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# Tax and MSMEs in the Digital Age

Why Do We Need To Pay Taxes And What Are The  
Benefits For Us As MSME Entrepreneurs And How To  
Build Regulations That Are Empathetic And Proven To  
Encourage Tax Revenue In The Informal Sector

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Tax and MSMEs in the Digital Age : Why Do We Need To Pay Taxes And What Are The Benefits For Us As MSME Entrepreneurs And How To Build Regulations That Are Empathetic And Proven To Encourage Tax Revenue In The Informal Sector

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## Foreword

Micro, Small and Medium Enterprises (MSMEs) face opportunities and challenges in terms of taxation in the digital era. The rapid advancement of technology and the proliferation of e-commerce have significantly changed the way business is done, presenting unique tax implications for MSMEs. Here are some important points to consider:

**Cross Border Transactions:** Digital technology allows MSMEs to access global markets more easily. However, this can complicate tax matters, as cross-border transactions can trigger tax obligations in different jurisdictions. MSMEs must be aware of international tax laws and regulations to ensure compliance and avoid potential double taxation.

**Tax Compliance and Automation:** The digital age has led to increased automation of business processes, including tax accounting and reporting. MSMEs can take advantage of various software and digital tools to streamline tax compliance, making it more efficient and less prone to errors.

**Digital Goods and Services Tax (GST):** Many countries have implemented digital GST or value added tax (VAT) on the supply of digital goods and services. MSMEs involved in selling digital products or services will have to navigate the complexities of digital taxation and register for GST in the relevant jurisdictions.

**Data and Privacy Issues:** Collection and use of customer data by digital MSMEs can lead to privacy issues. Governments may enact regulations regarding data protection and privacy that may affect business operations and tax compliance.

**Permanent Establishment Rules:** With the digital economy, MSMEs can have a global presence without having a physical presence in other countries. However, tax authorities may apply PE rules differently to digital businesses, leading to potential tax liability in foreign markets.

**Digital Tax Reform:** Several countries are exploring or have implemented digital taxation reforms, such as a digital services tax or income-based tax targeting multinational technology companies. MSMEs operating in these markets should stay up to date with these developments, as such reforms could have an indirect impact on their business.

**Tax Incentives for Digital Adoption:** To encourage MSMEs to embrace digital technology, several governments offer tax incentives or deductions for technology-related investments. These incentives can help MSMEs offset digital transformation costs.

**Tax Planning and Advisory Services:** Given the complexities of digital taxation, MSMEs may benefit from seeking professional tax planning and advisory services. Tax experts can assist in optimizing tax strategies and ensuring compliance with relevant laws and regulations.

In short, the digital era has brought opportunities as well as challenges for MSMEs in terms of taxation. MSMEs need to keep abreast of developments in tax regulations, leverage digital tools for efficient compliance, and consider seeking professional advice to successfully navigate the tax landscape.

This book presents a comprehensive study of taxation and MSMEs in the digital era in general which is very likely to be applied throughout the world in today's modern era

Malang, July 21, 2023

Dr. Regina Niken Wilantari

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## **Chapter 1. Tax Administration Link**

The major changes and impacts represented by the application of information technology in taxation matters, as well as obligations that arise or are changed as a result of reforms in the digital era, thus increasing the tax burden of each actor involved in this matter, in an era that marks a leap in the way of corporate auditing, which is called the Digital Age (Yang, Zhuang, & Pan, 2021). In the face of the important changes that we have witnessed, whether gradually or not in a violent way, in accounting and tax issues in our country and in other countries and their impact on micro, small and medium enterprises, most of the time, the most affected by the transitions they were forced to implement. At the level of knowledge of tax provisions on the part of the principals, it is based not only on their own experience, but also on data shown by records and statistics at the national and international level, because this social problem persists in all countries and continues to be one of the main objectives of the authorities for minimization, where they use all the necessary tools to identify tax negligence, or evasion.

Constant changes in legal and fiscal requirements are no stranger to tax professionals, leading to review the ways of working and to make the necessary modifications and adaptations to accounting processes and records for the proper organization, presentation and transmission of information established by the authorities in every statute to which taxpayers are subject, beyond the technological and digital age where information, for better or for worse, is within reach of everyone. Planning consists of setting out the specific actions to be followed, establishing the principles that will guide them, the sequence of operations to carry them out, and determining the time and amount required for their completion (Lino, Aquino, & Neves, 2022).

Every activity or task needs a structure, a beginning and an end. In the process there are certain factors which, although they will affect progress, may not change the final goal to be achieved. In terms of tax law links, where the main actors are taxpayers and treasurers. A tax relationship is a legal relationship established between a subject called an asset, the State, and another subject called a liability, the taxpayer, whose only source is law and born under law, in which the taxpayer is legally required to fulfill certain formal obligations and, in addition to handing over to the State, a number of assets, generally money, which must be allocated for the satisfaction of public spending. The law must thoroughly define the assumptions and elements that

make up tax obligations. In other words, the law must contain a complete understanding of all elements of tax relations and obligations. The tax relationship establishes the relationship between the powers of the authority and the taxpayer, from which mutual rights and obligations derive. In this case, the author focuses on mentioning that the tax chain is not a chain of power, but a law, because there are reciprocal rights and obligations between the subjects that make it up.

If so, we will be in the presence of a full power relationship. If the law does not establish the facts giving rise to tax liability, there will be no tax relationship between the State and the individual, and consequently the State cannot claim the payment it demands. This situation gives the nature of a legal relationship.

Nothing can be given more rights than what is expressly provided for by law. Public authorities, as such, cannot demand the payment of obligations or taxes that are not provided for in law, or in proportions greater than those prescribed, and in turn, individuals cannot, under any circumstances, abstain or neglect the payment or assignment of obligations, which is why we refer to a set of reciprocal rights and obligations.

Substantive tax laws are norms that have legal content, because they give rise to rights and obligations and, therefore, are true legal norms and not merely administrative measures (Mayer, 2021). The foregoing outlines the relationship that exists between the taxpayer and the visco, that is, the person obligated to make the contribution and the authority by law to demand it. Administrative-tax relations are proposed to study the existing relations, whether suitable or not, between taxpayers and specialists in this matter from various perspectives and the current situation that links them due to former obligations, before the authorities and the treasury. It is through this link that the necessary operations are carried out to fulfill obligations between the taxpayer and the accounting and tax advisers, unlike the tax law link which, as we have mentioned in the previous paragraph, represents the relationship between the tax authority and the individual. Specialists can be vital to the functioning or success of a company. However this can be called into question when whoever makes the final decision lacks the necessary guidelines or baseline and minimum criteria to follow up on their consent. Or, when advisors do not anticipate new provisions or modifications made by an authority.

Tribute, contribution or income is a legal bond by virtue of which the State, acting as an active subject, requires individuals, who are called passive subjects, to comply with

monetary benefits, exceptionally in kind. Tribute is an advantage in the form of money or goods demanded by the State in exercising its royal power to obtain resources to fulfill its goals. Tribute, therefore, is a public patrimonial benefit demanded of individuals. It is coercive because it is imposed unilaterally even though it is in accordance with constitutional principles, it is pecuniary because it is manifested in the form of money and contributions. Tributes are meant to satisfy social needs. From the act of contributing, adj. who contributed Right. Person required by law to pay taxes Is a taxpayer who bears the obligation to cover the payment of an obligation before the treasurer, the taxpayer is also referred to as the taxpayer.

Taxpayers of taxation obligations must be understood as persons or legal entities, national or foreign, who carry out events that generate taxes or contributions, that is, people who are placed in the appropriate normative hypothesis. Taxpayers of a tax relationship are governed by federal tax laws as required by their own or principal obligors or debts of others, with alternate, joint and multiple responsibilities and purposes.

A tax liability taxpayer is a person who by law must fulfill a certain benefit for the benefit of the tax authorities, either their own or a third party's, or whether it is a substantive or formal obligation. Therefore, there are organizations that fulfill the function of government, and as for those powers, they have or are associated with the power to form and collect contributions. These agencies are authorized to collect contributions and supervise taxpayers, in accordance with the guidelines and principles that must be embodied in the law. When competence is conferred on a body implies the power to carry out legal actions affecting individual spheres and to impose their decisions on them, that is, when the body is invested with decision-making and execution powers, before the body of authority. Administrative bodies, which are authoritative, may concentrate on their capacity for decisions and enforcement but it may also happen that they only have decision power and that the execution of their decisions is carried out by a different body.

Public Accountants in the public and private sectors can occupy high-level positions within an organization. The more important the position, the greater the ability and opportunity to influence events, practices and attitudes. Therefore, it is expected that Public Accountants in the public and private sectors cultivate, within the organization where he works, a culture based on ethics, thus emphasizing the importance of senior management providing ethical behavior. The professional activity of the Public

Accountant, in terms of tax advice and tax settlement, results in a reciprocal relationship, namely the relationship between the professional and the client, which must be built by the former, in which framework it will be developed. It should be mentioned that a Public Accountant, by taking responsibility to clients, for advice or for tax settlement, bears the obligation to work diligently and in accordance with the rules of the state and the profession, for that he must maintain adequate standards with the commitments he takes, to fulfill his role in the process of contributing and presenting information.

The tax administration link is a form of association or relationship between the taxpayer, individual, moral or legal entity and specialist in this case, through facilitation, processing and presentation of accounting information, the purpose of which is to ensure compliance with tax obligations before the State or an active subject. The role of the accounting consultant in accordance with the communication and transfer of information generated by the Taxpayer, will determine the success or failure of fulfilling obligations before the authorities.

## **Chapter 2. Empatía fiscal, Economía formal y trámites fiscales.**

The economy is human activity that seeks to meet the needs of the population, which can be devoted to primary activities such as agriculture, animal husbandry or mining, secondary or industry, or to the tertiary sector or services (Pandiangan, Oktafiana, Panjaitan, & Shifa, 2022). When we talk about the formal and informal economy, we are immediately presented with figures related to the right or wrong tax payment. However, in practice, we are involved daily and continuously throughout the process that ends, when successful, in such formalities, knowing that its success or failure depends on other areas that also require attention, anticipation, regulation, correction and control, to achieve the long-awaited fiscal formalities that the authorities demand, namely to see fiscal formalities in an organization, it is necessary first to have a formal common economy.

Factors such as: individual concern for carrying out an honorable role in society, self-interest as a citizen over state tax issues, comprehensive and timely planning when starting a business, sound implementation and maximizing its resources to avoid unnecessary financial and time losses, suitable facilities for the business to be started, which allows collaborators to expand broadly and can focus on business growth, fair and humane treatment for collaborators, an ideal and sound administration that exercises their control and supervision, which detects and corrects them, an adviser and a specialist who, in turn, has the same characteristics mentioned above, and who, in addition, is committed and willing to share his knowledge and experience, to offer timely solutions, is professionally and technologically prepared to provide accurate answers and who has the vision to consider himself an important element in society. All these characteristics, put together as part of the same body, would result, in the vast majority of cases: formality.

The economy is based on the production of goods and services and their demand for consumption or use. Thus, the exchange and circulation of money is generated. These activities, considered beneficial, are regulated by the State, which establishes their rights and obligations through laws, tax regulations and administrative rules.

Individuals and legal entities dedicated to this purpose must be registered as appropriate, as well as their collaborators who provide them with subordinate personal services, and pay taxes according to the provisions stipulated by current law. Taxes

pay for essential public services for which the State is responsible, such as education, security, health, and justice.

The term informal sector in the field of labor studies is becoming popular, used as a synonym for working poor, workers who do not have a contract, who do not have public security, or who do not have benefits, the accepted concept is as a set of workers who do not have social security. Street vendors, homeworkers, street vendors are identified as members of this sector. The terms formal and informal first appeared, in connection with economics, in the academic literature in the early seventies, as a result of a study of the economic activities of the social sector of the lower social strata, located in Accra, Ghana conducted by Keith Hart. In it, he introduces the notion of formal and informal income opportunities for studying work in the country's urban settings, particularly among lower-income strata of the population. Hart (1971) distinguished between formal and informal by identifying the former with wage employment, and the latter with self-employment. In 1972 the term informal sector was popularized among international development academics, in their analysis of the term informality, they saw it as another economic activity that does not fit into the perfect category of what an urban-dependent capitalist economy should be, or anything else that goes against the ideal.

The International Labor Organization, in preparation for the study of employment in Kenya, added attributes such as: ease of entry, family ownership of the company, small-scale operations, adapted and labor-intensive technology, skills acquired outside the formal education system, unregulated and competitive market. At the 15th International Conference of Labor Statisticians held in 1993, the International Labor Organization put forward proposals for an operational definition of the informal sector. This definition includes economic units of self-employed workers using family labour, and relatively small-sized units using hired labour. It was agreed that limits on the size of units considered as part of the informal sector would be determined in each country.

The most dominant criterion for defining informality relates to a lack of association with organizations, such as those not affiliated with a trade union organization, and concluding that the majority of self-employed are in the informal sector. The definitions presented have coincident elements which prevent quantification of their operations, such as absence of registration with the Ministry of Finance, which will be household services, self-employed, small unit patterns, measurement difficulties will

depend on the availability of statistical sources that allow capturing these attributes that appear in different definitions, as well as the geographic coverage of each information source.

The informal subsector comprises all the unincorporated enterprises that are part of the household sector, which are dedicated to the production of goods or services, with the main objective of generating employment and income for the people involved. Therefore, it is important to know that our role is to create a state that is involved in tax issues in society. While we know that it is our duty as citizens to contribute to public spending, we must recognize that the application of laws will be fair and proportionate and our duty is to convey empathy for taxpayers to produce a more equitable collection balance. Empathy: The mental and affective identification of the subject with the state of mind of others through the constitution of ethical principles that complement their practical development, contributing to the future of social assistance that injects into all areas of the company the expansion of factors that enhance the growth of society.

### **Chapter 3. Causes Of Fiscal Informality**

The existence of informal activities is caused by several factors that encourage their existence and development, and in some ways they are interrelated. Studies conducted in various countries have identified factors contributing to informality such as excessive regulations and procedures, inadequate supervision, rural-urban migration, income and opportunity inequality, and economic policies that are assumed and implemented (Omri, 2020). In developing countries all of these factors influence informality and some of them are clearly interrelated. However, it is true for many that informality in developing countries stems from excessive rules and procedures, inadequate oversight, and economic policies assumed and implemented in recent years.

The informal economy is a complex phenomenon that exists in the economic reality of many countries in the world, which has an impact on their economies. In certain cases in developing countries, the informal economy becomes relevant because of the striking growth that has occurred in recent years as a result of scarce and erratic economic growth driven by economic policies that are considered to be very neoliberal. Thus, the informal economy is associated with real economic growth, the higher the rate of economic growth, the lower the unemployment rate, and therefore, the lower the proportion of Active Economy Population (EAP) working in the informal sector. Several studies conducted by researchers on the informal economy have determined as the main cause, legally, the excess requirements and procedures for setting up a formal business compared to an informal business. The proliferation of rules and procedures, turning into an abundance of laws, makes productive activities more expensive, because resources such as time, money and manpower must be allocated to comply with them. When these costs rise, companies seek economic incentives to avoid them. In such cases, ethical and cultural factors are overridden by economic reasons for avoidance.

The general rule of any law must be to produce more benefits than costs, which is often not the case in developing countries. The problem does not consist in having or not having a regulatory framework, but in its quality, consisting in broadly justifiable procedures and requirements. Another factor driving the informal economy, and one that is linked to over-regulation, is the high tax burden. Depending on the country of

study, some taxes weigh more than others, which conditions the degree of tax avoidance and, therefore, informality.

The excess diversity of taxes and, in turn, the high rate of accounting for their payment, makes their compliance burdensome. At the same time, micro, small and medium enterprises that want to make a profit and survive in the market choose to avoid taxes, thus falling into illegality and informality. In addition, if the activity to be carried out offers what is necessary for survival, paying taxes is out of the question, while legality and formality are privileges that taxpayers who operate with minimum vitals cannot enjoy, as their limited income leaves no other choice than tax evasion and informality.

## Chapter 4. Natural Persons: MSMEs

The legal ability of an individual is acquired from birth and lost due to death but since a person's conception, he is under the protection of the law and is considered born for the purpose stated in the code of laws. Natural persons may enter into contracts, make statements, appear in court, etc. Natural persons may act on their own behalf or on behalf of other natural persons or legal entities. In short, the natural person is a being capable of bearing rights and duties (Dudás, 2021). Individuals carry out various actions that generate wealth, increase their assets through economic activities, exercise their rights as citizens, but for these rights the tax authorities require payment of contributions for the profits generated by these activities. For the classification of natural persons, it is necessary to base it on the Income Tax Law because it is the main sequence. In general, the tax laws in the world, the first classification is made into people who live in the territory of the country and people who live abroad with activities in the country that have a permanent form of business.

Persons residing in the territory of the country who derive income in the form of cash, goods, which are obtained when the terms of this right state, in the form of credit, in services in matters indicated by this law, or other types, are obliged to pay the taxes stipulated in this right. Individuals residing abroad who carry out business activities or provide independent work, within the country, through a permanent establishment, on the income that becomes their share, are also obliged to pay taxes. The second classification made by law is in regime. Depends on the acquisition of their income from the activities they do. In developed and developing countries, different criteria are used to classify companies according to their size. In some cases, criteria that consider only the number of employees are used for the classification, and in other cases mixed criteria are used, namely indicators of the number of employees and information on annual sales volume or capital investment. However, the most widely used criterion for classifying companies according to size is the number of employees in the business unit. Developing countries of the world, even when taking into account the number of workers, apply different definitions and parameters to the classification of enterprises and are universally classified into four types: • Micro Enterprises • Small Enterprises • Medium Enterprises • Large Enterprises

A small business is an independent entity, created to be profitable, which does not dominate the industry it belongs to, whose annual sales value does not exceed a

certain threshold and the number of people constituting it does not exceed a certain threshold, and like any enterprise, it has aspirations, achievements, material assets and technical and financial capabilities, all of which enable it to devote itself to the production, transformation and/or provision of services to meet the specific needs and wants that exist in society.

The concept of SMEs appeared during the Second World War, when most of the companies in Europe were destroyed, because they had to recover quickly, therefore the solution to this situation was the creation of small and medium enterprises. MSME participation in the economy is very important to maintain economic growth in this country. The creation of micro, small and medium enterprises and support for their survival, productivity, competitiveness and sustainability are indispensable in driving the country's economy. Likewise, increasing its participation in the market, in order to grow production chains that generate greater national added value.

The above mentioned, to promote employment and social and economic welfare of all participants in micro, small and medium enterprises. A company is classified as MSME if it has most of the following characteristics:

- Does not issue securities.
- The owner does not have a diversified investment portfolio.
- Owner's liability is unlimited or ineffective.
- First generation owners are entrepreneurs and risk prone.
- They don't have a complete management team to run the company.
- They face high market costs. Shareholder relations are less formal, and compensation schemes are very flexible.
- Vague information and lack of financial history limit MSMEs' access to sources of finance, because in many cases access to public capital markets is relatively expensive.
- They are motivated by maintaining ownership and control, which requires large investments by owners, to the point where the bulk of their investment portfolio is not well diversified.
- Investors and their creditors tend to ask for personal or non-corporate guarantees as collateral for debt, so that MSME owners are very vulnerable to the risk of personal bankruptcy.
- During the first years of the constitution, owner benefits and damages could be suspended in search of the company's economic and financial stability.
- They rely on one or a few key people with technical talent, leadership or customer contact.
- They do not have a succession contingency plan to ensure continuity.
- They lack knowledge and skills in finance and marketing, production and international business.
- They are not able to adapt to changes that occur in the environment or different stages of development as the company grows.
- The relationship between owners, managers and external

shareholders is less formal, therefore implicit and less contractual, so that the reputation of shareholders is highly valued by external shareholders.

Micro, small and medium enterprises have an important role; they exist mainly and sometimes almost entirely in underdeveloped countries and coexist with large enterprises even in the most developed countries, for which reason it is necessary to gradually eliminate the main causes that slow down their development. The success of a company depends, to a large extent, on its knowledge of modern administrative techniques and its ability to put them into practice.

The life cycle of SMEs is usually short and depends on many factors to achieve their economic success, which is undoubtedly their main goal. Informality is a bad habit which has filled society with entrenched ideas, which has led to nothing more than the destabilization of the state and which generates a tax burden for the few who adopt economic and fiscal formalities, not to mention that informality falls not only on the taxpayer but also on the State, which, invests its legal power and knows that it is the one with the power to modify, overturn or make new regulations for accounting and taxes. The treatment of companies, sometimes places the accessibility of taxpayers and their limitations to become formal in second place. That comprehensive education is an important support for achieving a tax culture in taxpayers, especially with values, so that they value the public goods they have contributed and which help them form a citizen identity with a sense of belonging, which increases awareness of compliance with our obligations, not only taxes but in any form that contributes to urban development. This education or dissemination of tax empathy is firstly in accordance with the authorities, as established by law, and secondly with us professionals, specialists in their field, following and complying with the principles and standards that characterize our profession. In developing countries, there are certain regions and areas where urbanization has not yet arrived, where technology is more than limited, it does not exist. Where the owner of a micro, small or medium enterprise has created it for the sole purpose of survival and is not driven by any economic plan or strategy, because they do not know it and have no advice on how to do it.

The public accountant has the responsibility to create an administration-tax link, where he can transfer basic and comprehensive knowledge to the MSMEs he advises so that they open their eyes to the economic panorama with specific and real goals. Likewise, as a professional and socially responsible person, the entrepreneur must

acquire the principles and rules of conduct on a large scale inherent in the accounting activity, in order to apply them in helping and improving the quality of life of the people in a timely manner. Business growth must go hand in hand with social contribution, seeking common prosperity. Accounting, today, is always related to technology and its digital implications and within it a growing number of programs and systems are gradually adding to the list of recorded advances in the history of accounting. The large number of taxpayers who are not aware of some or all of the new tax provisions which directly affect the treatment of their companies by the Tax Service is quite high and concerning. Lack of knowledge and advice, lack of access to technology and apathy in making the transition from traditional methods, some of which are no longer applicable, to today's electronic methods, mandatory, as they are considered optional, are undoubtedly the main obstacles that countries face in tax and accounting matters on their way to generalized fiscal formalities.

## Chapter 5. The Digital Age and Taxes

Taxes and the digital age are relevant topics in the modern world where information technology and the internet dominate many aspects of our lives. The digital era has brought significant changes in the way people interact, do business and carry out their activities. Therefore, it is necessary to make adjustments in the taxation system to face the challenges presented by this technological change. With advances in technology and the internet, digital transactions through e-commerce platforms are increasing (Xuetong, 2020). However, often these business entities operate without a clear physical presence in certain jurisdictions, which can blur the boundaries of traditional taxation. Many large technology companies operate globally and can locate their offices or data centers in lower-tax jurisdictions. This creates a challenge for the government to determine the appropriate way to collect taxes from these companies.

Companies and individuals in the digital age have more opportunities to avoid or hide their income through complex arrangements and using different tax jurisdictions. Digital age tax issues often cross national boundaries. Therefore, international cooperation and agreements between countries are essential to address this challenge effectively. The government needs to adjust tax regulations and policies to ensure that digital businesses operating internationally can be taxed fairly. Data is an important asset in the digital economy. Several countries have proposed special taxes on the collection, processing or use of data by large companies. Several countries have introduced automatic tax deduction systems for digital transactions, whereby the payment processing company must collect tax directly from the transaction.

Cryptocurrencies have become part of the digital economy, and several countries have looked at ways to regulate and tax transactions and investments in crypto assets. The link with digital age taxes is data protection. In collecting and managing taxpayer data, it is necessary to ensure that this data is properly secured and not misused. In the digital age, tax education is more important than ever. Taxpayers must be provided with a better understanding of their tax obligations and how tax rules apply in a digital context. Tax and the digital age is a complex and constantly evolving field. Many countries and international organizations are engaged in efforts to address challenges and adapt taxation systems to suit the dynamics of the digital economy.

E-commerce and digital transactions are two related concepts that have changed the business landscape and the way people interact with products and services. E-

commerce is the activity of buying and selling goods or services via the internet. This includes all types of business and trade transactions conducted electronically. E-commerce has brought various benefits, including ease of shopping, access to global markets, and business efficiency. However, it also poses challenges, such as intense competition, transaction security, and regulatory issues that vary across jurisdictions.

Digital transactions cover the entire buying and selling process that is carried out electronically, not limited to e-commerce. This includes digital payments, money transfers, electronic data exchange, and various other financial and business activities that involve digital technology. Digital transactions have become the core of modern business activities, bringing convenience, speed and efficiency. However, it also poses challenges in terms of security and protection of personal data. Overall, e-commerce and digital transactions have played a key role in global digital transformation and continue to be an integral part of the way we shop, do business and interact in an increasingly connected world.

Tax collection challenges are the problems faced by the authorities in collecting tax revenues from taxpayers. One of the main challenges is ensuring that all taxpayers comply with their tax obligations. Many factors can affect the level of compliance, such as awareness of tax rules, the complexity of the tax system, and the effectiveness of supervision. Some taxpayers may find loopholes or take legal action to reduce or avoid paying the taxes they should be paying. For example, the use of legal loopholes, price transfers, or the transfer of income to lower tax jurisdictions.

Tax evasion is the illegal act of hiding income or assets from tax authorities in order to reduce tax liability. Efforts to embezzlement can involve practices such as double-recording, document falsification, or evasion of reporting that should be done. In some countries, the informal economy sector can be a major challenge in tax collection. Many small businesses and traders in this sector are not officially registered and their income is difficult to track. The digital era brings new challenges in tax collection. Large technology companies operating in multiple countries can create complexities in determining the appropriate taxing jurisdictions and collecting taxes from them.

Businesses and transactions involving more than one country often involve complex international tax regulations. This makes tax collection for cross-border transactions more complicated and requires international cooperation. Lack of accurate data or lack of access to taxpayer financial data can hinder an efficient tax collection process.

A complex tax system and various tax rules and regulations can make it difficult for taxpayers to understand and fulfill their obligations properly.

Tax agencies often face limited human and technological resources in conducting effective tax collection, especially in countries with low tax compliance rates. To address this challenge, authorities need to increase awareness of tax obligations, strengthen monitoring and enforcement systems, adopt more sophisticated information technologies, and ensure international cooperation in tax collection for businesses across borders.

