vanuatu for numerous reasons. For example, (a) government can collect adequate revenue through income tax; (b) government can achieve fairness and equity using income tax; (c) income tax is a relatively stable source of revenue; (d) income tax redistributes resources. Moreover, (e) the Republic of Vanuatu can fully mobilize domestic resources (Vanuatu Revenue Review, 2017).

This paper provides expertise to the Republic of Vanuatu by sharing the Korean experience regarding tax administration. The Republic of Korea has the experience of colonization and civil war, which caused devastating poverty and destruction. In the early period of independence, between 1949 and the middle of the 1950s, loans were the primary sources of government revenue. Following the civil war, between the late 1950s and early 1960s, aid and grants comprised more than 50 percent of government revenue. Only 15% of revenue was collected from taxes and non-tax revenues. But through the rapid economic growth called ‘the miracle on the Han River’ in the mid-1950s through 1997, Korea successfully mobilized domestic revenue. This means, Korean government collects adequate revenues from taxes. Now, the Republic of Korea gives aid and grants to other countries. This experience could be helpful to the government of the Republic of Vanuatu.

This paper is structured as follows. Chapter 2 details the operation of income tax in the world and chapter 3 discusses the income tax system in Korea. Chapter 4 summarizes the theory of income tax and chapter 5 presents the income tax system proposed by the Vanuatu Revenue Review. Chapter 6 gives the comprehensive review of the proposed income tax. Chapter 7 suggests policy recommendations and chapter 8 concludes.

2. Income taxes around the world

A. Income tax as a major source of revenue

Income tax is common around the world and is a major revenue resource in most developed countries. According to Modica & Harding (2018), 24.4% of total tax revenue comes from personal income taxes and nearly 1/3 of tax revenue is collected from personal and corporate income tax on average. That is, personal income tax is a more significant factor of revenue. In contrast, developing countries rely more on VAT (Value Added Tax), and VAT represents 30% of total taxation. <Table 1> shows the tax structure of countries in which the income tax forms the greatest share of tax revenue. Most countries are members of the OECD and personal income tax has a greater share than corporate income tax. VAT is also an important source of revenue, but not as significant compared to income tax. Moreover, Modica & Harding (2018) found the positive correlation between personal income tax and tax to GDP ratio. This shows that countries with lower tax to GDP ratio collect smaller shares of total taxation from personal income tax. They also found a negative relationship between VAT and tax to GDP ratio. This negative sign indicates that a higher VAT share of tax revenue results in a lower tax to GDP ratios. Moreover, a lower tax to GDP ratio means smaller tax revenue relative to GDP growth.

<Table 1> Tax structure of countries with high share of income taxes in 2015

	Personal income tax	Corporate income tax	VAT	Other taxes	Tax to GDP ratio
Denmark	55.2	5.6	20	7.5	45.9
Australia	41.5	15.3	13	15.8	28.2
United States	40.5	8.5	0	10.3	26.2
New Zealand	38.1	13.8	29.7	9.8	33
Canada	36.9	9.9	13.2	15.1	32
Iceland	36.7	6.5	22.6	14.6	36.7
South Africa	33.4	16.4	23.8	8.5	29
Ireland	31.6	11.3	19.7	7.6	23.1
Switzerland	31.1	10.8	12.4	11.7	27.7
Finland	30.2	4.9	20.6	3.5	43.9
Sweden	29.1	6.9	20.9	13.6	43.3
Swaziland	28.7	19.7	27.5	3.2	15.3
Belgium	28.3	7.4	15	8.6	44.8
Norway	27.9	11.5	21.4	2.9	38.3
United Kingdom	27.7	7.5	21.2	13.1	32.5
Italy	26	4.7	14.2	11.8	43.3
Luxembourg	24.5	11.9	17.6	9.2	36.8
Mexico	20.6	20.1	23.9	6.8	16.2
Korea	17.2	13.1	15.3	15.1	25.2
Trinidad and Tobago	16.9	44	15.7	3.9	30.6
Singapore	16.6	25.6	18.6	26.1	13.6
Malaysia	14.8	42.5	15.2	9.3	15.3
Philippines	13.7	25.2	13.1	8.1	17

Note: Countries are ranked by their share of personal income tax revenues
Source: Modica & Harding (2018)

B. Countries that have introduced an income tax

The structure and rate of income taxes vary from country to country, but the existence of income tax is almost certain. <Table 2> shows the number of countries with personal income tax and without personal income tax. Only 8% of these countries do not imposed personal income tax and the

Republic of Vanuatu is one of them. All developed countries impose income tax and countries without income taxes are mostly located in Asia. In Europe, there is no country that does not impose income tax. A progressive income tax rate is common but there exist countries which impose flat income taxes. The East-European bloc introduced a flat income tax rate.

<Table 2> Personal income taxes in the world

	Developed		Developing (including LDCs)	
	Imposed	Not imposed	Imposed	Not imposed
Asia	2	0	30	7
Oceania	2	0	4	1
Latin America	-	-	21	2
North America	2	0	4	1
Africa	-	-	26	1
Europe	30	0	14	0
Total	36	0	99	12

Source: KPMG data (url: https://home.kpmg/xx/en/home/services/tax/tax-tools-and-resources/tax-rates-online/individual-income-tax-rates-table.html)
* Classifying countries according to criteria in UN (2018b).

Corporate income tax is more widely adopted compared to personal income tax. <Table 3> shows the current state of corporate income taxes globally. Only 5% of countries do not imposed corporate income tax, including Vanuatu. All developed countries impose corporate income tax. In contrast to <Table 1>, all Asian countries have introduced corporate income taxes, except for Bahrain. In addition, three European countries do not impose a corporate income tax; Guernsey, Isle of Man, and Jersey, and these three countries are Crown dependent. Most countries have a single corporate tax rate but there exist countries that impose a progressive tax rate. Among OECD countries, only 9 out of 35 countries have progressive corporate taxes as of 2017.

<Table 3> Corporate income taxes in the world

	Developed	Developing (including LDCs)

	Imposed	Not imposed	Imposed	Not imposed
Asia	2	0	40	1
Oceania	2	0	3	1
Latin America	-	-	25	2
North America	2	0	8	2
Africa	-	-	35	1
Europe	30	0	14	3
total	36	0	125	10

Source: KPMG data (url: https://home.kpmg/xx/en/home/services/tax/tax-tools-and-resources/tax-rates-online/individual-income-tax-rates-table.html)
* Classifying countries according to criteria in UN (2018b).

3. Income tax in the Republic of Korea

A. Overview of the history of income tax

The personal income tax system was introduced in Korea in 1934 and the income tax law was newly enacted in 1949. Most incomes, excluding retirement income and capital gains, have been subject to taxation using progressive tax rates since 1975. Retirement income and capital gains are not included in personal income but are taxed separately. Interest and dividend income more than a certain amount were subject to taxation in 1996. In the case of interest and dividend income less than a certain amount (currently KRW 20 million), tax liabilities are settled only by withholding taxes at the time of payment. Public pension income has been taxed since 2002.

Through multiple amendments of Income Tax Law, the Korean government has tried to enhance the tax compliance of business owners. But statutory loopholes, a weak bookkeeping culture, and a limited auditing capacity has hampered achieving a high level of tax compliance. To relieve the burden of bookkeeping for small business, the government allows using an estimation method for the tax calculation within a certain turnover limits. This typically reduces the tax burdens for small business owners. As a consequence, the business owners have a strong incentive to underreport their turnover, which also leads to underreporting their taxable income at the personal level.

It is difficult to apply strict taxation to financial gains before information is collected. Therefore, tax authorities could not impose an income tax on financial income until 1993, when the real name system for ownership of financial assets was introduced. Prior to 1993, interest, dividends, and capital gains were either exempt or subject to final withholding taxes at varying rates. Since 1997, individual interest combined with dividends that exceed KRW 40 million have been taxable under the global income tax system. For reducing the negative impacts on financial markets, global taxation of capital income was suspended during 1998-2000. However, the first KRW 40 million of dividends and interest is still subject to a final withholding rate. Besides, capital gains from securities and real property haves separate tax systems.

The importance of corporate tax has been increasing steadily in Korea, and the government collected more revenue in corporate tax than personal income tax in some periods. Approximately 4 percent of GDP represents the amount of corporate tax, and this is a noticeable fact considering the relatively moderate marginal tax rates and widespread allowances and credits. Due to the high level of tax compliance of large conglomerates, the tax base erosion is not serious than personal income. According to the NTS (National Tax Service), only 0.19 percent of the total enterprises, or 609 firms paid 25 percent of all corporate taxes in 2017. In comparison, the next 2,033 firms or 0.62 percent of corporations accounted for 6.95 percent of the total corporate tax revenue. This means that over one-third of corporate tax revenue is collected from less than 1 percent of firms.

The economic crisis in 1997 brought about the greatest change in corporate tax. A large-scale restructuring was underway and the management system was transformed to reflect systems of advanced countries in the process of overcoming this crisis. Also, corporate tax systems have changed significantly over time. Specifically, comprehensive and systematic tax reform was conducted for the restructuring and M & A (merger and acquisition) by joint enterprises through the attraction of foreign capital. Tax reform during this period improved weak financial structures and the quality of the financial structure has greatly ameliorated with the result of the restructuring.

Another issue related to corporate income tax was the introduction and organization of the international tax system. As the economy became more open to global markets, international transaction and international investment, especially FDI (foreign direct investment) both inward and outward, sharply increased. Therefore, modifying the tax system was required to accommodate these changes. Above all, 'The act for the coordination of international tax affairs' was introduced in 1995. This act covered transfer pricing taxation, taxation on thin capitalization, and tax haven which was needed for international cooperation to adjust taxes on international transactions. Subsequently, additional responses to tax evasion due to capital liberalization and e-commerce were initiated.

In 2005, there was an institutional readjustment to improve the international tax system of Korea to meet international standards. Special provisions on the collection of withholding tax for foreign funds in tax haven were introduced, and the application of the principle of substantial taxation was introduced.

B. Current structure of income tax

i. Personal income tax

Persons who pay personal income tax submit payment records, including personal information and tax withholding amount, to the tax office by the end of February of each year; in the case of wage, salary and retirement income, this information must be reported by the 10th March of the following year. A taxpayer who owns their own business shall do the bookkeeping for the computation of taxable income amount. Small businesses can keep records under the “simplified bookkeeping system” instead of double-entry bookkeeping.

<Table 4> contains the details of taxable income. Personal income tax in Korea follows a progressive tax rate on the sum of income attributed to an individual. Interest, dividend, business income, wage and salary income, pension income, and other income are subject to personal income tax.

<Table 4> Subjects of personal income tax

	Scope of income
Interest	Interest and discount amount of deposits, bond, etc.
Dividend	Dividend and distributions of profits from a corporation
Business income	Profits from livestock, forestry, fishing, mining, manufacturing, construction, wholesale/retail trade, banking/insurance, other services, etc.
Wage and salary income	Wage, salary, remuneration, bonus, etc.
Pension income	Public pension income, income from private pension account
Other income	Prize money award, prize in a lottery or drawing, temporary personal services (lecture, etc.), indemnity payment for breach of a contract, gains from the transfer/rental of mining rights, fishing rights, industrial property rights, trademarks, etc.

<Table 5> summarizes the tax base and tax rates of Korea in 2018. There are 7 income brackets and the progressive tax rate scheme is applied. The lowest tax rate is 6% applied to KRW 12 million or less and the highest tax rate is 42% applied to KRW 500 million or more. Recent revisions of tax law have added the top income bracket and imposed highest tax rate on the high-income bracket to broaden the tax base.

