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# Evaluating Corporate Tax Incentives in Developing Countries in Light of the Global Minimum Tax

**Final Report**

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# Contenido

# I. INTRODUCTION

The objective of this study is to present a consistent set of recommendations aimed at developing countries, particularly low- and middle-income nations, regarding the necessary revision and reformulation of tax incentives for investments in light of the implementation of the Global Minimum Tax. To this end, the study reviews the available empirical evidence on the use of tax instruments—particularly those based on the Corporate Income Tax (CIT)—as tools for promoting and attracting investments in developing countries. This review also considers the potential of investment incentives to boost productive activities that contribute to development goals, typically including job creation, productivity improvements (e.g., through enhanced capacities via linkages and technology transfers), and the expansion of R&D and innovation activities, among others. The assessment is carried out within the framework of the GloBE initiative, examining its impact on the incentives commonly used by developing countries.

Evaluating this set of fiscal instruments, an inevitable step given the impact of the GloBE initiative on such incentives, is of great importance for developing countries, considering that low- and middle-income nations rely more heavily, in relative terms, on tax revenues from corporate income taxes (measures as percentage of tax revenue), as observed by Redonda et al (2024)

The study analyzes a vast range of data and literature from experiences in developing countries (low- and middle-income), aiming to provide a broad and diverse perspective on the implications of implementing a global minimum tax on corporate earnings for these nations. The heterogeneity of real-world situations—associated, among other factors, with disparate per capita income levels, notable differences in domestic market sizes, the size and organization of the public sector, financing structures, the existence of high or low statutory CIT rates, and the intensity with which countries use tax incentives to attract foreign direct investment—makes it essential for the empirical evaluation to be based on information illustrating the variety of situations observed in developing nations. Considering these issues becomes particularly relevant in light of the ongoing international tax reforms, which entail substantial changes in the orientation of global tax policy.

In recent years, the world has moved at a new speed towards the adoption of fiscal standards, such as Double Taxation Agreements, Transfer Pricing regulations, and, more recently, supranational administrative agreements. This has led to reform initiatives promoted by the G20 and the OECD, such as the Agreement on the Automatic Exchange of Financial Information for Tax Purposes, the Inclusive Framework on BEPS (Base Erosion and Profit Shifting), and the Global Anti-Base Erosion (GloBE) Rules under the 15% Global Minimum Tax Agreement. The backdrop to these proposals is the growing concern among governments of developed countries about multinational companies' tax avoidance and evasion practices. These initiatives are clear expressions of current international trends in tax matters.

Beyond the direct participation of developing countries in United Nations forums and despite some developing nations being OECD members, the orientation of these initiatives has been determined by the positions and, above all, the interests of developed countries. Indeed, OECD members have assumed a leading role, reflecting the interplay of politics in the international arena on the international stage.

Parallel to this process, international tax competition, combined with the unfair practices of low- or no-tax jurisdictions, has generated intense debate in developing countries. This is because corporate income tax is the most direct intersection between fiscal policy and industrial promotion policy, and it holds greater relative importance in public sector financing developed countries. Critics argue that there have been sustained increases in labor taxation and recurring adjustments in access conditions to social security benefits. These processes occur simultaneously with the granting of tax benefits and promotional mechanisms to large companies, particularly multinational corporations.

Specifically, one of the main questions in international discussions is whether efforts to coordinate the establishment of a Global Minimum Tax on multinational corporations' profits will in effect lead to a minimum level of taxation on profits generated by these corporations. The progress of these international initiatives could improve tax revenues and contribute to establishing a fairer and more balanced global tax system.

From the perspective of developing countries, pillar two represents a pressing opportunity to review national investment promotion systems, which often rely heavily on incentives that reduce corporate income taxes. Tax incentives have been a significant component of national strategies to promote investment and attract foreign direct investment (FDI) flows. There is ongoing debate about the effectiveness of these strategies, which involves both fiscal and tax dimensions as well as the efficiency of such instruments in promoting new productive activities.

The application of tax incentives, beyond the obvious erosion of corporate income tax bases and the consequent reduction in tax revenues through measures often excluded from the annual budgeting process, can conflict with other development objectives aimed at impacting the labour market, income distribution and adaptation to and mitigation of environmental changes.

Investment promotion strategies based on fiscal incentives include, among others, temporary tax holidays, permanent reductions in tax rates for specific activities, direct investment incentives (accelerated depreciation, deductions taxable income, tax credits, tax deferrals), the creation of special zones with preferential tax treatment, and tax benefits to foster employment creation.

As a result of the widespread use of tax incentives for large companies, developing countries have reached high levels of tax expenditures, leading to significant revenue losses. The scale of tax expenditures resulting from incentives, benefits, and other tax measures to stimulate investment is critical, particularly for countries with limited fiscal space. This issue is increasingly prominent in public debates within developing countries. Discussions often focus on the short-term fiscal costs and the erosion of horizontal equity within the tax system—manifested as revenue losses and differential treatment across sectors. However, there is little emphasis on the effectiveness of these measures in achieving developmental goals or fostering long-term economic growth, largely because most countries lack impact evaluations for these policies.

In developing countries, investment incentives, particularly those based on corporate tax exemptions, have been justified for achieving specific objectives such as the development of underprivileged regions, promotion of exports, industrialization, job creation, environmental protection, technology transfer, economic diversification, and human capital improvement. This approach contrasts with investment promotion policies in developed countries, which primarily rely on direct subsidies and low-interest loans while protecting the corporate income tax base. The limited use of subsidies in low- and middle-income developing countries generally correlates with smaller public sectors, while the reduced use of subsidized loans stems from underdeveloped capital markets and financial tools.

The report is structured as follows: Section II explores the role of corporate income tax in tax systems, the arguments supporting a 15% Global Minimum Tax on corporate profits, and the positions of various countries on advancing the GloBE rules. Section III reviews different tax incentives, focusing on their ability to attract and promote FDI, analyzing the impact of GloBE rules on investment incentive systems in developing countries and identifying foreseeable impacts and redesign requirements for these instruments. Section IV provides insights into the fiscal importance of corporate income tax and the magnitude of tax expenditures resulting from exemptions in developing countries. Section V examines the investment promotion strategies and FDI attraction policies of developing countries, utilizing data on key instruments applied across middle-income Latin American and Caribbean countries and referencing cases from Africa and Asia. Section VI summarizes available evidence on the impact of tax incentives in developing countries, evaluating their effectiveness in attracting FDI, and analyzes the effects of international tax competition. Section VII discusses the implications of implementing GloBE rules on the domestic tax structures of developing countries and assesses available alternatives in terms of risks and opportunities. The final section evaluates the challenges posed by international tax reforms to the investment promotion strategies of developing countries.

# II. A GLOBAL FRAMEWORK FOR CORPORATE INCOME TAXATION

The analysis of the implications of implementing the GloBE rules for low- and middle-income developing countries requires addressing a range of dimensions related to adapting their national tax systems. These considerations must take into account the general role of the corporate income tax (CIT) in tax structures and its specific importance in developing countries. The examination of tax-related dimensions also involves assessing the relevance of the arguments put forward by proponents of establishing a 15% Global Minimum Tax. This measure is advocated as a response to the intensifying fiscal competition to attract investment among countries, aggressive tax planning, and tax fraud.

From the perspective of developing countries, it is essential to incorporate into the analysis the opportunities that the advancement of the GloBE rules presents for enhancing the legitimacy and social acceptance of national tax systems.

## II.1. The Role of Corporate Income Tax

The CIT, together with the personal income tax, constitutes the system of direct taxation on income, which represents one of the pillars of modern tax systems. This tax instrument is generally defined by the establishment of a broad tax base, covering a wide range of production and commercial activities, and typically encompassing the total income earned by business entities, regardless of their legal nature (OECD, 2014). The income considered includes the normal return of businesses through the combination of capital and labor factors, as well as what can be described as "pure" or "economic" rents, derived exclusively from the capital factor, labor, or other advantages related to the markets in which the company operates (for example, when holding a monopolistic position).

By design, the CIT serves as the tax instrument that mediates between the state and businesses. The effective tax burden of this levy, resulting from the tax base determined after accounting for taxable and exempt sectors along with the tax rate, is the closest point of interaction between fiscal policy and industrial policy, largely reflecting the trade-offs between these two policy objectives.

When this tax was introduced into tax systems, one of its main objectives was for it to act as an advance payment of shareholders' obligations regarding personal income tax. The origin of corporate income tax, therefore, sought to "fill the gap," as Bird (2002) puts it, giving rise to what is known as the "deferral justification." The incorporation of the tax would help prevent the possible indefinite postponement of payments under personal income tax (Vann, 2010). The CIT tax base was considered an approximate indicator of the return on equity capital, so the tax is usually applied to the net profits of companies, i.e., the income received minus the corresponding expenses incurred to generate and maintain said business income.

To quantify taxable income, two basic models are used, differing in their determination procedures but similar in practical results. The first, known as the income and expense system (or profit and loss method), determines net income as the difference between all income earned by the entity during a specific fiscal period and all deductible expenses incurred by the company in that period. The second procedure, referred to as the "balance sheet" method and also known as the equity comparison method, determines net income by comparing the value of net assets on the balance sheet at the end of the fiscal period (plus distributed dividends) with the situation at the beginning of the period.

The technique for determining the CIT tax base is usually carried out based on the company's accounting information. However, since tax regulations are autonomous, differences may arise compared to accounting standards, where accounting treatment may be susceptible to manipulations aimed at distorting the determination of taxable income. This is the case, for example, with the denial of deductions for certain expenses, the existence of different methods for recognizing capital expenditures, differences in valuation criteria for assets, liabilities, intangibles, and income, and the incorporation of temporary adjustments for amortizations generated on certain fixed assets. In many countries, tax and financial accounting are independent, and legal provisions largely address the tax treatment and impact of transactions carried out by legal entities, starting from the accounting result and then making the necessary adjustments to reflect the differences between tax and accounting regulations (Sevilla Segura, 2005).