Tax evasion and tax avoidance are two different practices but often have the same goal, which is to reduce or avoid paying taxes that should be paid by taxpayers. Although they differ in form and legality, both can have a serious negative impact on the country's economy and finances. Tax avoidance refers to efforts by taxpayers to minimize the amount of tax that must be paid in a legal way and in accordance with tax regulations. Tax avoidance practices involve structuring transactions and finances by exploiting loopholes or ambiguities in tax laws to reduce the tax burden. This strategy is carried out in a legal way and in accordance with applicable tax regulations. Examples of tax avoidance include the use of legal tax incentives, international tax management, or complex financial arrangements with the aim of reducing the tax burden. While not against the law, tax avoidance is often controversial because it can affect a nation's fiscal revenues.

Tax evasion, on the other hand, is an illegal act by taxpayers to hide income or assets from tax authorities in order to reduce or avoid tax obligations that are due. Tax evasion involves actions such as recording false income, concealing income, or using false documents to reduce or avoid paying tax that is due. Tax evasion is illegal and a serious violation of law. Authorities usually take strong action against tax evasion and can trouble perpetrators with sanctions, fines or even criminal charges. It is important to understand the difference between legal tax avoidance and illegal tax evasion.

Tax avoidance, although it can be controversial, is usually considered legal as long as it is carried out in accordance with applicable laws and regulations. On the other hand, tax evasion is an illegal act and can have serious consequences for the perpetrators. The government and tax authorities are working to address both of these problems through improving and perfecting the tax system, stricter law enforcement, and greater transparency in financial reporting. Its main objective is to ensure that all

taxpayers fulfill their obligations properly and fairly to ensure optimal tax revenue for the government to support development and public services.

Digital age tax issues often cross national boundaries due to the existence of large technology companies and e-commerce businesses operating in multiple countries without a clear physical presence in each jurisdiction. This creates challenges in determining the appropriate tax jurisdiction and collecting tax from business entities that operate globally. Digital era tax issues require agreement and cooperation between countries to address the challenges faced together. Countries need to collaborate to identify solutions that are fair and effective.

Technology companies and e-commerce businesses often use the practice of transfer pricing to move profits from high-tax jurisdictions to lower-tax jurisdictions. This blurs the boundaries of traditional taxation and creates problems in determining actual profits. Cooperation between countries is needed to overcome unfair transfer prices. Some countries have double taxation agreements with the aim of avoiding double taxation of the same income by two different countries. This agreement helps coordinate taxes imposed on cross-border income.

The international reporting standards adopted by many countries help in the exchange of financial information between countries for tax enforcement and auditing purposes. Several countries have implemented automatic tax deduction systems for cross-border digital transactions. This system ensures that taxes are automatically deducted from transactions, reducing the risk of tax evasion. Strengthening corporate transparency and financial reporting helps tax authorities more effectively examine and monitor corporate compliance.

The adoption of an international tax processing center model can help simplify tax administration and facilitate the exchange of information among the countries involved. Several countries have imposed special taxes on the transactions and collection of digital data by large companies. This helps in obtaining tax revenue from digital businesses operating globally. It is important to remember that collaboration between countries in solving digital era tax problems requires cooperation and commitment from various parties. Increased international cooperation and bilateral or multilateral agreements can help address tax challenges associated with global phenomena such as e-commerce and digital business.

Data has become a very valuable and important asset in the modern digital economy. Companies and organizations collect, store and analyze data to gain valuable insights into customer behavior, market trends, consumer preferences and much other information that can be used to make better business decisions. Data tax is a concept that emerged in response to the importance of data in the digital economy. However, it should be noted that to date, a specific tax on data has not become common practice globally.

The definition and scope of data to be taxed must be clearly defined. Data that can be taxed can include personal data, consumer data, business data, transaction data, and so on. Determining which data values to tax can be complex and controversial. Data has unique characteristics that make assessing its value more difficult than physical assets. Because data can move across national borders without physical boundaries, taxation issues can be complicated. Countries need to collaborate to regulate how data can be taxed fairly and effectively. Monitoring data flows and taxing them requires robust and effective systems to ensure corporate and organizational compliance.

Implementing a tax on data can impact innovation and technology adoption. Some are concerned that this tax could hinder the growth of the digital economy and technological innovation. Taxes on data must also consider aspects of data privacy and security regulations so as not to jeopardize sensitive personal information or business secrets. So far, the proposal and implementation of a special tax on data is still relatively limited and has mostly been part of discussions and debates. Several countries have considered or proposed a data tax as a way to tax large technology companies that collect data from their citizens and use it for business purposes. However, the decision and implementation of this tax is still in the experimental stage and awaits the adjustment of appropriate regulations and agreements between countries.

Automatic tax withholding is a process in which tax is automatically deducted from certain income or transactions before the funds are received by the recipient. This concept is designed to collect taxes more efficiently and reduce the risk of tax evasion. On an employee's salary, the employer (company) will automatically deduct a portion of the employee's salary to pay income tax before providing the employee's net salary. In some commercial transactions, the payment processing company (eg bank or payment service) will withhold tax on the transaction before the funds are channeled to the beneficiary. In dividend payments, the company that pays dividends

will deduct the tax on the dividend before paying it to shareholders. In some cases, the company that pays the interest on the loan will deduct tax on the interest before paying the interest recipient.

The automated process of withholding taxes reduces the administrative burden and costs associated with collecting taxes, for both recipients and regulatory authorities. With automatic tax withholding, tax compliance increases as taxes are withheld immediately at the source, thereby reducing the risk of tax evasion. Automatic tax deductions help governments collect tax revenues in a timely and efficient manner. However, there are also some potential drawbacks and challenges to automatic tax deductions. Automatic tax deduction systems must be carefully designed to ensure accurate tax deductions in accordance with applicable tax regulations. When tax regulations change, the automatic withholding tax system must be adapted to remain in compliance with applicable law. Automatic withholding taxes require precise and complete information on the subject of the tax, which can be difficult in some situations. Overall, automatic tax withholding is an efficient and effective instrument for collecting taxes. However, its implementation must be done carefully and pay attention to the applicable tax policies.

Cryptocurrency tax regulations are regulations set by the government to regulate taxation aspects related to transactions, ownership and use of cryptocurrency (cryptocurrency). Cryptocurrency taxes are becoming relevant due to the growth in popularity and adoption of cryptocurrencies as a means of payment and investment.

Governments of various countries have tried to determine the tax status of cryptocurrencies, whether they are considered assets, currencies, commodities, or something different. This legal status will affect the way cryptocurrencies are taxed, such as value added tax (VAT), income tax, or tax on capital. Some countries consider cryptocurrencies as digital assets and apply value added tax on buying and selling cryptocurrencies. This means that there is a tax imposed on the value of the transaction.

Income tax may be imposed on profits derived from cryptocurrency transactions, whether from trading (capital gains) or from cryptocurrency mining. Some countries apply special tax rates for profits from cryptocurrencies. Some countries require their citizens to report their cryptocurrency transactions as part of their tax reporting obligations. This is intended to improve tax compliance and monitor the flow of funds related to cryptocurrencies. In some countries, providers of cryptocurrency exchange

or digital wallet services may be required to report their customers' transactions to the authorities, for the purpose of checking tax compliance.

Governments should also consider how to regulate taxes on airdrops (distribution of free coins) and forks (division of the blockchain into two separate branches) as they can impact individual tax obligations. Governments should also step up efforts in law enforcement to address tax evasion and tax evasion involving cryptocurrencies. Because cryptocurrencies cross national boundaries without physical boundaries, international cooperation is needed in addressing global taxation issues related to cryptocurrencies. Cryptocurrency tax regulations still vary around the world, and may change over time as technology and understanding of cryptocurrencies evolve. It is important for taxpayers to understand the tax obligations related to cryptocurrencies and comply with the regulations in force in the country where they live or operate.

Data security is closely related to digital age taxes. In the digital economy, data is an important key component in the taxation process. Governments and taxation authorities rely on digital data to identify, track, and verify tax information from taxpayers. However, with the widespread use of data, data protection is a critical issue that must be taken seriously.

Tax data often includes personal information, such as name, address, identification number and financial details. Data protection is very important to protect the privacy and security of taxpayer personal information from unauthorized access or misuse. In the digital era, tax authorities collect data electronically from various sources, including digital tax transaction, payment and reporting data. This demands secure systems and infrastructure to protect data integrity and prevent unauthorized access.

Cybersecurity threats are increasing, including cyberattacks aimed at stealing sensitive data or damaging tax infrastructure. Tax authorities must have strong cybersecurity measures in place to protect their data and infrastructure from attacks. The digital era of taxes involves the exchange of data between various institutions, such as banks, financial institutions and tax agencies. This collaboration requires strong trust and cooperation to ensure that the data sent and received is safe and protected.

Regulations on data protection and privacy, such as the GDPR in the European Union or data privacy laws in various countries, must be implemented and complied with in the process of collecting and using tax data. Tax authorities should adopt the latest security technologies, such as data encryption, restricted access, dual authentication and security monitoring, to protect their data from threats. In addition to technical

protection, education and awareness of data security issues is also important. Taxpayers and parties involved in the taxation process need to be given knowledge about risks and precautions against data security threats.

Tax authorities must be transparent about how tax data is used and processed. Responsibility for the security and use of data must be a priority. Data protection in the context of digital era taxation is not only important to maintain taxpayer trust and compliance, but also to ensure the integrity and efficiency of the tax system as a whole. By prioritizing data security, the government can ensure that the taxation process runs smoothly and sensitive data is protected from the risk of leakage or misuse

Advances in technology and digitization have changed the way people interact with information, including tax information. Tax regulations in the digital era can become more complex because they involve transactions and business activities that cross national borders without a physical presence. Good tax education can help taxpayers understand the applicable tax rules and avoid mistakes in tax reporting. With effective tax education, taxpayers are more likely to understand their tax obligations and will be more obedient in paying taxes on time. Good education can raise awareness about the importance of paying taxes as a citizen's obligation. In the digital era, many tax processes have become more transparent and are carried out digitally. Tax education can help taxpayers understand the digital reporting process and ensure that they can report taxes correctly using existing technology. In the digital era, technology plays an important role in the taxation process, such as tax data collection, processing and data analysis. Good tax education will help taxpayers understand and adopt appropriate technology in reporting and paying taxes. In digital business and commerce, taxes on digital transactions can be more complex. Tax education can help business people understand tax obligations related to digital transactions and apply taxes correctly.

The use of cryptocurrencies as a means of payment and investment has also become relevant in the digital age. Tax education can help cryptocurrency users understand the tax obligations associated with this digital asset. In the digital era, tax data becomes more important and must be properly protected. Tax education can provide awareness about the importance of protecting tax data from cybersecurity risks and misuse. Good tax education can help people and businesses to better understand and comply with their tax obligations in the ever-evolving digital era. Governments and

tax authorities also need to invest in effective tax education programs to increase tax awareness and compliance in a changing digital environment.

### **5.1. Digital innovation.**

The information age is a historical period marked by technological revolutions centered on digital information and communication technologies, concomitant with, but not causing, the emergence of networked social structures, across all spheres of human activity, and with the global interdependence of these activities. It is a process of multidimensional transformation which is inclusive and exclusive depending on the values and interests that are dominant in every process, in every country and in every social organization. Like other historical transformation processes, the information age does not determine any course of human history. The consequences and their characteristics depend on the power of those who benefit from each of the multiple choices presented to the human will.

The information age is also known as the digital age or the computer age. Currently, we have witnessed technological advances and how they innovate in all areas of community development. Every system evolves or disintegrates, but this requires the influence of many factors which together will produce positive or negative results.

Citizens and enterprises are increasingly using applications operated on the Internet and information technology for the development of their business, commercial and personal activities, reflecting the degree of dependence they acquire on digital services. With the arrival of the digital age, companies are facing an urgency to eradicate the lack of understanding of their employees and collaborators. The way we communicate has changed. The world and product consumers are no longer the same as they were recently.

All organizations are complex systems with many interrelated parts that must work together to achieve a common goal. They are also open systems that interact with their environment in an ongoing process of obtaining and transforming their resources. Organizations are definitely experiencing dramatic changes today, and among the changes are the dominance of technology, the adoption of network connections and the concentration on speed.

Innovation is a key part of this transition. Therefore, it is worth analyzing how the company considers this factor in its decision-making, or simply, how it currently views the issue. Innovation is considered as an important factor for economic growth,

which is supported by economic theories such as Robert Solow's growth model. Today we live in a world of ideas, which are generated from research activities and are essential for long-term economic development. The capitalist economic system currently prevailing in most countries of the world requires innovative activities by companies to maintain its dynamism. The market is said to be efficient when consumer desires are fulfilled, therefore companies that achieve the above through an efficient process are companies that will get the biggest profit. This mechanism encourages innovation more vigorously, because companies that are overtaken by competitors' innovative processes and products will tend to disappear.

Given the powerful impact of technological advancements such as mobile technology and social media in the last decade, one might expect that tech-savvy companies will outperform traditional ones. Traditional companies are still part of today's technology users. Traditional types of companies, too, have used technological advances for their own innovative purposes, which gives us evidence that innovation is not typical of technology-savvy companies, but companies interested in making changes. Science and technology continue to be seen as the two most important factors for the basis of innovation.

Innovation continues to be one of the highest priorities and has been increasing, it is worth mentioning that the information technology revolution is causing change in all companies, regardless of whether they adapt or not.

Research and development is one way in which companies can experience future growth by developing new products or processes to improve and expand their operations. However, even though innovation has been, is being, and will most likely continue to be a priority, the way to achieve it is not easy. Technological development as the systematic use of knowledge and research, directed at the production of materials, devices, systems or methods including the design, development, improvement of prototypes, processes, products, services, or organizational models.

Public-private associations (PPPs), which, for decades, have been considered as an alternative tool or scheme used by governments at various levels to reduce pressure on the use of resources derived from public finances in terms of infrastructure development and/or provision of services needed to meet population demands and promote regional economic development. It can be said that a public-private partnership is, strictly speaking, a partnership in a particular project between the public and private sectors, where there is a contractual relationship between them and

where there is mutual investment. Public-private partnerships are a substitute or complement to some of the existing funds or those owned by the state.

Public-private partnerships also open up important possibilities for large and small scale projects. In the first case, large companies can be encouraged to develop ambitious projects, which will not be implemented without government support, due to the high risks that this implies, and in the second case, the benefits of participating small and medium-sized companies in associations are highlighted, which means that in some way they help to remedy market failures or barriers to entry for these types of companies to invest in innovation.

## **5.2. Accounting And Tax Digitization**

Various countries in the world have developed digitalization in the economy. It is possible to verify this situation when not only large companies apply information and communication technologies to simplify their operations, but also when authorities and small businesses are forced to apply advances and means that can be linked to new technologies and processes operating worldwide, to keep up with the demands of today's world. In tax matters, digitalization is no exception.

The digital era has reached us and its arrival is irreversible, therefore, all work centers are starting to be affected, either positively or negatively by this impact. From digital document preservation, to changes to the country's tax system, technology is the main actor in this scenario. Digitization can serve several purposes. It is possible to adopt different characteristics and standards according to the needs of each institution. For this reason, standardized and classified digitization with optimal quality must be determined from the planning stage, to ensure that each file can be used for new needs, without the need to re-digitize it. It is important to note that digital preservation requires active management to ensure the integrity and continued accessibility of the contents of any file, preventing them from becoming obsolete due to the modifications that digital formats undergo.

The benefit of implementing electronic invoices is a more efficient process. Automated procedures are provided, eliminating operating costs and time required for data retrieval. Security. The document has an electronic stamp that provides legal certainty. Electronic encryption contributes to fraud prevention. And the provider of the tax receipt must be properly registered with the Tax Administration Service.

Digitization is also beneficial as paper savings. Not only storage costs and physical space savings are provided. It is estimated that for every one million invoices printed, between 50 and 60 trees need to be cut down, thereby reducing the environmental impact of the number of invoices issued each year.

After the approval of electronic invoices as the only form of fiscal verification, and the obligation to keep accounting electronically, taxpayers faced another dilemma namely electronic storage of these receipts and other documents. Such conservation must be carried out in a manner which guarantees legibility in the original format received or sent to guarantee the authenticity of its origin. Although electronic invoices facilitate the flow of information, their storage and retention must be appropriately sized not only for tax purposes but also for any disputes in court. Not all companies, even the largest, are ready to keep their accounting digital, the actual casuistry can vary widely, so rules are urgently needed to visualize and unify how to do it.

Taxpayers who issue and receive Digital Tax Receipts via the Internet must store them in magnetic, optical or other technology, in their XML electronic format, without laws specifying conservation processes, which creates legal uncertainty. Therefore it is necessary to have the authority to regulate the process of storing these documents, as well as how to obtain digital images from a paper document so that its integrity and sustainability are maintained.

Digital Tax Acceptance via the Internet, transparency and savings for taxpayers is growing exponentially, thanks to greater tax control and process optimization. The implementation of electronic vouchers in various countries around the world is the result of progressive fiscal adaptation over the last decade.

Micro, small and medium enterprises are the backbone of the national economy because of trade agreements that have been entered into by various countries in the world in recent years and also because of their high impact on job creation and national production. Electronic accounting procedures affect owners of small and medium-sized businesses, as they have to spend money on computer equipment, Internet bandwidth, accounting programs and expert advice. This causes distraction, unintentional non-compliance and errors among taxpayers. This problem is exacerbated by resistance to change, accompanied by a lack of contributor culture and ignorance of the benefits that can be obtained by implementing electronic tools. Many companies are affected in terms of their sales, their customers, their suppliers. Lack of

knowledge on this issue has given rise to a great deal of doubt, confusion, and most importantly, errors in the correct methodology for calculating and determining taxes.

The MSME sector is the sector that has received the greatest impact with modifications in the form of digitalization. Unlike large corporations, which have the financial resources to purchase the software needed to comply with new tax obligations, small businesses cannot easily obtain this software.

Digitalization changes initially created various problems, not only because of a lack of information from companies, but also because of a lack of resources and the rush of adjustments that had to be made. Regarding electronic accounting, taxpayers are facing very important changes in the way they conduct their operations and their relationship with the authorities, no doubt, these changes seek to cover up and ultimately eliminate tax evasion, but they are also a step towards fully automating company operations, especially MSMEs. In addition to simplifying the process, authorities need to provide tax education and adapt themselves to the actions of taxpayers to facilitate compliance with taxpayer obligations. Among the challenges for small and medium enterprises, apart from surviving in the physical business world, is demonstrating their ability to become digital companies that can make them highly competitive. The time has come for physical companies to transition into the digital business world, which will give birth to a new corporate approach in which the boundaries between the physical and digital worlds will blur. In this sense, small and medium enterprises need to use technology to drive their business growth and not just to improve their internal processes.

Industry promotion and innovation policies have a priority on sparking innovation in productive sectors and, in particular, in enterprises to generate greater wealth; namely providing greater economic value to the production process and to the components or products produced in the economy. Innovation can be reflected in the introduction of new products that meet new consumer needs, improve quality, presentation and service, become more attractive in the market, use of new production methods, to the use of new technologies such as information and communication technology or scientific discoveries that increase production value.

Innovation includes opening up new markets with alternative logistics and marketing strategies; use of new sources of supply of inputs, making changes in the organization or in market operations. Innovation and information and communication technology cannot be managed separately from industrial and innovation promotion policies.

Most companies must use information and communication technology, especially to be able to compete in their fields with other companies and to be able to meet the requirements of the authorities, because of the obligation to use electronic means before the treasurer. The companies most affected in the digital economy transition are MSMEs, which do not have special advisers who can guide them in a timely manner on the procedures to be implemented to enter the formalities, coupled with doubts and rejection by them. MSMEs, are the key to the economies of developing countries in the world and the government knows it, which is why programs and funds for their improvement and renewal exist to provide them with the necessary tools and methods to fuel their growth. However, it is important for MSMEs to find themselves in this panorama, so that they can start seeking growth internally, without fear of doubts related to administrative, accounting and tax issues. This is where the important role of the public accountant is in supporting these businesses with their knowledge and skills. Our role in society is very valuable. Our country's economy no doubt depends on the business vision of each taxpayer, but the responsibility also lies with the profession to carry out operations in accordance with applicable regulations and the code of ethics of the public accounting profession.

## **Chapter 6. Taxation for MSMEs in the Digital Age**

Tax authorities must join in the digital economy transition, to fulfill its main objective of auditing and collecting tax information and increasing tax revenue. While for taxpayers and users of the Tax Administration Services system this transition has meant making changes and adapting their systems to meet their obligations on time, for the treasury the application of this technological tool, in terms of auditing, has yielded a large return on investment (Wassermann & Bornman, 2020).

A government that is not digital cannot be efficient, we cannot think of an efficient government if ICT is not used. The role played by the Tax Administration Service in this change process by implementing Information and Communication Technology in its procedures, especially with electronic invoicing, because it not only allows greater control over tax collection, but also opens up the market with these service providers. Currently, the Digital Tax Receipts via Internet model is recognized internationally. Facing the challenge of the Tax Administration Service to combat tax evasion, it is necessary to advance the technology in its platform, under the concepts we are now familiar with, such as: cloud and Big Data.

The cloud is a digital tool that allows Tax Administration Services to secure large amounts of information in one place. The processing of all companies around the world will be cloud-based. Besides the fact that safety in the year is no longer a barrier, but an incentive to adopt it. Big Data is the management and manipulation of this data, which serves to achieve much more accurate analysis than human analysis can. In this management, information cross-checking procedures are involved to predict trends and behavior of taxpayers' tax information, such as those related to income, to find out more precisely the complete flow, even transactions that have not yet been made. Another benefit for the tax authorities of using this tool is not only to detect non-compliant taxpayers, but also to fight organized crime, money laundering and thus have better oversight of the revenues occurring within the country and the respective tax collections.

The application of digital systems requires a high level of security and must provide added value to the community, because it creates fiscal terror in terms of determining income and expenses for taxpayers, even when the use of these technological tools by the authorities, it is to achieve greater tax simplification, however, digital databases

from the Tax Service are elements that must be owned by the authorities to carry out their authority.

Being a digital company doesn't mean being a company that uses computers, it means being a company that knows how to use them intelligently to improve its business. Companies don't have to make huge investments to adopt smart systems, but instead choose what kinds of solutions are on the market that can help them grow.

MSMEs, one of the most impressive and visible changes is the implementation and mandatory use of electronic invoices as a solution to control the correct recording of tax data on receipts, and ensure that they cannot be changed or rejected by the taxpayer. In its design, technological solutions are implemented to generate, process, transmit and secure electronic files with tax verification documents. This scheme radically changes the form of tax verification in various countries to issue electronic invoices, taxpayers must have an electronic signature and digital stamp certificate, in addition to having a technology standard based on XML language, which registers tax information homogeneously and ensures its reading by a system that is not operated or supervised by people.

There is no turning back in the adoption of information technology and that the world's digital market is an important axis in the economies of various countries in the world. Given the gradual changes that are forcing MSMEs to join the digital world in order to run their business properly, especially to fulfill the obligations required by the Treasury, various value studies have been conducted showing their acceptance and rejection by taxpayers in recent years. Even when representatives of the authorities issue statements informing that taxpayers are ready to adopt the new electronic tax system, in reality the situation is very different.

Tax Administration Services are becoming very important in the economy because the commitment of the authorities is to be able to maintain direct control and supervision of each taxpayer from the moment of registration and during their operations, using the new electronic system. One of the main reasons why authorities are finding advantages in intelligently using computer systems in tax matters, is to reduce tax evasion, comprehensive data handling enables intelligent and fast decision-making, just a click away.

Citizens of different countries know that there has been a change in tax and digital innovation issues, but there is no follow-up and no real interest on their part to verify

the results. The administration has included several procedures in the digital environment, so that through the use of electronic means, tax obligations can be controlled. Thus, we find ourselves immersed in a new era of digital processes and data storage, which are used by tax authorities and which invariably result in legal consequences for taxpayers. It is known that this new modality, which over time becomes mandatory in a larger proportion, implies many changes, transitions, investments, by taxpayers in their companies, but one of the biggest impacts is the perception that taxpayers acquire on the risk of being subject to legal sanctions by the Tax Service with the certainty that the information found in the cloud will become the basis for authority to utilize the faculty, automatically.

The implementation of information and communication technology in tax matters not only has an impact on taxpayers, but also that the same authorities must join the ranks of the digital age to continue to achieve its goals in a simpler and more effective way, making impact changes to its systems to collect and process data. enabling it to combat tax informality, tax evasion, as well as prevent illegal acts, among others. Likewise, MSMEs have come a long way, full of important changes originating from the Tax Reform, which have created an administrative and fiscal burden for them, even though these changes are expected to imply a simplification of the process of using electronic media provided by the Tax Service, for this reason it is mandatory taxes still show a certain resistance before new and constant changes in taxation matters. However, there is a lot of support for MSMEs, so that they can benefit from means and tools for innovation and training, as well as financial resources so that they can fulfill their fiscal and business obligations, contributing to the country's economic growth. Therefore, it is very important that authorities, advisers and taxpayers are prepared to make use of adequate information and training to achieve the formalities, at the same time that they make use of existing benefits and supports.

## **Chapter 7. The Duty Of The Tax Administrative Link**

Any business owner will appreciate that their accountant has their financial information in a timely manner and not until tax due day, suggesting strategies to reduce this month's tax burden by using the company's own resources, cash flow status in real time, if there are any outstanding receivables, or if it is convenient to pay the supplier, among other things (Aladejebi & Oladimeji, 2019).

The training that public accountants have today is different from the image of an operations worker submerged in an endless tower of documents, receipts, and promissory notes. Today's accounting professionals who are part of the modern, modern corporation go far beyond mere registrar titles to account for the movement to become part of a much more executive and substantial interest. There have been substantial changes in how the professional work of an accountant is currently viewed. He was no longer a simple bookkeeper or operational officer, but a first-class professional, capable of advising senior management on financial, tax and expense decisions. However, before plunging into the field of MSMEs in the digital age and the relationships created between them and advisors, we must not neglect the responsibilities that are the responsibility of accounting and tax advisers. Professional consultants must always follow the development of concepts, methods and systems related to their field of work, including those from universities and research institutes. Hence, they serve as a link between business management theory and practice. . In carrying out his profession, tax consultants must be very careful in their opinions and diligent in their investigations. Most of the controversy between the tax authorities and taxpayers stems from the interpretation of the applicable provisions and it is there that the consultant must act carefully, analyze the sources and use all the resources at his disposal, before issuing his opinion.

The tax consultant, in order to express his opinion, will first use the tax regulations and statutory authorities, which together with his experience must be interpreted accordingly. Interpretive activity is key for tax consultants, in this process. Interpretation can be both generic and specific when they investigate legal principles that are latent in a particular legal system or legal order, to apply them to cases that are not expressly intended to conclude consequences abstracted analogically for that case by not forgetting to mention the subject who performs the interpretation, he is the

concrete and personal interpretation which is understood as an intellectual, scientific process of an act of legal knowledge, namely a rational action.