<Table 5> Personal income tax base and tax rates in Korea

Tax base	Tax Rates
KRW 12 million or less	6%

Tax base	Tax Rates
KRW 12 ~ 46 million	KRW 0.72 million + 15% of the excess over KRW 12 million
KRW 46 ~ 88 million	KRW 5.82 million + 24% of the excess over KRW 46 million
KRW 88 ~ 150 million	KRW 15.9 million + 35% of the excess over KRW 88 million
KRW 150 ~ 300 million	KRW 37.6 million + 38% of the excess over KRW 150 million
KRW 300 ~ 500 million	KRW 94.6 million + 40% of the excess over KRW 300 million
Over KRW 500 million	KRW 174.6 million + 42% of the excess over KRW 500 million

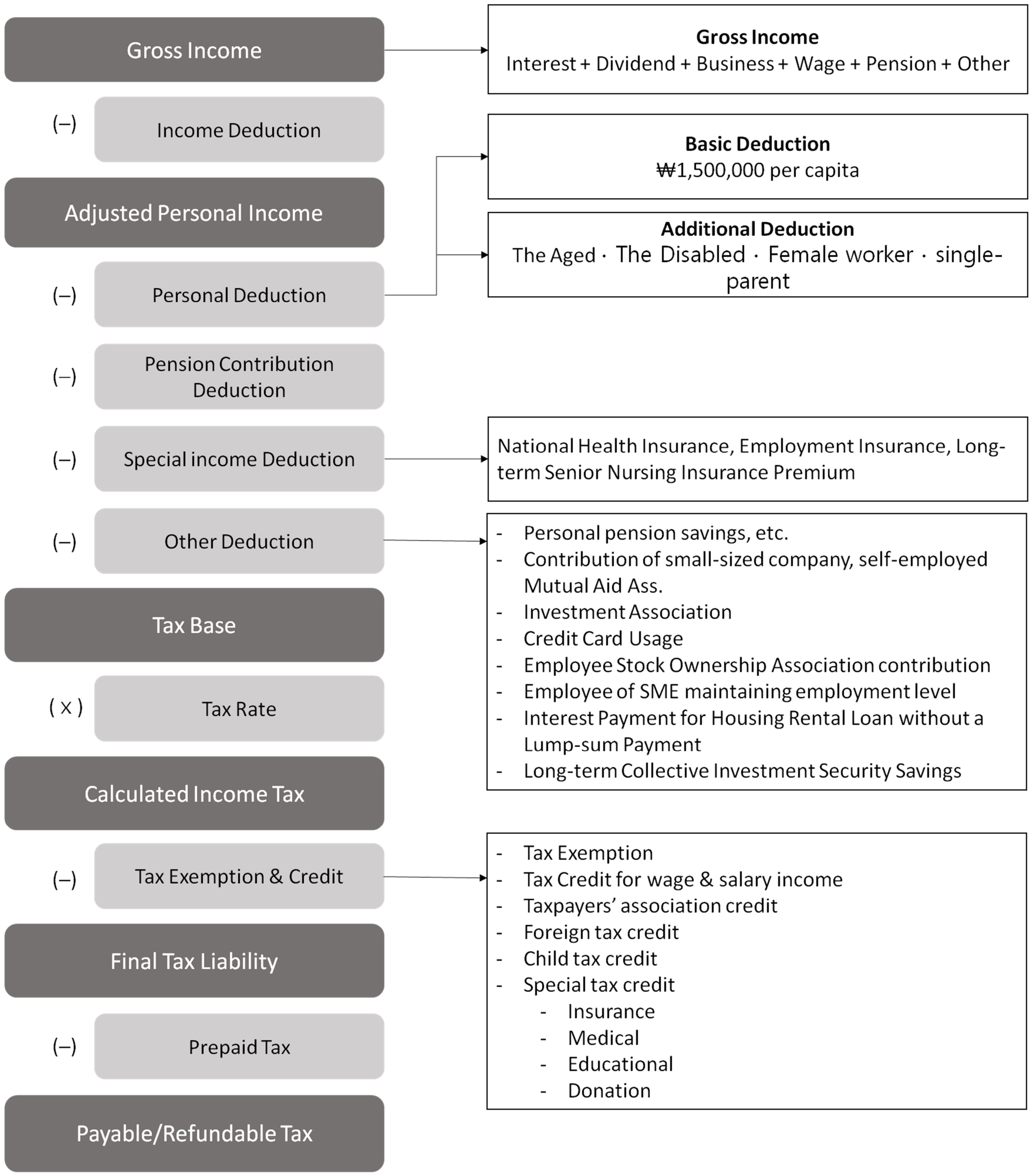
Note: USD 1 = KRW 1,100

[Figure 1] shows the flowchart of year-end settlement in Korea in the case of personal income tax. According to NTS (2014), year-end settlement is "the tax liabilities of employee's (excluding daily workers) wage and salary for the relevant taxable year are finalized". Moreover, "the balance between the tax paid and tax payable shall be collected as tax or refunded to the taxpayer".

Not all gross wages and salary income is taxed. The first step to calculate income tax is subtracting expenses incurred in earning that income. After that, various exemptions and deductions are applied before the tax rate is determined. The second step is the deductions are applied to adjusted wage and salary; personal deduction, pension contribution deduction, special income deduction and other deductions are applied to compute the tax base. The next step is applying the tax rate to the tax base and calculating the income tax. The final step is to subtract exemptions from calculated income tax, and prepaid tax is also subtracted to arrive at the payable/refundable tax.

This structure is complicated because of deductions, exemptions, and credits. But the government of the Republic of Korea uses these as policy means to achieve particular goals. For example, a child tax credit (CTC) is used for workers with children to reduce the tax burden and induce more child birth.

[Figure 1] Flowchart of Year-end Settlement



Note: USD 1 = KRW 1,100
Source: National Tax Service (2014), Easy Guide for Foreigner's Year-end Tax Settlement, p.17

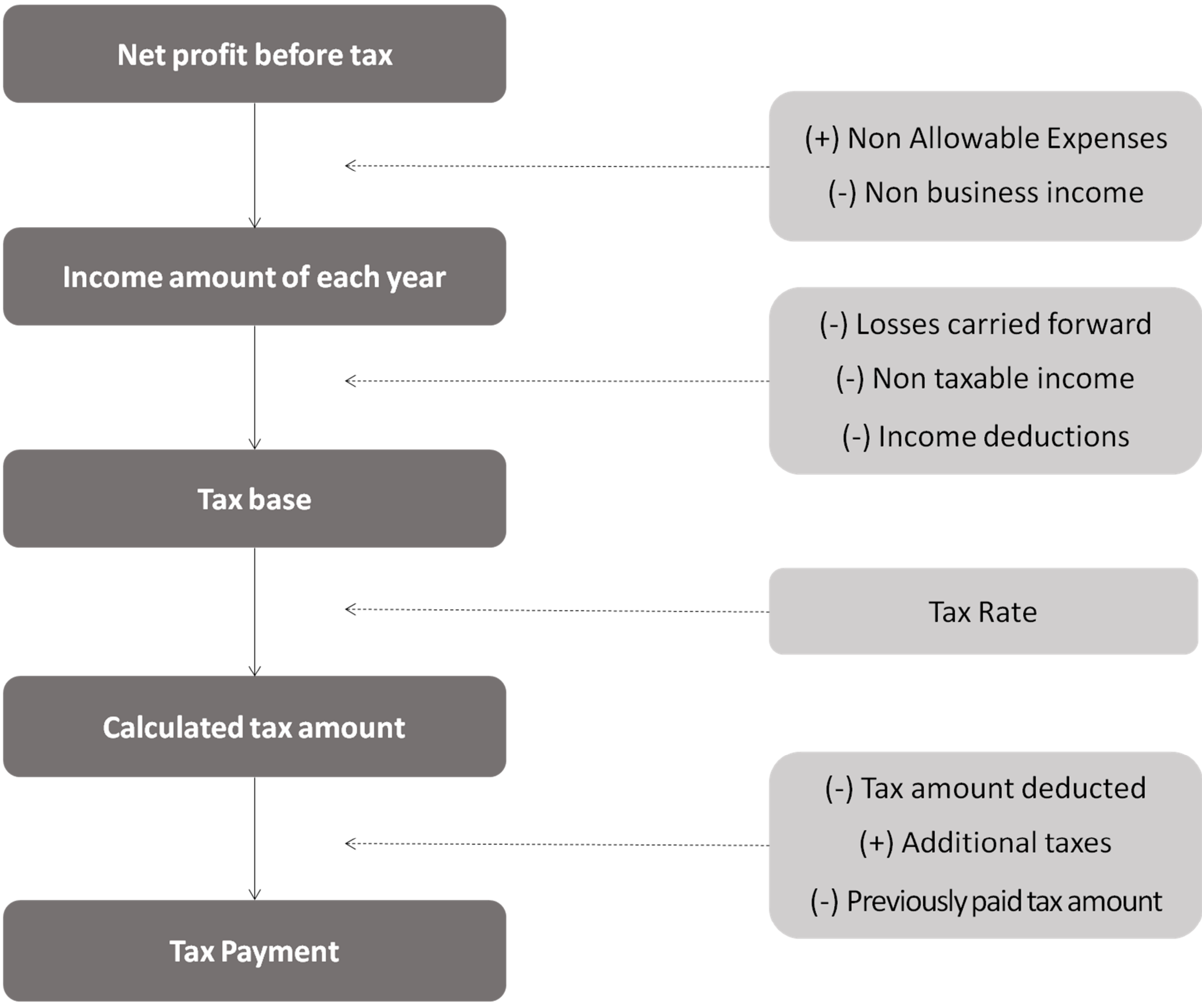
ii. Corporate income tax

A company pays corporate income tax for their taxable profits. This makes people feel more simple to calculate corporate income tax than personal income tax. But there is a conceptual difference between international financial reporting standards (IFRS) and the Corporate Income Tax Act. IFRS defines all transactions based on the principle of accrual and realization basis but corporate income tax uses settlement principle of claims and obligations. Therefore, steps to adjust profits are required.

[Figure 2] summarizes the process to calculate corporate income tax payment in Korea. Korea uses K-IFRS (Korea - International Financial Reporting Standards) and K-GAAP (Korea Generally Accepted Accounting Principles) simultaneously but the two standards are similar. So, net profit before tax is calculated using these standards through the income statement. To calculate the corporate income tax, companies should take additional steps. Inclusion of non-allowable expenses and exclusion non business income from gross revenue is the first step. For example, accounting standards accept deposit interest of bank accounts as business income, but corporate income tax does not recognize it as business income because it is not drawn from the account. Another example is the reserve for retirement allowance. In accounting, reserve for retirement allowance is a liability but the corporate income tax system recognizes it as an expense. After this, income amount of each year is calculated.

The next step is excluding the losses carried forward, non-taxable income, and income deductions. Loss carried forward is an accounting technique that applies the current year’s net operating losses to future years’ profits to reduce tax liability and track profits accurately. Then the company can determine the tax base and apply the tax rate. Once the tax rate is applied, the final step is left; exclude deductions to the tax amount and previously paid tax amounts and inclusion of the additional taxes. The tax payment is computed through these processes.

[Figure 2] Flowchart of calculation of corporate income tax



<Table 6> shows the tax base and tax rates of corporate income tax in Korea. There are 3 income brackets and corporate income tax system uses a progressive tax rate. If a corporation earns KRW 0.2 billion or less, they pay 10% of the tax base and corporations that earn 20 billion is subject to a 22% tax rate.

<Table 6> Corporate income tax base and tax rates in Korea

Tax base	Tax Rates
KRW 0.2 billion or less	10%
KRW0.2 ~ 20 billion	(Tax base × 20%) – KRW 20 million

Tax base	Tax Rates
Over KRW 200 billion	(Tax base × 20%) – KRW 420 million

Note: USD 1 = KRW 1,100

4. Theory of income tax[1]

A. Personal income tax

i. Defining income

Income tax is based on the ability to pay principle. However, it is hard to directly measure one's ability to pay, so income tax considers 'income' as a proxy to ability. Therefore, a definition of 'income' is necessary and important to operate income tax. Traditional standard to define income is the Haig-Simons (H-S) definition: Income is the money value of the net increase in an individual's power to consume during a period. This equals the actual amount of consumption during the period plus net additions to wealth. This definition includes unrealized capital gains as income because they represent the potential ability to consume. Moreover, the H-S definition is based on the accretion concept which means that any change seen as an increase in income, regardless of whether it is realized or not, is included in the income tax base. In reality, tax laws regulate income for administrative expediency and this naturally makes loopholes. The H-S definition helps to broaden the income tax base because theoretically, all increases in income are subject to taxation.

However, a comprehensive income tax system which reflects the H-S definition faces several problems. Firstly, it is nearly impossible to accurately measure the capital gains and losses, particularly when they are unrealized. It is common for some assets to rise in value and others to

[1] This section is based on Rosen and Gayer (2010) and Lee and Cho (2016).

decline in value at the same time. Secondly, some critics point out that including capital gains into the tax base pose a risk to double taxation. Capital gains reflect future increases of income, but if tax on capital gains is imposed every year and again in the future when the income is realized, then this represents double taxation. Lastly, it is difficult to tax things that we usually do not consider as income. For example, production and consumption in households, value of leisure and imputed income is hard to measure its value.

Typical subjects of taxation include factor earnings such as wage, rents, interests and dividends. Other types of income are partially taxed or exempted from taxation. For example, capital gains from the transactions involving assets generally are excluded from the income tax system. Although this stipulation varies slightly from country to country, there are few countries that include all capital gains in income tax.

ii. Rate structure

Choice related to rate structure means (a) decide the number of income brackets and (b) tax rate for each income bracket. Through this choice, the total amount of income tax revenue and progressivity of income tax system is determined. The total amount of income tax revenue can be determined by tax authorities, but deciding the progressivity is not as simple. It is difficult to know how much progressivity is needed to achieve equity, and government should also consider efficiency.

One important factor of choice related to rate structure is the determination of the number of income brackets. If income brackets are too narrow, then the income tax system will be too complicated. Also, if income brackets are too wide, then tax system might cause distortion. For instance, taxpayers could experience a steep change of marginal tax when they move into a higher income bracket. There is no ideal answer for the optimal number of income brackets. The number of income bracket should not be too many or too few, so government has to make a proper choice considering various aspects.

Most countries utilize a progressive tax in their income tax system. But most countries also introduce deductions, which affect the effective tax rate. Therefore, it is important to consider effective tax rate to evaluate progressivity. Effective tax rate means the average taxation rate, which is calculated by dividing total tax expense by taxable income. For example, the income tax rate system seems very progressive on the surface, but if most wealthy people's income is deducted from the taxable income, the tax burden that they actually bear is not heavy. Effective tax rate reflects the actual tax burden of each income bracket, so government should consider effective tax rate as policy establishment criteria.

Flat rate income tax has received a lot of attention recently. Flat rate income tax is the tax scheme that simplifies the tax structure and applies one tax rate for all individual. If governments have the goal that they must collect certain amount of tax revenue, the key trade-off under the flat income tax is between the size of the personal exemption and the marginal tax rate. A higher exemption might help to reduce tax avoidance and to increase progressiveness. But a higher exemption means that a higher marginal tax should be applied to maintain tax revenue.