The considerations regarding the different treatment of taxable income versus accounting income derived from company financial statements are highly relevant for evaluating the Global Minimum Tax. This is because the rules for the effective minimum tax rate (ETR) for multinational companies are calculated individually for each jurisdiction in which they operate, as a ratio between the tax effectively paid and the tax base. The tax base is determined by accounting income, which will be adjusted beforehand according to the objectives proposed by the Global Minimum Tax and certain mechanisms to mitigate temporary differences.

## II.2. Arguments for a Global Minimum Tax

The main arguments in favor of implementing a Global Minimum Tax appeal to the need for a more equitable and balanced global taxation system. This initiative would also contribute to improving national tax systems, particularly in a context marked by the advancement of economic and financial globalization and changes in countries' productive structures due to the continuous development of digital technologies.

The arguments related to tax justice often consider both national and international dimensions. The implementation of a global minimum tax on corporate income tax (CIT) could represent a positive step towards more progressive national tax systems, if it results in ineffective tax incentives being removed, a particularly relevant argument for many developing countries, especially those with low and middle

incomes. A design with less loopholes in it could have addressed the root causes of unfair tax competition practiced by jurisdictions with low or no taxation. The intensification of international tax competition has led to a decrease in average statutory CIT rates in OECD countries, dropping from 32% in 2000 to 23% in 2020.

Although the conceptual framework for international tax justice remains in its infancy (Dietsch and Rixen, 2019), assessing how fair an international tax system or reform is requires focusing on dimensions of tax justice that differ from and are arguably more complex than national dimensions (Jiménez, Ocampo, Podestá, and Valdéz, 2021). Structural tax differences between jurisdictions—such as applied rates, the breadth of tax bases, and the instruments employed (direct versus indirect taxes)—create a non-cooperative policy-making environment, with collateral effects (intended or unintended) on third countries. This is evident in fiscal competition among nations, which undermines the efficiency and effectiveness of national tax systems and compromises states' ability to finance public policies and achieve fairer tax distribution among taxpayers.

Thus, the debate on international tax equity focuses on competition among countries. Reductions in CIT rates, base erosion, the creation of preferential tax regimes, and the establishment of favorable fiscal zones—whether autonomously or as part of non-cooperative strategies by governments—undermine domestic revenues both in the initiating and affected countries. Such practices distort national tax structures under the guise of enhancing competitiveness and attracting investment.

From this perspective, evaluating the normative implications of tax competition between countries involves two key considerations: assessing the distributive consequences of competition in terms of tax equity and addressing the institutional framework governing fiscal interdependence among states, which tolerates and sometimes encourages harmful tax competition (Dietsch, 2018).

The Global Minimum Tax aims to reverse decades of a "race to the bottom" in corporate taxation by reducing incentives for fiscal competition among jurisdictions. Three mechanisms work together to ensure that multinational corporations pay a minimum 15% tax rate, regardless of the source country where they operate or the jurisdiction of their headquarters.

Contrary to common assumptions, agreements to establish global corporate tax systems are not solely about addressing the effects of tax competition to attract productive investment. The problem is significantly more complex and less transparent, as it often involves tax evasion practices.

Aggressive tax planning by large multinational corporations, leveraging technology, financial globalization, and global professional advisory services to avoid tax obligations, erodes all principles of international tax equity. These practices are unique to our era and were not significant when current tax systems were designed, primarily during the mid-20th century. These systems were conceptualized for businesses with a physical presence in markets through permanent establishments—productive or commercial—mainly used for transactions involving tangible goods.

In this context, the impact of international tax planning extends beyond relocating permanent establishments in a world shaped by fiscal competition to attract businesses to low-tax jurisdictions. This is just the tip of the iceberg regarding global tax competition and tax avoidance.

Tax evasion does not rely solely on exploiting tax rate arbitrage or preferential investment tax rates. Such practices are fundamentally based on exploiting legal loopholes in national frameworks and bilateral or multilateral agreements between countries. Aggressive tax planning aims to avoid taxes in all markets, allocating actual corporate profits to entities serving as vehicles for tax reduction. These

entities exploit legal tools such as payments for royalties, rights, patents, or interest on inter-company loans in low-tax or tax-free jurisdictions. These practices are further facilitated by tax havens, which extract minor benefits from a global tax system that enables and encourages such behaviors.

International tax evasion relies on more complex tax concepts, grounded in legal norms, which current international fiscal governance fails to address effectively. Aggressive tax planning strategies exploit gaps and discrepancies between national tax regulations. Examples include using tax treaties to avoid double taxation, thereby creating "double non-taxation" for certain incomes, or developing intricate systems of subsidiaries that shift intangible income. Financial flows are routed through intermediary companies in low-tax jurisdictions, that do not impose taxes on income from intangible assets, subsequently transferring final profits, tax-free, to the country of the parent company's residence, often located in a jurisdiction with low or zero corporate income tax.

## II.3. Social and Political Legitimation of National Tax Systems

The need to advance in global minimum taxation agreements for large multinational corporations is closely linked to the legitimacy and social acceptance of national tax systems.

Additionally, there is a growing discontent among the public in developing countries, with criticism directed at the sustained increases in labor taxation and the changes in access to social security benefits. Criticism also extends to the use of tax incentives and promotional mechanisms that benefit large corporations (particularly multinationals) and are not always available to small and medium-sized enterprises (SMEs).

This discussion, not always rational or well-founded, reflects increasing dissatisfaction with tax systems that, relatively speaking (and sometimes even in absolute terms), tax labor more heavily than capital, place a greater burden on SMEs compared to some large multinational corporations, concentrate taxation on physical goods rather than intangible assets, and rely on consumption taxes rather than income and wealth taxes. As a result, the middle sectors of society bear the greatest tax burden.

In parallel with ongoing changes in the global economy, the emergence of new digital-age businesses, and the growing incorporation of technology into productive and financial domains, there has been a historic rise in income and wealth inequality. This trend affects an increasing number of countries and has been consolidating as a global phenomenon. It is precisely within this context that international tax agreements on minimum corporate income taxation should be analyzed and evaluated, particularly with regard to their impact on developing countries, especially in fostering more effective and transparent investment promotion mechanisms than those used to date.

## II.4. Tax Base Erosion and GloBE Rules

The momentum behind the initiative to implement the Global Minimum Tax can be attributed to a confluence of situational factors—linked to governments addressing the effects of the 2008–2009 global financial crisis, the COVID-19 pandemic—and structural factors, associated with the need for increased tax revenues to ensure the sustainability of public finances and the legitimacy of tax systems in advanced economies.

The OECD's Inclusive Framework global agreement had the participation of 137 countries, including the United States and China. This understanding was the result from intense negotiations under the Base Erosion and Profit Shifting (BEPS) project, explicitly aimed at countering the erosion of corporate income tax (CIT) bases and the shifting of profits by companies to low- or no-tax jurisdictions. Concerns among advanced economies about the increasingly aggressive tax planning strategies of multinational corporations led to the beginning of negotiations on a BEPS Action Plan between 2013-2015, which resulted in 15 actions, some of them agreed to be minimum standards.

The October 2021 G20 agreement formalized a two-pillar approach to address the fiscal challenges arising from the digitalization of the economy. On July 11, 2023, the 138 members of the OECD Inclusive Framework approved a declaration documenting agreements reached after October 2021. Since then, additional members have joined. According to the OECD, "The two-pillar approach is a significant advancement in international cooperation, presenting new solutions such as reallocating taxing rights over a portion of residual profits to market jurisdictions, using more predictable formula-based methods rather than traditional fact- and circumstance-based methods, and approving a global minimum corporate tax rate" (OECD, 2024).

Pillar One proposes globally reallocating a portion of corporate tax revenues from large multinational corporations with annual revenues exceeding €20 billion, considering the countries where their sales occur. This entails creating a new taxing right.

Pillar Two establishes that multinational corporations with annual revenues above €750 million must pay a minimum effective tax rate (ETR) of 15% on CIT, applicable to profits generated in all countries where they operate.

The Global Anti-Base Erosion (GloBE) rules require multinational groups to pay a top-up tax that raises the total CIT paid on profits in low-tax jurisdictions to meet the 15% rate. This top-up tax may be collected by low-tax jurisdictions through the Qualified Domestic Minimum Top-up Tax (QDMTT). If the QDMTT is not applied, the top-up tax can be imposed by another jurisdiction through the Income Inclusion Rule (IIR). The top-up amount is payable by the parent entity on income earned by other constituent entities operating in low-tax jurisdictions. Alternatively, the Undertaxed Payment Rule (UTPR) can apply, denying expense deductions or requiring equivalent adjustments in another subsidiary's jurisdiction for payments not taxed at the minimum rate in the recipient's jurisdiction, thereby increasing the group's total taxes (OECD/IDB, 2024).

Implementation of Pillar 2 has advanced in many countries, and it is expected to result in concrete progress, even when the US has issued an Executive Order threatening countries implementing the UTPR on January 20, 2025; that has resulted in further legislation of Pillar 2 being slowed down. Its implementation is expected to impact many countries' investment promotion and attraction regimes, regardless of whether governments respond with changes to national tax systems. Some national tax measures aimed at attracting and retaining investment may lose effectiveness due to the GloBE rules. However, indirect effects may also arise as governments seize the opportunity to reform their national investment incentive systems by introducing new mechanisms compatible with GloBE rules (IISD, 2023).

In practice, many countries with promotional regimes (or favorable tax enclaves) offering reduced or zero CIT rates are likely to experience a shift starting in 2025. The impact will no longer be limited to CIT base erosion but will also involve direct revenue losses in favor of other countries. This change will cease to be a benefit for corporate shareholders.

# III. INCENTIVES BASED ON CORPORATE INCOME TAX

The analysis of the role played by investment incentives must be conducted by considering the full set of factors involved in investors' decision-making processes. Structural determinants—both economic and political-institutional—interact with incentives, both tax-related and non-tax-related, and influence their effectiveness. Variables considered by investors are ultimately related to profitability, security and feasibility of projects. From this perspective, the evaluation of investment incentives requires assessing the extent to which different promotional tools effectively contribute to improving the conditions that influence the investment decision and the location of the project.