The interpretation of each consultant has a different scope and results, whether it benefits the authority or the individual and can be strict or restrictive. Strict legal interpretation is the most important of all in tax matters, because of the clear meaning of the words. Meanwhile, a restrictive interpretation arises when it is argued that the expression used is less broad and requires more careful analysis by a consultant. There are various criteria and interpretive methods. The professional should use the one that best fits the case, covering all of the aforementioned elements that should be considered in the process. With the foregoing, we can imagine the figure of a tax consultant, a professional in a broad sense, who bases his opinion on maintaining professional ethics, who is trained and never gives up on seeking profits.

The general trend to migrate to the digital age is implicit in all of these proposed changes, which will ultimately allow companies or businesses to have savings or efficiencies converted into greater productivity. This, of course, does not allow entrepreneurs to get rid of accountants. I highly doubt that any of them are willing to spend their time solving all these tax-accounting issues, instead of investing it in operating and running their business. In a government migrating to digital operations, the commitment is twofold, having the responsibility to keep tax issues up to date as well as digital issues, as the two combine to comply with tax formalities.

The transformation to the digital era has become a great opportunity for accounting and tax consultants to break this paradigm and become a more important figure for business administration and management. It is the job of accounting and tax advisors to keep up to date when it comes to tax or accounting reforms. However, it is not enough.

Professional renewal is a modern concept, based on the principle that the knowledge acquired during the professional training stage is immediately surpassed by the progress achieved by the discipline itself; especially when offering deep and iterative changes, as has occurred in recent years since the Tax Reforms that have taken place in various countries. Professional evolution appears as a consequence of social evolution. The evolution of society consists of the following elements: • Population growth • Advances in science and technology • Increase in the size and number of companies • Increase in demands from the government • Evolution of the mentality of society.

Public accountants, although conservative in some aspects, have always made important progress in various fields; which requires constant review of the respective knowledge by training entities and collegiate bodies. The well-known Information and Communication Technologies and Networks have promoted the work of an accountant as an information professional. Which is supported by a special program that allows a more complete and in-depth analysis of financial information that can be accessed from anywhere in the world via the cloud.

Thanks to new technology, today's accountants can generate far more valuable and relevant information for decision making, both through the use and implementation of accounting software, as well as easy access to the Tax Administration Services database to gather and analyze information. Accountants can meet the need for information in real time, enabling immediate decision making. In addition, the existence of the cloud allows data recorded in one location to be used in another location simultaneously. As well as being users of digital tools oriented towards accounting or tax branches, accountants have also promoted themselves as proficient in the creation of accounting systems and the design of software that facilitates this work, due to the demands and needs that have arisen from tax reform. The modality of accounting outsourcing is also emerging, which poses new challenges for professionals.

The accountant must be part of the organizational culture of the company where the services are provided. Their work should not be limited to what is merely declarative or operational, but when handling sensitive information, they must disclose their identity and commitment to it. Some of the benefits of accounting outsourcing are: • Concentration on the activities of the organization itself. • Reduction and simplification of organizational accounting structures, significantly saving on the fixed costs of having an internal accounting department, as well as bonus and holiday payments, among other things. • Effective planning minimizes tax risks and contingencies. • Produce accurate and timely accounting, financial and managerial information.

The work of accounting and tax consultants must never stop being supported by a solid foundation of professional ethics. In its role as a controller, a professional accountant must have moral authority that enables him to produce decisive reports on the institution's financial statements. By expressing himself about the reliability and rationality of information, he fulfills the role of a notary before him. This ethical need

is very urgent in the management of state resources. Universities that train accountants, as we have already mentioned, in addition to all academic and technical tools, must promote training with ethical principles, which encourage socially responsible action. When an accountant performs his duties, beyond adherence to a code of ethics, there must be a genuine dedication to service. The aspiration to fulfill services to the community must be above money and the trust given to them as a professional and as a person must not be broken. It is clear that the adoption of modern practices in the execution of its activities, will bring with it the development of new functions and capabilities, which a potential client may consider as a major differentiator from its competitors. Thus, it can be concluded that the digital era is part of the life and daily functions of an accountant. For this reason, we need to be vigilant, adapt immediately and turn it into something positive. All these waves of change are giving accountants and tax advisors more and more iconic roles, who undoubtedly have a key role to play in becoming more and more important figures for business administration and management.

The development of digital technology leads to increased supervision of taxpayers by the Tax Administration Service, the authority that will conduct face-to-face audits digitally. In the same way, with the help of the use of information technology, when the tax authority sees or detects something amiss, the tax authority will also ask for accounting details digitally. By having everything electronic, information crossing will be automated, as well as reconciliation in the system. In addition, with electronic accounting it will be more difficult to continue with tax avoidance practices as companies will be required to update their accounting, all of their income and expenses will have to be registered, not just in the books, but digitally, and the options for making subsequent adjustments are more limited.

Technological innovations create a new profile for specialists in accounting and tax matters, as they not only stay in tax calculations, but also go a step further as they imply that accountants enter into a new scope of processes to be followed to comply with their clients' tax obligations, i.e. start learning about engineering, technology, information technology and digital innovation. With regard to whether we are ready to implement and study this system and these innovations, we must reiterate that the constant training of public accountants is very important, because it implies knowledge of the technological evolution that is changing the world, taking a big step towards a future that is more complex, but at the same time, one that facilitates the handling of information for consumers.

The public accountant recognized his new role as tax and accounting adviser, and is now committed to his own evolution towards research as an assistant in the application of advanced controls as innovations are created day by day, and most importantly, to be able to support his clients to comply with their tax obligations.

Accountants are very important in the authority-taxpayer relationship. Taxpayers through the Internet portal of the Tax Administration Service can calculate and find out their tax payments. The tool allows declarations to be pre-populated with information about income and expenses generated by taxpayers, offering the option at any time to make corrections or add information that has not been considered. However, a computer tool by itself will not enable an entrepreneur to fulfill the obligations to which he is obligated. You will need the help of a professional to guide you during the administration of your business to analyze which moves are indicated to be made as far as proper compliance with tax obligations. In the case of electronic invoices, since the announcement of their mandatory nature, the confusion has not stopped, from who will authorize digital tax receipts, what requirements will remain mandatory, and a series of changes that have appeared recently, such as the issuance of payment accompaniments, and their cancellation with the prior authorization of the recipient, has consequently brought about the need for companies to have accounting and tax advisers. Accountants were key in this great technological change, perhaps the most important in the history of the fiscal process in the country. Another important point to consider is that the Tax Administration Service speaks the language of accountants and not the language of taxpayers. Therefore, accountants are the natural translators of everything that is requested and ordered by the Tax Administration Service, therefore, for the good of the needs and for the good of the taxpayers, we consider accountants and tax advisers as the protagonists, the main actors, those who are responsible for regular and well-thought-out changes.

The responsibility of accounting and tax advisers is much bigger than it seems and it is worrying that this does not apply to Tax Administration Services. For the good administration of your business, every merchant should know that accounting is essential, not only for complying with the tax regulations that affect the company, but also because it is a great tool for evaluating the success or failure of a business. The problem with many budding entrepreneurs, hoping for success, is that they forget to seek the help of an accountant. An accountant doesn't just handle money and taxes, his role is that of a business adviser, helping determine the finer points to establish before launching a business and, from then on, helping to set the way for an SME to grow.

When starting a new company, accountants advise choosing the business structure that best suits your needs, according to tax advantages, legality and ease of operation. In addition to preparing annual taxes, bank statements, financial reports and accounting books, you will ensure that companies comply with regulations and changing laws. A good accountant will know how to recommend strategies to maximize revenue and business value with plans that reduce taxes legally. Launching an MSME is a lot of work, but a good work plan is not enough, an accountant, as a trusted advisor, will help make the right financial decisions.

The interaction of the accounting profession with other fields such as technological innovation is of the utmost importance to organizations, therefore the accountant's task should be aimed at finding and implementing strategies based on the current professional regulations, in such a way. that it enables joint decision-making with technological and scientific innovation. Accountants have gone from being mere characters in charge of procedures before the Tax Administration Service, to being avid readers of the Statute Book and true accounting and tax advisors or consultants. It's important to take this role as an expert very seriously, with a serious vision for the future. Some already do so, acting as direct management support and working on tax, financial and investment analysis issues, which add value to every business. Undoubtedly, the participation of a public accountant, preferably certified, is essential to assist with business start-up and monitoring, so that entrepreneurs can make informed decisions.

The arrival of the digital era, the concept of tax formality, as well as its impact, took a different turn and scope. Although the Executive's proposal with Tax Reform is to reduce tax informality, as well as simplify compliance with obligations for companies, to the extent that provisions and amendments have been issued, confusion and uncertainty has also increased, this is to properly comply with the Tax Administration Service guidelines. Complying with the taxpayer register does not guarantee that they are adequately complying with the conditions they are required to comply with.

Information technologies mark the most important factor in digital tax reform because they drive the entire environment in which companies operate, as well as tax and accounting advisors, and tax authorities. The digital age was a turning point in terms of taxes, and it will still exist, be improved and exploited. Any changes in accounting and tax guidelines are related to digital processing. Therefore, no company can, in formality, avoid coming under the tutelage and control of the authorities, which can

put any entity at gain or loss depending on its management and care. Given these changes, SMEs find themselves at a disadvantage due to the need to hire specialists in tax matters to advise them in directing their companies, in the same areas. That as a result of fiscal changes, implementation costs are an impossibility for it, which complicates and limits the viability of these companies.

That there are growth and support options for MSMEs, but there is a need for greater outreach, and advisors are ready to provide this information to taxpayers and support them to obtain it. The determining factor is precisely the accounting profession as a tax adviser between MSMEs and authorities in this digital news. Taxpayers acknowledge that it is their accountants or tax advisors who ultimately carry out operations in terms of filing and delivery of accounting and taxes to the authorities, as well as providing support to obtain facilities or resources to improve their services. Accountants and tax advisers are the ones who dominate most of the accounting platforms and programs for the purpose of complying with tax obligations in a timely and correct manner, as authority offices complete taxpayer requests without making a detailed analysis of these particular situations, as their consultants are subject to time and quantity control, but are not specialties when resolving cases.

Tax formality cannot, or achieves it, without the participation of accounting and tax advisors in the change process and the application of adequate controls, and without being part of decisions, even though current authorities do not consider it to be so. The majority of MSMEs do not know or only know part of their tax obligations, as well as the changes that must be implemented in their companies, and the mandatory nature of electronic accounting affects MSMEs in important administrative, operational and accounting areas, which shows that without a doubt, hiring a special adviser and being updated has become an important part for timely and correct compliance with their tax obligations.

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## **Chapter 8. Tax Challenges for MSMEs in the Digital Age**

Micro, Small, and Medium Enterprises (MSMEs) face several tax challenges due to the rapidly evolving business landscape and technological advancements in the digital age. With the rise of e-commerce and online marketplaces, MSMEs can now easily conduct business across borders. However, this can lead to complex tax implications, as different countries may have varying tax laws, regulations, and treaties (Hasbolah, Rosli, Hamzah, Omar, & Bhuiyan, 2021). Determining the tax liabilities in each jurisdiction and complying with international tax reporting requirements can be daunting for MSMEs. Many countries have introduced or are considering implementing digital sales taxes on goods and services provided over the internet. For MSMEs selling their products or services online, keeping track of these taxes and complying with the varying thresholds and regulations can be burdensome and may require specialized software or expertise. In some regions, VAT rules are applied to cross-border digital transactions, and MSMEs may be required to register for VAT in foreign countries if they meet certain thresholds. Managing VAT compliance and understanding the rules of different countries can be a significant challenge for small businesses.

MSMEs that collect and process customer data, especially across borders, must navigate data privacy regulations. Compliance with data protection laws like the EU's General Data Protection Regulation (GDPR) can be complex and require additional resources for smaller businesses. For MSMEs that are part of a multinational group, transfer pricing rules become important. These rules govern the pricing of transactions within group companies, and tax authorities are becoming more stringent in ensuring fair pricing to prevent profit shifting and tax avoidance. Some countries are exploring or have implemented specific digital taxation frameworks to tax tech companies or digital services. MSMEs may inadvertently fall under these frameworks, leading to additional tax liabilities and administrative complexities. As tax regulations become more complex, MSMEs may struggle with adapting to new reporting requirements and may not have the resources to implement automated tax reporting solutions, making compliance more challenging. Many MSMEs do not have dedicated tax departments or the financial resources to hire tax experts. This can result in potential non-compliance issues or missed opportunities for tax optimization.

The digital economy and technology are evolving rapidly, and tax laws and regulations may struggle to keep up. MSMEs may find it challenging to stay informed about the latest changes and adapt their tax strategies accordingly. To address these challenges, MSMEs should consider seeking professional tax advice, investing in tax compliance software and automation tools, and keeping themselves updated with the latest tax developments in the countries where they operate. Additionally, governments and tax authorities may need to work together to create a more streamlined and standardized tax framework that takes into account the unique challenges faced by MSMEs in the digital age.

The application of information and communication technology (ICT) in recent decades has affected all levels of society and, in particular, economic activities. Technology has changed our lives with unprecedented speed and dimensions. The technological revolution has driven disruptive changes in the economy that have led to the emergence of new business models. This change is not peaceful from a fiscal point of view. The concept of the 'digital economy' was coined a priori by Canadian writer D. Tapscott in 1996<sup>1</sup>. However, over the following twenty-three years, this concept has undergone various modulations and/or adaptations. The digital economy consists of digital technology-based markets that facilitate trade in goods and services via e-commerce. The ICT revolution has made technology cheaper and more robust, while standardizing it widely, thereby improving business processes and driving innovation across all sectors of the economy. However, the continuous advances in technology and, therefore, in the Digital Economy, force us to constantly re-examine the term itself and its impact on the tax system.

The Digital Economy is considered a branch of the economy in general, a separable field. However, what was initially seen as other economic sectors, eventually seeped into all economic sectors. In fact, many of the innovations that unfold in the Digital Economy have no legal regulation. Its speed and complexity sometimes cause the legal system to lag behind these advances. At certain times, even after a wise period of time has passed, there are scenarios that still continue without a peaceful legal approach between countries that share the same legal culture. These problems are many and affect various disciplines. The perception of data as intrinsic value, the risks associated with privacy, the erosion of the tax base, the ethical limitations of some activities, etc., are some of the challenges that are currently attracting the most attention. The immense breadth and complexity of these challenges makes it impossible for even a single academic paper to address them with the rigor and depth

they deserve. Therefore, and although many of the issues in this non-exhaustive list are related, this paper refers only to tax disputes. In fact, within the tax discipline, the discussion points generated by the Digital Economy are very diverse, therefore, in containment efforts, this work only addresses the following extremes: erosion of the tax base, effective digital presence in relation to intangible assets.

Since the end of the Cold War, the global community has experienced the longest period of time without war on a global scale. The triumph of capitalism, the establishment of market economies throughout much of the world, and the maturation of the liberal state have resulted in vigorous industrial development. Humanity has made the greatest advances in economic growth and poverty alleviation. In the last forty years, we have abandoned the so-called 'Third Industrial Revolution', to welcome a new stage of change. The changes that have taken place, thanks to digitalization in industry (and the economy in a broad sense), and society in general, have opened the door for a transformation process that has come to be known as the 'Fourth Industrial Revolution'.

Experts have characterized this new stage by the introduction of digitization to all sectors of the economy, without exception. The commercial world has completely changed. This digitalization phenomenon encourages innovation in all activities, reduces the time and cost of the production process and implements new business models. Companies no longer need a physical presence in an area to carry out transactions. Distance is no longer an obstacle to consuming or providing services. In this respect, the agents that have changed the way they operate in markets the most are multinational companies, which are further reducing their physical presence in the markets in which they operate. So much so that the so-called 'techno-optimists' are demanding new ways of measuring productivity and efficiency, different from Gross Domestic Product (GDP), as they are no longer able to measure the effects that come from the Digital Economy. This claim involves establishing new measurement mechanisms that capture increases in well-being, collaborative consumption, or organizational or relational changes. The digital market presents a series of features that are relevant from a tax point of view: a) direct and indirect effects of the network, with consequent growth of utility and added value; b) a common cost structure for all services and goods (very high fixed costs and low or no variable costs); c) complementary; d) increasing the speed of economic activity; e) proliferation of

multilateral business models<sup>8</sup>. This paradigm shift in the economy has yet to reach its peak.

The economy, like our life, will continue to undergo transformations related to technological innovation. The challenges of this continuous evolution are manifold and cannot be understood by a single country, which is why many countries demand a global commitment to respond. As mentioned earlier, in the introduction, the effects of economic digitization impact many facets of the system, which is why the challenges it creates concern important disciplines such as economics, ethics or law. Only in the field of taxation, the challenges are very broad, not only affecting the criteria but also the structure of the taxation itself.

Technology allows circumvention of the conquest or nexus criteria. Or what is the same, present in a country without being taxed because it does not fit the traditional criteria.

Attribution of value to data and its fiscal treatment. Until recently, user data, their preferences, etc. they are not attractive in economic terms to the company. However, this has changed. A clear example of this is the emergence of Fintech companies that intend to offer banking services thanks to the processing of data that has been stored by banks, but has never been utilized. - Classification of revenues derived from new business models. The large number of virtual transactions presents significant complexity, which makes it difficult to qualify for the revenue earned by companies. This situation has led to increased legal uncertainty and tax conflicts in the jurisdictions where they operate.

In fact, we dare say that we are still at the dawn of the digital age. States, whose revenues had dwindled during the years of economic downturn, saw in the new business model another outlet to tax collection. To this, we must add a claim for a greater tax justification. Despite the advances described above, the distribution of wealth has regressed. After years of diffuse concentration of capital, in 1970 this trend experienced a turning point. Thus, these protests have intensified in recent years, as a consequence of the emergence of new ways to avoid taxation.

The emergence of new digital businesses that escape tax jurisdictions and the continued concentration of the world's wealth in the hands of a few has led governments, citizens and experts to demand new tax reforms that ensure tax equity. However, current tax regulations, both national and international, are designed for a century in which technology has not yet reached this level of implementation. It was taxation for the analog world. To analyze in depth this and other possible alternatives to deal with the challenges emanating from the maturation of the digital economy.

Global governance has identified the erosion of the tax base as a serious risk to tax revenues, fiscal sovereignty and tax equity. The primitive international tax law architecture has been replaced by new business practices and aggressive tax planning tools. Although slightly harmonized, tax laws continue to emerge primarily from the United States.

The nations continued to maintain a tight grip on their taxation powers, refusing to surrender even a shred of their authority. Little progress in this area is reflected in the making, over the last century, of numerous bilateral agreements to avoid double taxation. The 'BEPS project' mentioned above is a strategy proposed by the OECD and the G-20 to deal with the challenges posed by BEPS (Base Erosion and Profit Shifting), namely the erosion of the tax base and transfer of profits, as a consequence of legal loopholes and fiscal engineering instruments. These practices, very common among multinational corporations (MNEs), involve the “writing off” of benefits from a tax perspective or transferring them to jurisdictions with little or no taxation (commonly known as tax havens). However, many of the practices employed by these companies are not illegal.

The establishment of national tax jurisdictions and the design of international taxation sometimes lead to the emergence of legal loopholes and even double non-tax situations. As such, many tax planning practices are completely legal, taking advantage of loopholes in outdated systems. As a result, as a result of national jurisdictions' fear of lower collection as a consequence of the new business model, they agreed, years ago, to form a study and research group that would identify steps to be taken to address those fears. The OECD and G-20 mandates for BEPS experts include finding a new tax formula that will reduce the erosion of the tax base and adapting the new business formula to the traditional principles of international tax regulations. In short, we are talking about the sufficiency of legal reality with material reality. Or what is the same, to ensure the effective functioning of corporate tax, because if this issue is not addressed, it will contribute to undermining the basic principles of the tax system and competition in the market.

Treaties or agreements to avoid double taxation include a set of techniques or criteria that determine the strength of taxation. However, due to the digitalization of the economy, some of these criteria have become ineffective. As a general rule, these factors are based on the reason of residency, nationality or tax filing where wealth is generated to resolve tax disputes or double taxation.

The criterion to tax profits at source, together with the concept of 'permanent establishment', are the criteria most affected or violated by the development of the Digital Economy. However, all of the above turned out to not be a problem regarding the digital economy itself; rather the problem is compounded by the emergence of these new models of economic activity. The erosion of the tax base and the transfer of

profits that take advantage of gaps in the taxation system are hallmarks of all types of transnational economic activity. Though, all of that is verified more clearly with the tech company's tax planning strategy.

In fact, this is the premise from which the OECD begins its work. The practices carried out by companies include reducing taxes on sources, treaty shopping, transfer pricing, reducing parent company taxes (through exemptions or withholding), canceling or destroying state taxes in power. As a result, the State has claimed and proposed reforms that allow for the restoration of tax rights at source and residence. To do this, and in line with what many experts have pointed out, progress is needed on international tax transparency standards, as well as coordinated work between most jurisdictions. As a consequence of this tax practice, it can be seen that there has been a discrepancy between what has so far been considered the tandem 'economic benefits tax base'. The Digital Economy has encouraged the transfer of profits, thus enabling the State to be unable to tax profits where economic activity actually takes place.

Each country has the right to tax its domestically produced income, a right routinely exercised through a source-based income tax, which is confirmed in the League of Nations' original income tax model.

Source country claims to tax income generated within their borders is analogous to a country's long recognized claim to sovereignty over the natural resources within its borders. The notion that the source country has a fair claim on the income generated within its borders is also based on the view that foreigners, whose activities reach a minimum threshold, should contribute to the costs of the services provided by the host government, including, for example, the cost of roads and other infrastructure, police and fire protection, law enforcement systems, education, and the like.

The services a country provides can contribute substantially to the ability of residents and foreigners to earn an income there. Burdening those revenues is one way for the source country to be compensated for its spending on the services it provides. This approximation, although brief, is essential for understanding the issues discussed below.

The Digital Economy is not a pioneer in the erosion and transfer of benefits, instead it has become a trigger for anxiety among state treasuries in many countries and not only in developed countries, but also in developing countries. The current tax system limits, in general terms, the tax authorities of a country where its borders end, while the Digital Economy crosses them without even knowing it.

Currently, international trade has recorded a magnitude that was never imagined before. In 2018, the world value of services provided was 5,800,000 million dollars and trade in merchandise was 19,480,000 million dollars. Also surprising are the

successive transformations that trade has undergone, in terms of how it works. Finally, the application of technological progress to organizational forms and the development of economic activity. In this sense, it should be noted that information and communication technology influences one of the basic principles of multinational corporations, the centralization of the value creation process. Therefore, the maturation of the Digital Economy causes the main functions of economic activity to be carried out outside the jurisdiction where transactions are actually carried out. The concept of 'Permanent Establishment' is a cornerstone of the distribution system of international tax authorities. Through it, the State has decided on the right to tax business income earned by non-residents in the country of origin.

The abuse, promoted by the digital business model, has led to the artificial fragmentation of economic activity, thereby avoiding the necessary presence of a permanent establishment in the source country in an era when foreign taxpayers can derive considerable benefits through transactions with customers located in other countries. Host countries, may wonder whether current rules allow a fair distribution of tax power over corporate profits, especially when profits made through such transactions are not taxed in any country.

The risk of loss of collection capacity by the source country is latent and the adverse effects associated with the lack of adequacy of the tax system are palpable in society. The Digital Economy has encouraged activities carried out in a jurisdiction, either because they are preparatory or additional activities, or because the functions performed are minimal.

The feature of provisions no longer refers to a physical place, but pertains to the regularity of economic activity since. Alternatively, the progressive economic dematerialization of generalized Internet use imposes, not so much taking into account physical presence, but looking at the adoption rates of companies operating in states other than the country of residence.

The Digital Economy manages to conquer, in a fair and effective manner, all wealth-generating activities, regardless of how they develop economic activity. The factors that determine this presence can be summarized in three: the use of various digital elements, the relationship with users, and the volume of revenue.

Significant digital presence is closely related to the presence of dematerialization activity, which forms the basis for determining whether or not there is a significant digital presence and, by extension, permanent digital establishment. A significant digital presence is “a situation where a large amount of totally dematerialized activity is carried out for a certain period of time in a territory other than the region of origin, so that we can de facto assume that the activity actively intervenes in the economic life of the countries where value is generated. or the transaction in question was made.

In this case, the defenders have explained the use and application of this new concept, taking into account a set of requirements to define cases where there is a significant digital presence. These include: number of contracts entered into, number of registered users on the website, impact on source Country, website in regional language, source Country provider, use of country's own web domain

The importance of this data or value is a result of the value dynamics of the Digital Economy network effect. So, for example, most web pages require registration before making a purchase so that the number of users registered on their platform can be counted and the company's presence in the country of origin can be calculated. Likewise, web language and domains (.es, .fr, .it or .com, for example) can also serve as an indication of the existence of a company in a country. Source State tax authorities may tax profits earned in their jurisdiction. However, it should be borne in mind that at present the tax archetype on which the CDI is based is the concept of permanent establishment. Therefore, the introduction of a new virtual concept will mean reformulating many of the agreements that, until recently, distributed tax power around the traditional concept. There is general consensus about the positive aspects of digitalization in terms of innovation and productivity. The implementation of ICT means a revolution in the way of developing economic activities in the 21st century.

Highly digital companies sustain their economic activity fundamentally in the intensive use of the intangible, in creating value and in generating revenue. This business model mutation has placed new operational factors under international tax focus among which, the matters discussed in this section are intangible assets and value determination. However, we can define that 'intangible assets' refers to economically valuable, identifiable rights that are non-monetary in nature and do not have a physical appearance.

These goods can be produced, marketed and consumed anywhere in the world without being controlled. His examination posed difficulties when it came to identifying which transactions and which countries had the power to tax them. The technological revolution, as investment in intangible assets has increased, has made it possible to dematerialize most of the basic elements for carrying out economic activities. It is therefore understandable that, rather than an open definition, the OECD is pursuing an informal definition, thus avoiding formalities that could exclude any asset that results from business dynamism.

Consequently, this dematerialization has led to greater mobility in relation to intangibles. Therefore, digital companies usually transfer ownership of intangible assets to subsidiaries or entities of the same business group, causing a separation between business activities and ownership of intangible assets participating in the production or exploitation of economic activities. To address tax conflicts arising from situations like this, stemming from an increase in these types of goods in

business activities, the OECD has established a series of rules regarding this tax treatment. In fact, the aforementioned Guidelines provide a series of guidelines for the attribution of income derived from commercial operations carried out on intangible assets, particularly regarding transfer pricing. For this purpose, the distribution of income generated by intangible assets must be determined among all commercial group entities that have participated in their production and exploitation. In this regard, it is necessary to emphasize the importance of the contribution of each subsidiary or entity to the creation of asset value.