The proponents of a flat tax rate argue that this system can reduce distortion in the private sector and also reduce administrative costs. Moreover, a flat tax rate can prevent legal tax avoidance. They insist that the real progressiveness will not be changed because tax avoidance occurs mainly in the higher income bracket. But opponents point out that a flat tax rate will be beneficial to higher income brackets. There is the possibility that a flat rate tax will decrease the tax burden on higher income brackets. That is, a flat rate tax has the chance to lower the effective tax rate of the higher income bracket.

iii. Choice of unit

In most of society, there is the increasing trend that both husband and wife work. This phenomenon has important meaning because the tax unit can influence marriage and working decisions. According to the traditional point of view, it is reasonable to consider the family as the tax unit. Other things being equal, families who have the same income should pay the same income tax. This satisfies the horizontal equity, which means the same income is responsible for paying the same tax. Suppose there are two couples, X and Y. Couples X and Y earn the same total income, \$4,000. But the husband of X couple earns \$3,000 and the wife earns \$1,000. In contrast, husband and wife of couple Y earn \$2,000 each. In addition, let's assume the income tax system stipulates that an individual would not pay any tax until their income reaches \$1,200 but the person who earns \$1,200~\$2,000 should pay 10% of their income and person who earns more than \$2,000 should pay 15% of their income. Then couple X should pay \$450(=\$1,000×0 + \$3,000×0.15) and couple Y should pay \$400(=\$2,000×0.10 + \$2,000×0.10), even though their total income is the same. On the contrary, if the tax unit is family, couple X and Y would pay \$600(=\$4,000×0.15). We can see the importance of the choice of tax unit through this simple example.

But if the tax unit is fixed to family, another important principle is violated, which is marriage neutral. Marriage neutral means a tax system should not affect marriage decisions. To satisfying this principle, the tax burden should not be changed after two people are married. If marriage affects the tax burden, individuals can change their behavior to minimize their tax. This means, if the family becomes the tax unit, marriage will result in a marriage penalty if the tax burden is greater. In contrast, if the tax burden is reduced, the family will receive a tax benefit from getting married.

iv. International income

Let's turn our focus to income tax systems in which the tax unit is the individual. If a person earns income abroad, then what is the appropriate tax treatment for that person? Most countries abide by the principle that the host country has the right to apply tax to individual income. At the same time, authorities hold the principle that their citizens, wherever s/he earns income, also have an obligation to pay tax in their own country. If these two principles applied simultaneously, a double taxation problem arises. Therefore, most countries also give credit for taxes paid in foreign countries. International income becomes more common in recent years, so government should set a standard of taxation.

There are two philosophical premises how to treat international income in the view of income tax; one is the global system and the other is the territorial system. A global system is a system under which an individual is taxed on income whether it is earned in the home country or abroad. In contrast to this, the territorial system is a system under which an individual earning income in a foreign country owes taxes only to the host government. We cannot determine which system is preferable to the other.

Let's take an example. Two different persons earn the same income in the same country but their citizenships are different. One country applies the global system and the other country applies the territorial system. The person who has citizenship in the country with the territorial system only pays the host country's income tax. But the other person who has citizenship in the country with the global system might be pay more income tax in the case of the tax rate of the home country is higher than host country. Although the global tax system equally treats citizen of the same country, it causes different treatment of citizens who come from different countries. The problem of horizontal equity becomes once again an issue. Should horizontal equity be defined on a national or a global basis?

Here is another example. Firms operate in the same country but come from different countries.

Assume the same conditions as the previous example; one country applies the global system and the other country applies the territorial system. The firm from the country with the global system might pay more labor cost because the firm from the country that applies the global system has to pay income tax for employees with the same citizenship in which the firm is based. This induces a cost disadvantage compared to the other firm. Therefore, the global system can distort the location decision. Employees can change their behavior based on their tax obligation. They will change their decision of foreign work to minimize their income tax. Conversely, there is little incentive to change location in the global system because there is no way to change income tax unless they change their citizenship.

Through these two examples, the global system distorts comparative advantage and the territorial system distorts location decisions. It is difficult to determine which system causes more inefficient and distortion. Governments must decide which factor has the higher priority.

B. Corporate income tax

i. Subject of taxation and rate structure

A corporate income tax is a direct tax imposed in a jurisdiction on the income or capital of corporations or analogous legal entities. Taxable income is often determined much like taxable income for individual taxpayers, with differences related to the inherent nature of corporations and individuals or unincorporated entities. For example, individuals are not forms, amalgamated, or acquired; and corporations do not incur medical expenses except by way of compensating individuals. Most countries collect corporate income tax from both domestic and foreign corporations. Generally, domestic corporations are taxed on worldwide income while foreign corporations are taxed only on income from sources within the jurisdiction. Taxable income often is defined as all gross income (i.e., sales plus other income) minus cost of goods sold and tax exempt income less allowance tax deductions, without the allowance of the standard deduction applicable to individuals. As in the case of income tax, it is delicate to select which items should be included in income or expense and which items should be excluded. The problem is even more challenging because the income and expenses of corporations are more varied and complex compared to individuals. Further, how to handle corporations with diverse characteristics, as well as deciding when would be suitable to allow expenses could be other considerations.

As personal income tax influences individual’s behavior, corporate income tax also affects the activity of corporations. For instance, corporate income tax systems allow interest of debt for expense but interest of capital owned by the business is not accounted for. This gives incentives to companies more reliant on borrowed capital, which is a liability. In addition, depending on how corporate income tax systems account for depreciation, the compositions as well as the absolute level of investment usually changes. Therefore, tax authorities should consider the influence of corporate income tax on the private sector when defining the subject of taxation.

A corporate income tax is a direct tax but the subject of tax burden is not clear. This means that the ability to pay principle is not applicable for corporate income tax. Even if owners of the corporations take most of the tax burden, it is nearly impossible to adjust the size of the corporate income tax burden in accordance with the ability of each shareholder. Therefore, corporate income tax does not need to have a progressive tax rate, unlike the personal income tax. The corporate income tax structure of many countries in the world maintains a very simple tax structure. Furthermore, the corporate tax rate is not related to the aspect of progressivity. In 2014, 28 countries in the OECD applied a single tax rate.

ii. Taxation on multinational corporations

Taxation of income from foreign corporations can be deferred if the company is a subsidiary. A foreign subsidiary could be a company owned by Vanuatu corporation but incorporated abroad and, thus, a separate corporation from a legal point of view. Profits earned by a subsidiary are subject to taxation only if returned (repatriated) to the parent company as dividends. Thus, for as long as the subsidiary exists, earnings retained abroad can be kept out of reach of the Vanuatu jurisdiction. It is hard to estimate how much tax revenue will be lost because of deferral. But we can make a guess through the tax rate levied abroad. If all foreign countries have a greater tax rate than that of Vanuatu, no additional tax revenue is obtained by another country. However, if a foreign country has a lower tax rate than Vanuatu, then deferral makes that country attractive to Vanuatu firms as a "tax haven".

It is often hard to know how much of multinational firm's total income is allocated to its operations in a given country. Originally domestic and foreign businesses are treated as separate entities. Therefore, the taxable incomes of each entity are calculated as its own sales minus its own costs. The problem arises because it is not always clear how to allocate costs for different locations, and this can lead to significant opportunities for tax avoidance. Specifically, consider a multinational firm that sells cars. One of the subsidiaries produces each part of the car and re-sells it to other subsidiaries. The corporation has an incentive to place the subsidiaries that produce components in a low-tax country, so that the payment received from other subsidiaries will be taxed at a relatively low tax rate. At the same time, the corporation also wants to position subsidiaries that buy components in relatively high-tax countries; high-tax rates mean that the value of the deductions associated with the sales is maximized. The whole process is internal to the company, but it will set the re-selling price as high as possible in order to maximize the tax benefit of this arrangement. Further, if there is no active market for the specific components outside the company, then tax authorities have little information for deciding whether or not the price of components is excessive.

This example is called the transfer-pricing problem, because it refers to the price that subsidiaries use for transferring resources to one another. Because of the potential for cross-border controlled transactions to distort taxable income, tax authorities in many countries try to deal with this problem.

iii. Incidence and excess burden

Understanding tax rules and computing effective tax rate is critical for analyzing corporate income tax. For this, it is necessary to determine who will finally bear the tax burden of corporate income tax and measure the accompanying cost of inefficiencies. There are two counter-opinions on this issue.

The first view is that corporate income tax is a tax on corporate capital. A corporate income tax system does not consider the opportunity costs of shareholders, but can be interpreted as the income tax for capital gains from investment in a corporation. From this point of view, we can calculate the tax incidence using the Harberger (1962) model. According to Harberger (1962), if tax is only imposed on corporate-specific capital, then the tax incidence can be determined by the factor substitution effect and output effect. The outcome effect occurs because of the change in demand caused by the rise in price of final products due to the increase in the price of capital. The outcome effect is unfavorable to capital intensive corporations because it reduces the relative price of capital. Besides, the factor substitution effect always lowers the relative price of capital regardless of factor intensity.

Therefore, if we postulate corporate entities are more capital intensive than non-corporation entities, capital owners bear the corporate income tax burden. The important fact to consider is that everyone who owns capital shares the tax burden and not only the owners who invested their capital in corporations. The net rate of return of capital becomes the same because of the capital shift from corporate entities to non-corporation entities due to the introduction of the corporate income tax. This shifting reduces the rate of return in non-corporate entities which are not subject to the corporate income tax.

This model does not suggest that labor doesn't share the tax burden when the corporate income tax is imposed. Labor bears a part of the tax burden as well as consumers. Moreover, actual burden is determined by various factors such as the difference of factor intensity, the elasticity of demand of final products, the elasticity of substitution between factors, and supply elasticity of capital.

The alternative view is that the corporate income tax is a tax on economic profits. This view is based on the observation that taxable income is determined by costs subtracted from gross corporate income, leaving only "profits". But in reality, taxable income is different from economic profits. Depreciation allowed in the corporate income tax system is different from economic depreciation, and imputed interest is not considered an expense in most countries. These discrepancies form a gap between taxable income and economic profits.

However, the corporate income tax is equivalent to economic profits tax under special circumstances. Firstly, there are adequate grounds that depreciation allowed by the corporate income tax system is close to economic depreciation. Along with this, we can take corporate income tax as the tax on the economic profits if the marginal investment is financed by borrowed funds. Marginal investment means the decision whether a corporation takes on additional investment. In the case of marginal investment funded by borrowed capital, the introduction of corporate income tax has no influence on a company's choice even if imputed interest is considered an expense. Because interest payments on borrowed capital are entered in a ledger as an expense, it has a different property from imputed interest.

As long as a company tries to maximize their economic profits, a tax causes no behavioral changes

– all decisions regarding prices and production remain unchanged. Thus, there is no way to shift the tax, and owners must pay corporate income taxes when the tax is imposed. Moreover, the fact that the tax does not incur any behavioral change, it results in no misallocation of resources. Hence, an excess tax burden does not exist.

When a corporate income tax has the nature of a tax imposed on economic profits, the burden is entirely on the corporate owner, the shareholders. This contrasts with the view that considers corporate income tax as a tax on corporate capital. The tax burden could be passed on to the labor supplier or the consumer of final goods depending on the economic situation. However, viewed as a tax on economic profits, the shareholders of the corporation cannot shift their tax burden onto others.

iv. Pros and cons of corporate income tax

A number of bases for a separate corporate income tax have been proposed: First, corporations really are distinct entities, especially large corporations. Large companies have thousands of shareholders, managers, employees and related businesses, so they have strong independence and social influence. Moreover, it is hard to take the view that corporations are only functioning as a role of generating and delivering income because most corporations are operated by a professional manager. This opinion is called the absolute view.

A second justification for corporate income tax is that the corporation receives privileges from society, the most important of which is limited liability of shareholders. It is true that doing business as a corporation is beneficial in many ways, which means that corporations receive legal and institutional support from the government. The corporate income tax can be perceived as a user fee for this benefit. But critics point out that government actually spends little resources to provide these benefits. Therefore, it is not fair to apply the benefit principle.

Finally, the corporate income tax is a useful method for governments when they have a purpose to change the behavior of corporations. For example, by adjusting corporate income tax, governments give incentives to invest more in research and development or infrastructure. Fundamentally, corporate income tax lessens the tax avoidance of individual taxpayers. It is possible to prevent an attempt to reduce the burden of income tax through taxation at the corporate level.

Conversely, critics of corporate income tax emphasize that individuals eventually bear all tax burden and that the notion of fair taxation is only applicable to individuals. They insist if integrated income tax is desirable, then the income generated by corporations must also be integrated into personal income and taxed as a whole. This point of view is called the integrationist view. They point out that the portion of profits generated by corporations allocated to shareholders is taxed at the corporate level, and then once again taxed at the individual level, resulting in the problem of double taxation. Meanwhile, the company reserves are only taxed once at the corporate level. However, there is another problem with the corporate income tax rate being different from the personal income tax rate applied to individual shareholders.

C. Characteristics of income tax

In most countries, income tax plays a major role in the tax structure. This means that income tax has a significant contribution to tax revenue. Especially, income tax makes a relatively low impact on markets but collects large amounts of tax revenue.

Income tax functions as a redistributive factor by using personal exemption, which considers the situation of an individual and progressive tax rate. Moreover, the elasticity of income tax is sensitive to tax rate changes because of personal exemption and progressive tax rate. Therefore, the amount of income tax revenue reduces more rapidly than income itself during recessions, but the reverse situation occurs in a boom period. This feature of income tax automatically stabilizes the economy, which is called a built-in stabilizer. The withholding tax system and estimated tax payment reinforce this stabilizer feature because these systems shorten the time lag between the occurrence of income and tax payment. But the recent trend of changing to a proportional tax rate weakens these characteristics.