## III.1. Determinants of Investment Decisions

The characteristics and objectives of an investment project (particularly internationally mobile ones) will determine the relative importance and the way in which each factor influences location decisions. The extensive literature on FDI (Foreign Direct Investment) has identified various potential determinants, which can be classified into three categories: i) general economic conditions; ii) political-institutional conditions; iii) investment promotion and attraction instruments.

General economic conditions include the size of the domestic market and aspects related to its potential growth or to well-established, preferential access to other markets of interest to investors. Another traditional determinant of investment decisions is the availability of production factors, in adequate conditions of quantity, quality, and cost. This mainly refers to natural resource endowments, the supply of qualified human resources, and the level of labor costs. Additionally, infrastructure, particularly transportation and communication, can play a critical role, especially in investments aimed at exporting goods and services within global or regional value chains. More recently, in the context of more sophisticated FDI attraction strategies, determinants such as the existence of agglomeration economies, opportunities to acquire strategic assets, and the development of local capabilities in technology and innovation have emerged.

Political-institutional conditions first and foremost refer to institutional quality, which can be understood as the synthesis of a set of fundamental pillars including governmental stability, integrity of the public sector, adherence to norms and contracts, and the protection of various forms of property. Also, from an institutional standpoint, relevant policy aspects include macroeconomic and tax stability, the level of the tax burden, and trade openness. Finally, among these factors, conditions related to migration and repatriation, as well as the efficiency of bureaucratic management, particularly concerning procedures for starting, establishing, and operating businesses, should also be considered.

These first two categories include relatively structural or slow-evolving conditions, largely determined by historical, cultural, and political factors and by the experience of countries in utilizing instruments that are complementary to investment but are associated with a broader set of activities and objectives. This does not contradict their potentially critical role in investment decisions.

The third category of determinants involves specific policies towards investments (Table 1). These can be classified into four sub-categories: i) norms and regulations that constitute the general investment regime and are primarily aimed at providing guarantees, rights, or protection for investments and

investors; ii) tax and financial incentives, both general and sector-specific; iii) incentive packages that combine instruments—incentives and support services—within a specific territorial and/or sectoral scope; iv) promotional activities and investor assistance, which are typically executed by investment promotion agencies.

**Table 1. Classification of Investment Attraction and Promotion Instruments**

| | ***Tools*** | ***Main contents*** |
|---|---|---|
| **General investment regime** | Specific rules and regulations | ☐ National laws on investment promotion and protection<br>☐ Investment contracts for legal and/or tax stability<br>☐ Investment promotion and protection agreements |
| **Public support for investments** | **Tax incentives** | ☐ Total or partial exemption from IRC (*tax holidays*) or other taxes<br>☐ Tax credits on IRC or other taxes<br>☐ Increased deductions in determining taxable income<br>☐ Accelerated depreciation |
| | Financial incentives | ☐ Direct subsidies (*grants*)<br>☐ Preferential credits<br>☐ Credit guarantees<br>☐ Preferential insurance (currency; commercial risk; political risk) |
| | **Incentive Packages** | ☐ Special economic zones (SEZs), free trade zones and similar<br>☐ Preferred development regions<br>☐ Sectoral promotion regimes<br>☐ Promotion schemes with broad sectoral scope outside zones or regions |
| | Promotional activities and investor assistance | ☐ Investment Promotion Agency (IPA):<br>o Promotion of the Country Image<br>o Investor assistance (pre-investment and execution)<br>o After care<br>o Policy Advocacy |

*Source: Own elaboration based on García, et al (2021).*

## III.2. Understanding the effectiveness of tax incentives

Investment incentive consist of quantifiable advantages granted by a level of government or under its supervision to specific companies or categories of companies, with the aim of stimulating the realization of productive investments. These incentives are generally subject to the fulfillment of certain requirements or offsets by the beneficiaries.

In this context, tax incentives represent exemptions to the general tax regime, reducing the effective tax burden of a project or a specific taxpayer. These reductions typically operate through exemptions, deductions, credits, preferential rates, or deferrals of obligations. In the particular case of tax incentives based on the Corporate Income Tax (CIT), a lower payable amount is determined compared to the general tax regime. The reduction of tax obligations occurs as a result of determining a lower net taxable income, applying a reduced rate, directly lowering the amount to be paid, or a combination of these methods.

Tax incentives are one of the potential determinants of investment location decisions, interacting with a wide range of other variables that influence investors' decisions. As in other cases, the effective impact of these incentives will depend on the objective of the investment project, the sector in which it operates, the global strategy of the multinational company, and other characteristics of the industry and the reference market.[1]

To better understand how tax incentives can impact the attraction of investments, three fundamental concepts are considered as the basis for such decisions: certainty, profitability, and feasibility (Ons, 2016). Investment location decisions are generally made based on a combination of these three factors. In this sense, the factors that determine general economic and political-institutional conditions can be classified according to which of these dimensions they mainly affect (Figure 1).

**Certainty (C)** relates to the degree of certainty regarding the conditions relevant for the proper development of the investment project and the enjoyment of its outcomes. This concept is linked to the respect for the legal rights of the investor, the predictability of policies, and substantial economic conditions. Generally, the conditions that ensure the certainty of an investment depend on how consolidated the government's private enterprise-friendly approach is.

**Profitability (P)** primarily depends on the business itself, but public policies can influence it in various ways, either directly or indirectly, by altering costs or the pricing of goods or services that are the object of the investment. Policies directly aiming to impact the profitability of investment projects include public support for investments. These may take the form of tax and/or financial incentives and their combinations, as well as general tax regimes. Other determinants that can significantly affect the profitability of a given project are often related to production factor costs, once the required quantity and quality are met. Similarly, competitive access to inputs and raw materials or preferential access to third markets play a role.

**Feasibility (F)** refers to the necessary conditions for carrying out a specific business in a particular country or location, regardless of security and profitability. These conditions are related to the availability of productive factors and natural resources, access to capital, infrastructure, and services, market access, the existence of strategic assets, or agglomeration economies, among other factors.

[1] The focus of this section is the introduction of investment tax incentives as part of a wide range of potential determinants of investment decisions and its implications for investment effectiveness. The effectiveness of tax incentives itself depends also on the interaction with the characteristics of the national tax regime, e.g., foreign tax credits, controlled foreign corporation (CFC) rules and tax sparing provisions.

**Figure 1. Determinants of Investment Decisions and Impacts**


*Source: Own elaboration.*

Figure 1 shows how tax incentives are expected to impact investment location decisions. Specifically, here we seek to identify situations where a tax incentive is expected to be effective, or in other words, to what extent, in the absence of the incentive, the investment project would materialize in the country or region in question (as opposed to redundancy, where the project would go ahead anyway, implying a waste of public resources in the form of foregone revenue).

In this sense, tax incentives do not operate in a "vacuum" but interact with various variables that investors consider when making decisions. By themselves, tax incentives may not influence the location of an investment if conditions related to security and feasibility are not met.

In such situations, offering investment incentives will not result in the realization of new investment projects. While there would be no waste of resources, the effects of poorly designed policies can be

highly negative. The mistaken expectation that investments can be secured through incentives may delay the necessary actions to improve other determinants of investment decisions, and, worse still, may damage the country's reputation.

Projects involving significant fixed asset investments, typically in manufacturing and infrastructure sectors, are more complex and costly to relocate (or transfer). Therefore, potential losses stemming from breaches of the general legal framework, discretionary measures, and emergency responses to critical economic and institutional circumstances cannot be compensated for through incentives.

Considering scenarios with limitations in the political-institutional conditions, in which incentives could be effective, a situation emerges where a moderate yet significant probability of negative events combines with foot loose projects, whose profitability is substantially enhanced by investment incentives. However, the relevance of this scenario is debatable. Moreover, it would attract investors and projects unlikely to generate the desired benefits for the domestic economy typically sought when attracting FDI.

The reasoning similarly applies to situations where the conditions for business feasibility are not met. Only in cases of relatively "narrow" gaps could increase profitability from incentives provide the resources needed to close the gaps and make the business viable. For example, this could occur when feasibility depends on the availability of human resources with specific skills that could be generated through short, moderately costly training processes. Again, this would be a highly specific scenario that does not apply to most determinants impacting business feasibility.

The consideration of feasibility conditions also supports the argument that investment incentives, whether tax-based or otherwise, should not be applied in isolation but should form part of a comprehensive approach to the respective problem. A common government objective is to promote the economic and social development of specific regions lagging in development indicators compared to the national average. Offering even extremely generous incentives is insufficient to attract productive activities to these regions. Incentives must necessarily be part of a regional development program that addresses infrastructure, access to basic services, and the regional capacities required to carry out business activities.

Investment tax incentives are generally unnecessary when combined with exploiting large domestic markets, natural resources, and other strategic assets, or when taking advantage of economies of agglomeration in certain zones or regions. In these cases, the availability of these elements acts as an incentive for investment decisions, making the provision of additional incentives wasteful, as it creates a redundant situation. These are types of assets or advantages that do not require additional incentives to attract investment.

In line with the previous reasoning, tax incentives can be effective when combined with less exceptional national assets or advantages, such as institutional quality, the predictability of substantive economic conditions, or the availability of skilled human resources. These factors can be somewhat enhanced by investment incentives, which affect the cost-benefit balance between similar locations regarding the security and feasibility determinants relevant to the investment project. Similarly, tax incentives could offset moderate disadvantages in expected profitability arising from higher tax burdens or labor costs.

In conclusion, the scope for the effectiveness of tax incentives is relatively narrow, and there is a significant likelihood of encountering situations of non-use or resource waste (redundancy), even under regimes designed to minimize such occurrences.