One of the main reasons is none other than the clear centralization of functions that comes from the unique characteristics of the value chain of the Digital Economy business model. This trend is exercised in a comfortable alignment with flights to jurisdictions where the cost of performing the function is lower. Likewise, DI companies tend to locate their collection companies where fees are minimal or almost non-existent. These practices and others promoted by the Digital Economy have a common denominator, obtaining tax advantages by shifting their activities to jurisdictions other than the areas where services are provided or goods are sold.

Data is one of the main challenges of the Digital Economy. Evidence of its importance is the growth it has experienced in the last twenty years. However, the importance of user/consumer data for the Digital Economy is highly controversial. There is no consensus on the effective role of user data in the value creation chain. While user data is undoubtedly essential for any business, the extent of its relevance remains, to this day, one of the stumbling blocks of international taxation. In short, the problem of intangible assets and data exploitation is fundamentally a Permanent Establishment problem.

Should reported revenue from advertising campaigns produced in the US based on profiles and data obtained from Spanish consumers be taxed in Spain? The answer is complicated. Data processing makes it possible to convert its gross value into economic benefits. The monetization process successfully converts that value through specific advertising campaigns, more efficient supply chains, offering better services, etc. This process is called the value creation chain. However, this process of monetization by multinational companies can result in loss of revenue for market jurisdictions or consumer/user circumstances. It is difficult to assess the user's contribution to the value creation process. Given the logic of whether someone outside the company can contribute to the value creation chain (even without being paid for it), it is necessary to determine how significant this "gross" contribution is and how much it depends on subsequent processing and monetization activity.

Globalization affects the sovereignty of States and we accept that, if it means the greater good, progress for Humanity. But tax havens (tax havens or non-cooperative jurisdictions) have also influenced that sovereignty over the decades. Parallel to the

globalization of the economy, a huge tax complex has arisen which the big corporations are constantly trying to overcome and, on the face of it, the State sees their actions as limited, due to globalization and international markets.

The operation and structure of the tax haven has not been changed by digitization. The Digital Economy is an exogenous factor for tax havens. However, the use of information and communication technologies has facilitated globalization and, inherently, the relocation of various production processes to obscure jurisdictions, with very low per unit costs, low taxes, or little cooperation with other tax administrations. In short, we can say that digitization has increased the chances of companies settling in tax havens. The tax architecture used by multinational companies from non-cooperative jurisdictions has not changed. The design was maintained based on two pillars: living quarters and a fountain. The current corporate tax scheme retains the physical presence criterion as the main tax base, which allows companies to place their residences, centers of activity or subsidiaries in tax havens. As such, the practices of multinational companies and platforms tend to be located in states with strong data protection laws, which prevent foreign administrations from controlling user value and revenue.

The concern of countries to stop these practices stems from their perceived significant drain on the public coffers. The OECD, recognizing this serious problem, has devised a tax haven blacklist and, recently, set out in the BEPS Action Plan the aim of eliminating this transfer of benefits, combining several of its actions to do so. As a result of the work of experts, the OECD recently published a proposal aimed at digital companies bearing their tax obligations where their economic activity is significant, based on consumers and the benefits they generate in the region. Faced with the huge risk of relocation that these companies present, thanks to the ease with which they can set up their servers in tax havens, it seems that changing the concept of permanent establishment is the ideal solution. In this sense, the OECD has declared itself, defending in its proposals and in similar guidelines the thesis to redefine the nexus rules and the criteria for the distribution of benefits to be taxed, taking into account user participation, intangible marketing and significant economic presence. Likewise, the proposal to redesign the global formula for the allocation of taxable profits is gaining momentum.

Analysis of the current taxable income distribution system reveals large differences between market jurisdictions and countries where the center of activity or place of residence is “artificially” located. In order to avoid discrepancies between where current profits are attributed and where the factors of production or sale are located, the current source- and residence-based apportionment and allocation formulas have become obsolete – as previously stated. The crisis itself, due to the complexity of its effective implementation as a consequence of the digitization of the economy, has

advocated a new allocation system. Although, not all proposals were fully accepted. The International Monetary Fund (IMF), among others, discarded the “where value is created” thesis as deemed inadequate, preferring instead to introduce a residual benefit reallocation scheme. Despite the differences in criteria, one thing is clear, as long as OECD member countries either as members or as signatories to agreements such as the Inclusive Framework do not adopt a firm and coordinated position, there is very little chance that the challenges exacerbated by the Digital Economy can be tackled effectively.

The Digital Economy has increased the risk of diverting profits to tax havens. However, no specific problems were identified as a consequence of technological advances in this economy. Consequently, the OECD and other international organizations have linked their proposals to combat tax havens with digital tax challenges. The tax structure of developed countries is characterized by having implemented a tax system with a broad scope of collection to provide sufficient financing to guarantee the provision of services. However, social pressure to design the current tax model has increased rapidly around the world. In addition, globalization has increased the level of tax pressure. Society at large demands a change in dealing with the outdated corporate tax regime, which allows for tax evasion and evasion. This struggle to capture or attract Single Market companies has resulted in no tax wins. Thus, there is a dual way of reducing taxable profit, on the one hand, corporate BEPS practices and, on the other hand, state-imposed tax rate reductions. Member States enter the tax competition game when the real winner is the tax haven; against them, they could not compete.

The Digital Economy has brought about a transcendental change in the market organization model. The technological revolution of the last two decades has caused society to reconsider various theses, until recently, static. Tax is one of them. For a long time, the basis of the international taxation system fell on appropriate economic standards. However, during the 21st century years that have passed to the present day, those principles have been affected. The universal validity of international tax rules is questionable. The agreements reached during the 20th century were in crisis. While no institution has a mandate for international tax governance, the OECD has played that role for decades, seeking global consensus on the matter. However, the consensus that until recently existed in the OECD seems to have faded in recent years.

The United States' staunch resistance and the prevailing political relativism in world government is driving urgent measures - such as taxation - not to be implemented. As was intended to be collected in this Master's Thesis, the progress of the new tax regulations has been completed. The resulting debates and conclusions reached regarding the taxation of the Digital Economy are very positive. However, paralysis or a lack of consensus delayed the necessary global regulatory changes. For this reason,

it is not enough just to 'patch up' the existing taxation system, it is necessary to carry out a comprehensive reform. At present, it is not possible to talk about the traditional economy as something completely different from the Digital Economy. Digitalization has penetrated all sectors of the economy; The economy has become a digital economy. In my opinion, understanding this point is critical to quantifying the urgent need to redesign the international tax architecture.

There is general consensus on the problems facing the national treasury with respect to new business models. While shifting profits and eroding the tax base are not new issues, they have been driven in recent years by digitization. Trade has changed. Both the way trade is conducted and the value chain are heavily influenced by the introduction of technology. Even the roles of the recipients themselves (subscribers, users) have changed. Now, participate in production and value creation. Through this approach, it is possible to appreciate the need to reformulate some of the fundamental pillars of the international tax architecture. Despite the weaknesses identified, the proposal is a commendable and risky attempt by the European Commission to determine the contribution of users to the value chain and create links for taxation of digital services. It seems clear that the classic tax design is not an adequate response to the new economic model. All the progress made by the OECD is a starting point for the process of adapting the international tax architecture to new socio-economic realities. From my point of view, this path is not without technical difficulties and complications, through the establishment of multiple guarantees, legal certainty for taxpayers and tax justice for all members of society.



## Chapter 9. Cross Border Transactions

Cross-border digital services will be understood as services provided by providers who are not domiciled in the country via the Internet or other digital platforms, which are consumed on the national territory. For this tax collection, legislators establish two mechanisms: direct collection by digital service providers; or billing by a debit or credit card issuer (Pananond, Gereffi, & Pedersen, 2020).

What gives States the right to tax certain international transactions? Are there any restrictions? These questions have always been discussed and have recently become more important, due to the continuous and exponential increase in cross-border transactions, particularly in the service sector, and the desire of states to unionize to increase their revenues. To increase revenue collection, Brazilian tax authorities are becoming more concerned about business activities and paying more attention to transactions made by Brazilian taxpayers, particularly operations involving large sums of money. . As a result, tax authorities have recently focused more on cross-border transactions in services, with an emphasis on imports of services into the country. Therefore, as a general rule, whenever there is a cross-border service transaction, involving a party importing the service, the authority requires the source to pay, withhold and pay income tax to the overseas remittance, in return for the services rendered. In order to require the withholding and payment of income tax in these cross-border service transactions, the tax authorities have classified this income as “other income” under domestic standards, which stipulates that income comes from the provision of technical services and technical assistance without technology transfer, paid to them. domiciled in countries that have entered into Double Taxation Agreements.

Consumers of digital services and/or intangible goods who are subject to VAT tax, may use as support for their purchases, invoices issued by suppliers or intermediaries domiciled abroad, bank account statements from cards used for services or intangible goods, or equivalent documents that you receive, in English or Spanish, which appear to transmit, separately, the amount of the transaction made and the tax on it.

The resolution regarding the collection and perception of VAT on cross-border digital services seeks to establish in detail the guidelines that must be followed and the formal and material obligations that must be complied with by providers of this type of service, as well as issuers of debit or debit cards, credit to those determined by the Value Added Tax Law as the person responsible for collecting this tax. This resolution sets specific dates for applying VAT on cross-border digital services, which are set following the OECD recommendations to address the taxation challenges of the digital economy.

Cross-border VAT refers to the rules of Value Added Tax (VAT) that apply in international trade. VAT is a tax on the consumption of goods and services, which at the international billing level must be applied according to special rules. It's easier not to confuse cross-border VAT with intra-community VAT. Even though it is a type of cross-border VAT, the rules that apply are not exactly the same as those that apply to transactions between countries in the world. In order to invoice companies, professionals or individuals from non-EU countries, two basic criteria must be taken into account. When the merchandise sold is a service, the invoice must be without VAT. However, it is possible that the seller will have to pay VAT if the service is used in another country within the European Union. As with the sale of goods, it is possible to deduct VAT from expenses in setting up services. If the service is purchased from a professional or a company located in a country outside the European Union, the buyer must pay VAT to his country as if he had provided the service (in this sense, the chargeback procedure is used). It is easier to wait for international coordination before continuing to unilaterally tax the benefits of the digital economy when there is no physical presence of the provider at the point of consumption. As an example of the service in question, storage of information provided by servers located outside the jurisdiction, platforms managed from abroad, such as social networks, which are used to provide big data services, advertisements or streaming of various content such as movies, videos or music, or search engines and e-commerce platforms.

The service provider does not have a physical presence in the user's jurisdiction, it is unlikely to have the data necessary to accurately determine the taxable profit in the user's head. When dealing with the collection modalities of the services concerned, it is important to note the fact that the same provider lies outside the jurisdiction of the user/consumer, so it is not possible for the latter authority, unilaterally, to determine the actual tax base, or to proceed with direct collection from the provider. Also, for the same reason, lack of physical presence of the provider in the jurisdiction of the user, tax collection is done through collection (consumption tax) and withholding (income tax) at source. Precisely, the above-mentioned income tax collection methods, and their role in economically taxable subjects, will be the source of our analysis which will lead us to conclude the need to avoid unilateral establishment of an income tax regime and await international coordination on the matter.

Collection of Income Tax through Withholding Agent. In this case, the agent who pays for the service, or intervenes in paying it, withholds the tax and pays it to the treasury. In other words, by implementing grossing up, the economically affected subjects are consumers of the service, distorting the spirit of taxation, ie imposing a tax on the expected profits accrued by the same provider.

Elasticity of Demand as a Determinant of Economically Affected Subjects. In what has been described above, we have analyzed the various values that, in theory, service providers would receive if a tax on profits were applied, regardless of whether gross income was applied or not. However, regardless of the nature of the tax, on consumption or profits, and whether gross income is applied or not, the value that providers actually receive will depend on the elasticity of demand for the service in question and the level of competitiveness. between supplier companies. In particular, if we are dealing with a service with demand for normal behavior, the elasticity of demand will tell us by what percentage the quantity demanded decreases in the face of a 1% increase. Now, if the demand does not fall when the price rises, we have demand that is perfectly inelastic. Also, if demand decreases less than price increases, demand is relatively inelastic.

Considering the elasticity of demand, before the imposition of a tax, the supply will transfer the same amount to its customers in the maximum possible amount, to the extent that the elasticity allows it. Therefore, the more inelastic the demand and the less competition the service providers face, the more share of the tax will be borne by local consumers and less by foreign providers.

While econometric studies can be carried out to determine the elasticity of demand for each service, we venture to point out that certain digital platforms and services present a relatively elastic demand due to the oligopolistic nature of the market, so it is expected that a share of the tax burden, perhaps the largest, will fall on local consumers. Examples of these companies could be Google, Facebook or Amazon. In this case, in the case of a value-added tax, the fact that the consumer bears the economic burden of the tax is what legislators seek, but not in the case of a tax that seeks to tax the benefits of the service. giver. From the description above it appears that the intention to impose a tax on profits translates into fact, wholly or partly, a consumption tax. If this existed, we would be confronted with the fact that, from an economic point of view, we have two taxes on consumption.

The search for unilateral solutions to reach the tax base represented by the benefits generated by these services is fully developed, as indicated by the existence of laws or considerations to tax the billing of the service provider in question. In this case, for tax-seeking taxes to fall effectively on them, a multilateral solution is appropriate, such as determining the tax directly on the tax base of companies providing services, and distributing it considering multiple criteria, as proposed in BEPS Action 1 (OECD), which consists of considering, for that purpose, the sales made by the company in each jurisdiction.

Given the importance of digital services, with their growing impact on an increasing number of sectors of the economy, criteria related to the subject of economic influence in the context of the collection of tax on profits through deductions at

source, must be taken into particular consideration when designing the taxable capability of such services. That the establishment of a withholding tax regime that seeks to tax the benefits of cross-border digital transactions, without the presence of a provider in the user's jurisdiction, could actually, from an economic standpoint, result in a consumption tax. If there is already a consumption tax on the services in question, these taxes can actually result in duplication of consumption tax. In order to avoid unwanted economic impacts by lawmakers, coordination of this issue must be awaited at the global level. A multilateral solution to this problem is to define a global tax base, distribute levies according to certain criteria, as stipulated in Action 1 BEPS, and sales amounts by jurisdiction.

The fact that in previous decades the interdependence of the international economy has become more acute, resulting in an increasingly integrated and uniform world of areas such as politics, finance, economics, commerce, culture, among others, cannot be denied. So much so that today it is easy to assert that the reciprocal flows of international trade are the engine of the world economy. Likewise, gigantic advances in information technology, telecommunications and transportation have facilitated the creation of a more connected world. In the previous panorama, this economic interdependence manifests itself in the replication of thousands and thousands of economic and business transactions carried out between persons and legal entities from different countries, continents and latitudes. In this way, it makes sense in practice that this operation results in the simultaneous application of several independent legal systems, not only from a commercial or private law standpoint, but also, of course, from tax law. Although conflicts of commercial rules, which apply to legal transactions carried out by legal subjects residing in different countries, have been resolved under the provisions of Private International Law, especially with the rules of conflict (legal conflicts) and international commercial arbitration, from a tax point of view, because these rules are tax in nature and, in this way, public order rules, cannot be changed and are not available to individuals, the resolution of conflicts of prosecutorial rules at the international level has not been achieved so peacefully or easily.

The above matters are not unimportant because it is precisely the conflict of international tax regulations that has given rise to a phenomenon that has received special attention in the modern world. In particular, international double taxation and the ways in which various tax collections act as enemies of international trade, by creating barriers that impede or limit economic agents from conducting operations abroad or beyond their borders, slowing trade abroad and distorting the allocation of resources in international transactions. However, bilateral or multilateral measures also appear to avoid or reduce the double taxation contained in international instruments. Thus the Agreements to Avoid Double Taxation (CDI) and other

multilateral agreements were born, such as the regulations of the Andean Community, CARICOM or the European Union.

Theoretically, another form of double taxation called economic is distinguished, which occurs when the imposition of the same economic facts, by two or more jurisdictions, with the same taxes and in the same time period, falls on two legally different subjects. For example, in the case of the simultaneous imposition of income tax on the heads of commercial companies and partners. Therefore, it should be remembered that internal tax regulations usually consider commercial companies as income tax payers for purposes of control, cash flow and to avoid tax deferral. So, in this case there will be a first level of taxation, i.e. corporate level, and a second level at the head of the shareholder. As can be seen, in the previous case the income tax is the same, for example, the profits generated by the company, which are taxed on two different subjects, the partner and the company, with the same tax, income tax, and in the same place. taxable period, unless the superimposition is headed by two different taxpayers. To illustrate economic double taxation in the previous case, the following example will be used, where there is a corporation and one partner whose exclusive income is dividends from the corporation.

Despite the fact that this socio-community economic double taxation phenomenon has been mitigated by using an integration system, i.e. not imposing a tax on the profits of the partners' heads which have been taxed at the corporate level, or a credit system, i.e. granting the right to take part of the tax paid by the company as a tax credit, this subject far exceeds the purpose of this text and, therefore, will not be the subject of further analysis. Another classic example of economic double taxation results from cases where the tax authority makes transfer price adjustments by reducing the amount of the deduction for operations with foreign economic partners. In this case, the symmetry between income and expenses will be split to the extent that the amount of income recorded in the country of residence of the party obtaining the income from the intra-group operations will not match the costs recorded by the party being audited by the tax authority, resulting in double taxation of the non-deductible portion, as long as the principle of fairness has been met.

Analysis of the tax credit model cannot be completed without reference to the summary of tax savings. First of all, it should be noted that although tax savings does not correspond to a true mechanism for avoiding double taxation, how it works makes it possible to study in the conceptual part of the tax credit. In addition, the tax-saving model results in concessions granted by developed countries to developing countries, as a tax mechanism to promote economic relations and stimulate trade between them. Thus, tax savings are a hypothetical credit granted by the country of residence against income from foreign sources that is not taxed. For a better understanding of the above, the following cases will be used: In the case considered, an investor from a first world

country invests in a developing country, presenting a typical case of legitimate international double taxation due to place of residence-source conflicts. However, the country of residence provides a tax credit with which the superimposition adjustment is made. Now, let's imagine that a developing country enacts a tax policy to encourage a larger volume of foreign investment. In this way, tax exemption on exempted income is created for foreign investors. In this way, underdeveloped countries see their taxable base eroded by not receiving taxes without this leading to greater investment of tax advantages. Now, if we imagine that in the former case the country of residence provides tax savings, i.e. a hypothetical tax credit in the case where there is no tax at source.

Undoubtedly, the recent and well-known phenomenon of globalization has increased international double taxation worldwide. Thus, various mechanisms, both internal and international, have been implemented to combat this phenomenon. Under this scenario, the figure of the tax credit was born, which seeks to achieve neutrality in the export of capital in order to increase international trade flows, although from a theoretical point of view there are different variants of this method.

Cross-border transactions refer to financial activities that involve the movement of money, goods, or services across international borders. These transactions can occur between individuals, companies, or governments in different countries. Taxes play a crucial role in cross-border transactions, as they can significantly impact the cost and profitability of such transactions. Cross-border transactions can take various forms, including the international sale of goods, provision of services to foreign customers, foreign investments, cross-border mergers and acquisitions, and international money transfers, among others.

One of the main challenges in cross-border transactions is the potential for double taxation. Double taxation occurs when the same income or transaction is subject to taxation in both the source country (where the income is earned) and the destination country (where the income is received). This can lead to a significant tax burden and hinder international trade and investment. To address the issue of double taxation and promote cross-border trade and investment, many countries have entered into bilateral tax treaties. These treaties are agreements between two countries that aim to eliminate or reduce double taxation, provide tax certainty, and establish rules for the exchange of information between tax authorities. In transactions between related parties (e.g., a parent company and its foreign subsidiary), transfer pricing rules come into play. These rules determine the prices at which goods, services, or intangibles are transferred between related entities. Tax authorities closely monitor transfer pricing to ensure that companies do not artificially shift profits to low-tax jurisdictions to reduce their tax liabilities.

Many countries impose withholding taxes on certain types of cross-border payments, such as dividends, interest, royalties, and service fees. These taxes are withheld at the source of payment, and the payer is responsible for withholding and remitting the tax to the tax authorities. For cross-border transactions involving the sale of goods and services, VAT or GST may apply. The tax treatment varies depending on whether the transaction is considered an export (zero-rated or exempt) or an import (subject to VAT/GST at the destination). In the context of cross-border business activities, the concept of a permanent establishment is crucial for determining tax liability. A permanent establishment is a fixed place of business through which a foreign company carries out part or all of its business activities in another country. The presence of a PE may trigger tax obligations in the host country. Navigating the complexities of cross-border taxation requires careful tax planning to optimize tax efficiency while ensuring compliance with relevant tax laws in different jurisdictions. Many multinational corporations seek the advice of tax experts to structure their cross-border transactions in a tax-efficient manner. It's important to note that tax laws and regulations regarding cross-border transactions can be intricate and may vary significantly from one country to another. If you are involved in cross-border transactions, it is advisable to seek professional advice from a tax expert with expertise in international taxation.

## **Chapter 10. Tax Compliance and Automation**

Tax compliance refers to the act of adhering to tax laws and regulations set forth by the government. It involves accurately reporting and filing income, expenses, and other financial information to calculate and pay the appropriate amount of taxes owed. Tax compliance is essential for individuals and businesses to avoid penalties, fines, and legal issues. It ensures that the government receives the necessary revenue to fund public services and infrastructure (Oladele, Aribaba, Ahmodu, Yusuff, & Alade, 2019).

Tax automation, on the other hand, refers to the use of technology and software to streamline and automate various tax-related processes. This technology can assist in preparing tax returns, calculating tax liabilities, managing deductions and credits, and ensuring timely and accurate filing. Automation reduces the chances of human error, leading to more accurate tax calculations and filings. Automation saves time and effort in data entry, validation, and report generation, making the process more efficient. Though tax automation solutions may require an initial investment, they often prove cost-effective in the long run by reducing manual labor and potential errors. Automation helps in meeting tax deadlines promptly, avoiding late filing penalties.

Tax automation systems are designed to stay updated with the latest tax laws and regulations, ensuring compliance with current requirements. These systems often offer robust security measures to protect sensitive financial information. Some tax automation tools provide data analytics capabilities, helping individuals and businesses gain insights into their financials and tax positions. Many tax automation platforms can integrate with existing accounting and financial software, streamlining data flow and reducing duplication. Despite the advantages, tax automation should not be seen as a complete replacement for professional tax advice. Complex financial situations and ever-changing tax laws may require the expertise of tax professionals to ensure optimal tax planning and compliance. It's important to keep in mind that while tax automation can significantly improve efficiency and accuracy, it's essential to review the automated results for any potential errors or discrepancies. Humans should always oversee the process to ensure everything is in order before filing.

Electronic invoices in various parts of the world have become a mandatory requirement for many companies since their implementation in these countries. The Internal Revenue Service established an electronic billing system with the aim of modernizing and streamlining billing processes, promoting efficiency and transparency in commercial transactions. Electronic invoices enable the issuance, receipt, and storage of tax validated electronic receipts, replacing traditional paper documents. This system is based on the use of electronic signatures, which guarantee

the authenticity and integrity of invoices issued. In order to implement electronic billing in Ecuador, companies must obtain authorization from SRI and comply with set technical requirements. These requirements include obtaining digital certificates, use of approved billing software, and adapting internal billing processes. Electronic invoices offer many benefits to both companies and taxpayers, some of the most prominent advantages include reduced costs associated with printing and physical storage of documents, simplified accounting and tax procedures, improved inventory management, and greater security in commercial transactions. Electronic invoicing and tax compliance are two major aspects of the financial administration of any company. Currently, government agencies have implemented electronic invoicing systems to streamline and make the process of controlling and collecting taxes more transparent. In this context, this study focuses on companies in the canton of Guaranda, analyzing the current state of the problem and its impact in 2022. Thus, economic globalization has resulted in the harmonization of world accounting standards to produce financial data whose content is comparable to the performance of economic entities and, at times the same, easy to read.

Taxpayers, for their part, can issue digital tax returns through their own channels or through service providers. With the findings of this tax verification, power has been used to oblige taxpayers, individuals and legal entities, who must contract directly with certified providers. These electronic invoices can be issued in a variety of formats, and as long as the fiscal requirements for their issuance are met, electronic invoicing systems provide greater benefits than traditional paper invoices as they can now be stored digitally.

In recent years, several studies have addressed the issue of electronic invoicing and tax compliance. However, research that specifically focuses on tax automation is still lacking. This gap in the scientific literature limits our understanding of how companies in this region adapt to new regulations and, consequently, the successful implementation of government policies. The concept of simplification in organizational processes that were previously done manually and which represents the constant use of paper and the possibility of error or fraud both externally related to the taxes that organizations are forced to pay to governments and internally as a result of a lack of ethics or process errors on the part of the organization.

The need to address this problem lies in the importance of ensuring adequate tax compliance, which means higher tax revenues and, hence, better State capacity to provide public services and promote economic development. In addition, the adoption of electronic invoicing can result in advantages for companies in terms of greater efficiency, cost reduction and security in their commercial transactions. Despite technological challenges and misperceptions of costs and investments by companies, e-invoicing has a positive impact on the organizational environment. Tax avoidance is

something that often happens and is carried out by organizations from various economic sectors. This happens because of the lack of ethics and morals of the main leaders, entrepreneurs, financiers and professionals of the country, or they are accomplices of fraudulent and corrupt acts, which they can do under the guise of monetary shields, in such a way that they avoid their tax obligations, and avoid complying with the established laws.

The use of this billing method brings several types of benefits, both for tax authorities and taxpayers, because it seeks to increase efficiency in submitting tax returns. Electronic invoices eliminate the need to print paper invoices, which reduces the costs associated with printing, shipping, and physical storage of documents. In addition, administrative costs associated with manually handling invoices and their subsequent filing are reduced. By eliminating manual processes and automating the creation and delivery of invoices, time can be saved compared to traditional invoicing. Additionally, electronic invoicing streamlines document management, facilitating information search and retrieval when needed. Electronic billing minimizes human errors associated with data entry and issuance of invoices. By using a computer system to generate invoices, calculation errors are reduced and the accuracy of accounting records is improved. Electronic invoices in Ecuador are supported by the Internal Revenue Service (SRI) and comply with established tax and legal requirements. This facilitates compliance with tax obligations, avoids possible sanctions and ensures greater transparency in commercial transactions. Electronic billing allows for better control and monitoring of commercial transactions. Detailed sales reports and analysis can be generated, facilitating decision making and financial planning.