An income tax is a tax imposed on individuals or entities (taxpayers) that vary with respective income or profits (taxable income). Income tax also considers objective factors which affect the taxpaying ability such as the number of members in a family. Moreover, the progressive tax rate allows income tax to achieve equality of taxation which corresponds to the taxpaying ability of an individual. But the tax base has been eroded because of difficulty in defining the income and advantageous tax treatment. The erosion of the tax base inevitably hinders the equality of taxation.

5. Income tax scheme proposed by Vanuatu Revenue Review Committee

A. Current revenue laws of Vanuatu

The Department of Customs and Inland Revenue (DCIR), namely DCIR, is a large and diverse department with over 90 employees spread across Vanuatu. There are offices in both Port Vila and Luganville and in all provincial centers in Lenakel, Lakatoro, Saratamata and Sola. The DCIR structure comprises of the Director and the two Deputy Directors, one of which is the Deputy Director of Revenue and the other the Deputy Director of Enforcement and Services.

The DCIR is divided into two sections, Customs and Inland Revenue. Inland Revenue collects taxes based on laws such as VAT and turnover tax. Customs do the job of protecting the community from potential risks arising from international trade and travel, while facilitating the legitimate movement of people and goods across borders. These two sections are closely related with each other and they also work with other border agencies, such as the Ministry of Agriculture and Forestry, Quarantine Service and the Immigration Service. <Table 4> provides a description of laws administered by the DCIR.

<Table 7> Description of Laws Administered by the DCIR

Tax Law	Legislative Law	Description	Rates / Fees Applicable
Business License Fees	Business License Act [CAP. 249]	Licensing of any lawful form of trade, commerce, profession, craftsmanship, or any other activity carried out for the purpose of gain or profit.	Ranging from 10,000 vatu to 1,000,000 vatu depending on the gross turnover for the last calendar year.
Turnover Tax	Business License Act [CAP. 249]	Tax charged on income that is not taxable under the VAT Act.	**Commercial banks –** 7% on net gross turnover **Others –** 5% on zero rated supplies under VAT Act
Rent Tax	Rent Taxation Act [CAP. 196]	Imposition of tax on residential rent which is charged bi-annually.	**Natural person –** 12.5% of excess of 200,000 vatu on all rent derived by the tax payer during each chargeable period **Non-natural person –** 12.5% of all rent derived by the taxpayer during each chargeable period
Vehicle Taxes	Road Traffic Control Act 9 [CAP. 29]	Road traffic control of motor vehicles and fees.	Vehicle registration fees – 7% of the purchase price **Transfers of ownership** – 7% of the purchase price **Duplicate registration book** – 2,500 vatu if lost or damaged **Driver's license fees** – 5,000 vatu for new and renewal of driver's license; 2,500 vatu for reprints **Learner's license –** 1,500 vatu for each driver's license category applied for **Driver's permits** – 2,000 vatu for new and renewals. 2,500 vatu for duplicates if lost, damaged, etc.

Tax Law	Legislative Law	Description	Rates / Fees Applicable
Road Tax	Road Traffic Control Act 9 [CAP. 29]	Annual tax paid by vehicle owners for using the public roads.	Ranging from 6,732 vatu to 85,000 vatu depending on the engine capacity for each vehicle
Liquor License Fees	Liquor Licensing Act [CAP. 52]	Controls the importation, sale and supply of alcoholic liquor.	Ranging from 3,094 vatu to 105,188 vatu depending on the license category selected and the opening hours
Casino Tax	Casino Control Act [CAP. 223]	Provides for the establishment and control of a casino in Vanuatu.	Annual license fee – 1,000,000 vatu **Tax –** 12.5% on the gross profit derived each month
Gaming Tax	Gaming Control Act [CAP. 172]	Laws that provides provisions to gaming.	Annual license fee: – 5,000,000 vatu for profit making establishments – 1,650,000 vatu for private clubs or non-profit establishments Monthly tax rates: Profit making establishments – 30% on the gross profit derived each month Private clubs or non-profit establishments – 7.5% on gross profit derived each month
Internet Casino Tax	Vanuatu Interactive Gaming Act [CAP. 261]	Act which regulates the internet casino gaming. (Games played over the internet or overseas not in Vanuatu).	Annual license fee: – 6,000,000 vatu for comprehensive interactive gaming license – 4,000,000 vatu for limited interactive gaming license. Monthly tax rate: 2.5% of gross profit (0.1% of turnover for fixed odds event wagering)

Source: Vanuatu Revenue Review (2016)

B. Overview of proposed income tax scheme

The Vanuatu Revenue Review Committee (VRRC) proposed an income tax system to collect sufficient revenue for government spending and broaden the scope of social welfare. Personal income tax involves paying income tax on the total amount of income received without any deductions against that income. This means, salary and wages are the tax base for income tax. The income tax rate is designed to have progressive characteristic, so individuals' tax rate will gradually rise as their incomes increase. Income tax is paid on a person's taxable income. Taxable income is the total income of the person and equals assessable income (total income less any income exempt from tax under the tax law) less allowable deductions. Individuals will add up their taxable income including salary, wages and profits for business and returns on investments. But income tax is not a turnover tax; only profits are the subject of the tax. The proposed personal income tax scheme does not allow any tax deductions and tax credits. The costs of renting a business property and office utilities are deductible expenses to the extent they are incurred to earn assessable income. Depreciation and gifts to charitable bodies may also be allowed under the tax law subject to certain restrictions.

Individuals will not pay income tax until their income reaches VT 750,000 during the year in total salary and wages, business profits and investment income. There are three brackets for income tax, but two tax rates for income tax. One is 10% for individuals who earn VT 750,001 ~ VT 3,500,000 a year and the other is 17% for individuals who earn above VT 3,500,000 a year. <Table 2> shows the personal income tax thresholds and rates. An amount is withheld from salary and wages at the time salary and wages are paid to the employee by the employer. The withheld amount of income tax will be forwarded to the DCIR by the employer. At the end of the year, the employee's tax liability is the amount withheld from the employee's wages. In most cases, the employee will not need to pay any further tax because there are no tax deductions and tax credits during the year.

In addition, the VRRC also imposes a corporate income tax. Corporations are distinct entities that are taxed separately than stockholders. Corporations will pay tax a flat rate of 17% of their taxable income (roughly, gross income less allowable expenses). A corporation is a form of business organization in which ownership is usually represented by transferable stock certificates. But the definition of a corporation is not restricted to limited companies. The corporate income tax system will collect tax on all kinds of companies such as statutory corporations, foundations, most partnerships, trusts and unincorporated associations or body of persons, other than a professional partnership or an estate. Dividends from a Vanuatu company paid to Vanuatu residents will be exempt from income and not subject to further taxation because of the double taxation problem. Dividends paid to non-resident stockholders will be subject to a 10% withholding tax.

<Table 8> Personal and corporate income tax thresholds and rates

0%	VT 1 ~ VT 750,000	No tax to pay
10%	VT 750,001 ~ VT 3,500,000	Pay VT 10 per VT 100 of annual income above VT 750,000 and below VT 3,500,000
17%	Above VT 3,500,000	Pay VT 275,000 plus VT 17 for every VT 100 earned over VT 3,500,000
Corporate income tax rate: 17%		

Note: USD 1 = VT 110

Source: Vanuatu Revenue Review (2017)

For example, if an individual earns VT 700,000 a year, s/he will not pay any income tax. If an individual earns VT 800,000 in one year, then the total income tax levied will be VT 5,000 (= 0.1 × (800,000 – 750,000)). If person earns VT 4,000,000, then income tax will be assessed at VT 360,000 (= 275,000 + ((4,000,000 – 3,500,000) × 0.17)).

Similar to many other countries, income tax will be applied only to salary and wages. Income tax will be withheld until the DCIR receives the information of salary and wages from employees. Because there is no deduction plan in the income tax system proposed by the VRRC, the employee will not need to pay additional tax or will not receive any tax return. The VRRC planned to give employers a taxpayer identification number (TIN) issued by the DCIR. The TIN will function as an identification marker for each employee, which allows the DCIR to identify taxpayers and ensure that tax is properly assessed. If an employee does not have a TIN, the DCIR requires the employee to pay the highest tax rate on income (17% from all payments) until the TIN is provided.

The Vanuatu Revenue Review (2016b) estimated the total number of taxpayers. An average income tax rate was estimated at 4 percent using government employment data. Moreover, the proportion of tax payers of each income bracket and marginal tax amounts were calculated based on public sector employee data. Approximately 85 percent of working people will not pay any income tax. Moreover, 12 percent of working people will pay between VT 6 and VT 80 for every VT 1,000 of income who earns between VT 750,001 ~ VT 3,500,000 a year. Around 3 percent of working people will be in the top tax bracket.

C. Estimation of the revenue impact

The VRRC has another goal of reducing the business cost when corporations do businesses in Vanuatu. Specifically, the VRRC recommended repealing fees and charges that are costly to collect and comply with. According to Vanuatu Revenue Review (2017), fees and charges to be repealed or reduced include:

- Rent tax – Repeal
- Business licenses and registration – Repeal
- Turnover tax – Repeal

- Work and residency permits – 25 percent reduction with the introduction of the income tax
- Vanuatu Investment Promotion Agency (VIPA) fee – 50 percent reduction with the introduction of the income tax

These fees and charges recommended to be repealed or reduced are difficult to enforce, costly to comply with and/or are not supportive of economic growth. The Vanuatu Revenue Review (2017) gives an example of the turnover tax that is imposed on the gross sales of businesses regardless of whether the business makes a profit or not. The Vanuatu Revenue Review (2017) also recommended reducing import duties over five years by approximately 65 percent of current levels. The lower level of import duties mitigates a hike in consumer prices and cost of living due to the introduction of income tax and enhances market competition. Therefore, the reduced amount of revenue should be additionally considered when analyzing the impact of introducing the income tax scheme. <Table 9> shows the estimated revenue, change in fees and expenditures. The proposed income tax scheme generates equivalent revenue to the removal or reduction of fees and charges and planned government expenditure.

<Table 9> Project Revenue from Personal and Corporate Tax, Offsets and Illustrative Expenditures, part1

(In million vatu)

	2019	2020	2021	2022	2023	2024	2025	2026
Personal income tax	2,210	2,460	2,725	2,885	3,055	3,220	3,405	3,595
Salaries and wages	1,145	1,270	1,410	1,490	1,575	1,665	1,760	1,860
Public sector	410	460	510	540	570	600	635	670
Private sector	730	815	900	955	1,010	1,065	1,125	1,190
Benefits	115	125	140	150	160	165	175	185
Business and investment income	950	1,065	1,175	1,245	1,320	1,390	1,470	1,550
Corporate income tax	2,620	3,090	3,275	3,465	3,660	3,865	4,085	4,315
Non-resident dividend	175	220	245	275	310	350	395	445

	2019	2020	2021	2022	2023	2024	2025	2026
withholding tax								
Total revenue	**5,120**	**5,895**	**6,385**	**6,775**	**7,185**	**7,600**	**8,060**	**8,540**
% of GDP	*4.70%*	*5.10%*	*5.20%*	*5.20%*	*5.20%*	*5.20%*	*5.30%*	*5.30%*
Reduced import duties	850	1,285	1,760	2,300	2,415	2,555	2,715	2,900
Turnover tax	410	430	450	480	505	535	565	600
Registration – offshore companies	160	165	175	185	195	210	220	235
Fees – taxes on companies	15	15	15	15	15	20	20	20
Stamp duties on companies	170	180	190	200	215	225	240	250
Rent tax	90	95	100	105	110	115	125	130
Business licenses and registration	310	330	345	370	390	410	435	455
Less: Total offsets	**2,005**	**2,500**	**3,035**	**3,655**	**3,845**	**4,070**	**4,320**	**4,590**
% of GDP	*1.80%*	*2.20%*	*2.50%*	*2.80%*	*2.80%*	*2.80%*	*2.80%*	*2.80%*
Less: Increased administration costs and possible additional expenditure	**3,115**	**3,395**	**3,350**	**3,120**	**3,340**	**3,530**	**3,740**	**3,950**
% of GDP	*2.90%*	*2.90%*	*2.70%*	*2.40%*	*2.40%*	*2.40%*	*2.40%*	*2.40%*
Net revenue gain	0	0	0	0	0	0	0	0

Source: Vanuatu Revenue Review (2016b), 24p.

D. Sensitive analysis of revenue raising options

The VRRC received various feedback regarding the income tax scheme including other options to raise revenues. Numerous submissions were presented, and the VRRC considered options to evaluate the effectiveness of each proposal. In this section, the sensitivity analysis of these alternatives will be examined. These alternatives include:

- Increase VAT rate
- Financial transactions tax
- Land value tax

- Sale of unproductive government assets
- Tourism levy
- Turnover tax
- Lower rates and thresholds
- Increased VAT compliance
- Departure tax of VT 2,000 per international passenger
- Higher excise / sin tax

i. Comparing alternatives

The VRRC sets the criteria for evaluating revenue options including financial implication, fundamental guiding principles, and economic implications. In the Vanuatu Revenue Review (2017), the detailed contents of each criterion presented. The revenue forecast produced helps in evaluating whether a particular option is capable of generating sufficient revenue in the long run. Therefore, if the revenue option reduces fees and charges and lowers cost of doing business, then the revenue option has a positive financial impact. Thus, the various options can be compared with the key guiding principles of a good revenue system[2]. In particular, the impact of the revenue option on different income groups, cost of administration, and compliance are considered. To examine the economic implications, the options are further evaluated against their possible impact on macro-economic variables such as consumer prices, FDI, and economic growth.