Redundancy is one of the critical aspects of an incentive regime, as it implies wasting scarce resources. This waste can be reduced by avoiding the application of incentives in situations where the investment would occur regardless. However, given information asymmetries, even well-designed investment incentive regimes are likely to involve significant levels of redundancy, either because the incentive is unnecessary or excessively generous. One way to partially compensate for this resource waste is to condition the provision of incentives on fulfilling certain requirements that would not occur otherwise. For instance, increased spending on R&D, supplier development, or hiring employees with specific characteristics such as age, gender, or vulnerability.

Moreover, analyzing the effectiveness of tax incentives, particularly those based on CIT, must consider certain inherent characteristics of these instruments that undermine their effectiveness, as discussed below.

## III.3. Tax Incentives, Uncertainty and Tax Holidays

In a document jointly prepared by several international organizations, emphasis is placed on the preference for tax incentives that reduce investment costs over those based on corporate net profits (IMF/OECD/WB/UN, 2015). The former involve specific reductions linked to investment projects, such as accelerated depreciation schemes, deductions, and special tax credits. Mechanisms aimed at reducing costs can result in an increase in the profitability of investment projects, encouraging investments that would otherwise not have been undertaken. On the other hand, tax incentives based on corporate net profits generally reduce the applicable tax rate on taxable income.

Incentives based on corporate income require positive and sufficient net income to realize the benefit. Additionally, for some of these instruments, the incentive amount is not known in advance. Thus, CIT-based tax incentives are subject to some level of uncertainty, as it is uncertain whether the incentive will be utilized, when it will be realized, and what its actual value will be. Indeed, an unexpected negative evolution in business-relevant conditions could result in reduced or zero (or negative) profitability, leading to equally reduced or zero benefits from the incentive.

Certainty is an essential characteristic of an investment incentive. The higher the degree of uncertainty, the lower the likelihood of the incentive affecting an investment decision (as the present value of expected benefits decreases). Consequently, the effectiveness of CIT-based incentives declines as uncertainty increases. At its extreme, the incentive approaches a windfall gain and, therefore, has no impact on investment decisions.

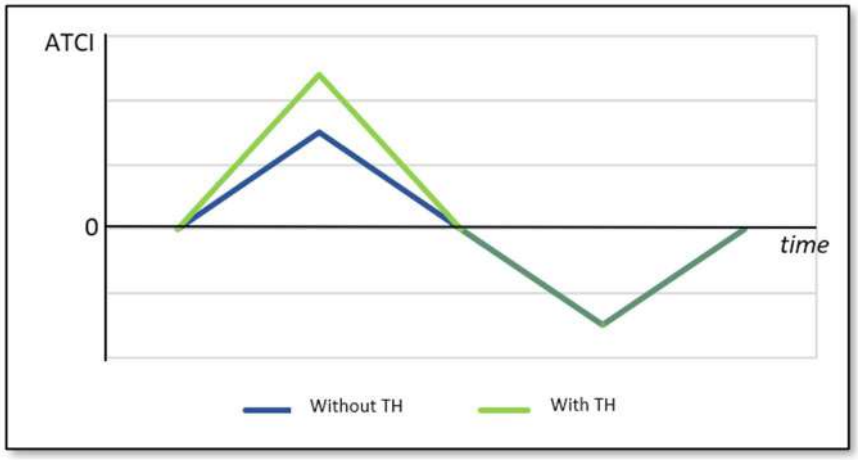
This approach to the issue becomes even more relevant in a context of growing uncertainty faced by many developing countries today. In the post-COVID-19 pandemic stage, the general economic context has become considerably more uncertain. Several sectors faced an unprecedented and unforeseen crisis, while others could capitalize on opportunities stemming from such shocks. Adding to these factors that have heightened uncertainty is the simultaneous deepening of pre-existing instability trends and situations, including the U.S.-China trade war, China's dominant role in several strategic product markets, the increasing likelihood of regional or global environmental crises, the acceleration of technological change and its impacts, the rapid (and disorganized) progress of sustainability requirements with potential effects on trade, FDI, and international financial markets, changes in international taxation, and the weakening of multilateralism, among others.

One of the most common forms of fiscal incentives is temporary tax holidays, which exempt new companies from paying CIT for a fixed period. However, given that these companies typically do not generate profits during their initial years of operation, this incentive may be of little utility if losses incurred cannot be carried forward to future years. This makes the incentive potentially unjustified, at least from the perspective of the country's development objectives. The use of this instrument may therefore favor highly profitable projects that likely would have been implemented anyway, even without the incentive. In such cases, there is a loss of fiscal revenue (tax expenditure) to make certain investment projects even more profitable than they already were, which would have been undertaken even in the absence of the incentive.[2]

Figure 2 advances this analysis specifically regarding tax holidays. To this end, it shows a hypothetical evolution of post-tax income with and without the full exemption of CIT during the benefit period, with one phase of positive net income and another of negative net income.

**Figure 2. Tax Holiday effects**

**After-tax behavior of corporate income (ATCI)**




*Source: Own elaboration.*

From the analysis of post-tax business income behavior, it can be inferred that tax holiday incentives have the following characteristics:

a) They involve a positive correlation between business success and the level of the incentive benefit, which is not necessarily aligned with the investor's interests, as the investor would assign greater value to a dollar of benefit in an unfavorable business moment than to a dollar of benefit in a situation of prosperity;

b) They transfer uncertainty about future conditions to the effective benefits of the incentive;

c) They do not contribute to reducing the risk of an investment project, as risk reduction is a desirable feature of an incentive program;

[2] Another modality widely used by countries as an investment incentive, and which has characteristics similar to tax holiday schemes, is the application of reduced CIT rates.

d) They increase the variability of post-tax income, as they increase income in situations where there are profits and leave it unchanged in situations of loss.

However, this analysis has taken into account only the characteristics of the benefit itself. As will be stated bellow, the effects of a tax incentive depend not only on the specific type of incentive but also on the set of rules for its granting.

### III.4. Investment Promotion and GloBE Rules

Within each national jurisdiction, the GloBE rules could have far-reaching implications for the design of tax incentives (Eze *et al*., 2023). The impact will mainly depend on the nature of the incentive and whether or not a significant part of the tax base is under scope.

The GloBE rules protect incentives that result in real economic activity within the country, by excluding excessive profits subject to complementary tax that reflect economic substance, defined in terms of physical asset performance and employee compensation costs.

In the case of non-qualified tax incentive regimes, the impact of GloBE is to neutralize the benefit that otherwise would accrue to the relevant multinational companies, ensuring that the untaxed income resulting from the incentive is taxed by the jurisdiction of the ultimate parent company or an intermediary parent entity of the relevant multinational company.

Even when a multinational company is considered stateless, the rules contain detailed provisions that describe how untaxed income would be taxed by some country in some manner.

Therefore, the impact of GloBE on a specific tax incentive regime depends both on the nature of the incentive and its effects.

Table 2 identifies the main tax incentives for investments associated with corporate income tax, highlighting the most relevant design aspects and potential impacts under the GloBE rules.

**Table 2. Typology of Tax Incentives and Expected Impacts of GloBE Rules on ETR**

| *Tax incentives* | *Impact on ETR* |
|---|---|
| Total exemption from corporate income tax for a certain period ( *tax holiday* ) | **High probability**, to the extent that it contemplates a very significant reduction in the ETR established in the GloBE for prolonged periods. |
| Partial exemption from corporate income tax for a certain period | **Medium Probability**, depending on the general corporate income tax rate and the magnitude of the deviation from the ETR.<br>**Low probability**, if the design of the tax incentives does not result in the payment of the complementary tax, which would imply a moderate reduction in the ETR.<br>**Aspects associated with the "substance" of the activities carried out can moderate the impacts on the ETR.** |
| Reduced corporate income tax rate for certain activities, companies or regions | **Medium Probability**, depending on the general corporate income tax rate and the magnitude of the deviation from the ETR.<br>**Low probability**, if the design of the tax incentives does not result in the payment of the complementary tax, which would imply a moderate reduction in the ETR.<br>**Aspects associated with the "substance" of the activities carried out can moderate the impacts on the ETR.** |
| Deduction in the determination of net taxable income of a percentage of eligible investment expenses (in addition to depreciation) – *Investment deduction* | **Medium Probability,** imply a reduction in the covered taxes and a decrease in the numerator of the ETR calculation. |
| Deduction in the determination of net taxable income of certain eligible expenses for more than 100% of the amount actually paid – *Increased deduction. "Super" deduction* | **Medium/Low Probability**, increased deductions are not usually incentives of great significance, they are usually focused, so they do not generate substantial decreases in ETR. |
| Deduction of the amount payable for corporate income tax for a percentage of eligible expenses on investments or other components – *Corporate income tax credit* . | **High/Medium probability**, when the credit is not a Qualifying refundable tax credit and implies a reduction in the covered taxes.<br>**Low/Medium Probability**, when it is a Qualifying refundable tax credit and is treated as GloBE income (increase the denominator of the ETR calculation) |
| Application of depreciation percentages for fixed assets higher than those applicable in the general regime – *Accelerated depreciation, deferral of taxes.* | **Low probability**, to the extent that accelerated amortization of intangible assets apply a recapture mechanism, depending on the useful life.<br>**Zero Probability**, when accelerated depreciation involves tangible assets that do not modify the ETR (given the applied adjustments). |
| Reduced general corporate income tax rate | **High probability**, to the extent that it gives rise to ETR below 15% and the payment of the complementary tax by all multinational companies covered by GloBE.<br>**Medium Probability**, for jurisdictions with average or higher than average corporate income tax rates, not being significantly affected by the GloBE rules. |

*Source: authors adaptation based on OECD (2022), "Tax Incentives and the Global Minimum Corporate Tax: Reconsidering Tax Incentives after the GloBE Rules." OECD Publishing, Paris.*

The impact of implementing the GloBE rules on each type of incentive depends on a set of factors inherent to the characteristics of national tax systems, in particular, the design of the specific investment incentive regime under which benefits have been granted to multinational companies, to the extent that the beneficiary companies fall within the scope of Pillar Two, the level of income to which it applies, and its interaction with the mechanics of the GloBE rules (IISD, 2023). In each case, a thorough analysis will be required by governments seeking to avoid the transfer of taxes not paid in their countries to the countries of residence of the MNEs due to widespread adoption of the GloBE rules. However, all countries can benefit from a critical review of their incentive regimes that generate high levels of tax expenditure. This is particularly relevant for developing countries in general, which face the challenge of reviewing or eliminating tax provisions or promotional regimes that, over time, have become ineffective and contribute little in terms of the main economic and social development objectives.