Electronic invoices use digital signatures and security certificates to guarantee the authenticity and integrity of invoices. In addition, electronic documents are stored on secure servers, thereby reducing the risk of loss or damage to tax receipts. Electronic invoices simplify administrative and accounting procedures, enabling more agile and efficient business management. The process of issuing, receiving, and reconciling invoices is simplified, which increases productivity and facilitates workflow.

The implementation of electronic invoicing in the canton of Guaranda is an important and relevant issue in the current context. Electronic invoicing refers to the process of issuing and receiving invoices in an electronic format, rather than using a physical paper document. This technology aims to improve administrative efficiency, reduce printing and storage costs, and combat tax evasion. In many countries, the adoption of electronic invoicing has been promoted by government entities to modernize and streamline billing processes, as well as strengthen tax audits and controls. However, it is important to consider the particularities and needs of each region.

It is important to underline that electronic invoicing not only results in reduced material costs, but also streamlines tax procedures, enhances environmental protection and provides greater security. By avoiding manipulation of information and evasion of tax obligations, a more efficient and reliable system is promoted. Efforts need to be made to inform and educate those who still have doubts and lack knowledge about electronic invoicing. By highlighting the benefits, such as reduced costs, agility in procedures and information security, greater acceptance and understanding of the new system can be fostered. In addition, logistical and implementation aspects must be carefully considered to ensure a successful transition to this more efficient and sustainable system.

The adoption of electronic invoicing is a process that must be carefully evaluated, taking into account the available technological infrastructure, required training, costs and benefits, public participation, and adequate implementation plans. This will ensure a successful transition to a more efficient and transparent billing system in the canton. This new system will not only result in a reduction in material costs but also in the time required to carry out the respective tax procedures, increase and implement better environmental care, and become an efficient system with greater and better security, avoiding information manipulation and tax evasion. Electronic invoicing has proven to be a step towards a more secure and reliable system, as it guarantees data integrity and minimizes the risk of manipulation or tax evasion. Using technology and robust security protocols, the authenticity of transactions is ensured and trust is strengthened for both companies and tax authorities. This additional level of security is essential to protect financial information and protect the interests of the parties involved.

Tax compliance is the willingness of taxpayers to comply with tax regulations in a country. In a self-assessment system, the government gives trust to taxpayers to calculate, deposit and report their own tax obligations. Thus, the awareness of taxpayers to fulfill tax obligations in accordance with applicable regulations is the spearhead of the success of the taxation system. Meanwhile, tax automation is the use of information technology in the taxation process. Tax automation can help increase the efficiency and effectiveness of tax collection and minimize human error in tax calculation and reporting. In the current digital era, tax automation is one of the solutions to improve tax compliance. With tax automation, taxpayers can more easily and quickly report their tax obligations. In addition, tax automation can also assist the government in supervising the implementation of tax obligations by taxpayers

The technology used in tax automation includes electronic systems for tax administration such as e-Registration, e-Filing, e-SPT, and e-Billing. In addition, the Directorate General of Taxes also continues to carry out digital transformation to improve service quality and increase the effectiveness of oversight of taxpayer

compliance. One of the updates made is implementing the latest information technology in tax services. In this sophisticated era, the Directorate General of Taxes is trying to create a new tax information technology that is believed to be successful in supporting tax collection to be more effective and efficient. The core tax technology owned by the Directorate General of Taxes is currently considered to be too old with more than 15 years of age. There needs to be a system update because it is no longer compatible with current information technology developments, so it cannot be developed further

## **Chapter 11. Digital Goods and Services Tax**

Digital Goods and Services Tax is a tax system that is applied to digital transactions, especially goods and services buying and selling transactions conducted through digital platforms. This concept emerged due to the rapid development of information technology and the internet, which has changed the way consumers and businesses interact.

The BDP Digital Tax applies to transactions made electronically through digital platforms, such as e-commerce websites, mobile applications or online marketplaces. In some cases, digital platform providers act as tax collectors on behalf of merchants or service providers. This means they are responsible for collecting and submitting the taxes owed to the tax authorities. Some countries or jurisdictions may have certain transaction value limits before Digital goods and services Tax obligations apply. Transactions below these limits may not be subject to this special tax.

Digital platform providers or online merchants who reach the transaction threshold are usually required to register as taxpayers and comply with applicable tax obligations. In some cases, Digital goods and services tax may also apply to consumers who purchase digital products or services from overseas providers. The application of Digital goods and services Tax varies in each country, and the rules and applicable tax rates may also vary. The Digital goods and services tax aims to ensure that digital transactions, which are increasing in value, also contribute to state revenues in the form of taxes. It is important for businesses and individuals involved in digital transactions to understand the tax obligations that apply to their region or country and comply with those rules. If you are involved in digital business, it is advisable to consult with a tax expert or related authorities to obtain accurate and precise information regarding Digital goods and services Tax.

Digital Goods and Services Tax is a tax imposed on the sale of goods and/or services by a Taxable Entrepreneur through electronic media. Digital goods and services tax is imposed on digital transactions carried out by taxable entrepreneurs through electronic media such as applications, websites or other digital platforms. Digital transactions that are subject to digital goods and services tax include sales of goods or services made by taxpayers.

Digital goods and services are products or activities that are delivered or performed electronically, such as e-books, music, videos, games, software, online courses, cloud computing, social media, and e-commerce. These digital products and services have become increasingly popular and profitable in the global market, especially during the COVID-19 pandemic, which accelerated the digital transformation of many businesses and consumers (Bai et al., 2015; Dou & Wu, 2021; Huang et al., 2021).

However, the taxation of digital goods and services poses significant challenges for both tax authorities and taxpayers, as the existing tax rules and systems may not be able to capture the value creation and consumption of these intangible and cross-border transactions.

One of the main challenges of taxing digital goods and services is determining the jurisdiction and the nexus of taxation. Traditionally, tax authorities rely on physical presence or permanent establishment to establish the nexus of taxation, which means that a foreign business must have a fixed place of business or a dependent agent in the source country to be subject to tax there. However, digital businesses can operate and sell their products and services remotely without having any physical presence or permanent establishment in the market country, thus avoiding taxation in that country (Fitriandi, 2020; OECD, 2020; Utomo, 2017). This creates unfair competition for domestic businesses and erodes the tax base of the market country.

Another challenge of taxing digital goods and services is defining and classifying them for tax purposes. Different countries may have different definitions and classifications of digital goods and services, which may lead to double taxation or double non-taxation. For example, some countries may treat e-books as goods subject to value-added tax (VAT) or goods and services tax (GST), while others may treat them as services subject to income tax or withholding tax. Moreover, some digital products and services may have hybrid or mixed characteristics that make them difficult to categorize as either goods or services (Dou et al., 2017; Wijaya & Sabina, 2021; Zulvina, 2017). For instance, software as a service (SaaS) may involve both the provision of software (a good) and the provision of hosting or maintenance (a service).

To address these challenges, many countries have adopted or proposed various measures to tax digital goods and services, such as equalization levy, digital services tax (DST), significant economic presence (SEP), simplified registration scheme, destination-based consumption tax, and multilateral agreement. These measures aim to expand the scope of taxation, allocate taxing rights, prevent tax avoidance, ensure tax compliance, and harmonize tax rules. However, these measures also face some limitations and criticisms, such as complexity, uncertainty, inconsistency, discrimination, retaliation, double taxation, administrative burden, compliance cost, and coordination problem.

Therefore, there is a need for a comprehensive and coherent global solution to tax digital goods and services in a fair and efficient manner. The Organization for Economic Cooperation and Development (OECD) has been leading the efforts to achieve such a solution through its Base Erosion and Profit Shifting (BEPS) project and its Inclusive Framework on BEPS. The OECD has proposed a two-pillar approach to reform the international tax system for the digital economy. The first pillar aims to

reallocate taxing rights among countries based on the concept of nexus and profit allocation that reflects the value creation of digital businesses in the market country (OECD, 2020). The second pillar aims to establish a global minimum tax rate that would prevent profit shifting and tax competition among countries (OECD, 2020).

The OECD's proposal is expected to be finalized by mid-2021 after several rounds of consultation and negotiation among its member countries and other stakeholders. However, reaching a consensus on such a complex and controversial issue may not be easy or feasible in the short term. Therefore, it is likely that different countries will continue to adopt their own unilateral measures to tax digital goods and services until a global solution is agreed upon.

## Chapter 12. Digital Tax Reform

Digital tax reform is an attempt by the government to increase tax revenue from digital transactions. In tax administration, digital transformation will change the fundamentals of the taxpayer compliance process. One of the main goals of the tax authorities is to improve compliance in tax reporting and payment to secure revenues. This tax reform is believed to be very beneficial as an effort to increase tax ratios, avoidance and tax evasion, and encourage taxpayer compliance in the digital economy era.

Digital tax reform was a significant and ongoing topic of discussion among many countries and international organizations. The main concern behind digital tax reform was that traditional tax rules often struggled to keep up with the rapidly evolving digital economy. This allowed some multinational digital companies to exploit loopholes and conduct business in ways that minimized their tax liabilities in certain jurisdictions. The core of the issue was the concept of "tax nexus" or "permanent establishment." Historically, companies were required to have a physical presence, such as offices or factories, in a country to be subject to its tax laws. However, in the digital era, many companies could provide digital services and sell goods without having a physical presence in a country, making it difficult for countries to tax their profits effectively. In response to these challenges, various countries and international organizations proposed and discussed different approaches to digital tax reform.

Several countries considered implementing DST, which is a tax on the revenue or turnover generated by digital companies in their jurisdictions. DST aimed to ensure that digital companies contribute to the tax base in the countries where they operate, even if they lack a physical presence there. Another proposal was to establish a global minimum tax rate to prevent companies from shifting profits to low-tax jurisdictions. This initiative was part of the discussions within the framework of the Organization for Economic Cooperation and Development (OECD) and the G20 countries. Some discussions centered around how to allocate profits more fairly among countries based on factors like user location, digital activities, and other relevant criteria.

The OECD was at the forefront of coordinating international discussions on digital tax reform, aiming to reach a consensus among countries on how to address the challenges posed by the digital economy. It is important to note that the specifics of digital tax reform and its implementation varied from country to country, and progress was ongoing at the time of my last update. For the latest information on digital tax reform, I recommend checking reputable news sources or official statements from tax authorities and international organizations like the OECD.

The Digital Services Tax (DST) is a specific type of tax that some countries have introduced or considered implementing to address the challenges posed by the digital economy. As the digital economy has grown rapidly, traditional tax rules have struggled to keep up with the changing business models of multinational digital companies. DST is one of the measures proposed by certain countries to ensure that digital companies pay their fair share of taxes in the jurisdictions where they operate, even if they lack a physical presence there.

DST is specifically designed to target companies that provide certain digital services and generate significant revenue from users in a country, irrespective of whether they have a physical presence in that country or not. DST typically covers digital services such as online advertising, social media platforms, digital marketplaces, and other digital platforms where users' data is collected and used for revenue generation.

Countries that have implemented DST usually set a revenue threshold to determine which companies are subject to the tax. The threshold ensures that smaller businesses and startups are not unduly burdened by the tax and that it primarily affects larger multinational digital corporations. DST is often applied as a fixed percentage of the company's revenue generated from the covered digital services in the country. The tax rate can vary among different countries that have implemented it. DST is often seen as a complementary measure to existing corporate income tax regimes. It is intended to capture revenue from digital activities that may otherwise be difficult to tax under traditional tax rules due to the lack of physical presence. The implementation of DST has raised some international concerns and disputes, particularly when it comes to the potential for double taxation. Some countries have argued that DST unfairly targets their digital companies, while others see it as a way to ensure that digital giants pay their fair share of taxes. It's important to note that DST has not been universally adopted, and opinions on its effectiveness and implications vary among countries and international organizations. Additionally, as the field of digital taxation is continuously evolving..

The Digital Services Tax (DST) is specifically targeted at digital companies that provide certain digital services and generate significant revenue from users in a particular country. The primary aim of DST is to address the challenges posed by the digital economy, where multinational digital companies often conduct business and generate profits in countries without having a physical presence there. As a result, these companies can sometimes exploit loopholes in traditional tax rules, leading to concerns about their fair contribution to the tax base of the countries where they operate. To address this issue, DST focuses on taxing revenue generated from specific digital services and activities, regardless of whether the digital company has a physical establishment or permanent presence in the country. The tax is designed to capture the economic value created by digital activities and ensure that digital

companies pay their fair share of taxes in the jurisdictions where they operate and derive profits.

DST typically targets revenue generated from specific digital activities, such as online advertising, digital marketplaces, social media platforms, and other digital services that involve the collection and use of user data. Many countries that have implemented DST set revenue thresholds to determine which digital companies are subject to the tax. This threshold is meant to exclude smaller businesses and startups, focusing the tax on larger multinational digital corporations. DST is often structured as a fixed percentage tax on the revenue generated by digital companies from the specified digital services within the country. The tax rate may vary depending on the country's legislation.

DST aims to ensure that multinational digital companies with substantial digital operations in a country are appropriately taxed, even if they do not have a physical presence there. This has led to discussions and negotiations between countries regarding the impact of DST on international taxation and potential issues of double taxation. DST is usually introduced as a complementary measure to the existing corporate income tax regime. It addresses the challenges arising from the digital economy's unique characteristics and is intended to work alongside traditional taxation methods.

The Global Minimum Tax, also known as the Global Minimum Corporate Tax or Global Minimum Effective Tax Rate, is a proposed tax measure aimed at addressing issues related to corporate tax avoidance and profit shifting in the international tax system. The primary goal of a global minimum tax is to establish a floor for corporate tax rates worldwide, ensuring that multinational companies pay a minimum level of tax regardless of where they operate or locate their profits.

The concept of a Global Minimum Tax gained significant attention and momentum in recent years as part of broader efforts to reform the international tax framework. One of the main reasons behind proposing a Global Minimum Tax is to curb tax avoidance strategies employed by multinational companies. Some corporations have used various mechanisms to shift profits to low-tax jurisdictions, effectively reducing their overall tax liabilities. A global minimum tax seeks to create a more level playing field among countries, preventing a race to the bottom in which countries compete by offering lower and lower corporate tax rates to attract businesses. By establishing a minimum tax rate, countries aim to maintain a fair and consistent corporate tax environment.

Governments worldwide rely on corporate tax revenue to fund public services and infrastructure. A global minimum tax aims to ensure that companies contribute a minimum amount of tax revenue to the countries in which they conduct business.

With a global minimum tax in place, companies may have less incentive to shift profits to low-tax jurisdictions and may be more inclined to invest and conduct business in jurisdictions with higher tax rates. Implementing a global minimum tax requires international cooperation and coordination among countries. Discussions and negotiations on this topic have taken place in forums such as the Organization for Economic Cooperation and Development (OECD) and the G20.

Discussions on the Global Minimum Tax were ongoing, and several countries expressed support for the concept. However, specific details on the agreed-upon tax rate and the mechanics of implementation were still under negotiation. The actual implementation of a global minimum tax would require broad consensus among countries and may involve changes to domestic tax laws and international tax treaties.

Given the rapidly changing nature of global tax policy and international agreements, I recommend checking for the latest updates and developments on the topic of Global Minimum Tax from reliable sources or official announcements from tax authorities and international organizations.

Global Minimum Tax is the minimum tax value that must be paid by every domestic multinational company that earns income from abroad. This rule aims to ensure that these companies pay minimum taxes regardless of their headquarters and jurisdictions where they operate. In October 2021, more than 130 countries have agreed to a global agreement on a minimum tax rate of 15% for multinational companies. This agreement aims to ensure that these companies pay fair taxes and reduce the tax race between countries.

Profit reallocation, also known as profit shifting or profit allocation, is a concept in international taxation that aims to ensure a fair distribution of taxable profits among countries in which multinational companies operate. The traditional international tax rules are based on the principle of “arm’s length pricing,” which requires that transactions between related entities within a multinational group be conducted as if they were unrelated parties to prevent any potential tax manipulation. However, multinational companies can sometimes use various strategies to shift profits to low-tax jurisdictions where they have little or no economic activity, resulting in lower overall tax liabilities. Profit reallocation seeks to address this issue by adjusting the allocation of profits based on the economic substance and value creation of the company’s operations in each country.

The practice of profit reallocation gained significant attention in the context of the Base Erosion and Profit Shifting (BEPS) project led by the Organization for Economic Cooperation and Development (OECD). BEPS is a comprehensive plan to address international tax challenges arising from digitalization, globalization, and the mobility of capital. Profit reallocation focuses on identifying where value is created

within a multinational enterprise. This involves analyzing functions performed, risks assumed, and assets used by each entity in the group to determine their contribution to generating profits.

Transfer pricing rules are at the core of profit reallocation efforts. Transfer prices refer to the prices at which related entities within a multinational group transact with each other. Authorities may make transfer pricing adjustments if they believe that the prices used in related-party transactions do not reflect arm's length prices.

Profit reallocation also relates to the concept of permanent establishment (PE). Countries have the right to tax a portion of a company's profits if it has a PE within their jurisdiction. A PE is generally defined as a fixed place of business through which the company carries out its business activities.

Base Erosion and Profit Shifting (BEPS) is a term used to describe tax planning strategies employed by multinational companies to exploit gaps and mismatches in the international tax rules to artificially reduce their tax liabilities. The BEPS project was initiated by the Organization for Economic Cooperation and Development (OECD) in response to growing concerns about aggressive tax planning practices that erode the tax base of countries and shift profits to low-tax or no-tax jurisdictions.

BEPS aims to tackle the strategies used by multinational companies to legally but aggressively minimize their tax payments by shifting profits to jurisdictions with more favorable tax regimes. The project seeks to ensure that companies pay taxes in the countries where they conduct substantial economic activities and generate profits, regardless of whether they have a physical presence there or not.

BEPS aims to establish coordinated and consistent international tax rules to prevent double non-taxation, where income goes untaxed in any jurisdiction, and to avoid situations where the same income is taxed twice in different countries. The project emphasizes improving transparency and information exchange between tax authorities to detect and address aggressive tax planning more effectively.

The BEPS project involves collaboration among OECD member countries and G20 nations, along with the engagement of other non-OECD countries and stakeholders. It resulted in the development of a series of action plans targeting different aspects of international tax rules and practices.

Companies are required to provide detailed information about their global business activities, profits, and taxes paid in each country of operation. To streamline the implementation of the BEPS recommendations, the MLI was developed to modify existing bilateral tax treaties to incorporate BEPS-related measures.

Tax multilateral agreements are international agreements or conventions that involve multiple countries and deal with various issues of cross-border taxation. These agreements aim to foster cooperation and coordination among countries to solve tax-related problems, stop tax evasion and avoidance, and create a more fair and effective international tax system. There are various tax multilateral agreements and initiatives led by organizations such as the OECD, the UN, and the G20. The MLI is a key result of the OECD's BEPS project. It enables countries to change their existing bilateral tax treaties to include BEPS-related measures without having to renegotiate each treaty separately. The MLI seeks to prevent tax treaty abuse and enhance dispute resolution mechanisms. The CRS is an international standard for the automatic exchange of financial account information among tax authorities. It obliges financial institutions to gather and report information about their account holders' financial assets and income to their own tax authorities, who then exchange the information with other participating countries. The Global Forum, set up by the OECD, is a platform for encouraging the implementation of international standards on tax transparency and the exchange of information. It carries out peer reviews to evaluate countries' adherence to these standards. The Inclusive Framework comprises more than 140 countries and jurisdictions that work together on implementing the BEPS project's recommendations. The project aims to address loopholes in international tax rules that allow multinational companies to artificially shift profits to low-tax jurisdictions. The framework tries to ensure that companies pay taxes where they have significant economic activities. These multilateral agreements try to establish harmonized and consistent international tax rules that avoid double non-taxation, where income is not taxed in any jurisdiction, and prevent situations where the same income is taxed twice in different countries. They emphasize improving transparency and information exchange among tax authorities to detect and address aggressive tax planning more effectively.

Activities subject to tax are certain types of transactions, income, or economic activity that are subject to tax in accordance with the tax laws in force in a country or region. Different types of taxes may apply to different taxable activities, depending on the country's tax system and regulations. Wages, salaries, bonuses, commissions and other forms of compensation that individuals derive from their work are often subject to income tax. Profits earned by businesses or companies from their commercial activities are generally subject to corporate income tax.

Capital gains arise when an asset, such as a stock, property, or investment, is sold for a higher price than the cost of buying it originally. These gains are often subject to capital gains tax. Many countries impose taxes on the sale of goods and services. Sales tax is usually applied at the time of sale, whereas VAT is a consumption tax that is imposed at each stage of the supply chain. Income derived from dividends and interest payments on investments and bank accounts may be subject to dividend tax or

interest tax, respectively. Income received from renting out real estate properties is often subject to rental income tax. Self-employed individuals, freelancers and independent contractors may be required to pay income tax on their earnings. Royalty income earned from the use of intellectual property, such as patents, copyrights and trademarks, may be taxable. Some countries impose taxes on inherited assets or gifts received above a certain threshold. Customs duties are taxes imposed on certain goods, such as tobacco, alcohol and certain luxury goods.

Taxes and duties may apply to the import or export of goods between countries. It should be noted that the activities that are taxed and applicable tax rates can vary significantly from country to country. Tax laws and regulations can be complex and subject to frequent changes due to evolving economic and political factors. Therefore, individuals and businesses should seek professional advice and consult local tax authorities to ensure compliance with the tax laws relevant to their respective situation and region. In the context of taxation, an income threshold is a certain level of income or turnover that a business or individual must pass before certain tax obligations or rules apply. Income thresholds are frequently used in various tax laws and regulations to determine the scope of taxation for businesses, eligibility for certain tax benefits or exemptions, and compliance requirements. Income thresholds have important implications for economic growth, social welfare, and fiscal equity.

One example of the use of income thresholds is in the Value Added Tax (VAT) system. Many countries require businesses to register for VAT if their annual income exceeds a certain threshold. Below this threshold, businesses may not be required to charge VAT on their goods or services, but once they cross the threshold, they become VAT registered and must collect and remit the VAT to the tax authorities. VAT thresholds vary from country to country, depending on applicable VAT rates, economic structure and policy objectives. For example, the VAT threshold in the European Union ranges from 10,000 euros to 100,000 euros, while in Indonesia the VAT threshold is 4.8 billion rupiah.

VAT thresholds can influence business behavior and consumer choices. From a business standpoint, the VAT threshold can provide incentives for small businesses to stay below the threshold so as not to be burdened with VAT-related administration and compliance costs. This can hinder business growth and reduce the efficiency of resource allocation. From the consumer side, the VAT threshold can create price distortions between goods and services that are subject to VAT and those that are not. This can affect consumer preferences and their well-being. In addition to VAT, income thresholds are also used in many other types of taxes, such as income tax, corporate tax, property tax, environmental tax, and others. Income thresholds can serve as a tool to provide tax breaks or incentives for businesses or individuals who fall below certain thresholds. These tax benefits or incentives could include lower tax

rates, simplified reporting requirements, or exemptions from certain taxes. The purpose of these tax benefits or incentives can vary, such as to encourage economic growth, support certain sectors, protect vulnerable groups, or enhance environmental goals. However, the income threshold also has some challenges and risks. One of them is to determine the optimal value of the income threshold according to the conditions and objectives of a particular country. The optimal value of the income threshold can be influenced by various factors, such as per capita income level, sectoral structure, income distribution, demand and supply elasticity, jumping effect, avoidance effect, evasion effect, and others. According to an empirical study by Menescal and Alves (2022), the optimal value of the total tax burden was around 23.5% of Gross Domestic Product (GDP) for 43 developing countries between 1990 and 2019. However, this value may differ between countries with different income levels, as well as between different types of taxes.

Another challenge of the income threshold is overcoming the problem of fiscal injustice and unfair competition. Income thresholds can create unequal treatment between businesses or individuals who fall above and below the threshold. This can lead to dissatisfaction and disobedience on the part of those who feel aggrieved. Income thresholds can also be used by businesses or individuals who wish to reduce their tax liability by means of income manipulation, for example by breaking the business into smaller units, delaying or advancing transactions, or shifting income to other entities. This can reduce tax revenues and damage the integrity of the tax system. Therefore, income thresholds must be set and applied with care and discretion, taking into account various economic, social and political aspects. Income thresholds should be adapted to specific country conditions and goals, and evaluated periodically to ensure their relevance and effectiveness. The income threshold must also be supported by an efficient and effective tax administration and compliance system, as well as coordination and cooperation mechanisms between tax authorities, both at the national and international levels.

The income threshold is the minimum income that an individual or business must have in order to be taxable. Income thresholds can affect a person's or business's tax liability in a number of ways. This article will explain some of these influences and provide examples of various tax systems in the world (Aydin & Esen, 2019).

One effect of income thresholds is determining who must file income tax returns. For example, taxpayers whose income is below a certain threshold may not need to file an income tax return. This aims to reduce administrative burdens and costs for taxpayers with low income. Non-profit organizations or charities may also be exempt from certain taxes, such as income tax or property taxes, as long as their income remains below a certain threshold. This aims to support social and humanitarian activities carried out by the organization or institution.

Another effect of income thresholds is determining the frequency and manner of tax reporting. In some tax systems, businesses with income above a certain threshold may have to file tax returns quarterly rather than annually. This aims to improve efficiency and accuracy in tax collection and monitoring. Additionally, businesses with revenue above a certain threshold may also have to use electronic payment methods instead of cash or check. This aims to prevent tax evasion and evasion.

Please note that income thresholds can vary significantly depending on the laws and tax regulations in each country. The income threshold can be determined based on various factors such as the type of business, the nature of the income, the economic sector and the type of tax considered. In addition, the income threshold can also change over time as the government adjusts tax policies to achieve economic and fiscal goals. Therefore, businesses and individuals should stay up to date with the latest tax law developments and consult a tax professional to understand how the income threshold may affect their tax liability

Fixed percentage tax is a tax system that applies the same tax rate to all levels of income. In other words, there is no difference between the tax rates paid by people with low, middle, or high incomes. This system differs from a progressive tax system, which applies a higher tax rate to higher income, or a regressive tax system, which applies a lower tax rate to higher income.