<Table 10> summarizes the advantages and disadvantages of each option. All options excluding the introduction of the income tax were not adequate for Vanuatu according to the evaluation criteria. The government can collect sufficient revenue from income tax to provide vital public

[2] The detailed explanation of guiding principle of good taxation is in the Chapter 6.

services such as health care and education. Moreover, growing concerns across Vanuatu due to the population growth can be alleviated and the living standard will be enhanced by public spending collected from income tax. Contrast to common beliefs, the tax burden could be spread among all people.

<Table 10> Advantages and disadvantages of each option

Options	Advantages	Disadvantages
Personal Income Tax and Corporate Tax	- Generates appropriate revenue - Sustainable in the long run - Facilitates reduction in fees and charges to help reduce cost of doing business - Progressive: People's contribution to taxes increase with income - Broadens tax base - Compliance: Having a low tax rate and broad base with a modernised revenue administration would result in higher compliance.	- High administration and compliance costs - Some of the income tax costs will also be passed on to consumers, but the burden passed on to consumer prices will be lower under the proposed revenue reform than with a higher VAT rate. Impact on price level increase of ~1.5%
Increasing VAT rate: 17.5% (with exceptions on basic items)	- Adequate revenue could be earned from this initiative when combined with the increase in other fees and charges. - Relatively easier to implement; moderate cost of administration in general. - However, exemption of certain items will significantly raise administration and compliance costs.	- Not sustainable in the long run as revenue growth is expected to become relatively stagnant after 2 years of implementation - Does not facilitate any reduction in fees and charges - Direct impact on consumer price level. Higher VAT rate increase prices and the cost of living by more than the introduction of income tax. Expect increase in inflation – 2.5% - Regressive: high VAT rate will hurt low income earners more than high income earners. Lower income earners are more affected by higher prices than higher income earners because

Options	Advantages	Disadvantages
		they spend all their income on consumption. - VAT paid as a percent of income declines as income rises. Higher VAT rate would further shift the tax burden from higher to lower income households. - VAT exemptions on necessity items does not resolve the fairness problem – because higher income earners also spend more on necessity items than lower income earners, and thus, would receive a larger benefit from the VAT exemption.
Financial Transaction Tax	- 0.5% tax on financial transaction (e.g. Money Transfers, bills payments, ATM Withdrawals) would generate revenue of 0.6% of GDP	- Financial transactions taxes discourage use of financial services, works against other government initiatives like Financial Inclusion. - International evidence shows that financial transaction taxes can be easily avoided and revenues tend to decline over time. - Money sent home by Recognised Seasonal Employer (RSE) workers would be taxed.
Land Value Tax	- Additional VT 2.8 billion of land tax can be collected (2.4% of GDP)	- Government already collects VT 500 – 700 million in land rents, registration and premiums. Raising additional revenue would make Vanuatu the largest collector of recurrent taxes on immovable property as a percent of GDP. - This proposal in isolation cannot generate adequate revenue to meet Government's current needs.
Sale of Unproductive Government Assets	- Quick revenue - Save government from maintenance costs	- One-off source of revenue – Not a long term source of revenue to fund operating costs of public services.

Options	Advantages	Disadvantages
		- Complicated: need to avoid under-pricing
Tourism Levy	- More revenue - Easy to collect since the cost will be in-build in the ticketing	- Tourists already contribute significantly to VAT revenue. - Levying very high tax rates on foreign visitors to fund public services for Vanuatu residents would not generate significant revenues. - Will be discouraging for the tourism industry. Similar fees are already collected by the Tourist and Resort Association
Turnover Tax	- Easy to administer	- Turnover tax needs to be paid regardless of whether a business or entity makes a profit. - With turnover taxes, businesses do not get a deduction for expenses. - Harmful to economic growth as they discourage employment growth, business start-ups and investment. - This proposal in isolation cannot generate adequate revenue to meet Government's current needs.
Lower Thresholds	- Ensure equitable contribution to Government revenue even for low income earners.	- Low thresholds impose more tax on lower incomes – harder to administer - A tax free threshold would not ensure that people in subsistence economy are exempted resulting in substantially high cost of administration.
Increasing VAT compliance	- Efficient VAT collection	- Under modernisation of the DCIR, major effort was made to improve VAT compliance. - This measure in isolation is not sufficient to generate requisite revenue.
Departure tax	- Less cost to collect and the Revenue Estimated to collect is estimated	- Revenue generated would be insufficient and could already be

Options	Advantages	Disadvantages
	around 0.7% of GDP	earmarked for other civil aviation requirements. - Tax of VT 200 already levied; can be a deterrent for tourism.
Higher Excise Tax	- More revenue - Socially beneficial	- The number of cigarettes smoked, refined sugar and alcoholic drinks consumed will not increase with income. - Revenue from higher excise tax would be insufficient and declining over time. Hence, not a sustainable source of revenue.

Sources: Vanuatu Revenue Review (2017)

ii. Scenario analysis

<Table 11> illustrates the estimation results of select revenue alternatives. Other alternatives are not presented because the estimated amount of benefits are similar to the option involving a tax levied on international financial transactions. The amount of offsets and cost and expenditures are shown in <Table 9>. However, these figures differ from <Table 11A> and <Table 11B> because those options consider raising fees and charges, unlike the baseline scenario. All alternatives are expected to lead to a fiscal deficit. Other income tax scenarios are found in the appendix.

<Table 11> Selective revenue estimates of alternatives

	2019	2020	2021	2022	2023	2024	2025
A. 15% VAT rate, 20% higher fees and charges							
Offsets	770	1,155	1,580	2,055	2.145	2.235	2.335
Costs and expenditure	2,830	2,865	2,775	2,525	2,670	2,855	3,025
Revenue	2,885	2,840	2,935	3,070	3,230	3,395	3,575
Gain	-715	-1,180	-1,420	-1,510	-1,585	-1,695	-1,785
B. 17.5% VAT rate							
Offsets	770	1,155	1,580	2,055	2.145	2.235	2.335

	2019	2020	2021	2022	2023	2024	2025
Costs and expenditure	2,830	2,865	2,775	2,525	2,670	2,855	3,025
Revenue	3,755	3,635	3,750	3,925	4,125	4,345	4,575
Gain	155	-385	-605	-655	-690	-745	-785
C. 0.5% tax on international financial transactions							
Trade balance	576	552	560	578	600	626	654
Primary income	82	92	84	87	90	93	102
Secondary income	2	2	2	2	2	3	3
Capital income	1	1	1	1	1	1	1
Net errors and omissions	13	14	14	15	15	16	16
Total revenue	674	661	661	683	708	739	776
D. Income tax scenario							
Total offsets	2,005	2,500	3,035	3,655	3,845	4,070	4,320
Total costs and expenditure	3,115	3,395	3,350	3,120	3,340	3,530	3,740
D.1. Lower rates and thresholds							
Revenue	4,725	5,490	5,800	6,190	6,590	7,005	7,460
Gain	-395	-405	-585	-585	-595	-595	-600
D.2. Higher rates and thresholds							
Revenue	4,795	5,505	5,885	6,275	6,685	7,110	7,575
Gain	-325	-390	-500	-500	-500	-490	-485
D.3. Very low income tax rate							
Revenue	975	1,080	1,185	1,265	1,350	1,435	1,530
Gain	-4,145	-4,815	-5,200	-5,510	-5,835	-6,165	-6,530

Sources: Vanuatu Revenue Review (2016b), Vanuatu Revenue Review (2017)

6. Comprehensive review of the income tax scheme

A. Well-designed taxation

The income tax scheme proposed by the VRRC considers various factors to meet the guiding principles of a good revenue system. According to the Vanuatu Revenue Review (2017), the specifics of this scheme are as follows:

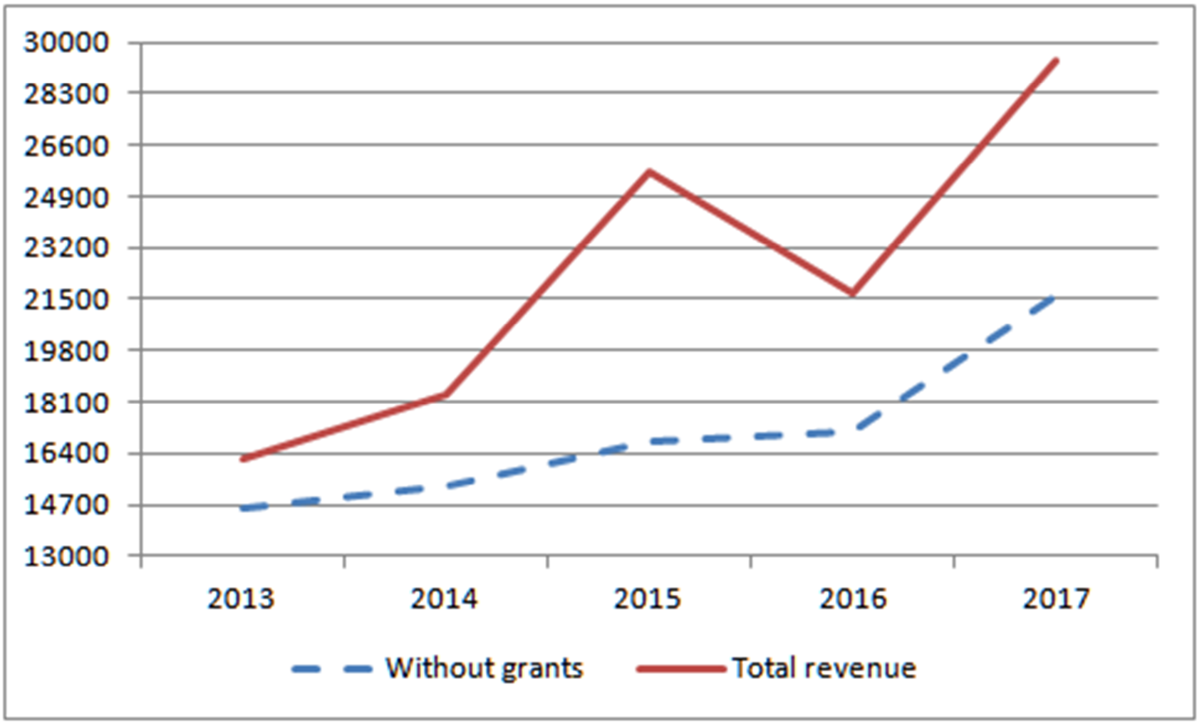
- Appropriate Government revenues – A good revenue system must raise sufficient revenue to fund Government’s development needs.

- Support economic growth and raise living standards
  - Economy of collection: A good revenue system should be cost effective to administer.
  - High tax compliance: The taxation system must be easy and efficient to administer and comply with to make it economically efficient.
- Fairness – Responsibility to contribute
  - Equity and fairness: A good tax system must ensure that people in the same economic circumstances should generally bear similar tax burdens.
  - Neutrality: The imposition of taxation should be neutral to the extent that decisions are made regardless of taxes; that is, taxes do not interfere with the natural flow of capital towards its most productive use.
- Simplicity, certainty and convenience
  - Convenience of payment: A good revenue system makes it as convenient as possible for taxpayers to meet their obligations.
  - Ease of complying with tax obligations: A good revenue system should be simple so that taxpayers can understand the rules and meet their obligations.
- The revenue system must meet the needs of the Vanuatu community.

Over decades, the government of Vanuatu has found ways to increase revenue for government expenditure without aids or grants. [Figure 3] shows the total revenue (solid line) and total revenue without grants (dashed line). In 2017, the total revenue of Vanuatu was VT 34,749 million and the growth rate of revenue was approximately 37%. The large gap between total revenue without grants and total revenue in 2015 was due to grants. Because cyclone Pam hit Vanuatu in 2015, large amounts of grants were provided. In 2016, total revenue dropped but recovered immediately. The reason for this sharp increase in total revenue was grants because the growth of grants was over 70%. However, during 2016-2017, total revenue without grant increased only 26%. Vanuatu still relies on grants for nearly 20% of their revenue, so total revenue changes according to the grant amounts.