The application of the GloBE rules counteracts the benefit of some tax incentives by granting another jurisdiction the authority to impose a complementary tax whenever a multinational company within the scope of the rules is taxed below the 15% ETR. Maintaining the affected tax incentives will result in a loss of tax revenue for a jurisdiction, while nullifying the effectiveness of the instrument to promote investment, as the multinational company will still be liable for the complementary tax (IISD, 2023).

# IV. FISCAL REVENUES AND CORPORATE INCOME TAX

The GloBE rules require us to make specific considerations regarding nominal or statutory tax rates versus effective tax rates, as they are established for an effective tax rate (ETR), and the starting point is the accounting results that arise from the financial statements of the entities constituting multinational groups. This situation is a novelty compared to traditional taxable bases, and these basic provisions are essential to understand how the rules work and to identify cases where the supplementary tax may arise.

International statistics show that the revenue generated by CIT as a proportion of GDP is relatively uniform across regions. Data for 2021 indicates that, in OECD countries, the revenue represented 3.3% of GDP, while in Latin America and the Caribbean and the Asia-Pacific region, it reached 3.3% and 3.2%, respectively. In African countries, this tax modality generated slightly lower revenue, reaching an amount equivalent to 2.7% of GDP (OECD, 2024). However, it is important to note that countries achieve this revenue with different combinations of taxable base, deductions, and tax rates, so conclusions drawn from comparing this indicator should be taken with caution.

When analyzing the data by country, fiscal revenues generated by CIT vary significantly from one jurisdiction to another. In 2021, in most of the 123 jurisdictions covered by the Corporate Tax Statistics publication (OECD, 2024), the variation range between countries was between 2% and 5% of GDP. Only in 12 jurisdictions did the revenue from corporate income tax exceed 5% of GDP, while in 2021, records lower than 2% of GDP were observed in only 27 jurisdictions.

The diversity of situations between countries is considerably expanded when considering the importance of CIT as a proportion of total tax revenue. In this case, significant differences are seen between developed and developing countries. In 2021, in OECD countries, revenue from this tax represented only 10.2% of total revenue, followed in decreasing order of relative importance by the

27 jurisdictions in Latin America and the Caribbean (15.4%), the 31 jurisdictions in the Asia-Pacific region (18.2%), and the 32 jurisdictions in Africa (18.7%).

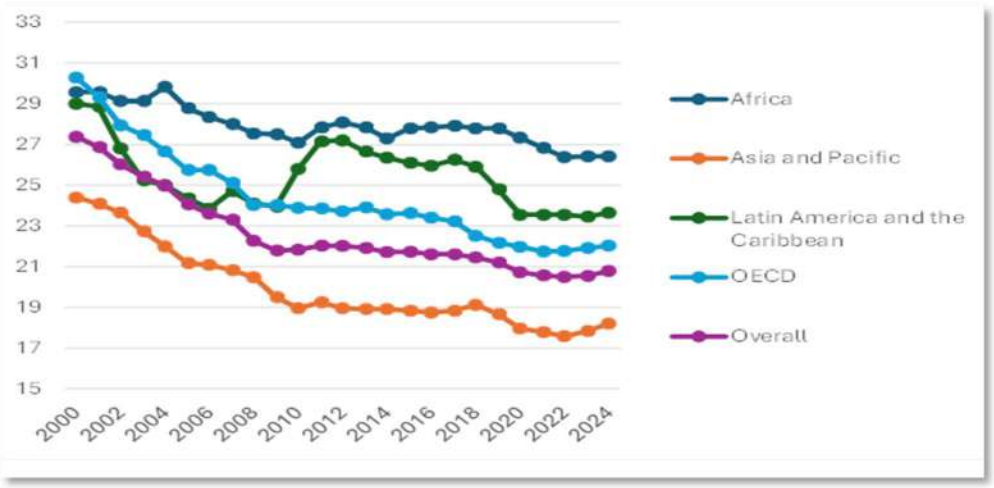
## IV.1. Statutory and Effective Rates

To a large extent, the heterogeneity observed between countries in the participation of CIT in total fiscal revenues can be attributed to differences in statutory tax rates between jurisdictions. It is important to emphasize, however, that these differences should not be mechanically interpreted as a direct expression of base erosion and profit shifting, as many other factors are likely playing an important role in explaining the diversity of situations observed in practice (OECD, 2024). Indeed, the revenue-generating capacity of this tax modality depends on institutional factors and also on specificities of national tax systems, such as the breadth of the taxable bases, the methods of tax declaration depending on the legal form of the contributing companies, the phase of the economic cycle, links with other taxes, special regimes or exemptions, and the existence of mining or extractive activities with special settlement regimes.

Statutory CIT rates can be compared across different jurisdictions and over time. These rates represent the marginal tax that would be paid on an additional unit of net profit, in the absence of other provisions that reduce the taxable base. In reality, statutory rates do not provide a complete picture of the tax burden faced by businesses in a given jurisdiction, as they do not account for the existence of any special tax regime, do not consider specific tax treatments for certain industries or income types, nor reflect the scope of the business base on which they are applied.

However, it is important to highlight that, since the early 21st century, there has been a global trend of reducing statutory rates (OECD, 2024). The reduction has been widespread and has involved both advanced OECD countries and developing countries in the Asia-Pacific, Africa, and Latin America and the Caribbean regions. In the case of OECD members, average CIT rates were reduced from 30% in 2000 to 23.7% in 2024 (Figure 3). Latin American countries have also experienced a significant reduction, though more moderate, from an average of 26.8% in 2000 to 21.1% in 2024. In Africa, the average statutory rate stood at 26.5% in 2024, while the Asia-Pacific region had a slightly lower average rate.

**Figure 3. Average CIT statutory rates by region (2000-2024)**




*Fuente: OECD Tax Database Table II.1, Corporate Tax Statistics Statutory Corporate Income Tax Rates*

Since 2019, a greater stability in the average statutory rates has been observed across all regions of the world. The inclusion of jurisdictions with zero statutory rates affects the average tax rates, with more significant effects in some regions than in others, as jurisdictions with no taxation are not evenly distributed among the different groups of countries. If jurisdictions with zero statutory rates are excluded from comparisons, the global average statutory rate increases by approximately 1.6 percentage points in 2024.

The variations between jurisdictions in defining the taxable bases of CIT can have a significant impact when quantifying the tax burden associated with a particular investment project. These differences may be due to various factors, including technical aspects, such as the rules for depreciation of assets, but also the existence of exemptions arising from the application of investment incentive regimes of varying scope and nature. Therefore, to more accurately and reliably capture the differential effects of national regulations, it is necessary to go beyond the comparison of statutory rates. This historical situation becomes even more relevant within the framework of the GloBE rules, as it involves effective tax rates calculated on taxable bases other than those applied by most countries in their domestic tax regulations.

Calculating the effective tax that companies face on their accounting profits requires a detailed analysis of the proportion of their total profits that are subject to taxation (the taxable base).

The way taxable bases are defined is key to this calculation. Taxable income is not simply defined as the difference between a company's sales and its production costs. The definition also includes numerous tax provisions, such as deductions for asset depreciation (such as capital goods), deductions for interest payments on corporate debt, inventory valuation, treatment of intangibles or intra-group transactions (transfer pricing), among others. The more generous these provisions are, the lower the adjusted taxable base and the effective taxation of business income.

To this end, the database accompanying the publication *Corporate Tax Statistics* (OECD, 2024) provides information on four indicators of prospective fiscal policy: i) the effective average tax rate (EATR); ii) the effective marginal tax rate (EMTR); iii) the cost of capital; iv) the net present value of capital provisions as a percentage of the initial investment.

These indicators are calculated by applying the specific tax rules of each jurisdiction, considering a hypothetical prospective investment project. Calculations are made separately for investments in different types of assets and financing sources (i.e., debt and equity). The composite indicators are calculated by weighting the assets and financing sources.

The methodology used to calculate effective rates simulates the amount of taxes that potential investment projects will have to pay in the future. This methodology is commonly known as prospective effective tax rates (ETR). This type of methodology does not require information from tax returns, as calculations are based on assumptions about the financial returns of hypothetical investment projects, to which the current tax legislation is applied to determine the amount of taxes owed.

Two types of ETRs from the *Corporate Tax Statistics* (OECD, 2024) will be presented:

- The EATR measures the percentage of income that companies allocate to paying CIT. This indicator can help policymakers understand whether taxes influence companies' decisions to invest in new projects (Figure 4).
- The EMTR measures how taxes increase the marginal cost of capital. This indicator can help policymakers understand whether taxes affect companies' incentives to expand existing investments (Figure 5).