One of the reasons often cited in favor of the fixed percentage tax is that it is simpler, fairer, and more efficient than other tax systems. Proponents of the fixed percentage tax argue that this system can reduce administrative costs, remove incentives to avoid or evade taxes, and stimulate economic growth by increasing investment and consumption. In addition, proponents of the fixed percentage tax also claim that this system can increase horizontal equity, that is, equal treatment of people with equal ability to pay.

However, the fixed percentage tax also has some drawbacks and challenges. One of the main drawbacks of this system is that it can reduce vertical equity, i.e. differential treatment of people with different abilities to pay. With a fixed percentage tax, people with low incomes will pay a larger proportion of their income in taxes than people with high incomes. This can increase the tax burden on the poor and reduce social welfare. In addition, a fixed percentage tax can also reduce state revenues from certain sectors, such as the corporate sector, which are usually subject to higher tax rates than other sectors.

One example of a country that applies a fixed percentage tax is the United States (US), which adopted the Tax Cuts and Jobs Act of 2017 (TCJA). The TCJA is the largest tax reform in the US since 1986, which lowered the corporate tax rate from 35% to 21%, and lowered individual tax rates across several income groups.

According to the International Monetary Fund (IMF), TCJA had a positive impact on investment in the US in 2018, but this impact is expected to decrease in the following years. The IMF also stated that TCJA could increase income inequality and public debt in the US (Kopp et al., 2019).

Complementary Measure is a concept that describes the degree to which renewable energy sources (RET) can support each other and reduce the variability of their energy output. This concept is important for increasing the reliability and availability of RET in a sustainable and low-carbon energy system. However, there is no clear definition and consensus on what is meant by a complementary measure and how to measure it. Therefore, the aim of this article is to review the existing literature on complementary measures from various perspectives, including concepts, metrics, applications and future research directions (Jurasz, Canales, Kies, Guezgouz, & Beluco, 2020).

Renewable energy sources (RET) have great potential to reduce greenhouse gas emissions and improve energy security. However, one of the main challenges of integrating RETs into energy systems is the variability of their energy output, which can lead to a mismatch between energy supply and demand, as well as create energy system reliability and availability problems. Therefore, strategies are needed to address the variability of energy output from RETs and enhance their integration in sustainable and low-carbon energy systems.

One strategy that has received considerable attention in the literature is the complementary measure between RET. Complementary measure is a concept that describes the extent to which two or more RETs can support each other and reduce the variability of their energy output within a certain time scale, resulting in a smoother and more stable energy output profile (Jurasz et al., 2020). This concept is important for increasing the reliability and availability of RET in energy systems, as well as reducing energy system costs and increasing the economic value of RET.

However, although complementary measures between RETs have become a topic of interest to researchers and practitioners, there are still some gaps and challenges that need to be addressed. First, there is no clear definition and consensus on what is meant by a complementary measure between RET and how to measure it. Second, there is no standard and uniform method for measuring complementary measures between RETs, making it difficult to compare the results of different studies. Third, there is no comprehensive and systematic study on the application of complementary measures between RETs in the context of different energy systems, such as electricity systems, heat or cooling systems, transportation or mobility systems and multi-energy systems. Fourth, there are no studies exploring the potential for a complementary measure between RET in a sustainable and low-carbon energy transition scenario.

The implementation of the Digital Services Tax (PLD) has raised international concerns and disputes. One of the main reasons for this is that PLD primarily targets digital companies, particularly large multinational technology companies, which often have a significant global presence but may not have physical offices in countries where they generate large revenues. Following are some of the main concerns and disputes related to the implementation of PLD:

**Double Taxation:** One of the main concerns raised by countries with digital companies affected by PLD is the potential for double taxation. Double taxation occurs when the same income or profits are taxed by two or more countries. This can happen if digital companies are already subject to corporate income tax in their home country and then face additional PLD in other countries where they operate.

**Impact on Innovation and Investment:** Opponents of PLD argue that it can hinder innovation and investment in the digital economy. They claim that imposing separate taxes on digital services could discourage companies from expanding operations or investing in new technologies and services.

**Unbalanced Burden on Technology Companies:** Some countries and technology companies argue that PLD is disproportionately targeting digital companies, especially those with business models based on data and digital services. They claim that traditional businesses with significant physical operations may not be subject to the same tax rules, creating an unfair playing field.

**Countermeasures and Trade Tensions:** The implementation of PLDs by several countries has raised concerns about potential trade tensions and countermeasures. For example, several countries, notably the United States, have threatened to introduce tariffs or other trade measures in response to PLD, arguing that it unfairly targets American technology firms.

**Compliance Costs and Complexity:** Implementing a PLD can be complex, and can incur additional compliance costs for both digital companies and tax authorities. Different countries may have varying PLD rules, causing administrative challenges for multinational companies.

**Lack of Global Consensus:** While some countries have introduced or considered implementing PLD, others prefer to tackle digital taxation within the framework of a global solution. The lack of a comprehensive global consensus on digital taxation has contributed to disagreements and disputes between countries.

To address these concerns and disputes, there has been ongoing discussion at the international level, especially within the Organization for Economic Cooperation and Development (OECD) and the G20, which aim to find a globally coordinated

approach to digital taxation. The aim is to develop rules that ensure a fair distribution of tax rights and reduce the risk of double taxation or trade tensions.

## Chapter 13. Tax Incentives for Digital Adoption

Information technology and the use of computers can make things more efficient and less expensive. A computer virus that wreaks havoc by crippling telephone exchanges, altering land and air traffic control systems, and even seriously disrupting finances. The pandemic has highlighted the need to create a more equitable and sustainable business environment, given that small businesses are often more difficult to start and thrive in one market. As is well known, one of the key principles underlying recovery is ecological transition, which implies implementing measures that promote a more circular economy that increases economic resilience through the development of innovative business models with digital technologies to increase the efficiency of the use of secondary resources and raw materials. This will be linked to the notion of green innovation (regarded as a 'dual positive externality'), which consists of developing and implementing a business model based on the sustainability of all company activities based on a life cycle analysis and in cooperation with various partners in the value creation chain. Therefore, innovation and technological progress are key to determining medium and long term solutions to economic and environmental challenges. In this sense, subsidies, tax allowances, public assistance in the form of participatory loans or reimbursable advances, among others, are relevant institutions for promoting innovation.

Traditionally, resources were directly dedicated to research and development activities carried out by the public sector especially universities and Public Research Organizations as the State's form of stimulating innovation. The development of innovation and technology through tax regulations encourages other subjects to do so for the possibility of obtaining tax benefits. In this regard, the OECD has indicated, as a tax policy option for post-pandemic recovery<sup>19</sup>, providing preferential tax treatment for technology investments and green investments, which are characterized by their indirect positive effects.

The OECD also highlighted the need to promote investments that strengthen the economy not only to overcome the post-covid 19 health crisis (and subsequent socio-economic crises) but also to emerge stronger from these crises to face possible future crises. As such, tax incentives will not only be used as an instrument to stimulate business investment to mitigate the impact of the pandemic but also to promote certain investments that help increase the resilience of the health system. With respect to the latter, it should be borne in mind that the maturity of so-called green technologies is not always in a sufficiently advanced state to meet environmental challenges, so that it may become the preferred resort. To tax incentives that enable it to ensure optimal development of these technologies. Indeed, the cost of implementing eco-innovation implies a significant initial investment which can hinder

many companies, especially for SMEs due to lower availability of financial resources. Consequently, this work focuses on the design and configuration of tax incentives for technology development that can support technological maturity to meet environmental challenges. Basically, support for R&D contributes to the development of innovative alternatives. Given that the forms of tax incentives may vary and comply with fiscal policy issues in individual countries, where the business setup is largely composed of SMEs, it must be considered (among other variables) the size of the firm when adopting incentives. In addition, regarding the advantages of eco-innovation, its implementation in SMEs is considered to be able to contribute to reducing resource limitations and environmental degradation, increasing social welfare and participation of local communities, creating jobs, and the ability to attract financial resources.

Digital adoption is the process of utilizing digital technology to improve business performance, efficiency and competitiveness. Digital adoption can help businesses face economic and environmental challenges, especially during the Covid-19 pandemic. However, digital adoption also faces various barriers, such as costs, skills, infrastructure and regulations. Therefore, tax incentives are needed that can encourage businesses, especially small and medium enterprises (SMEs), to adopt digital. Tax incentives can take the form of tax deductions, exemptions, or credits on spending related to digital adoption. Tax incentives must also be well designed to be effective, efficient and transparent. This article will discuss the concepts, benefits, and challenges of digital adoption, as well as examples of tax incentives provided in several countries.

Digital adoption is the process of utilizing digital technology to improve business performance, efficiency and competitiveness (OECD, 2019). Digital technology includes a wide variety of tools, platforms, applications and services that are based on the internet, computers or mobile devices. Some examples of digital technology are e-commerce, cloud computing, big data, artificial intelligence (AI), internet of things (IoT), blockchain, and cybersecurity.

Digital adoption can provide various benefits for businesses, such as increasing productivity, innovation, product or service quality, market access, customer involvement, and collaboration with business partners (OECD, 2019). Digital adoption can also help businesses face economic and environmental challenges, especially during the Covid-19 pandemic which limits mobility and social interaction. With digital adoption, businesses can continue to operate online, flexibly and adaptively. However, digital adoption also faces various obstacles, such as high costs to buy or rent digital devices and services; limited skills and knowledge of digital technology; lack of adequate and affordable infrastructure to access the internet; and regulations that do not yet support or even hinder the use of digital technology

(OECD, 2019). These barriers tend to be greater for small and medium enterprises (SMEs) which have more limited resources than large businesses. Therefore, tax incentives are needed that can encourage businesses, especially SMEs, to adopt digital. Tax incentives are policies that provide special treatment to certain taxpayers to achieve certain goals (James & Nobes, 2018). Tax incentives can be in the form of reductions, exemptions, or tax credits for expenses related to digital adoption. Tax incentives can benefit businesses by reducing their tax burden and increasing their cash flow.

Tax incentives for digital adoption can be provided in various forms and mechanisms. Following are some examples of tax incentives provided in several countries:

- In Spain, there are tax incentives for SMEs that carry out eco-innovations. Eco-innovation is innovation that aims to reduce the environmental impact of business activities. This tax incentive is in the form of an 8% deduction from the corporate income tax rate on expenses related to eco-innovation, including spending on the adoption of environmentally friendly digital technologies (Gil García, 2021).
- In Singapore, there are tax incentives for digitalizing businesses. Digitalization is a business transformation process using digital technology. This tax incentive is in the form of a tax credit of 250% on expenses related to digitization, such as the cost of software, hardware and consulting services. This tax credit can be used to reduce corporate income tax up to a maximum of 15% of taxable income (IRAS, 2020).
- In Australia, there are tax incentives for businesses doing research and development (R&D). R&D is an activity that aims to create or improve new or existing products, processes or services. This tax incentive is in the form of a tax credit of 43.5% or 38.5% on R&D-related expenses, depending on the size and income of the business. This tax credit can be used to reduce corporate income tax or returned in cash (ATO, 2020).

Tax incentives for digital adoption not only provide benefits, they also pose challenges. Some of the challenges that need to be faced are:

- High fiscal costs. Tax incentives can reduce state revenue from the business sector and reduce fiscal space to finance other public needs. Therefore, it is necessary to carry out a cost-benefit analysis to assess whether the tax incentive is effective in achieving the desired goals.
- Administrative complexity. Tax incentives can increase the administrative burden for businesses and tax authorities. Businesses must meet certain requirements and procedures to receive tax incentives, such as providing relevant documents and reports. Tax authorities must verify and supervise the provision of tax incentives, including preventing tax abuse and evasion.

- Legal uncertainty. Tax incentives can create legal uncertainty for businesses if the regulations governing them are not clear, consistent or stable. Legal uncertainty can reduce trust and business interest in digital adoption.

To overcome these challenges, the following are some recommendations that can be made:

- Design tax incentives well. Tax incentives must be designed taking into account the objectives, targets, criteria, duration and evaluation of the policy. Tax incentives must also be adjusted to the conditions and needs of businesses in that country.

- Increase transparency and accountability. Tax incentives must be reported openly and regularly by the tax authorities and businesses receiving incentives. The report must include information on the type, amount and impact of the tax incentives provided.

- Coordination and harmonization. Tax incentives should be coordinated with other policies related to digital adoption, such as education, infrastructure, trade and environmental policies. Tax incentives must also be harmonized with applicable international rules to prevent unfair competition or harmful practices between countries.

Digital adoption is the process of utilizing digital technology to improve business performance, efficiency and competitiveness. Digital adoption can provide a variety of benefits to businesses, but it also comes with a number of barriers. Therefore, tax incentives are needed that can encourage businesses, especially SMEs, to do so

Digitalization is the process of using digital technologies and solutions to improve the efficiency, effectiveness, and transparency of various activities and sectors, such as public administration, business, education, health, and social services. Digitalization can bring many benefits to society, such as increasing productivity, competitiveness, innovation, inclusion, and environmental sustainability. However, digitalization also poses some challenges, such as the need for adequate infrastructure, skills, regulation, and governance.

One of the ways to promote and facilitate digitalization is through tax incentives. Tax incentives are measures that reduce the tax burden or provide other advantages to taxpayers who meet certain conditions or perform certain activities. Tax incentives can be used to encourage digital adoption by both public and private actors, such as governments, businesses, and individuals.

According to Seco and Muñoz (2018), tax incentives for digital adoption can be classified into four categories:

**Tax incentives for digital infrastructure:** These are measures that aim to support the development and expansion of the physical and technological infrastructure that enables digitalization, such as broadband networks, data centers, cloud computing services, etc. For example, some countries offer tax exemptions or deductions for investments in digital infrastructure or for the provision of digital services.

**Tax incentives for digital skills:** These are measures that aim to enhance the human capital and capabilities that are necessary for digitalization, such as digital literacy, education, training, certification, etc. For example, some countries offer tax credits or deductions for expenses related to digital education or training or for hiring workers with digital skills.

**Tax incentives for digital innovation:** These are measures that aim to foster the creation and diffusion of new digital products, processes, or business models that generate value and social impact. For example, some countries offer tax exemptions or deductions for research and development (R&D) activities related to digital innovation or for the acquisition or use of digital technologies or solutions.

**Tax incentives for digital inclusion:** These are measures that aim to reduce the digital divide and ensure that all segments of society have access to and benefit from digitalization, especially those who are disadvantaged or marginalized. For example, some countries offer tax exemptions or deductions for donations or contributions to digital inclusion initiatives or for the purchase or use of digital devices or services by low-income groups.

Tax incentives for digital adoption can have positive effects on the economy and society by stimulating demand and supply of digital goods and services, enhancing competitiveness and productivity, fostering innovation and entrepreneurship, improving public service delivery and governance, increasing social welfare and equity, and reducing environmental impact. However, tax incentives also have some drawbacks and risks, such as:

**Fiscal cost:** Tax incentives imply a loss of revenue for the government that could otherwise be used for other public spending or debt reduction. Therefore, tax incentives should be carefully designed and evaluated to ensure that they are efficient and effective in achieving their objectives and that they do not create distortions or inefficiencies in the tax system or the market.

**Compliance and administration:** Tax incentives require clear rules and criteria to determine eligibility and verification of compliance. They also require adequate monitoring and enforcement mechanisms to prevent abuse or fraud. Therefore, tax incentives should be simple and transparent to avoid complexity and uncertainty for taxpayers and tax authorities.

Coordination and cooperation: Tax incentives may have spillover effects on other jurisdictions or sectors that may not share the same goals or interests. They may also create competition or conflicts among different actors or stakeholders. Therefore, tax incentives should be coordinated and harmonized with other policies and regulations at the national and international level to ensure coherence and complementarity. Tax incentives can be a useful tool to promote and facilitate digital adoption by various actors in society. However, they should be carefully designed and implemented to ensure that they are aligned with the overall objectives of digitalization and that they do not create negative consequences for the fiscal system or the economy.

The development of digital technology has had a major impact on the global economy, including in terms of taxation. Multinational corporations (MNEs) can conduct business in different countries without having to have a physical presence there. This poses a challenge to the international taxation system, which is still largely based on the concept of permanent establishment as a condition for imposing a tax on company profits (OECD, 2021a).

One of the practices that is often carried out by MNEs to reduce their tax burden is base erosion and profit shifting (BEPS), namely the transfer of the tax and profit base from countries with high tax rates to countries with low or zero tax rates. According to the OECD (2021b), BEPS practices cause an estimated USD 200 billion in lost global tax revenue each year. This practice also creates injustice and imbalance between source countries and countries where companies are domiciled (residence countries), as well as between MNE and domestic companies. To address tax challenges arising from digitalization of the economy, the OECD/G20 Inclusive Framework on BEPS (Inclusive Framework) proposes a multilateral solution called the Two-Pillar Solution. This solution consists of two pillars, namely Pillar 1 and Pillar 2. Pillar 1 aims to ensure a fairer distribution of profits and tax rights among countries by introducing nexus and a new profit allocation based on the place of consumption of goods or services. Pillar 2 is designed to ensure that MNEs pay a certain minimum tax on their worldwide business operations (OECD, 2021a).

Pillar 1 will apply to the world's largest and most profitable MNEs, namely MNEs with global consolidated revenues of over EUR 20 billion and consolidated profit margins of over 10%. Pillar 1 will allocate a portion of the MNE's residential profits to market countries, i.e. countries where the MNE sells significant goods or services. The amount of residential profit allocated will be determined by a formula that takes into account the market size, sales intensity and profitability of the MNE. Market countries will gain the right to tax these residential profits at their respective national tax rates (OECD, 2021c).

Pillar 2 will apply to MNEs with global consolidated revenue of over EUR 750 million. Pillar 2 will establish a global minimum tax rate of 15% that must be paid by

MNEs in each of its operating entities or jurisdictions. If the entity or jurisdiction pays less tax than that minimum rate, the parent or source country will have the right to add tax on the difference. This would prevent MNEs from shifting their profits to low- or zero-tax jurisdictions (OECD, 2021d).

With the Two-Pillar Solution, all types of economies – whether developing, medium or advanced – will benefit from the additional tax revenue. According to the OECD (2021c), Pillar 1 will allocate tax rights on more than USD 125 billion in profits to market countries annually. Meanwhile, according to the OECD (2021d), Pillar 2 will increase global tax revenues by around USD 150 billion annually. In addition, the Two-Pillar Solution will also reduce incentives to carry out BEPS, increase legal certainty, and end unfair tax competition between countries.

Two-Pillar Solution is an innovative and comprehensive multilateral solution to address tax challenges in the digital era. This solution was agreed upon by 136 countries and jurisdictions that are members of the Inclusive Framework on October 8, 2021. It is planned that this solution will be implemented in 2023 after completing the technical and legal aspects. It is hoped that with this solution, digital taxation will become more fair, efficient and sustainable for all parties.

## Chapter 14. Tax Planning and Advisory Services

Tax is one of the important sources of state revenue to finance various development and public service activities. However, tax is also a burden for taxpayers, both individuals and business entities, who must fulfill their tax obligations in accordance with the applicable regulations. Therefore, tax consultation and planning services are needed to help taxpayers in managing and optimizing their tax affairs.

Tax consultation services are services that provide advice, assistance, and solutions related to tax issues faced by taxpayers. These services can cover various aspects, such as interpretation and application of tax regulations, local and international tax structuring, tax consultation on inbound and outbound investment, review of contracts and other documents from a tax perspective, handling of tax disputes and litigation, as well as tax reporting and compliance (PwC, n.d.).

Tax planning services are services that aim to reduce or minimize the tax burden that must be paid by taxpayers in a legal and efficient way. These services are carried out by utilizing the loopholes that exist in the tax laws or arranging transactions, operations, and business relationships to suit the most beneficial tax scheme. These services also include calculating and providing funds for tax payments to avoid being late or subject to penalties (Accounting Binus University, 2021).

The benefits of tax consultation and planning services are as follows:

- Increasing cost efficiency by saving expenses for paying taxes.
- Avoiding legal or administrative risks due to violations or non-compliance with taxation.
- Maximizing profits or net income by taking into account the tax impact of every business decision.
- Adapting to the changing tax regulations both at the national and international levels.
- Strengthening reputation and image as a responsible and law-abiding taxpayer.

To get quality tax consultation and planning services, taxpayers can choose service providers who have competence, experience, and a wide network in the field of taxation. In addition, taxpayers must also actively communicate and collaborate with service providers to convey relevant information, follow the advice given, and evaluate the results of the services received.

Chen et al. (2021) propose a conceptual framework of tax planning and advisory services that consists of four dimensions: (1) the nature of tax planning and advisory services, (2) the determinants of tax planning and advisory services, (3) the outcomes of tax planning and advisory services, and (4) the moderators of tax planning and advisory services. The framework is illustrated in Figure 1.

The nature of tax planning and advisory services refers to the characteristics and types of tax planning and advisory services that are provided by the service providers to the service recipients. Chen et al. (2021) classify the nature of tax planning and advisory services into two categories: (a) compliance-oriented services and (b) value-added services. Compliance-oriented services are those that focus on fulfilling the statutory obligations of the taxpayers, such as preparing and filing tax returns, calculating tax liabilities, and responding to tax audits. Value-added services are those that go beyond compliance and aim to create value for the taxpayers, such as designing tax strategies, providing tax advice, and implementing tax solutions.

The determinants of tax planning and advisory services refer to the factors that influence the demand for and supply of tax planning and advisory services. Chen et al. (2021) identify four main determinants: (a) taxpayer characteristics, (b) service provider characteristics, (c) institutional environment, and (d) market competition. Taxpayer characteristics include the size, complexity, profitability, risk appetite, ownership structure, industry affiliation, international exposure, social responsibility, and reputation of the taxpayers. Service provider characteristics include the size, reputation, specialization, expertise, quality control, independence, and ethics of the service providers. Institutional environment includes the legal system, tax system, regulatory system, political system, and cultural system that affect the taxation of the taxpayers. Market competition includes the intensity, structure, and dynamics of the market for tax planning and advisory services.

The outcomes of tax planning and advisory services refer to the effects and consequences of tax planning and advisory services on the taxpayers, the service providers, the tax authorities, and the society. Chen et al. (2021) distinguish between two types of outcomes: (a) financial outcomes and (b) non-financial outcomes. Financial outcomes include the changes in tax costs, tax savings, tax risks, tax penalties, tax compliance costs, and tax revenues that result from tax planning and advisory services. Non-financial outcomes include the changes in tax compliance behavior, tax aggressiveness, tax morale, tax fairness, tax transparency, tax reputation, and tax social responsibility that result from tax planning and advisory services.

The moderators of tax planning and advisory services refer to the factors that affect the relationship between the determinants and outcomes of tax planning and advisory

services. Chen et al. (2021) suggest three potential moderators: (a) time horizon, (b) contingency factors, and © interaction effects. Time horizon refers to the temporal dimension of tax planning and advisory services, such as the short-term versus long-term effects, the lagged versus immediate effects, and the dynamic versus static effects. Contingency factors refer to the situational variables that influence the effectiveness and efficiency of tax planning and advisory services, such as the complexity and uncertainty of the tax environment, the availability and reliability of the tax information, and the alignment and coordination of the tax objectives and incentives. Interaction effects refer to the synergistic or antagonistic effects that arise from the combination or interaction of different types of tax planning and advisory services, such as the complementarity or substitutability of compliance-oriented and value-added services, or the consistency or inconsistency of tax planning and tax reporting.

Tax planning and advisory services are activities that aim to minimize the tax burden and maximize the after-tax income of individuals or businesses. Tax planning and advisory services can involve various aspects, such as choosing the appropriate tax structure, applying tax incentives and exemptions, managing tax risks and compliance, and optimizing tax reporting and filing. Tax planning and advisory services can also help individuals or businesses to achieve their financial goals and objectives, such as increasing profitability, enhancing cash flow, reducing costs, and improving competitiveness.

Tax planning and advisory services are important for several reasons. First, tax planning and advisory services can help individuals or businesses to save money and increase their net income by reducing their tax liabilities. This can be done by taking advantage of the existing tax laws and regulations, such as using tax deductions, credits, deferrals, exemptions, and incentives. Tax planning and advisory services can also help individuals or businesses to avoid or minimize tax penalties, interest, and audits by ensuring that they comply with the tax rules and obligations.

Second, tax planning and advisory services can help individuals or businesses to improve their financial performance and position by enhancing their tax efficiency and effectiveness. This can be done by aligning their tax strategies with their business strategies, such as choosing the optimal tax structure, location, and timing for their transactions and operations. Tax planning and advisory services can also help individuals or businesses to optimize their tax reporting and filing by using appropriate accounting methods, standards, and systems.

Third, tax planning and advisory services can help individuals or businesses to create value and gain competitive advantage by leveraging their tax opportunities and benefits. This can be done by identifying and exploiting the potential tax savings and incentives that are available for their specific industries, sectors, markets, or activities.

Tax planning and advisory services can also help individuals or businesses to manage their tax risks and uncertainties by assessing and mitigating the possible tax implications of their decisions and actions.

Corporate governance is the system of rules, practices, and processes that governs how a company is directed and controlled. Corporate governance involves the relationship among the shareholders, board of directors, management, auditors, regulators, and other stakeholders of a company. Corporate governance affects the performance, accountability, transparency, and sustainability of a company.

One of the aspects that corporate governance affects is tax planning. Tax planning is the process of arranging the financial affairs of a company in order to minimize its tax liabilities. Tax planning can have a significant impact on the profitability, cash flow, reputation, and value of a company.

According to Bhagiawan & Mukhlisin (2020), corporate governance has a positive effect on tax planning and firm value. The authors conducted a study on 100 manufacturing companies listed on the Indonesia Stock Exchange from 2014 to 2018. They used four variables to measure corporate governance: board size, board independence, audit committee size, and audit committee independence. They used two variables to measure tax planning: effective tax rate (ETR) and book-tax difference (BTD). They used one variable to measure firm value: Tobin's Q.

The results of the study showed that board size, board independence, audit committee size, and audit committee independence had a negative effect on ETR and a positive effect on BTD. This means that companies with better corporate governance tend to have lower ETRs (i.e., pay less taxes) and higher BTDs (i.e., report more income for accounting purposes than for tax purposes). The results also showed that ETR had a negative effect on Tobin's Q while BTD had a positive effect on Tobin's Q. This means that companies with lower ETRs (i.e., more tax savings) and higher BTDs (i.e., more income recognition) tend to have higher Tobin's Qs (i.e., higher market values).

The authors concluded that corporate governance influences the tax planning behavior of companies in Indonesia. They suggested that companies should improve their corporate governance practices in order to enhance their tax planning activities and increase their firm value.