[Figure 3] Total revenue of Vanuatu

(In million Vatu)

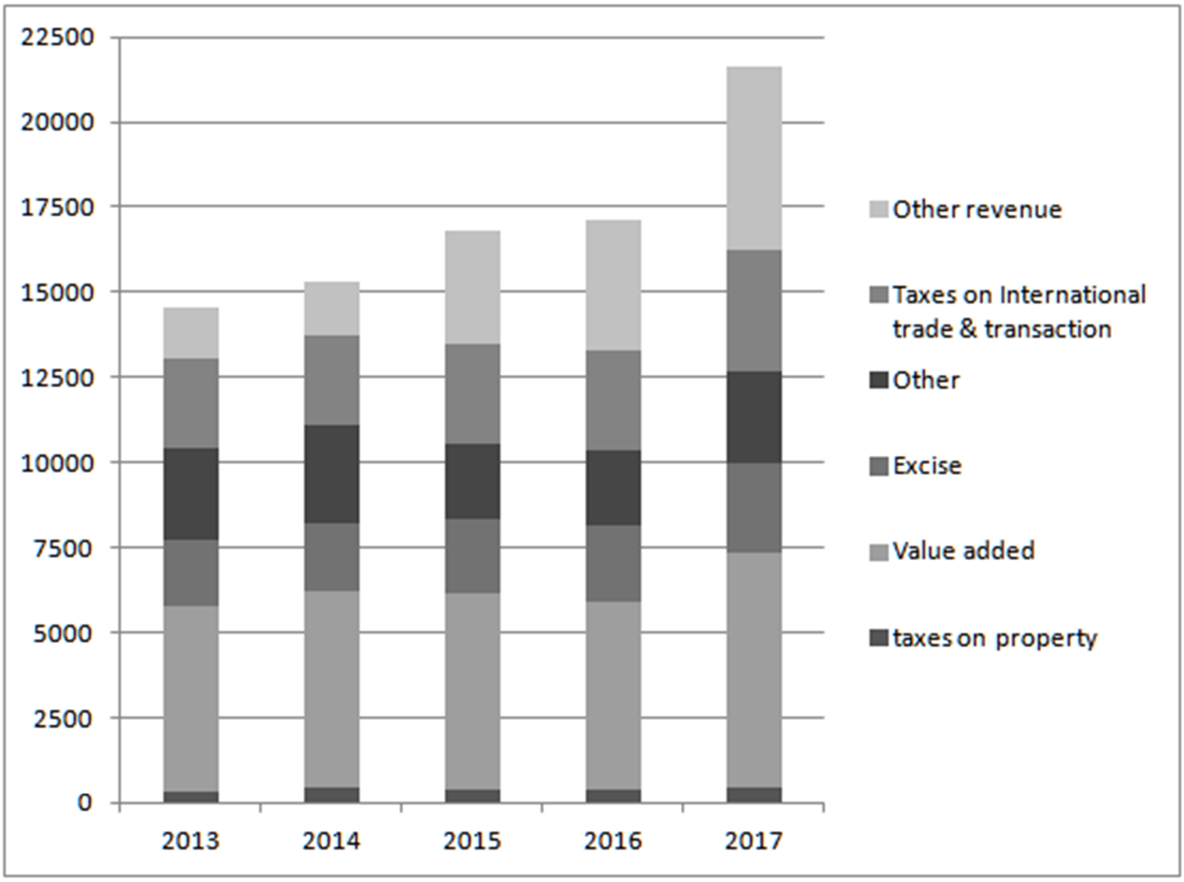


Source: Vanuatu National Statistics Office (2018)

[Figure 4] shows the composition of total revenue excluding grants. Vanuatu's revenue system heavily relies on value added tax (VAT) revenue. Over 30% of total revenue excluding grants was collected through the VAT. Other types of taxes and taxes on international trade transactions account for nearly 20% of total revenue. Excise and other revenue sources were important sources of revenue, accounting for more than 10% of total revenue excluding grants. The tax system of Vanuatu is simple, so there are few sources to collect taxes. If government of Vanuatu wants to raise revenues, it seems that broadening the tax base and create new tax items are needed.

[Figure 4] Composition of total revenue without grants

(In million Vatu)



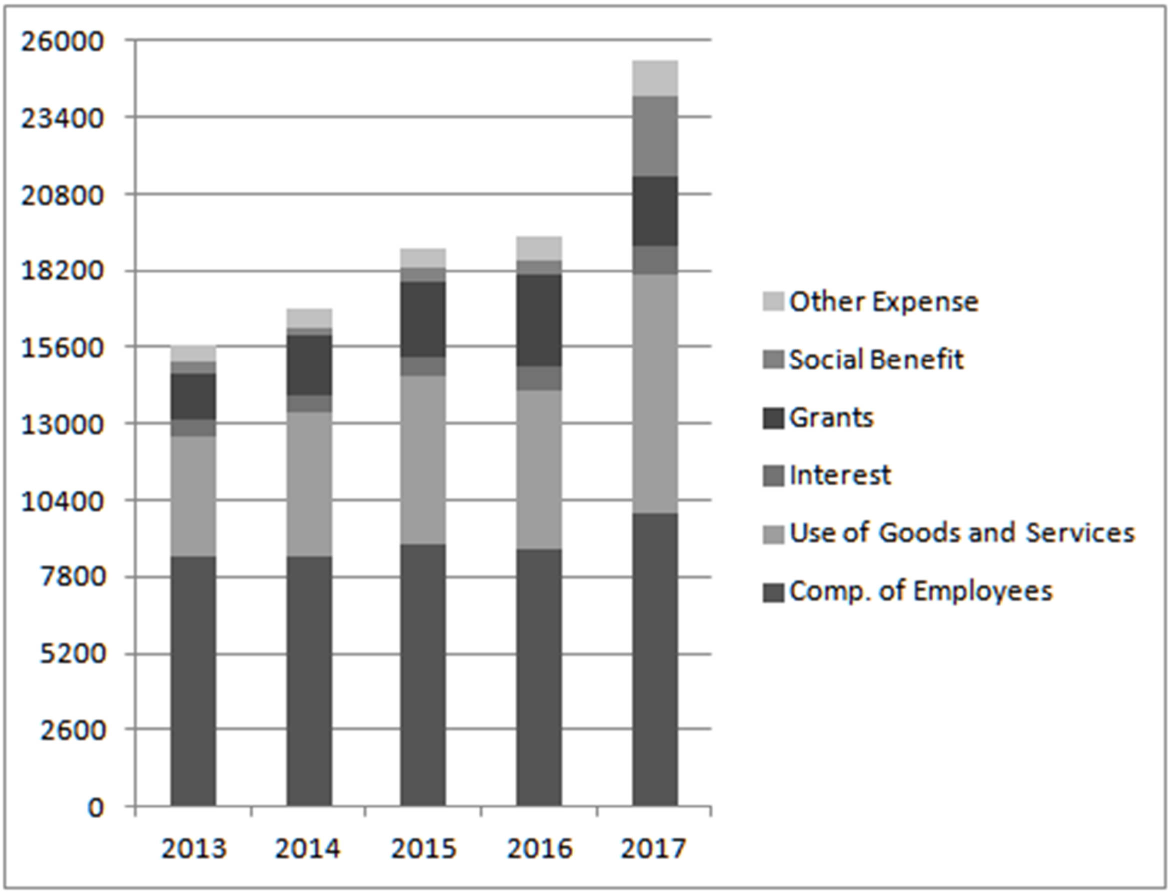
Source: Vanuatu National Statistics Office (2018)

Moreover, the scheme is appropriate because revenue is estimated to be sufficient for government spending. Recent government expenditure mainly comprises of compensation of employees. [Figure 5] shows the total expenditure of Vanuatu. Compared to total revenue, Vanuatu tends to spend less than collected. But compare to total revenue without grants, the size of the deficit is growing from VT 1,129 million in 2013 to VT 3,694 million currently. Vanuatu is planning to graduate from the LDC (Least Developed Country) by 2020, and the government of Vanuatu should actively take actions on this front. The government of Vanuatu should collect more tax and reduce expenditures. The compensation of employees accounted for40% of expenditures. The amount of expenditure to employees is increasing but the proportion of government spending is decreasing.

Conversely, expenses on the use of goods and services has continuously increased over time. It was VT 4,125 million in 2013, and has almost doubled to VT 8,099 million in 2017. Moreover, grants and social benefit expenditure are also growing. Vanuatu has plans to spend more budget on social benefit, so this growth seems reasonable.

[Figure 5] Total expenditure

(In million Vatu)



Source: Vanuatu National Statistics Office (2018)

The introduction of income tax is timely. According to the Vanuatu Revenue Review (2017), personal income tax and corporate income tax is estimated to generate VT 4.2 billion in the first year of implementation. This amount is enough to cover planned governmental expenditure. The governments of Vanuatu are planning to provide additional funding to expand free education to age

10, increase health expenditure, improve infrastructure, and repay national debt obligations. <Table 10> summarizes government expenditure projections. As shown in <Table 9>, total revenue from income tax is sufficient for these planned expenditure. Moreover, expenditures will not be used mostly for compensation of public servant. Social welfare, such as free education and health care, and fiscal transfers to provincial administrations are the main uses of future expenditure.

<Table 12> Project Revenue from Personal and Corporate Tax, Offsets and Illustrative Expenditures, part2

(In million vatu)

	2019	2020	2021	2022	2023	2024	2025	2026
Total revenue from income taxes	**5,120**	**5,895**	**6,385**	**6,775**	**7,185**	**7,600**	**8,060**	**8,540**
% of GDP	*4.70%*	*5.10%*	*5.20%*	*5.20%*	*5.20%*	*5.20%*	*5.30%*	*5.30%*
Less: Total offsets from removal or reduce of fees and charges	**2,005**	**2,500**	**3,035**	**3,655**	**3,845**	**4,070**	**4,320**	**4,590**
% of GDP	*1.80%*	*2.20%*	*2.50%*	*2.80%*	*2.80%*	*2.80%*	*2.80%*	*2.80%*
Increased tax administration / policy staff costs	115	120	125	130	140	145	150	160
New DCIR computer system	0	0	0	0	0	0	0	0
Free education to year 10	340	345	345	350	355	360	365	365
Improved health care	200	305	405	515	620	730	840	955
Grant to provinces for forgone business license revenue	60	65	70	75	80	80	85	90
Fiscal transfer to councils and provinces	800	815	835	850	870	885	905	925
Set aside for future severance payments	325	340	355	375	390	410	430	450

	2019	2020	2021	2022	2023	2024	2025	2026
Cost of living adjustment for public servants (after tax)	415	435	0	0	0	0	0	0
Additional cash reserve requirement	535	575	505	540	580	615	655	695
Contribution to fiscal responsibility / development fund	325	395	710	285	305	305	310	310
Less: Increased administration costs and possible additional expenditure	**3,115**	**3,395**	**3,350**	**3,120**	**3,340**	**3,530**	**3,740**	**3,950**
% of GDP	*2.90%*	*2.90%*	*2.70%*	*2.40%*	*2.40%*	*2.40%*	*2.40%*	*2.40%*
Net revenue gain	0	0	0	0	0	0	0	0

Source: Vanuatu Revenue Review (2016b), 24p.

In addition, the introduction of income tax is expected to raise GDP in the long run by improving productivity of the labor force. The government of Vanuatu is planning to expand health and educational expenditure and social infrastructure, which can induce the increase of human and physical capital. The Vanuatu Revenue Review (2017) estimated this increase can offset the loss of GDP caused by the introduction of income tax. In addition, this scheme also has fairness and simplicity present in the personal income tax which features a progressive but simple tax rate. Furthermore, personal and corporate income tax is imposed on each individual and legal entity, so horizontal and vertical equity is satisfied. Moreover, a flat-rate corporate tax is appropriate for the economic conditions of Vanuatu.

B. Comments on the income tax scheme

The income tax scheme proposed by the Vanuatu Revenue Review has both virtues and drawbacks like other countries' tax systems. The Vanuatu Revenue Review made an elaborate tax system with the reference of income tax systems in the Pacific area. Therefore, the progressiveness of the personal income tax features the fundamental characteristic of income tax, which is redistribution, and is considered in the structure of the tax scheme. Moreover, a single and low level of corporate tax provides a relatively small economic shock to the nation. Considering the controversy towards the introduction of the corporate income tax, a low and flat corporate tax rate is highly desirable.

However, there are some factors to consider before introducing the income tax. The Vanuatu Revenue Review set the income tax brackets and rates to meet expected government spending. But the policy evaluation should consider both macro-economic and micro-economic variables. That is, behavioral changes of individual and households should be considered to properly assess its economic impact. Financial neutrality is important, but neutrality in individual choice has equal importance. As the Vanuatu Revenue Review (2016b) mentioned, there are assumptions which cause limitations in interpreting the estimation results. These might induce a fiscal deficit after imposing the income tax. More careful approaches and assumptions are required during the estimation of revenue. In addition to this, introducing the income tax without infrastructure might be a primary reason for the low level of compliance and high administration cost. The organizational aspect, such as recruiting more skilled staff, education for members of revenue bodies, and modernisation of the DCIR should be solved first.

C. Another consideration

But in the view of income tax theory, the VRRC should consider few predicted effects of income tax. Firstly, the marriage tax problem might be aroused. As discussed in chapter 4, equity between individuals is fully satisfied but the scheme might not guarantee equity between families. If the income tax unit will be the individual, then people might change their behavior to split their properties and income among the couple to reduce tax burden. In contrast to this, the family taxable unit distorts the labor force participation of married women. LaLumia (2008) found that approximately 2 percentage points in the employment rate of highly educated married women decreased after the taxable unit was changed from individual to family. The VRRC should consider which factor is more important than others; horizontal equity between families versus marriage neutrality.

Secondly, the income tax law should clarify whether the income tax is based on the global or the territorial system. This might be a minor problem at this point, but this could be problematic after the tourism industry grows. For example, tour guides from other countries in which the global system requires more tax due to the ambiguity of income tax laws in Vanuatu may pose problems.

Lastly, a careful approach to deciding the depreciation method is required when defining expenses. Choosing which method of depreciation is often critical especially allowing accelerated depreciation. Accelerated depreciation is the method of allowing firms to take depreciation allowances faster than true economic depreciation. This system is useful to facilitate investment of corporations or economic recovery, but it may be exploited by companies as a means of avoiding tax burden. The corporations could re-sell the physical capital at the market price after saving taxes using accelerated depreciation. If this happens, accelerated depreciation will serve as a means to avoid tax burden, not to encourage investment.

7. Policy recommendation

In this chapter, we suggest policy recommendations to improve the effectiveness of the proposed income tax scheme. We divide these recommendations into two parts; taxation system and tax administration. The recommendations are based on the experience of the Korean government, the international organization, and the theory of income tax. This study focused on the introduction of income tax in the Republic of Vanuatu, but the principles in the recommendation could be applied to any country that is planning to introduce an income tax.