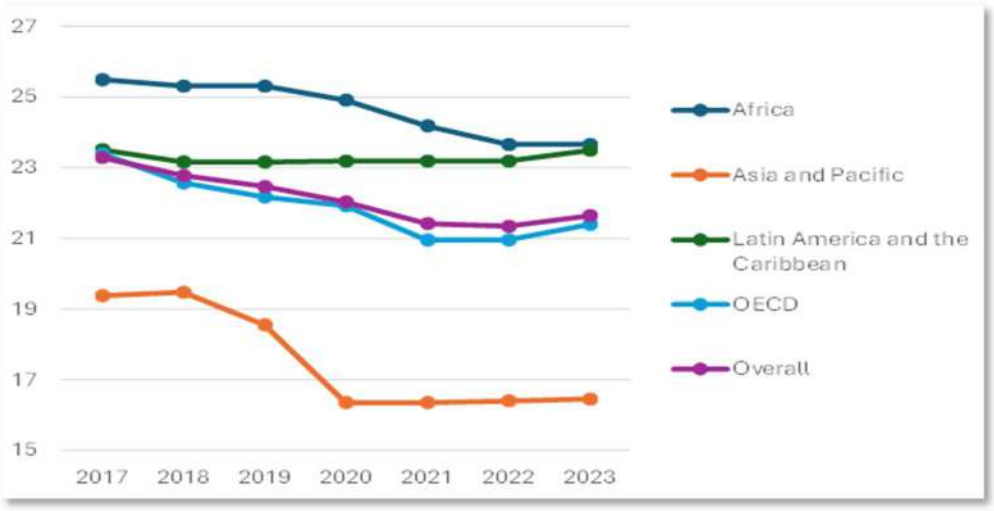
It is worth highlighting two aspects of the methodology. First, this procedure considers the case of a typical company that does not receive any preferential tax treatment. This is important because developing countries tend to offer many preferential tax treatments to certain companies and sectors, which reduce the ETRs for the companies benefiting from them.

Second, the resulting ETRs represent composite rates, obtained as the weighted average of the effective rates corresponding to different combinations of assets and financing sources. This is an important methodological issue, as different tax treatments are often applied to projects financed with debt versus equity. Similarly, different depreciation allowances are applied to investments in different types of assets. These different treatments affect the value of the ETR.

The analysis of data for developing countries shows that countries in Africa and Latin America and the Caribbean (LAC) tend to have higher EMTRs and EATRs. The levels found in developing countries are primarily explained by the high nominal corporate income tax rates. However, they are also partly due to less generous tax provisions, such as the annual economic depreciation rate for certain sectors (e.g., the software industry).

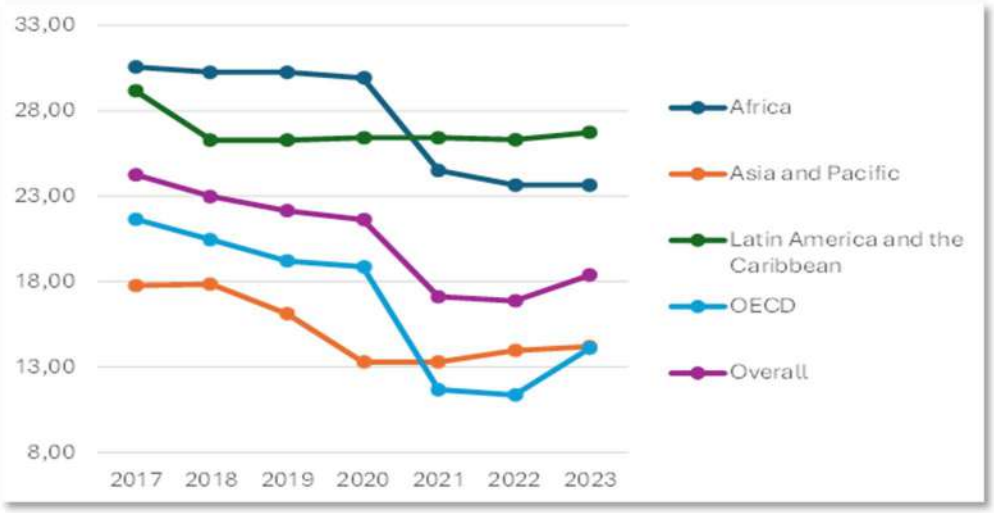
It is important to emphasize that this theoretical result is based on a methodology that, as noted, considers the case of a typical company that does not receive any preferential tax treatment. However, this is not the reality for companies operating in relatively underdeveloped regions, and therefore, these results should be analyzed more deeply and critically, in light of the new effective tax rate (ETR) in the context of the GloBE rules and definitions for each region.

**Figure 4. Average EATR by region (2017-2023)**




*Fuente: Corporate Tax Statistics Effective Tax Rates*

**Figure 5. Average EMTR by region (2017-2023)**




*Source: Corporate Tax Statistics Effective Tax Rates*

## IV.2. Tax Expenditure and Base Erosion

Tax incentives are a subset of tax expenditures, those seeking to incentivize (activities, sectors, etc) through changes in behaviour. What tax expenditures (and tax incentives) trigger is a loss of revenue collection, which is often called "revenue forgone".

"Tax expenditure", therefore, defines the absence of collection, as a result of a different or exceptional tax treatment than that provided for in the general tax regime, within a specific tax system. More specifically, the loss of revenue derived from the application, within the current tax system, of differential tax treatments, special regimes, reduced rates and/or exemptions is measured.

The term "tax expenditure" is attributed to Stanley Surrey, who, as Assistant Secretary of the Treasury in 1967, compiled a list of preferences and concessions in the income tax, shaping it into a spending program (see Burman, 2003). The idea behind this formulation is that what is not collected due to exemptions could be collected and spent on this or other options. Therefore, to evaluate the opportunity cost of this exemption, it is necessary to calculate what is not being collected. Of course, for this exercise to be complete, the cost of this waiver should be compared in terms of its impact with the impact of alternative measures.

A tax expenditure is a transfer of public resources made through reductions in tax obligations, which are typically calculated relative to a specific benchmark, instead of being made through direct public spending (OECD, 2004).

The magnitude of the tax expenditure of a particular country is defined as the total amount of resources the state foregoes due to the existence of incentives or benefits that reduce the direct or indirect tax burden of certain taxpayers in relation to the general framework determined by the reference tax system, which is assumed as a benchmark, in order to achieve specific economic and social policy objectives (CIAT, 2011). According to this definition, there would be tax expenditure whenever there is a deviation from the benchmark, causing a loss of revenue that is appropriated by the benefiting taxpayers.

Tax expenditures can come from different types of tax exemptions, ranging from temporary tax exemptions, exclusions, reductions, deductions, tax credits, tax deferrals, accelerated depreciation systems, to special zones with preferential tax treatment (which may include import duties, income tax, value-added tax, or other taxes).

As a result of these measures, a series of effects occur, the most evident being the loss of revenue for the State, which limits the available fiscal space. Another disadvantage is that the existence of these preferential treatments creates greater complexity in tax systems, increasing administration and compliance costs, and creating opportunities for tax evasion and avoidance. Furthermore, since these policies are not subject to the same control and evaluation mechanisms as direct spending, tax expenditures reduce transparency in fiscal policy, while making it more difficult to distinguish between beneficiaries, which represents an important difference compared to direct expenditure policies or the application of direct subsidies.

On the other hand, tax expenditures affect efficiency, as they create tax competition between different jurisdictions in order to influence the investment decisions of economic agents, thereby distorting resource allocation. Another disadvantage of tax expenditures is the loss of equity, both horizontally and vertically. In the first case, as tax expenditures favor certain sectors or activities, different tax burdens may arise for similar taxpayers. In addition, they can lead to a loss of progressivity and vertical equity, especially when these tax treatments affect progressive taxes with greater redistributive impact, such as personal income tax or wealth taxes.

It is important to emphasize, however, that not all tax expenditures correspond to incentives or promotional tax regimes. There are situations where benefits are granted to taxpayers without explicitly setting a specific objective. In this regard, Villela (2006) points out that every incentive involves a benefit, but not every benefit constitutes an incentive, although both ultimately result in a loss of revenue. An incentive aims to promote a change in the behavior of economic agents, while a benefit does not have this purpose, as it is simply a form of financial support to taxpayers (e.g in the case of personal expense deductions in personal income tax).

The measurement of tax expenditures is a complex task and is not without problems, criticisms, and limitations. There is no single definition of tax expenditure or what constitutes a reference tax system (benchmark). The methods applied, as well as the reference frameworks used to identify tax expenditures, vary from country to country, making international comparison difficult or even invalid.

The benchmark can be based on the existing legal framework or on conceptual definitions from a theoretical perspective. The most commonly applied one is the former, which takes the structure established by the tax law itself as a reference. Thus, tax expenditures are considered as the amounts of resources not collected due to the reduction of taxpayer payments in relation to what is generally established in the specific tax legislation. On the other hand, the conceptual framework consists of taking a broad tax base as the reference, so any exclusion from this base would result in a tax expenditure.

From a methodological perspective, three different approaches can be applied to estimate tax expenditures (Jiménez and Podestá, 2009).

The revenue forgone approach estimates the revenue the State losses assuming that taxpayers would not change their behavior if the tax benefit were abolished. In this case, in order to estimate the magnitude of the tax expenditure, it is assumed that the tax exemption implemented in a certain good, service or sector would be transformed into tax resources if it were abolished. The fact that the estimate of tax expenditure comes from a partial equilibrium model (without considering the possible second-round effects that this exemption may have on the level of activity and therefore tax collection) results in 100% of the exemption being considered a tax cost, in the case of tax incentives, could imply it is redundant (i.e. that the decisions made by taxpayers would have been exactly the same without the tax incentive).

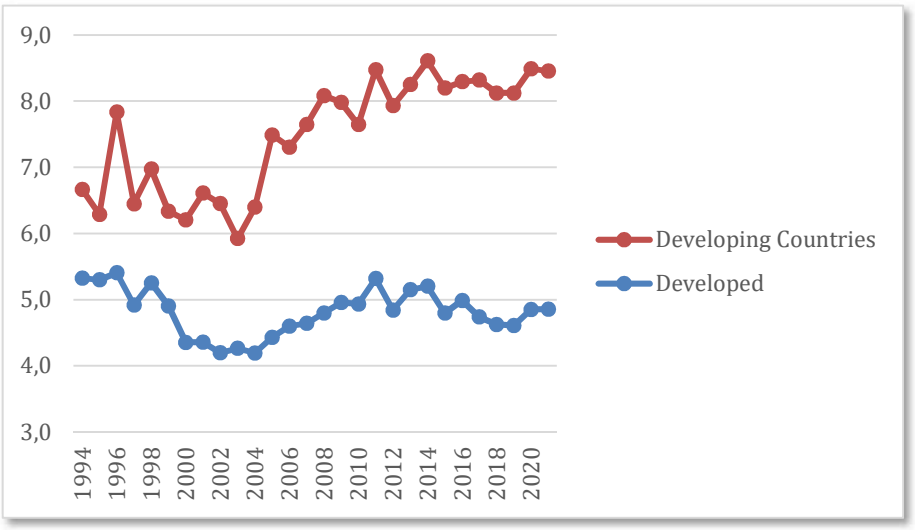
The revenue forgone method estimates the revenue gain that would result from eliminating the preferential treatment, requiring some assumption about behavioral changes from the beneficiaries.