Tax planning and advisory services are essential for individuals or businesses who want to reduce their tax burden and increase their after-tax income. Tax planning and advisory services can also help individuals or businesses to improve their financial performance and position, create value and gain competitive advantage, and manage their tax risks and uncertainties. Corporate governance is one of the factors that affects the tax planning behavior of companies. Companies with better corporate governance

tend to have more effective and efficient tax planning activities that result in higher firm value.

Tax planning and advisory services are services that help companies and individuals manage their tax obligations effectively and efficiently. This service covers various aspects, such as:

- Develop a tax planning strategy in accordance with business and operational goals
- Identify and utilize available government incentives, credits and grants
- Manage intangible assets, such as intellectual property rights, and evaluate their impact on tax liability
- Align value chains and supply chains with tax regulations applicable in various jurisdictions
- Determine the optimal legal entity structure to reduce tax risks and costs
- Supporting finance and treasury functions in facing tax challenges and opportunities
- Provide legal and technical assistance in terms of controversy, audit, and settlement of tax disputes

Tax planning and advisory services can provide benefits for companies and individuals, including:

- Save on tax costs by minimizing the effective tax burden
- Improve cash flow by optimizing tax returns and reducing prepayments
- Strengthen tax compliance by fulfilling reporting and documentation obligations
- Improve reputation and image by maintaining good relations with tax authorities and other stakeholders
- Support business growth by taking advantage of market and investment opportunities supported by tax incentives
- Reducing risk and uncertainty by anticipating changes in tax regulations and their impact on business operations

Service Provider of Tax Planning and Advisory Services, Some of the leading providers of tax planning and advisory services in the world are:

- EY: EY provides tax planning and advisory services integrated with its global network. EY assists clients in every stage of the tax cycle: planning, accounting, compliance and controversy (EY, 2022).
- Deloitte: Deloitte offers tax planning and advisory services that support business transactions and business strategy. Deloitte serves clients of all sizes, from multinational corporations to family businesses, by developing and implementing practical tax management strategies (Deloitte, 2022).
- KPMG: KPMG provides tax planning and advisory services based on in-depth tax knowledge and extensive industry experience. KPMG helps clients navigate changes in laws and regulations that affect how they manage and report their taxes (KPMG, 2022).

## Chapter 15. Data and Privacy Issues

Big data technology has provided many benefits for various sectors, including health, education, finance, and government. However, the use of big data also poses various challenges and risks related to privacy and personal data protection. Personal data is information that can be used to identify or contact a person, such as name, address, phone number, email, identity number, fingerprint, voice, face, and so on. Personal data is a valuable asset for individuals and organizations, so it needs to be kept confidential and secure.

One aspect that relates to privacy and personal data protection is tax. Tax is the obligation of taxpayers that must be paid to the state as a contribution to development and public welfare. Tax is also an important source of information for the government to regulate and monitor the economic and social activities of citizens. Therefore, tax requires the collection, processing, storage, and disclosure of personal data of taxpayers. However, this process can cause problems related to the rights of taxpayers as owners of personal data. Taxpayers have the right to know how their personal data is used by tax authorities, who can access it, for what purpose, and how to protect and delete it if necessary. Taxpayers also have the right to get legal protection if there is a violation or misuse of their personal data by unauthorized parties.

One of the issues that often arises related to tax, data, and privacy is data breaches and identity theft. Data breaches are events where personal data of taxpayers leaks or is disseminated to unauthorized parties without their knowledge or consent. Identity theft is an event where someone uses personal data of taxpayers to commit illegal or harmful acts or harm them.

Data breaches and identity theft can occur due to various factors, such as cyberattacks, human errors, negligence of security systems, or corruption. An example of a data breach that occurred in the field of tax is the Equifax case in 2017, where personal data of more than 140 million US citizens including social security numbers, dates of birth, addresses, credit card numbers, and other information leaked due to hacker attacks (Ryle et al., 2020). An example of identity theft that occurred in the field of tax is the Veterans Affairs case in 2019, where five people were charged with using personal data of veterans to claim health benefits and pensions illegally (Vigdor, 2019).

Data breaches and identity theft can have negative impacts for taxpayers as well as tax authorities. For taxpayers, some of the negative impacts are:

- Financial losses due to fraud, embezzlement, or tax evasion by unauthorized parties.

- Reputation losses due to misuse of personal data for criminal, political, or social purposes.
- Psychological losses due to stress, trauma, or fear of threats to personal data security.
- Legal losses due to difficulty proving identity, managing documents, or filing lawsuits.

For tax authorities, some of the negative impacts are:

- Revenue losses due to reduction of tax base, tax evasion, or illegitimate tax refunds.
- Credibility losses due to loss of trust and compliance of taxpayers.
- Efficiency losses due to increased costs of administration, investigation, and law enforcement.
- Policy losses due to difficulty in designing and implementing a fair, effective, and transparent tax system.

Another issue that relates to tax, data, and privacy is the use of big data and biometric technology. Big data is a collection of data that is very large, complex, and varied that is generated from various sources and can be analyzed with advanced technology to produce useful information. Biometric technology is a technology that can recognize the physical or behavioral characteristics of a person, such as fingerprints, voice, face, iris, or heartbeat.

The use of big data and biometric technology can provide benefits for the field of tax, such as:

- Improving the accuracy and completeness of taxpayer data by integrating data from various internal and external sources.
- Improving the effectiveness and efficiency of tax administration by automating the process of collecting, processing, storing, and disclosing taxpayer data.
- Improving compliance and obedience of taxpayers by increasing the ability to detect, prevent, and act against violations or misuse of taxes.
- Improving service and facilities for taxpayers by increasing the ease, speed, and convenience in dealing with tax matters.

However, the use of big data and biometric technology also poses challenges and risks for the privacy and protection of personal data of taxpayers. Some of the challenges and risks are:

Reducing control and consent of taxpayers over their personal data by increasing the frequency, volume, and diversity of data collected, processed, stored, and disclosed by tax authorities.

Reducing security and confidentiality of personal data of taxpayers by increasing the potential for access or misuse of data by unauthorized or irresponsible parties.

Reducing quality and accountability of personal data of taxpayers by increasing the possibility of errors, inconsistencies, or incompleteness of data due to imperfect or unstandardized technology.

Reducing rights and legal protection of taxpayers related to their personal data by increasing the complexity and ambiguity of regulations or practices that govern the use of big data and biometric technology.

### **Recommendations for Improving the Protection of Personal Data of Taxpayers**

Based on the issues discussed above, we provide some recommendations to improve the protection of personal data of taxpayers in the era of big data. Some of the recommendations are:

#### **Increasing Awareness and Education**

One important step to improve the protection of personal data of taxpayers is to increase awareness and education about their rights, obligations, and responsibilities related to the use of big data and biometric technology. Taxpayers need to know how their personal data is collected, processed, stored, and disclosed by tax authorities, as well as how to protect and delete it if necessary. Taxpayers also need to know how to report and resolve problems or disputes related to their personal data.

Tax authorities need to conduct socialization and education to taxpayers about the policies and practices that govern the use of big data and biometric technology. Tax authorities also need to provide clear, transparent, and easily accessible information about the purpose, benefits, risks, and protection associated with personal data of taxpayers. Tax authorities also need to provide choices and consent to taxpayers to agree or refuse the use of big data and biometric technology.

#### **Improving Standards and Security Systems**

Another step that needs to be done to improve the protection of personal data of taxpayers is to improve the standards and security systems that can prevent, detect, and handle data breaches and identity theft. Tax authorities need to implement encryption, authentication, authorization, audit, and monitoring technology that can protect personal data of taxpayers from unauthorized or misuse access. Tax authorities

also need to conduct testing, updating, and maintenance regularly on the security system.

Tax authorities also need to develop protocols and procedures that can anticipate and respond to incidents of data breaches or identity theft. Tax authorities need to have a special team that is responsible for managing data security risks. Tax authorities also need to have a reporting and notification mechanism that can inform taxpayers if there is an incident related to their personal data. Tax authorities also need to have a recovery and mitigation plan that can minimize the negative impact of the incident.

### **Improving Cooperation and Coordination**

The next step that can be done to improve the protection of personal data of taxpayers is to improve cooperation and coordination between various parties involved in the use of big data and biometric technology. The parties include tax authorities, technology service providers, law enforcement agencies, consumer protection agencies, human rights institutions, civil society organizations, academics, and media.

Cooperation and coordination between these parties can help to:

- Harmonize perceptions and understanding of issues related to tax, data, and privacy.
- Develop and agree on standards, guidelines, or codes of ethics that govern the use of big data and biometric technology.
- Establish effective and efficient communication and consultation in addressing problems or disputes related to personal data of taxpayers.
- Build trust and partnership that are mutually beneficial in improving the quality of service and tax policy.

The use of big data and biometric technology has brought many benefits for the field of tax. However, the use also poses various challenges and risks related to privacy and personal data protection of taxpayers. Therefore, steps need to be taken to improve the protection of personal data of taxpayers in the era of big data. Some steps that can be done are increasing awareness and education, improving standards and security systems, and improving cooperation and coordination between various parties involved in the use of big data and biometric technology.

## Chapter 16. Permanent Establishment Rules

Permanent establishment (PE) is a concept used in international tax treaties to determine whether a country has the right to tax the profits earned by a foreign company operating in its territory. Generally, PE is defined as a fixed place of business where a foreign company carries out all or part of its business activities. Examples of PE include headquarters, branches, factories, workshops, or mines. However, with the development of information and communication technology, many foreign companies are able to do business in other countries without having to have a fixed place of business there. For example, e-commerce companies that sell goods or services online to customers in other countries, or digital companies that provide platforms, applications, or content via the internet. This poses a challenge for the existing PE rules, because the destination countries cannot tax the profits earned by these foreign companies, even though they benefit economically from their activities. To address this issue, some countries have proposed or implemented new PE rules called digital permanent establishment (DPE). DPE is a concept that expands the definition of PE to include the digital presence of a foreign company in another country, without requiring a physical fixed place of business. Thus, destination countries can tax the profits earned by foreign companies that have DPE in their territory.

One of the criteria used to determine DPE is significant economic presence (SEP). SEP is a measure that describes the level of economic involvement of a foreign company in the destination country, based on factors such as revenue, number of users, or volume of transactions. If a foreign company exceeds a certain threshold of these factors, it is considered to have SEP and DPE in the destination country. However, the concept of DPE and SEP still raises various problems and challenges. First, there is no international agreement on the definition and measurement of DPE and SEP. Each country can have different rules and standards, which can create legal uncertainty and double taxation risk for foreign companies. Second, DPE and SEP rules may conflict with the basic principles of international tax treaties, such as non-discrimination, profit allocation based on function, assets, and risk (FAR), and tax avoidance prevention. Third, DPE and SEP rules may disrupt global trade and investment flows, as well as hamper innovation and economic growth. Therefore, cooperation and coordination between countries are needed to find a fair and effective solution to address the digital tax challenge.

One of the efforts being made is through the Organization for Economic Cooperation and Development (OECD), which has formulated a framework for reforming the international tax system called the Inclusive Framework on Base Erosion and Profit Shifting (BEPS). This framework consists of two main pillars: pillar one that relates to

the allocation of taxing rights over the profits of multinational enterprises (MNEs), including digital MNEs; and pillar two that relates to the introduction of global minimum tax rules to prevent tax avoidance by MNEs.

The OECD framework is expected to provide a comprehensive and consistent solution to address the digital tax challenge, as well as avoid fragmentation and conflict between countries. However, there are still many issues and obstacles that need to be resolved, such as profit allocation determination, minimum tax rate setting, dispute resolution, and rule implementation. Therefore, strong political commitment and consensus from all countries involved are needed to reach an acceptable and sustainable agreement.

### Permanent Establishment Rules: Concept and Problems

Permanent establishment (PE) is a concept used in international tax treaties to determine the right of a country to tax income earned by foreign taxpayers in its territory. In general, PE can be defined as the physical or business presence of a foreign taxpayer in the source country of income. The concept of PE aims to prevent tax evasion and avoid double taxation on cross-border income.

However, the concept of PE also raises various problems, especially in the era of digitalization and globalization today. One of the problems is determining the criteria and limits of PE, both in terms of place, time, function, and substance. Another problem is measuring and allocating income that can be attributed to PE, as well as resolving disputes between the source country and the domicile country of foreign taxpayers.

This article will discuss the concept and problems of PE in more depth, with reference to some references from scientific articles published between 2017 and 2022. This article will also provide some suggestions and recommendations to overcome the problems of PE.

#### **16.1. Concept of Permanent Establishment**

The concept of PE originates from the Model Tax Convention on Income and on Capital prepared by the Organization for Economic Cooperation and Development (OECD). This model convention is a guideline for OECD member and non-member countries to make bilateral tax treaties with other countries. This model convention also contains explanatory comments that provide interpretation and examples of the application of the provisions in the model convention.

According to Article 5 paragraph (1) of the OECD Model Convention 2017, PE is defined as:

A fixed place of business through which the business of an enterprise is wholly or partly carried on.

From this definition, there are three main elements that must be met for a place to be categorized as PE, namely:

- Fixed place of business, which is a place that has a fixed or permanent characteristic in geographical or temporal terms. This place can be an office, factory, warehouse, workshop, shop, or other place used to carry out business activities.
- Business of an enterprise, which is a business activity carried out by a foreign taxpayer in the source country of income. This business activity can be production, trade, service, or other activities that are commercial in nature.
- Wholly or partly carried on, which is a direct or substantial relationship between the place and the business activity. This relationship can be shown by the existence of authority or control over the place by the foreign taxpayer.

In addition to these three main elements, Article 5 of the OECD Model Convention 2017 also provides some exceptions and explanations regarding certain situations that can or cannot be considered as PE. Some examples of exceptions are:

- A place used only for storage, display, or delivery of goods belonging to a foreign taxpayer.
- A place used only for preparatory or auxiliary activities for a foreign taxpayer.
- A place used only for collecting information or research for a foreign taxpayer.

Some examples of explanations are:

- PE can be formed if a foreign taxpayer has an agent who is authorized and usually binds it in contracts in the source country of income, unless the agent acts independently and within the scope of his normal business activities.
- PE is not formed simply because a foreign taxpayer carries out business activities in the source country of income through an intermediary who is not his agent, such as a broker, commissioner, or other trader who acts on his own behalf.
- PE can be formed if a foreign taxpayer carries out business activities in the source country of income through a place owned or controlled by a company affiliated with it, either directly or indirectly.

## **16.2. Problems of Permanent Establishment**

The concept of PE regulated in the OECD Model Convention 2017 has been widely adopted by countries in making bilateral tax treaties with other countries. However, this concept also raises various problems, especially in the era of digitalization and globalization today. Here are some problems that often arise related to PE:

- Determining the criteria and limits of fixed place of business, especially in the context of business activities carried out electronically or online. For example, can servers, websites, or digital platforms be considered as fixed places? Can the presence of customers or users in a country give rise to PE? Is there a minimum or maximum duration to determine permanent presence?
- Determining the criteria and limits of business of an enterprise, especially in the context of hybrid or multifunctional business activities. For example, can business activities carried out through the internet be considered as preparatory or auxiliary activities? Can business activities carried out through digital agents be considered as substantial activities? Are there quantitative or qualitative criteria to determine the relationship between place and business activity?
- Measuring and allocating income that can be attributed to PE, especially in the context of business activities that involve many parties or countries. For example, how to determine transfer prices between PE and parent company or affiliated company? How to divide profits between PE and domicile country of foreign taxpayer? How to avoid double taxation or tax evasion on income derived from PE?
- Resolving disputes between source country and domicile country of foreign taxpayer, especially in the context of interpretation and application of PE provisions in bilateral tax treaties. For example, how to resolve differences of views between tax authorities of source country and domicile country regarding the existence or absence of PE? How to resolve legal conflicts between national and international provisions regarding PE? How to resolve specific cases involving PE?

## **16.3. Suggestions and Recommendations**

To overcome the problems of PE that have been described above, this article provides some suggestions and recommendations as follows:

- Revising or adjusting the definition and provisions of PE in the OECD Model Convention 2017, to suit the development of technology and business today. For example, by adding criteria or explanations regarding PE in the context of digital economy, such as servers, websites, or digital platforms.

- Coordinating and cooperating between countries in making bilateral tax treaties with other countries, to have uniformity and consistency in applying the concept of PE. For example, by adopting international standards agreed upon together, such as the Base Erosion and Profit Shifting (BEPS) Action Plan designed by the OECD and G20.
- Conducting research and evaluation periodically on the impact and effectiveness of the application of the concept of PE, both in terms of legal, economic, and social. For example, by collecting data and information on the number and type of PE, income generated by PE, as well as costs and benefits arising from PE.
- Conducting socialization and education to foreign taxpayers and the general public about rights and obligations related to PE, as well as mechanisms and procedures that apply in case of disputes or problems regarding PE. For example, by providing online guides or assistance, hotline, or free consultation on PE.

Permanent establishment (PE) is a concept used in international tax treaties to determine the right of a country to tax income earned by foreign taxpayers in its territory. This concept aims to prevent tax evasion and avoid double taxation on cross-border income. However, this concept also raises various problems, especially in the era of digitalization and globalization today. These problems include determining the criteria and limits of PE, measuring and allocating income that can be attributed to PE, as well as resolving disputes between source country and domicile country of foreign taxpayers.

## **Chapter 17. Why Do We Need To Pay Taxes**

Taxes are mandatory contributions that must be paid by every citizen to the state without receiving direct benefits. Taxes are a source of state revenue that is used to finance various development and public service activities, such as infrastructure, education, health, defense, and others. Taxes also function as a tool to regulate the economy, reduce social inequality, and protect the environment.

However, not everyone realizes the importance of paying taxes accurately and obediently. Many factors influence tax compliance, such as understanding tax regulations, tax rates, tax sanctions, level of religiosity, knowledge, and social environment (Barus & Wijaya, 2021). In addition, there are also tax avoidance practices carried out by some taxpayers by exploiting legal loopholes or using intermediaries such as offshore companies or tax havens (Zulvina, 2017).

Tax avoidance can harm the state and society because it reduces tax revenue that should be used to meet public needs. In addition, tax avoidance can also cause social injustice because it provides benefits for certain groups of people who do not pay taxes according to their economic ability. Therefore, there is a need for efforts to increase awareness and obligation to pay taxes among the public.

One of the efforts that can be done is by providing education and socialization about the importance of paying taxes for the country and society. Education and socialization can be done through various media, such as schools, campuses, community organizations, mass media, and social media. Education and socialization can provide information about the functions and benefits of taxes, the rights and obligations of taxpayers, the mechanisms and procedures for paying taxes, as well as the positive and negative impacts of paying or not paying taxes. In addition, another effort that can be done is by improving tax services and facilities that are easy and convenient for taxpayers. Tax services and facilities can include an efficient and transparent tax administration system, online applications for filling out and reporting taxes (e-filing), providing incentives or discounts for compliant taxpayers, as well as strict law enforcement for naughty taxpayers.

Thus, paying taxes is a moral and legal obligation that must be fulfilled by every citizen as a form of responsibility and participation in national development. Paying taxes is also a form of social solidarity because it can help alleviate the burden of the less fortunate. Paying taxes is not a burden or sacrifice, but an investment for a better future.

Taxes are one of the important sources of state revenue to finance development and public welfare. However, the development of information and communication technology has brought about major changes in the world of business and economy, including in terms of taxation. The digital era offers new opportunities for business actors to expand their markets, increase efficiency, and innovate. However, the digital era also poses challenges for tax authorities in regulating, supervising, and imposing taxes on business activities carried out through electronic systems.

What is meant by taxes in the digital era? The definition of taxes in the digital era is taxes on companies that utilize internet technology. Starting from digital content providers, social media to transactions of goods/services through electronic systems which are subsequently referred to as e-commerce (OnlinePajak, 2021). Taxes in the digital era do not mean new taxes, but rather existing taxes that are applied to different objects. For example, income tax (PPH) on income earned from business activities through the internet, value added tax (PPN) on delivery of taxable goods or taxable services electronically, or stamp duty on electronic documents.

Why do we need taxes in the digital era? The main reason is to create a level playing field or fair competition for all business actors, both digital and conventional business actors. So far, many digital business actors, especially those from abroad, do not pay taxes in Indonesia even though they have consumers or users in Indonesia. This certainly harms the country and local business actors who have to pay taxes according to the provisions. In addition, taxes in the digital era also aim to secure the potential state revenue from the rapidly growing business sector amid the Covid-19 pandemic. Some business sectors such as telecommunications, digital entertainment, and e-commerce have experienced an increase in revenue due to the increased use of internet by the public (Directorate General of Taxes, 2021).

How to impose taxes in the digital era? One of the biggest challenges in imposing taxes in the digital era is determining the existence or nationality of a company. In the international taxation system, a company must have a permanent establishment (PE) or a permanent business form (BUT) in a country in order to be taxed on its income in that country. However, in the digital era, many companies do not have a PE or BUT physically in a country, but can conduct transactions with consumers or users in that country through the internet. This makes it difficult for tax authorities to determine tax obligations for these companies. To overcome this problem, some countries have implemented special rules to determine PE or BUT based on factors other than physical presence. For example, using criteria such as number of users, number of transactions, amount of data, or amount of content generated in a country. In addition, some countries have also imposed special taxes for certain digital companies that have revenues exceeding certain thresholds in a country. These taxes are usually referred to as digital service tax (DST) or equalization levy.

In Indonesia itself, the government has issued several regulations related to taxes in the digital era, among others:

- Government Regulation Number 46 of 2013 concerning Income Tax on Income from Business Received or Earned by Taxpayers who Have Certain Gross Turnover. This regulation stipulates that taxpayers who have gross turnover not more than IDR 4.8 billion in one tax year can be subject to final PPh of 1% of gross turnover. This regulation applies to taxpayers who sell goods or services through the internet, either through their own website or through a marketplace.

- Minister of Finance Regulation Number 210/PMK.010/2018 concerning Determination of Electronic System Trade Providers who are Obligated to Record Electronic System Trade Transactions and Submit Electronic System Trade Provider Reports. This regulation stipulates that PMSE providers who have transactions with buyers or sellers in Indonesia are obliged to record these transactions and submit reports periodically to the Directorate General of Taxes. The report can be used as a basis for taxation for business actors involved in these transactions.

- Minister of Finance Regulation Number 48/PMK.03/2020 concerning Procedures for Appointment and Obligations of Payment System Service Providers for Deduction, Deposit, and Reporting Value Added Tax and Income Tax in order to Trade Through Electronic Systems. This regulation stipulates that payment system service providers (PJSP) who cooperate with PMSE providers are obliged to deduct, deposit, and report PPN and PPh on transactions made through PMSE. The amount of PPN and PPh deducted is 10% of the transaction value.

- Minister of Finance Regulation Number 86/PMK.03/2020 concerning Procedures for Appointment and Obligations of Foreign Electronic System Trade Providers who Conduct Business Activities in the Field of Digital Economy in Indonesia to Pay, Deposit and Report Value Added Tax on Certain Taxable Goods Sold Through Trade Through Electronic Systems . This regulation stipulates that foreign PMSE providers who conduct business activities in the field of digital economy in Indonesia are obliged to pay, deposit, and report PPN on certain BKP sold through PMSE. Certain BKP are tangible BKP that are shipped from outside the customs area to within the customs area with a customs value not more than IDR 1,500,000 per shipment. The amount of PPN paid is 10% of the customs value.

- Minister of Finance Regulation Number 1/PMK.03/2020 concerning Procedures for Appointment and Obligations of Foreign Electronic System Trade Providers and Traders, Service Providers, and/or Users of Foreign Electronic System Trade Facilities in order to Calculation, Collection, and Deposit and Reporting Income Tax. This regulation stipulates that foreign PMSE providers and traders, service providers, and/or users of foreign PMSE facilities who have a turnover exceeding certain

thresholds in Indonesia are obliged to pay, deposit, and report PPh on their income in Indonesia. The amount of PPh paid is 2% of turnover.

From the above regulations, it can be seen that the Indonesian government has tried to impose taxes in the digital era in various ways, either by using the mechanism of deduction, deposit, and reporting by third parties (PJSP and PMSE providers), or by imposing direct obligations on foreign digital business actors. However, these regulations still have room for improvement and harmonization, both in terms of technical and legal aspects. In addition, these regulations also need to be supported by more intensive international cooperation between tax authorities in Indonesia and tax authorities in other countries, especially in terms of information exchange and dispute resolution.

One of the international cooperation efforts being carried out is through the Base Erosion and Profit Shifting (BEPS) initiative led by the Organization for Economic Cooperation and Development (OECD). This initiative aims to address tax avoidance practices by multinational companies, including digital companies, that exploit legal loopholes and differences in tax systems between countries. In this initiative, there are 15 actions recommended by the OECD to be implemented by member and partner countries. One of the actions that is most relevant to taxes in the digital era is action 1 which discusses the tax challenges of the digital economy.

In action 1, the OECD proposes two main pillars to address the tax challenges of the digital economy, namely:

- Pillar 1: Allocating greater taxing rights to market countries where consumers or users are located, without having to rely on the physical presence of PE or BUT. This is done by revising the rules for allocating profits between countries based on a new nexus concept called significant economic presence (SEP). SEP is determined based on criteria such as number of users, number of transactions, amount of data, or amount of content generated in a country. In addition, pillar 1 also proposes a simple and objective profit allocation formula based on a certain profitability level.
- Pillar 2: Establishing a global minimum tax rate that applies to multinational companies, including digital companies, to prevent profit shifting practices to low or zero tax countries. This is done by giving the right to the source country or the country where the company is domiciled to add taxes on income that is taxed low or not taxed at all in other countries. In addition, pillar 2 also proposes anti-avoidance rules to deny expense deductions or tax cuts on payments that are taxed low or not taxed at all in other countries.

The OECD's proposals are still under discussion and negotiation between more than 130 countries and regions involved in the BEPS initiative. It is hoped that a global

agreement can be reached by mid-2021 and its implementation can begin in 2023. Indonesia itself has expressed its support for the OECD's proposals and committed to follow them if agreed upon globally. In addition to following the BEPS initiative, Indonesia has also conducted bilateral cooperation with several countries in terms of tax information exchange. One form of such cooperation is through Automatic Exchange of Information (AEOI) or automatic information exchange. AEOI is a mechanism for exchanging financial information automatically between tax authorities of participating countries according to standards set by the OECD. The financial information exchanged includes account balances, interest income, dividends, royalties, and capital gains earned by taxpayers in other countries. The purpose of AEOI is to increase transparency and tax compliance, as well as prevent tax evasion through the use of foreign accounts.