A. Taxation system aspect

i. Step-wise introduction of income tax

The government might be hard to accomplish important principles such as equity and fairness because the revenue body of Vanuatu has no experience of collecting taxes directly from income. Also, it is difficult to expect a high level of tax compliance in the situation in which the government of Vanuatu is faced with a low level of confidence (Vanuatu Revenue Review, 2017). The government must firstly show credible action to achieve important aspects of tax and to gain confidence. Therefore, we suggest three steps to gain the trust of taxpayers.

The proposed income tax will be imposed on all kinds of income including gains from capital. Generally, imposing tax on capital gains is more complicated than salary, wages, and business income. It is partly because calculating the tax base features changing standards and mostly because defining the tax base itself is difficult. For example, there has been debate surrounding which system is more suitable for the tax base; current market price or acquisition cost. In reality, the computation of gains and losses of an individual is intricate especially for those investments involving frequent transactions like stock trading. In extreme cases, some taxpayers might pay income tax even if they lose income overall. Therefore, the aggregated tax system needs a firm standard and the revenue body of Vanuatu should consider various options for a tax on capital gains.

We suggest imposing income tax gradually in the order of (a) salary, wages and business income and (b) capital gains. In the first phase, the revenue body constructs an overall tax collecting system on a national scale and testing the system through collecting income tax from salary, wages, and business income. Then the revenue body exacts income tax by simply applying the same system to capital gains in the second phase. Before the second phase begins, the revenue body should decide the standard of the tax base for gains from capital.

Taxation on capital has complicated issues, so proper means to consider fairness is needed in transactions. "Section 1031 Exchange" or even "Like-Kind Exchange" is a good example that takes into account the substance of actual transactions. Broadly speaking, a 1031 Exchange is the trade of one investment property for another. IRC Section 1031 (a)(1) states:

> *"No gain or loss shall be recognized on the exchange of real property held for productive use in a trade or business or for investment, if such real property is exchanged solely for real property of like-kind which is to be held either for productive use in a trade or business or for investment."*

Although most transactions are subject to tax, if a transaction meets the requirements of 1031, there will either have no tax or limited tax due at the time of the exchange. This tax-deferred exchange allows investors to defer capital gain taxes as well as facilitate significant portfolio growth and increase return on investment.

Another way to introduce income tax is test-operating it in a limited area such as capital. With this test-operation, the revenue body will be able to gain experience from trial and error to properly operate the system. Moreover, the test-operation might be a way to minimize the impact of errors. Or phase-in the income tax could be another option. For example, as proposed by the Vanuatu Revenue Review, impose the tax to three income brackets but apply the tax rate gradually; 5 percent and 10 percent in the first year, 7 percent and 13 percent in the third year, and 10 percent and 17 percent in the fifth year. This gradual rise of the tax rate will reduce tax resistance and improve tax compliance.

ii. Modeling tax compliance

As mentioned in the VRRC (2016a), a tax compliance model is important. All revenue bodies want to improve taxpayer's voluntary compliance because it is the only way to increase tax revenue and minimize the cost of collecting taxes. Moreover, a high level of tax compliance gives confidence to society in their operation of tax laws. The success of tax administration depends on identifying and managing major tax compliance risks.

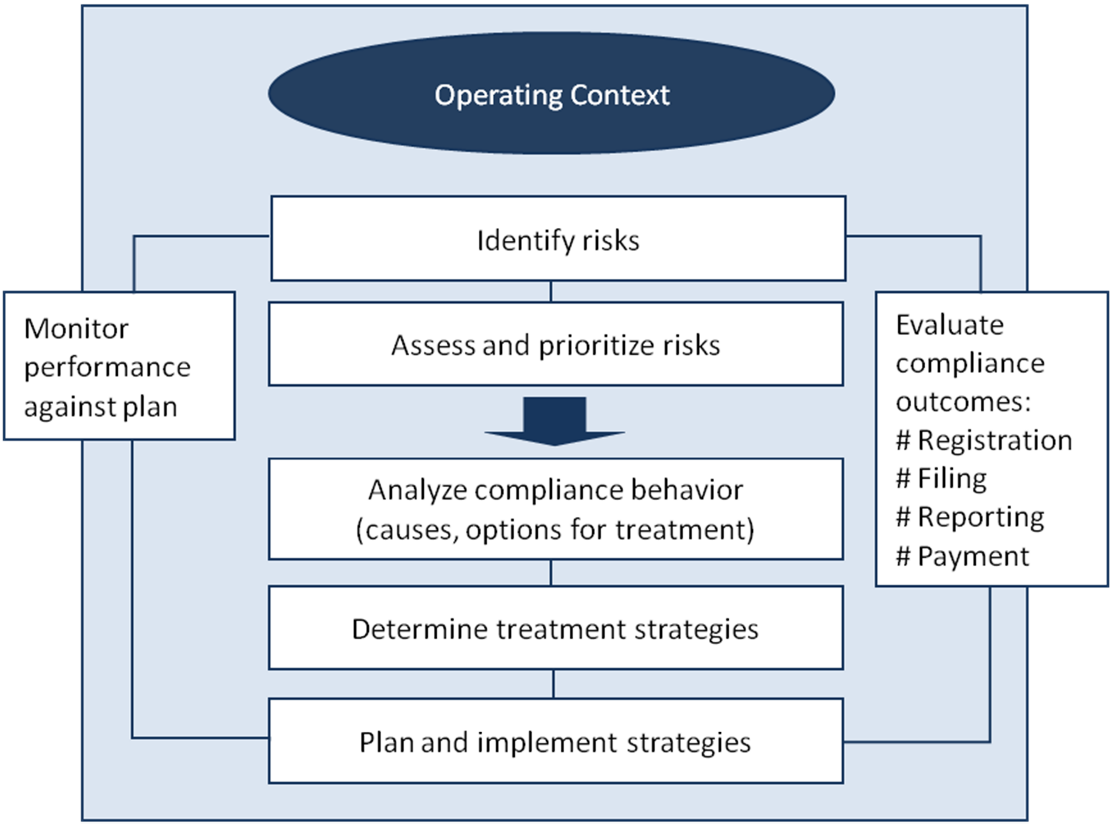
The process of tax compliance management was first introduced in the OECD (2004), and [Figure 6] shows the framework which revenue bodies follow. The OECD (2004) noted this framework assists revenue authorities to respond promptly to changing circumstances; initially focusing on activities with the highest priority, and strategies with a high possibility of success are subject to taxation initially; to minimize the impact of interventions, and thus, ultimately to achieve the intent of operation (collecting more revenue from a wide tax base at a low tax rate).

Also, the ADB (2018) interpreted this process as a "top-down" type that focuses on the overall compliance environment rather than individual taxpayers. In reality, most revenue bodies use a taxpayer segment-by-segment approach to improve tax compliance. But this process covers a chain of steps that should be completed systematically. This would assist revenue bodies when compliance risks are clearly identified to set priorities across all segments of taxpayers. The OECD (2004) stressed revenue bodies should focus on factors underlying taxpayer's compliance behavior rather than non-compliance behavior. Because all revenue bodies are faced with limited resources and investigate reasons for compliance, this focus is more effective. ADB (2018) gives examples of specific compliance risks (a) legislative changes (i.e., new reporting obligations); (b) new taxpayer education and service products; (c) simplifying administrative processes and reducing opportunities for taxpayer's errors; (d) acquiring additional and/or better-skilled staff; (e) working with third parties (i.e., tax professionals) to leverage improved compliance; (f) increased and/or more targeted use of sanctions; (g) using the media to communicate news of actions taken and results achieved; (h) introducing new forms of intervention (i.e., third party data matching); (i) making more effective use of technology (i.e., better targeted of "at risk" taxpayers); and (j) working more collaboratively with other government agencies.

The environment might make it difficult to follow these steps, but there are a few things that should be considered. First, continuous monitoring of both operating of the authority and taxpayer activity is required. Second, identifying, assessing and prioritizing risks to tax revenue should be done at the very beginning. Along with this, the taxation system as a whole should be continually evaluated. Moreover, the reputation of the tax authority should also be managed. Third, understanding factors underlying taxpayer behavior that drive non-compliance is another important activity. The revenue bodies closely investigate incentives to improve compliance. Threats of prosecution or providing tax credits for voluntary disclosure can be potential examples. Lastly, successful intervention should be recorded and managed. In order to judge the success of these interventions, it is necessary to separate the effect of the specific intervention from that of other factors.

The principles in the OECD (2004) still remain valid. However, the operation technology of the tax authority has developed dramatically with advances in IT technology. Therefore, advanced analytic techniques provide more efficient methods for risk detection, monitoring, and evaluation. A vast amount of data has been collected which can facilitate risk detection. On top of this, these advancements make revenue bodies able to intervene in real-time. In the meantime, the use of complete data sets enables the management across groups of taxpayers rather than a case-by-case basis.

[Figure 6] Compliance Risk Management Framework



Source: OECD (2004)

iii. Tax deductions and tax credits introduction

To properly operate an income tax system, tax credits and exemptions should be considered. If an individual spends more to earn the same income than others, then that cost should be subtracted from income. But this is an idealistic case because it is difficult to calculate costs associated with earning income in reality. Moreover, there is no objective standard to classify each expense as a cost to subtract from income. For example, for someone who is strongly recommended to wear the finest clothing for their profession, it is hard to categorize the cost of clothing as a subtraction for income tax purposes. Therefore, a loophole in the income tax generally comes from these types of issue. To handle complex issues, a tax authority can use two types of measures; exemptions and deductions.

A tax exemption is a monetary exemption which reduces taxable income. There are items that taxpayers must purchase for their lives regardless of income activity. A typical example includes living expenses for the taxpayer and their family. Personal exemption derives from this point, which allows a certain amount of deductions for each family member. The other subtraction allowed for income is a deduction. Tax deduction is a reduction in the tax base and is generally a result of expenses, particularly those incurred to produce income.

Another reason for considering tax deductions and exemptions is to guarantee equity between employees and business owners. Employees cannot hide their income because tax authorities can easily collect information about labor income. But business owners could underreport profits or sales to evade income tax. This problem has been actively debated over decades in Korea, so the Korean government gradually extended tax deductions and exemptions over time.

The problem of tax deductions and exemptions is taxpayers that feature a higher marginal tax rate receive greater benefit. Although the same amount is subtracted from income, a person with higher income receives a greater reduction to their tax burden. Moreover, deductions require rules to determine which expenses qualify. Designing such rules is difficult. And it is true that deductions increase complexity. But the complexity does not necessarily mean that it is a bad thing. In fact, complexity needs to be taken into consideration when deciding whether to introduce deductions.

A tax credit is an amount of money that taxpayers can subtract from taxes owed to government. In contrast to tax deductions, tax credits allow a reduction in tax burden regardless of the marginal tax rate. Therefore, there is the possibility that the person with a low marginal tax rate receive greater benefits compared to those in higher income brackets.

B. Tax administration aspect

i. Autonomous operation of tax authorities

Developing and consolidating a nationwide tax system and setting the basis for the national tax administration are important factors for collecting tax effectively. According to the OECD (2017), the autonomy of tax administration can enhance the service quality of taxation and improve outcomes. The tax authority of Vanuatu, the DCIR, has suffered from the lack of adequate staff and persecutors, and resources for field investigation, especially vehicles. In the case of Korea, before the NTS established, most taxpayers did not keep ledgers, which are essential for the calculation of tax. Moreover, taxpayers commonly falsified transaction entries if they used ledgers. Therefore, the tax administration depends on tax imposition in the absence of tax returns filed by taxpayers. In addition, conflict and collusive ties between taxpayer and tax authorities as well as base erosion was severe.

In this situation, the establishment of an independent tax authority, the NTS (National Tax System) [3], is a noteworthy event in the history of tax administration in Korea. The main goal of the newly established NTS was to support the expansion of government expenditure for economic development and social policies. Another significant goal was increasing tax revenue to achieve economic independence.

The establishment of the NTS significantly reinforced the government's efforts to collect taxes, and the addition of the Bureau of Investigation boosted the government's ability to investigate tax-related fraud. Investigation divisions were added to tax offices nationwide to prevent tax evasion and improve control over public revenue sources. In the year of its foundation, 1966, the NTS managed

[3] NTS is the Korea national tax authority.

to collect KRW 70 billion in total in taxes, a 66.5 percent increase from 1965. The yearly amount of taxes collected by the NTS continued to grow significantly, by 48.3 percent in 1967 and by 50.5 percent in 1968.

ii. Computerizing the tax collecting system

To guarantee efficiency and to improve compliance of the a income tax, revenue bodies should organize the tax collecting system first. Improving tax compliance is the common goal of both developed and developing countries. However, the weak governance and unfamiliar risk-assessment approaches differs between taxpayers and tax authorities in developing countries. To achieve the goals set by the Vanuatu Revenue Review, computerization or introducing ICT (Information and Communication Technology) is recommended. Korea ranked second highest on the ICT development index[4] and the third highest level on the e-government development index (UN, 2018a), so the case study of Korea is helpful for introducing computerized tax administration.

The Republic of Korea suffered from the same problems of inefficiency and low level of compliance. In introducing the computerized tax administration, equity and fairness had the highest priority for the national tax administration policy. After the introduction of ICT, the Korean government experienced significant changes due to advances in Korea's ICT and e-government. The goal of computerizing and automating tax administration made meaningful progress with increasingly more computerization specialists being trained and better computer technologies applied to tax investigations. The Tax Integration System (TIS) was launched in 1997, epitomizing the rapidly advancing state of science and professionalism in tax administration. The volume of

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[4] ICT development index is a composite index that combines 11 indicators into one benchmark measure. Detailed information and rank can be found in the International Telecommunication Union homepage. (url: https://www.itu.int/en/Pages/default.aspx)

international taxation tasks also multiplied quickly during this period, as the Korean government actively embraced globalization and economic liberalization. Consequently, Korean tax authorities increased tax investigation of international transactions and sought greater international cooperation on tax matters. The Bureau of International Taxation was thus created in 1986, and tax liaison officers began to be dispatched overseas. The Division of Foreign Taxpayers, which originally formed part of the Bureau of Direct Tax, was given greater independence and scope of authority to handle international tax relations. In February 1987, the position of the International Tax Coordination Officer (Grade 1) was newly created to assist the Director of the National Tax Service.