Lastly, the outlay equivalence approach measures the cost of providing the same monetary benefit that the tax expenditure offers through direct expenditure.

In the OECD (2004) report, certain recommendations are provided for the quantification of tax expenditures, both in relation to determining the reference tax framework and the estimation approach. Regarding the first aspect, it indicates that the reference framework does not necessarily need to be based on the legal structure of the tax and should be broad and unique. It also states that all tax expenditures should be considered and recommends estimating the lost revenue. On the other hand, the CIAT (2011) recommends that the reference tax system should arise from the reading of legal norms, such that the lowest tax burden would be verified by comparing what the taxpayer actually bears with what they would have had to bear if the general legislation had been applied. However, in cases where domestic legislation deviates significantly from internationally accepted doctrine, it suggests using a tax system based on a theoretical conceptual framework.

Although, as stated above, the comparison of tax expenditure estimates between countries has multiple difficulties related to the different methodologies used to measure them, below are some graphs that can give an idea of the magnitude and differences between regions and between countries, developed and developing. Figure 6 shows that the average level of tax expenditure is higher in developing countries than in advanced countries.

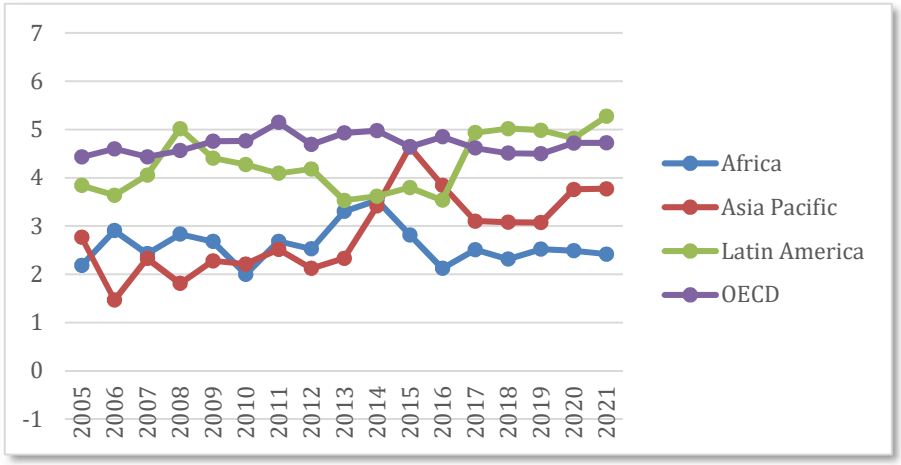
**Figure 6. Tax Expenditure as GDP percentage (2017-2023)**




*Source: PWC Tax Summaries*

In order to continue with the grouping presented in previous sections, Figure 7 presents the estimates of tax expenditure by region (OECD countries; Asia-Pacific; Africa; and Latin America and the Caribbean regions).

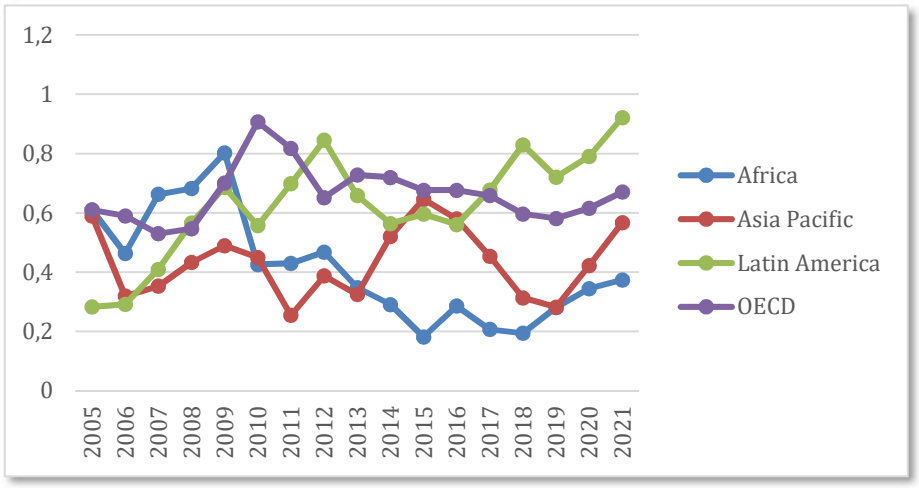
**Figure 7. Tax Expenditure as GDP percentage by regions (2005-2021)**




*Source: PWC Tax Summaries*

Figure 7 highlights significant regional differences in total tax expenditure as a percentage of GDP. Latin America stands out as the region with the highest proportion, exceeding 6%, reflecting extensive use of tax exemptions as an economic policy tool. In contrast, African countries report the lowest tax expenditure, around 2% of GDP. Asia-Pacific and OCDE show intermediate levels, with percentages ranging from 3% to 5% of GDP, indicating a moderate approach to utilizing these fiscal tools. Figure 8 shows the estimate of tax expenditures from exemptions from the CIT, by region.

**Figure 8. Tax Expenditure from Corporate Income Tax as GDP percentage by regions (2005-2021)**




*Source: Global tax Expenditures Database (GTED)*

Figure 8, which focuses on tax expenditure from exemptions on Corporate Income Tax (CIT). As in the previous figure, Latin America records the highest tax expenditure on CIT exemptions, followed by OECD and the Caribbean, Asia-Pacific, and finally, African countries, which demonstrate the least reliance on these fiscal incentives. These variations reflect differing regional approaches to tax policies, influenced by economic priorities and the structure of tax systems in each area.

In terms of tax administration, the IMF (2024) highlights at least four facilitating practices or approaches that allow for effective management of tax incentives: integrated work of all public agencies involved in managing tax incentives; public awareness of the existence of tax incentives and their social benefits and costs; clear and simple policy design and legislation on tax incentives; and a modern risk management framework for compliance.

# V. TAX INCENTIVES IMPLEMENTATION IN DEVELOPING COUNTIRES

## V.1. The Case of Latin American and Caribbean Countries

For the analysis of the LAC experience, a database on tax and non-tax instruments used to promote investment was utilized. This database, which contains information updated to 2024 for 18 middle-income countries in the region, was built from an own survey of investment incentives legislation.[3] This information allows for the identification of specific instruments, benefits, and the usual

[3] The 18 LAC countries considered in this section are: Argentina, Belize, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Paraguay and Peru.

requirements for beneficiaries. The survey covers both general investment promotion regimes and instruments used to stimulate investment in specific activities, detailing for each instrument: beneficiaries, benefits, sectoral scope, timeframes, legal and institutional support, and, when possible, levels of utilization. The conditions required to access the various benefits can be considered a preliminary approach to the expected indirect effects of applying incentives (such as capacity building, technology transfer, R&D, and climate change mitigation and adaptation, among others).

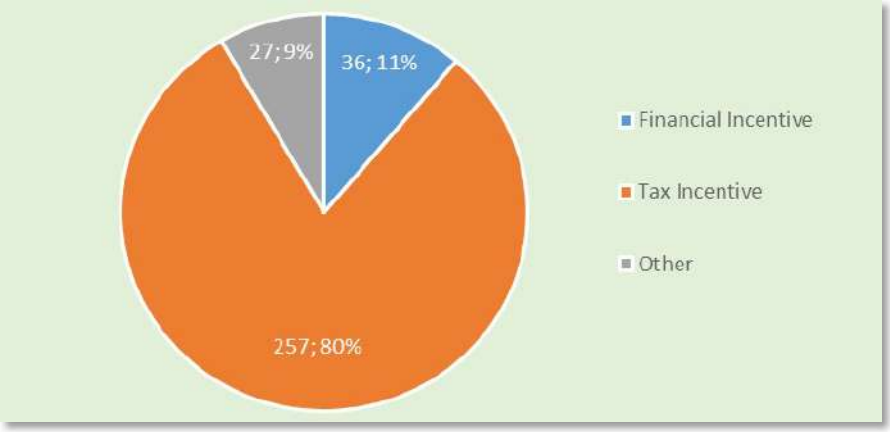
The focus of the analysis is to review and evaluate the existing evidence data on CIT-related incentives in terms of their effects on real investment (e.g. gross fixed capital formation). Only instruments available to large companies were considered, including those with majority foreign ownership. That is, instruments aimed at promoting startups, relatively smaller companies (SMEs), and small or medium-sized agricultural producers were excluded. Additionally, measures that could be exclusively utilized by companies under national capital control were not taken into account.[4,5] The analysis also excluded certain instruments commonly included in lists of investment incentives, such as suspension and restitution regimes for taxes applied to the import of inputs (temporary admission and drawback), as well as tax refund schemes for exports. Individual instruments that provide tax exemptions on the import of capital goods, and occasionally on materials, inputs, and other intermediate goods, were not considered in the analysis (unless they are part of broader incentive packages). Similarly, free trade zone regimes were excluded when they are essentially limited to tax exemptions on the entry and exit of goods, without incorporating additional incentives that could be significant for investment decisions. In total, 103 programs or instruments were surveyed, which together contain 320 incentive measures. 80% of these incentives are tax-related, while financial incentives account for only 11% of the total measures surveyed (Figure 9). The remainder of the programs primarily includes regulatory facilitation measures—for example, related to the hiring of foreign workers or access to public procurement markets—and those that provide some form of stability guarantee, such as clauses of legal or tax stability, or that allow for the possibility of applying compensations in the event of measures that negatively affect the originally expected economic conditions. Investment contracts present in some countries in the region were not included in the considered instruments, except when they also involve the granting of incentives beyond the stabilization of legal and tax conditions.[6]

[4] The focus on small and medium-sized enterprises refers to programs exclusively for these companies, as well as those that do not prevent the participation of large companies but, due to the maximum amounts of their individual operations, are only significant for smaller companies.