Indonesia has participated in AEOI since 2018 and has exchanged information with more than 80 countries and regions. The information obtained from AEOI can be used by the Directorate General of Taxes to identify potential taxpayers, calculate tax obligations, and conduct audits or tax collection. In addition, this information can also be used to encourage taxpayers to voluntarily report and pay taxes through programs such as tax amnesty or tax forgiveness. From the above description, it can be concluded that taxes in the digital era are a phenomenon that cannot be avoided along with the development of information and communication technology. Taxes in the digital era offer opportunities for the country to increase state revenue from a rapidly growing business sector, as well as create fair competition for all business actors. However, taxes in the digital era also pose challenges for tax authorities in regulating, supervising, and imposing taxes on business activities carried out through electronic systems. To overcome these challenges, more intensive international cooperation is needed between countries in terms of information exchange and dispute resolution, as well as harmonization of tax rules that comply with global standards.

## Chapter 18. Benefits of Paying Taxes for MSME Entrepreneurs

Micro, Small and Medium Enterprises Entrepreneurs (MSMEs) have an important role in economic and social development in Indonesia. According to data from the Ministry of Cooperatives and SMEs, the number of MSMEs in Indonesia reached 64.2 million units in 2019, which contributed 60.34% to the Gross Domestic Product (GDP) and 97% to the national workforce. MSMEs also contribute to the achievement of the Sustainable Development Goals (SDGs), particularly in terms of reducing poverty, increasing welfare, encouraging inclusive and sustainable growth, and strengthening innovation and competitiveness (Liu, 2018).

However, MSMEs also face various challenges in developing their business, one of which is the obligation to pay taxes. Many MSME entrepreneurs do not understand the benefits of paying taxes for their businesses, so they tend to avoid or delay these obligations. In fact, paying taxes on time and according to the provisions can provide various benefits for MSME entrepreneurs, both directly and indirectly. Following are some of the benefits of paying taxes for MSME entrepreneurs:

1. Get tax facilities from the government. The government provides various tax facilities for registered and tax-compliant MSMEs, such as reducing the final income tax (PPh) rate from 1% to 0.5%, exemption from import PPh article 22 for MSMEs conducting export activities, as well as tax incentives for MSMEs who has the status of a business entity (Investopedia, 2021). In addition, the government also provides tax concessions for MSMEs affected by the Covid-19 pandemic, such as delaying payment of PPh articles 21 and PPh articles 25/29, as well as exemption from PPh article 4 paragraph (2) on loan interest from banks or other financial institutions (EMSME). .ORG, 2021).

2. Obtaining convenience in managing business licensing. One of the requirements for obtaining business licenses, such as a Trade Business License (SIUP), Company Registration Certificate (TDP), or Industrial Business License (IUI), is to have a Taxpayer Identification Number (NPWP). By having an NPWP and paying taxes regularly, MSME entrepreneurs can speed up their business licensing process and avoid administrative sanctions or fines.

3. Get easier access to financing. Having an NPWP and paying taxes obediently will make it easier for MSME entrepreneurs to get business capital loans. Business capital loans can be submitted through banks or other financial institutions. As a condition for applying for the loan, the first requirement is the possession of a NPWP. By having an NPWP, the loan process can be processed by a bank or other financial institution. The

business capital loan obtained will increase the scale of the business being managed (taxconsultant.id, n.d.).

4. Increase the reputation and credibility of the business. Paying taxes is a form of social responsibility of MSME entrepreneurs to the state and society. By paying taxes correctly and transparently, MSME entrepreneurs can improve their business reputation and credibility in the eyes of customers, business partners, the government, and the wider community. This will have a positive impact on customer trust and loyalty, as well as open up opportunities for wider cooperation with business partners.

From the description above, it can be concluded that paying taxes has many benefits for MSME entrepreneurs, both directly and indirectly. Therefore, MSME entrepreneurs need to realize the importance of paying taxes as one of their obligations and rights as citizens who contribute to nation building. Thus, MSMEs can develop and be competitive in a sustainable manner.

## **Chapter 19. How To Build Regulations That Are Empathetic And Proven To Encourage Tax Revenue In The Informal Sector**

The informal sector, comprising activities that have market value and would add to tax revenue and GDP if they were recorded, is a globally widespread phenomenon. According to the International Labour Organization, about 2 billion workers, or 60 percent of the world's employed population ages 15 and older, spend at least part of their time in the informal sector (Deléchat & Medina, 2020). The size of the informal sector slowly decreases as economies develop, but with wide variations across regions and countries. Today, the informal sector still accounts for about a third of low- and middle-income countries' economic activity—15 percent in advanced economies (Deléchat & Medina, 2020).

The informal sector poses significant challenges for sustainable development, as it is associated with low productivity, poverty, inequality, gender gaps, and weak public finances. Informal firms do not contribute to the tax base and tend to remain small, with limited access to finance. Informal workers are more likely to be poor than workers in the formal sector, both because they lack formal contracts and social protection and because they tend to be less educated. The prevalence of informal work is also linked with high inequality: workers with similar skills tend to earn less in the informal sector than their formal sector peers, and the wage gap between formal and informal workers is higher at lower skill levels. Therefore, designing and implementing effective regulations that can reduce informality and increase tax revenue is a key policy goal for many governments. However, this is not an easy task, as informality covers a wide range of situations within and across countries, and it arises for a number of reasons. On the one hand, individuals and firms may choose to remain outside the formal economy to avoid taxes and social contributions or compliance with standards and licensing requirements. This relates to the common but misconceived view that informality is caused mainly by firms and individuals “cheating” to avoid paying taxes. On the other hand, individuals may rely on informal activities as a safety net: they may lack the education and skills for formal employment or be too poor to access public and financial services (Deléchat & Medina, 2020).

Hence, regulations that aim to reduce informality and increase tax revenue need to be empathetic and tailored to the specific characteristics and constraints of the informal sector. Empathetic regulations are those that acknowledge the heterogeneity of the informal sector and its drivers, and that seek to provide incentives and support for formalization rather than punitive measures or coercion. Empathetic regulations also take into account the potential trade-offs and spillovers between different policy

instruments and objectives, such as growth, equity, fiscal sustainability, and social protection.

One example of an empathetic regulation is the simplified tax regime for microenterprises (RST) in Peru, which was introduced in 2003. The RST is a voluntary scheme that allows eligible firms with annual sales below a certain threshold to pay a fixed monthly amount based on their turnover instead of income tax and value-added tax. The RST also provides access to social security benefits for the owners and workers of these firms. The RST was designed to encourage formalization by reducing the administrative burden and compliance costs of taxation, as well as by providing social benefits that could outweigh the tax payments. A recent study by Alcázar et al. (2019) found that the RST increased formalization by 8 percentage points among eligible firms, without affecting their profitability or productivity.

Another example of an empathetic regulation is the presumptive taxation scheme for small businesses in India, which was introduced in 2016. The scheme allows eligible firms with annual turnover below a certain limit to pay a flat rate of income tax based on their turnover instead of filing detailed tax returns. The scheme also exempts these firms from audit requirements and advance tax payments. The scheme was designed to simplify taxation and reduce compliance costs for small businesses, as well as to widen the tax base by bringing more firms into the formal sector. A recent study by Mukherjee et al. (2021) found that the scheme increased tax compliance by 12 percentage points among eligible firms, without affecting their growth or investment.

These examples illustrate how empathetic regulations can help reduce informality and increase tax revenue by providing incentives and support for formalization rather than punitive measures or coercion. However, these regulations are not sufficient by themselves to address the complex and multifaceted challenges posed by informality. They need to be complemented by other policies that can improve the quality and accessibility of public services, such as education, health care, infrastructure, and social protection; that can enhance the productivity and competitiveness of informal firms through access to finance, technology, innovation, and markets; and that can foster a culture of tax compliance and civic responsibility among citizens and businesses. Only by adopting a comprehensive and holistic approach to informality can governments achieve sustainable development and inclusive growth.

The informal sector is an important part of the economy of many countries, especially in developing countries. The informal sector includes various economic activities that are unregistered, unregulated, or not subject to government regulations. According to the International Labour Organization (ILO), the informal sector accounts for about

50% of the global gross domestic product (GDP) and 70% of employment in developing countries (ILO, 2018).

One of the main challenges faced by governments in managing the informal sector is how to increase tax compliance among small business operators who operate in this sector. Tax compliance is the level of obedience of taxpayers to their tax obligations, such as reporting income, paying taxes, and following administrative procedures. Low tax compliance can reduce state revenue, disrupt fair competition, and undermine the legitimacy of the tax system.

To increase tax compliance in the informal sector, some countries have implemented a presumptive taxation system, which is a system that determines tax liability based on simple and easily observable indicators, such as the area of business premises, number of employees, or type of activity. The presumptive taxation system aims to simplify the taxation process, reduce compliance costs, and provide incentives for small business operators to switch to the formal sector.

However, the presumptive taxation system also has some drawbacks, such as potential distortion of resource allocation, difficulty in setting fair and efficient tax rates, and risk of abuse or tax evasion. Therefore, it is important for governments to build regulations that are empathetic and proven to encourage tax revenue in the informal sector. Here are some steps that can be taken:

- Conduct surveys or research to understand the characteristics, preferences, and constraints faced by small business operators in the informal sector. This can help governments design a presumptive taxation system that suits the field conditions and needs of business operators.
- Involve small business operators in the policy-making and implementation process of the presumptive taxation system. This can increase participation, awareness, and support from business operators for the taxation system. In addition, this can also allow governments to obtain feedback and suggestions to improve the quality and effectiveness of the taxation system.
- Provide facilities or incentives for small business operators who comply with their tax obligations. For example, providing access to formal financial services, social protection, legal assistance, or technical assistance. This can provide additional benefits for business operators to switch to the formal sector and improve their welfare.

- Conduct socialization and education about the importance of paying taxes and its positive impact on national development. This can increase awareness and social responsibility of business operators for their tax obligations. In addition, this can also foster trust and mutual respect between governments and business operators.
- Conduct monitoring and law enforcement fairly and transparently against business operators who do not comply with their tax obligations. This can prevent practices of tax avoidance or evasion, as well as provide proportional and effective sanctions. In addition, this can also increase credibility and accountability of governments in managing the taxation system.

By implementing the steps above, governments can build regulations that are empathetic and proven to encourage tax revenue in the informal sector. This can not only increase sources of state revenue, but also increase social and economic inclusion, as well as strengthen governance and democracy.

### **Increasing Tax Compliance in the Informal Sector**

Tax compliance is one of the important factors that determine the performance of tax revenue in a country. Tax compliance can be defined as the implementation of tax obligations by taxpayers in accordance with the provisions of tax laws and regulations (Fadilah et al., 2021). Tax compliance can be distinguished into formal and informal compliance. Formal compliance is compliance with tax administration procedures, such as registration, submission of notifications, payment, and reporting. Informal compliance is compliance with the substance of tax matters, such as calculating, reporting, and paying taxes correctly (Sofiyana et al., 2013).

One of the challenges in increasing tax compliance is the existence of an informal sector that is not recorded in the tax administration system. The informal sector is an economic sector that is unorganized, unregistered, unregulated, and not subject to formal legal rules (ILO, 2002). The informal sector includes various types of micro, small, and medium enterprises (MSMEs), freelancers, street vendors, and others. According to data from the Central Statistics Agency (BPS), the number of MSMEs in Indonesia in 2020 reached 64.19 million business units, with a contribution to Gross Domestic Product (GDP) of 61.07 percent. However, only about 20 percent of MSMEs are registered as taxpayers (Kompas.com, 2021).

The informal sector has a large potential for tax revenue if it can be taxed effectively. However, there are several factors that make it difficult for the government to expand the tax base in the informal sector, such as:

- Lack of knowledge and awareness of taxation among informal business actors. Many informal business actors do not know their obligations and rights as taxpayers, as well as the benefits and functions of taxes for national development. This causes them to be reluctant or negligent to register as taxpayers, report and pay taxes correctly.
- Low quality and accessibility of tax services for informal business actors. Tax services that are not friendly, easy, fast, and transparent can hinder informal business actors from fulfilling their tax obligations. In addition, tax services that are not evenly distributed throughout Indonesia can also make it difficult for informal business actors who are in remote or inaccessible areas.
- The practice of tax planning and tax avoidance among informal business actors. Tax planning is a financial planning activity carried out by taxpayers to minimize tax liabilities in a lawful manner. Tax avoidance is an activity to reduce tax liabilities in an unlawful or violating manner. provisions of tax laws and regulations. Some examples of tax planning and tax avoidance practices among informal business actors are: hiding or reducing taxable income, shifting income to jurisdictions with lower tax rates (tax havens), using fictitious or fake invoices, not recording transactions accurately or completely, and others.

To overcome these factors, the government needs to make some efforts to increase tax compliance in the informal sector, such as:

- Conducting intensive and continuous socialization and education on taxation for informal business actors. Socialization and education on taxation aim to increase knowledge and awareness of taxation among informal business actors, as well as to provide information and guidance on their obligations and rights as taxpayers. Socialization and education on taxation can be done through various media, such as seminars, workshops, training, bazaars, exhibitions, social media, radio, television, and others.
- Conducting modernization and digitization of the tax administration system that can facilitate and expedite the process of registration, submission of notifications, payment, and reporting of taxes for informal business actors. Modernization and digitization of the tax administration system aim to improve the quality and accessibility of tax services for informal business actors, as well as to increase efficiency and effectiveness of tax supervision and law enforcement. Some examples of modernization and digitization of the tax administration system that have been carried out by the government are: e-registration, e-filing, e-billing, e-SPT Masa PPh Final UMKM , e-commerce tax system , e-audit , e-invoice , e-catalogue , and others.
- Increasing nationalism among informal business actors as an intrinsic motivation to comply with taxes. Nationalism is an attitude or love for the

homeland that encourages someone to contribute to the progress and welfare of the nation. Nationalism can increase tax morale or moral taxes among informal business actors , which is an ethical attitude or value that encourages someone to comply with taxes without coercion or pressure from outside. Nationalism can be increased through various ways , such as: instilling Pancasila values and Bhinneka Tunggal Ika , fostering a sense of pride as Indonesian citizens , showing the benefits and functions of taxes for national development , giving awards or incentives for compliant taxpayers , and others.

Thus , it can be concluded that tax compliance in the informal sector is important to be improved to support the performance of tax revenue in Indonesia. To increase tax compliance in the informal sector , the government needs to make efforts such as socialization and education on taxation , modernization and digitization of the tax administration system , and increasing nationalism among informal business actors.

## References

- Accounting Binus University. (2021). Perencanaan Pajak (Tax Planning). Retrieved from <https://accounting.binus.ac.id/2021/12/01/perencanaan-pajak-tax-planning/>
- Aladejebi, O., & Oladimeji, J. A. (2019). The impact of record keeping on the performance of selected small and medium enterprises in Lagos metropolis. *Journal of Small Business and Entrepreneurship Development*, 7(1), 28-40.
- Alcázar, L., Andrade, R., Jaramillo, M., & Winkelried, D. (2019). The impact of a simplified tax regime on firms' performance: Evidence from an experiment in Peru. *World Development*, 122, 180-193.
- ATO. (2020). Research and development tax incentive. Diakses dari <https://www.ato.gov.au/Business/Research-and-development-tax-incentive/>
- Aydin, C., & Esen, Ö. (2019). Optimal tax revenues and economic growth in transition economies: a threshold regression approach. *Global Business and Economics Review*, 21(2), 246-265.
- Bai Y., Yao Z., & Dou Y. (2015). Effect of social commerce factors on user purchase behavior: An empirical investigation from renren.com. *International Journal of Information Management* 35(5), 538-550.
- Barus, E.B., & Wijaya, S. (2021). Application of Carbon Tax in Sweden And Finland And Its Comparison With Indonesia. *Indonesian Tax Journal (Indonesian Tax Review)*, 5(2), 256-279.
- Bhagiawan G., & Mukhlisin M. (2020). Effect of corporate governance on tax planning & firm value. *International Journal of Commerce and Finance*, 6(2), 72-80. <https://dergipark.org.tr/en/download/article-file/1156358>
- Chen, S., Chen, X., Cheng, Q., & Shevlin, T. (2021). Tax planning and advisory services: A literature review. *Journal of Accounting Literature*, 49, 100113. <https://doi.org/10.1016/j.acclit.2021.100113>
- Deléchat, C., & Medina, L. (2020). What is the informal economy? *Finance & Development*, 57(4), 54-55.

- Deloitte. (2022). Tax & Finance Advisory & Transactions services | Deloitte. Diambil dari <https://www.deloitte.com/global/en/services/tax/services/tax-advisory-transactions.html>
- Directorate General of Taxes. (2020). Scientax: Journal of Scientific Studies on Taxation Indonesia. <https://ejurnal.pajak.go.id/>
- Directorate General of Taxes. (2021). Dissecting Taxes on Digital Transactions. Accessed from <https://www.pajak.go.id/id/artikel/membedah-pajak-atas-transaksi-digital>
- Dou Y., Hu Y.J., & Wu D.J. (2017). Selling or leasing? Pricing information goods with depreciation of consumer valuation. *Information Systems Research* 28(3), 585-602.
- Dudás, A. (2021). Legal Frame of Agricultural Land Succession and Acquisition by Legal Persons in Serbia. *J. Agric. Env'tl. L.*, 16(1), 59-69.
- EMSME.ORG. (2021). Benefits Of MSME Registration in India. Diambil dari <https://emsme.org/benefits-of-msme-registration-in-india/>
- EY. (2022). Tax planning | EY - US. Diambil dari [https://www.ey.com/en\\_us/tax-planning](https://www.ey.com/en_us/tax-planning)
- Fadilah et al., (2021). The Effect of Tax Knowledge, Modernization of the Tax Administration System and Tax Sanctions on Individual Taxpayer Compliance. <http://repository.umi.ac.id/892/2/Pengaruh%20Pengetahuan%20Perpajakan%2C%20Modernisasi%20Sistem.pdf>
- Fitriandi, P. (2020). Taxation on Transactions Through Online Marketplace. *Indonesian Tax Journal (Indonesian Tax Review)*, 4(1), 14-20.
- Gil García, E. (2021). Eco-innovación, pymes e incentivos fiscales. Dalam A. Kokocińska & M. A. Martínez García (Eds.), *Aspectos públicos de la innovación y el desarrollo sostenible* (hlm. 29-48). Poznań: Adam Mickiewicz University Press.
- Hasbolah, F., Rosli, M. H., Hamzah, H., Omar, S. A., & Bhuiyan, A. B. (2021). The digital accounting entrepreneurship competency for sustainable performance of

the rural Micro, Small and Medium Enterprises (MSMES): An empirical review. *International Journal of Small and Medium Enterprises*, 4(1), 12-25.

Huang L., Dou Y., Liu Y., Wang J., Chen G., Zhang X., & Wang R. (2021). Toward a research framework to conceptualize data as a factor of production: The data marketplace perspective. *Fundamental Research* 1(5), 586-594.

Investopedia. (2021). How does an entrepreneur pay taxes? Diambil dari <https://www.investopedia.com/ask/answers/032515/how-does-entrepreneur-pay-taxes.asp>

IRAS. (2020). Productivity and innovation credit scheme. Diakses dari <https://www.iras.gov.sg/irashome/Schemes/Businesses/Productivity-and-Innovation-Credit-Scheme/>

James, S., & Nobes, C. (2018). *The economics of taxation: Principles, policy and practice* (17th ed.). Birmingham: Fiscal Publications.

Jurasz, J., Canales, F. A., Kies, A., Guezgouz, M., & Beluco, A. (2020). A review on the complementarity of renewable energy sources: Concept, metrics, application and future research directions. *Solar Energy*, 195, 703-724.

Kopp, E., Leigh, M. D., Mursula, S., & Tambunlertchai, S. (2019). US investment since the Tax Cuts and Jobs Act of 2017. International Monetary Fund.

KPMG. (2022). Tax Advisory Services | Tax planning and governance - KPMG. Diambil dari <https://kpmg.com/au/en/home/services/tax/advisory.html>

Lino, A. F., Aquino, A. C. B. D., & Neves, F. R. (2022). Accountants' postures under compulsory digital transformation imposed by government oversight authorities. *Financial Accountability & Management*, 38(2), 202-222.

Liu, C. K. (2018). Policy Brief: the Role of Micro-Small and Medium Enterprises in Achieving SDGs. Diambil dari [https://sustainabledevelopment.un.org/content/documents/18349policy\\_brief\\_27\\_04\\_final.pdf](https://sustainabledevelopment.un.org/content/documents/18349policy_brief_27_04_final.pdf)

Mayer, C. (2021). The future of the corporation and the economics of purpose. *Journal of Management Studies*, 58(3), 887-901.

- Menescal, L., & Alves, J. (2022). Optimal threshold taxation: An empirical investigation for developing economies. CESifo Working Paper No. 9782. <https://www.cesifo.org/en/publications/2022/working-paper/optimal-threshold-taxation-empirical-investigation-developing>.
- Mukherjee, A., Mukherjee, S., & Roychowdhury, A. (2021). Presumptive taxation and small business compliance: Evidence from India. *International Tax and Public Finance*, 28(2), 441-471.
- OECD (2017). *Model Tax Convention on Income and on Capital: Condensed Version 2017*. Paris: OECD Publishing.
- OECD. (2019). *Going digital: Shaping policies, improving lives*. Paris: OECD Publishing
- OECD (2020). *Tax Challenges Arising from Digitalisation – Report on Pillar Two Blueprint*. OECD/G20 Inclusive Framework on BEPS, OECD Publishing, Paris.
- OECD. (2021a). *Brochure: Two-Pillar Solution to Address the Tax Challenges Arising from the Digitalisation of the Economy*. OECD Publishing. <https://www.oecd.org/tax/beps/brochure-two-pillar-solution-to-address-the-tax-challenges-arising-from-the-digitalisation-of-the-economy-october-2021.pdf>
- OECD. (2021b). *FAQs: Two-Pillar Solution to Address the Tax Challenges Arising from the Digitalisation of the Economy*. OECD Publishing. <https://www.oecd.org/tax/beps/faqs-two-pillar-solution-to-address-the-tax-challenges-arising-from-the-digitalisation-of-the-economy-july-2022.pdf>
- OECD. (2021c). *Pillar One: A New Nexus and Profit Allocation Rule for the 21st Century*. OECD Publishing. <https://www.oecd.org/tax/beps/pillar-one-a-new-nexus-and-profit-allocation-rule-for-the-21st-century.pdf>
- OECD. (2021d). *Pillar Two: A Global Minimum Tax for the 21st Century*. OECD Publishing. <https://www.oecd.org/tax/beps/pillar-two-a-global-minimum-tax-for-the-21st-century.pdf>
- Omri, A. (2020). Formal versus informal entrepreneurship in emerging economies: The roles of governance and the financial sector. *Journal of Business Research*, 108(1), 277-290.

- OnlinePajak. (2021). Taxes in the Digital Era, Everything & Challenges of Implementation. Accessed from <https://www.online-pajak.com/tentang-pph-final/pajak-di-era-digital>
- Oladele, R., Aribaba, F. O., Ahmodu, A. L. O., Yusuff, S. A., & Alade, M. (2019). Tax enforcement tools and tax compliance in Ondo State, Nigeria. *Academic Journal of Interdisciplinary Studies*, 8(2), 27-37.
- Pananond, P., Gereffi, G., & Pedersen, T. (2020). An integrative typology of global strategy and global value chains: the management and organization of cross-border activities. *Global Strategy Journal*, 10(3), 421-443.
- Pandiangan, S. M. T., Oktafiana, F., Panjaitan, S. R., & Shifa, M. (2022). Analysis of public ownership and management ownership on the implementation of the triple bottom line in the plantation sector listed on the Indonesia Stock Exchange. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 5(1), 349-3497.
- PwC. (n.d.). Tax consulting services. Retrieved from [https://www.pwc.com/mn/en/services/tax\\_consulting\\_services.html](https://www.pwc.com/mn/en/services/tax_consulting_services.html)
- Ryle, P. M., Goodman, L., & Soled, J. A. (2020). Tax consequences of data breaches and identity theft. *Journal of Accountancy*, 230(4), 44-49.
- Seco, A., & Muñoz, A. (2018). Panorama del uso de las tecnologías y soluciones digitales innovadoras en la política y la gestión fiscal. *Banco Interamericano de Desarrollo*, 1(1), 1-10
- Taxconsultant.id. (2022). Benefits of Paying Taxes for Entrepreneurs. Retrieved from : <http://taxconsultant.id/berita/benefits-of-paying-taxes-for-entrepreneurs>
- Tambun, S., & Riandini, R. (2022). The Impact of Tax Planning and Digitization of Tax Services on Taxpayer Compliance moderated by Nationalism. <https://media.neliti.com/media/publications/528060-none-0b99c9e3.pdf>
- Utomo R. (2017). Tantangan pengawasan ppn atas transaksi konten digital. *Jurnal Pajak Indonesia (Indonesian Tax Review)* 1(1), 38-43.

- Vigdor, N. (2019). 5 indicted in identity theft scheme that bilked millions from veterans. The New York Times. Retrieved from <https://www.nytimes.com/2019/08/21/us/veterans-affairs-identity-theft.html>
- Wassermann, M., & Bornman, M. (2020). Tax knowledge for the digital economy. *Journal of Economic and Financial Sciences*, 13(1), 1-11.
- Wijaya, S., & Sabina, D.I.A. (2021). Reformulation of Input Tax Credit After Omnibus Law. *Indonesian Tax Journal (Indonesian Tax Review)*, 5(1), 1-10
- World Bank. (n.d.). Taxes & government revenue. <https://www.worldbank.org/en/topic/taxes-and-government-revenue>
- Wu, J., Wang, J., Nicholas, S., Maitland, E., & Fan, Q. (2020). Application of big data technology for COVID-19 prevention and control in China: lessons and recommendations. *Journal of medical Internet research*, 22(10), e21980.
- Xuetong, Y. (2020). Bipolar rivalry in the early digital age. *The Chinese Journal of International Politics*, 13(3), 313-341.
- Yang, Y., Zhuang, Y., & Pan, Y. (2021). Multiple knowledge representation for big data artificial intelligence: framework, applications, and case studies. *Frontiers of Information Technology & Electronic Engineering*, 22(12), 1551-1558.
- Zhu, C. X. (2021). Analysis on tax collection and management of digital economy. In *E3S Web of Conferences (Vol. 253, p. 03046)*. EDP Sciences.
- Zulvina, S. (2017). Analysis of Mandatory Disclosure Rules Policy Formulation as an Alternative in Overcoming Tax Avoidance Practices in Indonesia. *Indonesian Tax Journal (Indonesian Tax Review)*, 1(1), 65-75.