Significant strides were made in the areas of automation and computerization after 1998. The electronic data interchange (EDI) system was set up in 1998 to enable the online tax payment and application. A national administration intranet was also established in 1999, dramatically improving the efficiency and productivity of tax services. The Home Tax Service was launched in 2001, and the NTS began to circulate newsletters via e-mail in 2003 to foster communication with taxpayers. The NTS call center was expanded and reorganized in 2003 into the National Tax General Call Center to provide better services for callers. The Home Tax Service is a high-tech tax administration service widely used in Korea, which enables taxpayers to conveniently take care of their tax affairs online without having to visit a tax office. The Home Tax Service not only allows filing, payment, application and issuance of tax certificates, it also enables checking the issuance of tax invoices and cash receipts as proof of payment.

These efforts were made to realize a more equitable tax system and improve tax bases. Trust, friendliness, and service also become keywords, reflecting the growing perception in Korean society of the taxpayer as an autonomous actor in the nationwide tax system and administration. The release of the Declaration of Taxpayer’s Rights in June 1997 marked the culmination of such a perception.

Computerizing the tax collecting system also helps tax-related data accumulation. Building a database is the most important steps to accurately assess the policy. The Vanuatu Revenue Review (2016b) conducted an evaluation of the introduction of income tax in Vanuatu using alternative data because nationwide data was not available. Through modernization of the DCIR, including computerization, makes the tax authority possible to aggregate tax-related statistics and data. In the long term, tax authorities should consider promoting the use of equipment for electronic tax-paying to taxpayers. Once infrastructure for electronic device is developed, it could be used for various purposes. In Korea, the same device is used for inventory management, issuance of tax certificate, and filing documents. This integrated and computerized tax collecting system is helpful for the preparation of the tax information exchange agreement.

iii. Legalizing the shadow economy

Legalizing the shadow economy is one of the biggest challenges that every country faces. Korea is not an exception, so the Korean government has been working to promote tax collection in the shadow economy since the 1980s. Cash-based transactions can be one of the main reasons for the underground economy because there are incentives to hide business sales of the self-employed. In the case of Korea, Schneider et al. (2010) estimated the size of the underground economy was around 25% of GDP in 1998. This relatively large scale of the underground economy was largely ascribed to tax evasion of the self-employed. There was a widely accepted common belief that many of the self-employed had not reported their business sales honestly in Korea because of the conventional cash paying practice among consumers. Business owners could easily hide sales and it was true that many were tempted to do so in order to minimize their tax burden.

In 1981, Korea introduced personal checks, which are commonly used in the United States. A personal check is a form of payment used to pay for goods and services and is drawn against an individual's personal checking account. Personal checks can reduce cash payments in transactions and promote the development of the banking system. Moreover, a personal check allows the advancement of a credit-based society and efficient use of money by increasing the use of banks. However, Korean businesses didn't have adequate reasons to widely accept personal checks. They spent more time at banks to confirm whether checks were valid, and had greater financial and tax reporting duties. Even consumers were pre-disposed to cash because it is much easier and simpler to use. The critical reason why personal checks failed to gain wide use in Korea was that personal checks were frequently dishonored. People did not perceive personal checks as a reliable source of payment. Therefore, policy that encourages adoption of personal checks failed because there was little incentive to use checks in practice.

Accurate recording is an important factor for collecting taxes. The principle of documented taxation clearly shows that bookkeeping is the fundamental element of recording. But bookkeeping by double entry is complicated for small scale business owners. Therefore, the Korean government introduced a simple ledger system in 1999 to reduce the burden of recording each transaction. Anyone can write a simple ledger even if an individual has no accounting knowledge because a person just documents revenue and expenditure by date like a cashbook regardless of the accounting title. If a business is to simple ledger, there is no need to submit a balance sheet or an income sheet when they report income tax. After the introduction of the simple ledger, a significant number of business owners reported their income and more than 60 percent of businesses owners paid their income tax by the use of a simple ledger.

Until the early 1990s financial transactions involving large amounts between private parties had usually been conducted under false names or pseudonyms to protect confidentiality and to evade tax. In 1993, President Young-sam Kim proclaimed his Emergency Presidential Order on Real Name

Financial Transactions and Protection of Confidentiality. This meant that no one could open bank accounts without disclosing his or her name and resident registration number. This regulation aimed at keeping the shadow economy under tight control by making all transactions subject to taxation. Tax revenues increased because concealed financial transactions were exposed by means of the real name transaction system. It was effective in tracing funds for various corruption scandals, including collusion between politics and business. In addition, this policy could reduce the gap between the rich and the poor by enhancing fairness in tax administration.

In spite of these efforts, successful integration of the shadow economy in the tax system was limited. Therefore, the Korean Government developed an innovative way to legalize the underground economy and introduced the Cash Receipt System in 2005. This program was designed to expose cash transactions by offering incentives to consumers when they pay in cash. Further, business owners could also have some tax benefits if they issued cash receipts. The Cash Receipt System is unique to Korea. Hence, it is fair enough to say that the example of Korea is appropriate to countries concerned about the underground economy of their country.

Before introducing the Cash Receipt System, the Korean government launched the Credit Card Income Deduction Program in 1999 to expand the tax base of the national economy. This is a program which aims to increase the tax base of self-employed taxpayers by giving incentives to consumers. If consumers pay by credit card, they receive a benefit for their income tax liability. Concretely speaking, some part of credit card payments is deducted from an individual’s income tax base. Thus, personal income taxpayers can reduce their taxes owed by the deducted amount times their marginal tax rate. Therefore, people have the incentive to pay for goods and services by credit card. Once a transaction is settled through credit card, the transaction history is recorded and reported to the NTS. Then, self-employed individuals cannot hide their business income from the NTS. That is, the transparency of transactions can be substantially improved by encouraging consumers to use credit cards. Not that this program was developed by recognizing that every transaction has two sides, the seller and the buyer. By providing some incentive to the buyer side, government can determine the national tax base from the seller side. In this sense, on may say that the Credit Card Income Deduction Program is an example of well-designed government policy.

Suspicious transactions are other concerns when legalizing the shadow economy. Considerable time and effort may be put into the detection of criminal activities and suspicious transactions. However, money laundering is hard to detect. Therefore, the Suspicious Transaction Report (STR) and the Anti-Money Laundering (AML) law are ways to deal with this. An STR is a report that financial institutions are required to file when transactions involving more than a certain amount in cash have occurred. And AML is a term mainly used in the financial and legal industries to describe the legal controls that require financial institutions and other regulated entities to prevent, detect, and report money laundering activities. An effective AML program requires a jurisdiction to criminalise money laundering, giving the relevant regulators and police the powers and tools to investigate, be able to share information with other countries as appropriate, and require financial institutions to identify their customers, establish risk-based controls, keep records, and report suspicious activities. STR is a method to detecting money laundering used in many countries. Strict background checks are necessary to identify money launderers that invest through complex ownership and company structures.

8. Conclusion

The Republic of Vanuatu faces various challenges such as demographic changes, natural disasters, and graduation from least developed country (LDC). In this context, there have been active discussions about the introduction of income tax in Vanuatu. This paper provides valuable insights by sharing the Korean experience, especially on the tax administration.

Income tax is common all around the world. Most developed countries collect revenues from income tax. Korea also has an income tax, including personal income tax and corporate income tax. The personal income tax system was introduced in Korea in 1934 and the Income Tax Law was enacted in 1949. Most incomes (excluding retirement income and capital gains) have been subject to global taxation using progressive tax rates since 1975.

There are theoretical factors to consider when introducing a personal and corporate income tax. In the case of personal income tax, (a) defining the income, (b) constructing the rate structure, (c) choice of unit and (d) treatment of international income effects on overall income tax revenue. For the introduction of the corporate tax, (a) deciding the subject of taxation and rate structure, (b) taxation of multinational corporations, (c) tax incidence and excess burden of corporate tax, and (d) full consideration of both pros and cons about the existence of corporate income tax.

Vanuatu has a plan to introduce a personal and corporate income tax, and <Table 8> shows the tax thresholds and rates. Individuals will not pay income tax until their income reaches VT 750,000 during the year in total salary and wages, business profits and investment income. There are three brackets for income tax, but two tax rates. One is 10% for a person who earns between VT 750,001 ~ VT 3,500,000 a year and the other tax rate is 17% for individuals who earn in excess of VT 3,500,000 a year. Corporations will pay a flat tax rate of 17% of their taxable income (roughly, gross income less allowable expenses).

The income tax scheme of Vanuatu is a well-designed tax system. It meets the guiding principles Vanuatu set before the introduction of the income tax. However, there are some aspects to consider before introducing the income tax; (a) consider both macro and micro-economic shock, (b) recheck the assumptions regarding revenue estimation and (c) infrastructure related to tax system should be organized firstly. Addition to these, a theoretical approach to the introduction of income tax is recommended. That is, equity between individual and families, a clear statement of the global or territorial system, and choosing an appropriate depreciation method when defining expenses should be considered.

To improve the income tax system of Vanuatu, we suggest policy recommendations. As for the taxation system, (a) a step-wise introduction of income tax, (b) modeling tax compliance, and (c) tax deductions and tax credits are approaches we propose. For the tax administration aspects, (a) autonomous operation of the tax authority, (b) computerizing the tax collecting system, and (c) legalizing the shadow economy are critical success factors. These suggestions might be hard to implement in beginning stages, but it is necessary to consider these aspects because they are important elements in the long run.

This study is mainly focused on the Republic of Vanuatu, but most countries considering the introduction of an income tax might face similar challenges. We hope this study helps other countries when they initiate an income tax system.

Appendix

<Table A. 1> Lower tax rates and lower thresholds

0%	VT 1 ~ VT 500,000	57% of working people would not be paying income tax
7.5%	VT 500,001 ~ VT 1,600,000	33% of working people would be paying 20% of the personal income taxes collected.
15%	Above VT 1,600,000	The top 10% of earners would be paying 80% of the personal income taxes collected.

Source: Vanuatu Revenue Review (2016b)

<Table A. 2> Higher tax rates and higher thresholds

0%	VT 1 ~ VT 1,000,000	90% of working people would not be paying income tax
10%	VT 1,000,001 ~ VT 4,000,000	9% of working people would be paying 43% of the personal income taxes collected.
20%	Above VT 4,000,000	1% of working people would be paying 57% of the personal income taxes collected.

Source: Vanuatu Revenue Review (2016b)

<Table A. 3> Very low personal income tax rates

0%	VT 1 ~ VT 360,000
2%	VT 360,001 ~ VT 550,000
3%	VT 550,001 ~ VT 1,800,000
4%	VT 1,800,001 ~ VT 3,600,000
5%	Above VT 3,600,000

Source: Vanuatu Revenue Review (2016b)

9. References

Asian Development Bank (ADB), 2018. A Comparative Analysis of Tax Administration in Asia and the Pacific, Manila.

Harberger, A., 1962. The Incidence of the Corporation Income Tax, *Journal of Political Economy*, vol. 70, pp. 214~240.

LaLumia, S., 2008. The Effects of Joint Taxation of Married Couples on Labor Supply and Non-Wage Income, *Journal of Public Economics*, Vol. 92 Issue 7, pp. 1698~1719.

Lee, Joon Koo, Myeonghwan Cho, 2016. *Public Finance* (5th Ed.). Goyang-si, MoonWoo.

National Tax Service (NTS), 2014. Easy Guide for Foreigners' Year-end Tax Settlement, International Tax Resource Management Division, National Tax Service of Korea, Sejong-si.

Organisation for Economic Co-operation and Development (OECD), 2004. Compliance Risk Management: Managing and Improving Tax Compliance, OECD Publishing, Paris.

Organisation for Economic Co-operation and Development (OECD), 2017. Tax Administration 2017: Comparative Information on OECD and Other Advanced and Emerging Economies, OECD Publishing, Paris.

Modica, E., S. Laudage, M. Haridng, 2018. "Domestic Revenue Mobilisation: A new database on tax levels and structures in 80 countries", *OECD Taxation Working Papers*, No. 36, OECD Publishing, Paris.

Rosen, Harvey S., Ted Gayer, 2010. *Public Finance* (International edition 2010). New York, NY: McGraw-Hill.

Schneider, Friedrich, Andreas Buehn, and Claudio E. Montengro, 15~16 April 2010. "Shadow Economies all over the World: New Estimates for 162 Countries from 1999 to 2007", presented at Workshop on Shadow Economy, Tax Policy, and the Labor Markets in an International

Comparison: Options for Economic Policy.

United Nations (UN), 2018a. Global E-government Survey, United Nations, New York.

United Nations (UN), 2018b. World Economic Situation and Prospects 2018, United Nations, New York.

Vanuatu National Statistics office (VNSO), 2018. Quarterly statistical indicators.

Vanuatu Revenue Review, 2016a. Vanuatu revenue review consultation paper.

Vanuatu Revenue Review, 2016b. Information Paper – Empirical Analysis of Revenue Reform Options.

Vanuatu Revenue Review, July 2017. Final report on the case for revenue reform and modernisation.