[5] In the countries considered, the vast majority of instruments aimed at large companies do not discriminate between national and foreign capital.

[6] Over the last decade, the number of LAC countries with the investment contract instrument has decreased (El Salvador, Guatemala, Honduras, Paraguay, Peru and Ecuador).

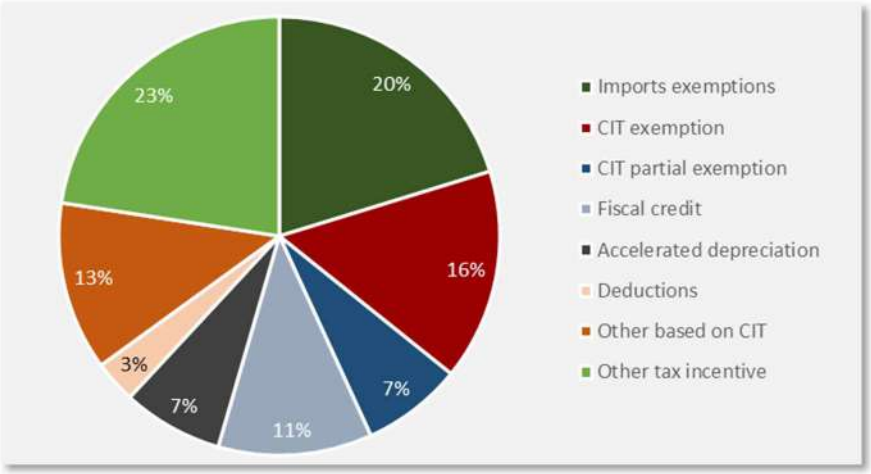
**Figure 9. LAC: Investment incentives in selected middle income countries (as a percentage of total)**




*Source: Own elaboration.*

Regarding tax incentives, the set of exemptions from the CIT tax represents 23% of the total measures observed. Among these, approximately two-thirds correspond to total tax exemptions (tax holidays), with the remainder being partial exemptions or reductions in tax rates (Figure 10). Exemptions from the payment of duties and other taxes on the import of capital goods and/or inputs for production account for 20%, and tax credits represent 11%. Accelerated depreciation and other increased deductions in the calculation of the CIT taxable base account for 7% and 3%, respectively. The category of other tax incentives based on the CIT mainly includes benefits related to withholding taxes and distributions of profits and dividends, and accounts for 13%. Finally, other tax incentives represent 23% of the total and essentially consist of exemptions from other taxes, particularly indirect taxes and property and property transfer taxes. Considering the tax credits that must be applied to CIT payments, it is observed that CIT-based incentives account for just over half of the total tax incentives. Thus, tax incentives overwhelmingly dominate the overall investment incentives, with a relatively intensive use of CIT-based incentives, particularly exemptions from the tax.

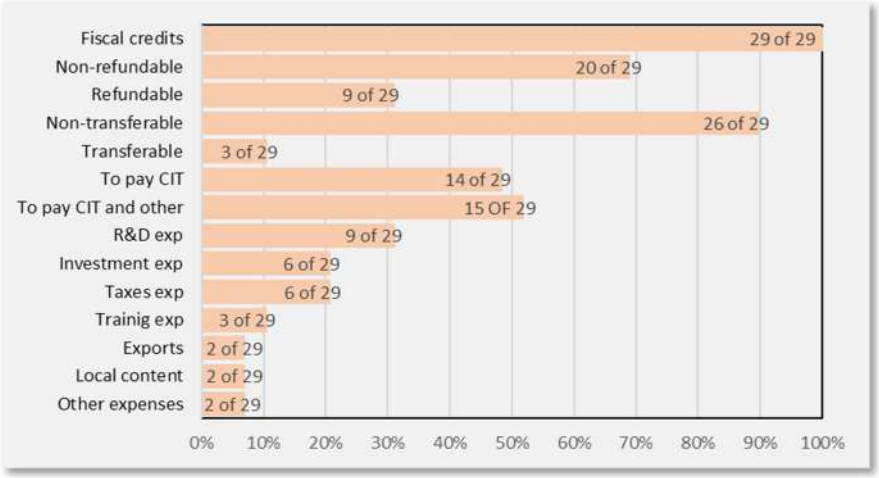
**Figure 10. LAC: Tax incentives for investment in selected middle income countries (as a percentage of total)**




*Source: Own elaboration.*

Tax credits can be characterized according to several dimensions (Figure 11). In most cases, nearly two-thirds, unused balances do not result in refunds, and in general, granted credits cannot be transferred. Regarding their potential applications, in half of the cases, they can be used to pay the CIT, while in the remaining cases, they can also be applied to the payment of other taxes (generally those directly administered by the tax authority). The entitlement to these credits can have various origins, with the most common being expenditures on R&D, capital investments, and the payment of taxes themselves (to a lesser extent, they originate from local content, exports, and training expenses).

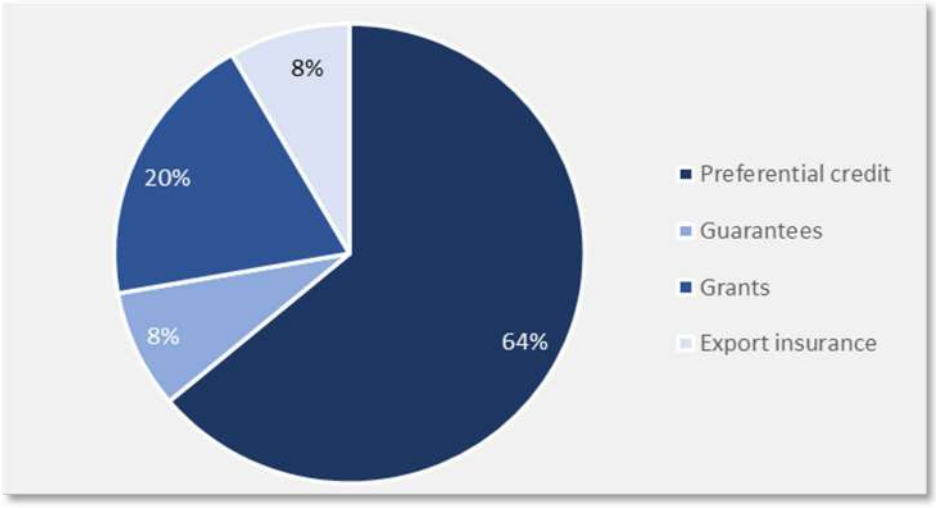
**Figure 11. LAC: Characteristics of tax credits (selected countries)**




*Source: Own elaboration.*

Financial incentives are mostly comprised of preferential loans, with a smaller proportion consisting of direct subsidies (grants) and other financial mechanisms such as guarantee systems and export insurance (Figure 12).

**Figure 12. LAC: Financial incentives for investments in selected countires (as a percentage of total)**

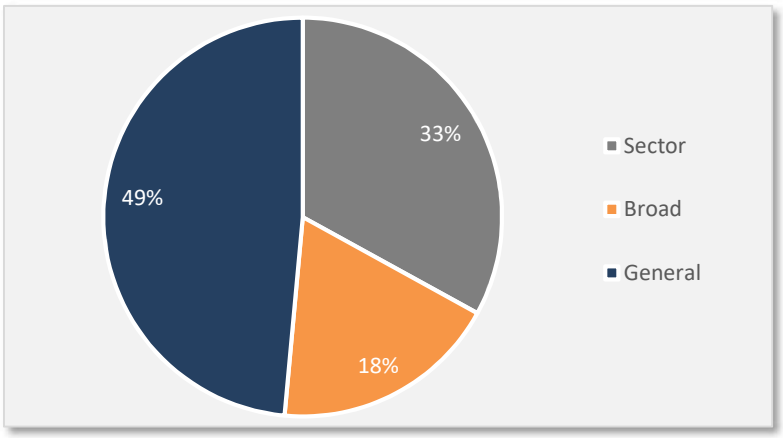



*Source: Own elaboration.*

A noteworthy observation is that 80% of financial incentives are granted in the region's largest economies (Argentina, Brazil, Colombia, and Mexico). In this regard, the role of public financial institutions aimed at promoting investment and foreign trade is prominent: BICE (Argentina), BNDES (Brazil), Bancoldex (Colombia), and Bancomext (Mexico). When instruments aimed at SMEs and startups are not considered, there is very limited use of financial incentives in middle-income countries, particularly those with smaller economies. These countries rely almost exclusively on tax incentives, as usual fiscal constraints make it possible to forgo tax collection but not provide fresh money. This economic size effect is reinforced by the fact that the conclusion generally applies to smaller developing countries in LAC, including those classified as high-income.

An analysis at the instrument level reveals other significant characteristics of the design and implementation of investment incentives in middle-income countries in LAC. The instrument may correspond to either an individual incentive measure—such as, for example, a tax credit program for R&D expenditures—or a broader incentives package, like free trade zones, where multiple benefits can be granted. A key dimension in which promotional instruments can differ is their sectoral coverage. This can range from application to a highly specific sector or subsector of production to being applicable on a general or almost general basis, with few exclusions, including all large sectors of the economy. In an intermediate situation, the application can be limited to a large sector as manufacturing or agribusiness. Approximately half of the surveyed instruments have a general scope, and only one-third apply to a specific sector (Figure 13).[7] Most of intermediate cases -broad scope- are focused on the manufacturing industry and related activities.

**Figure 13. LAC: Coverage of investment promotion instruments in selected countries (as a percentage of total)**



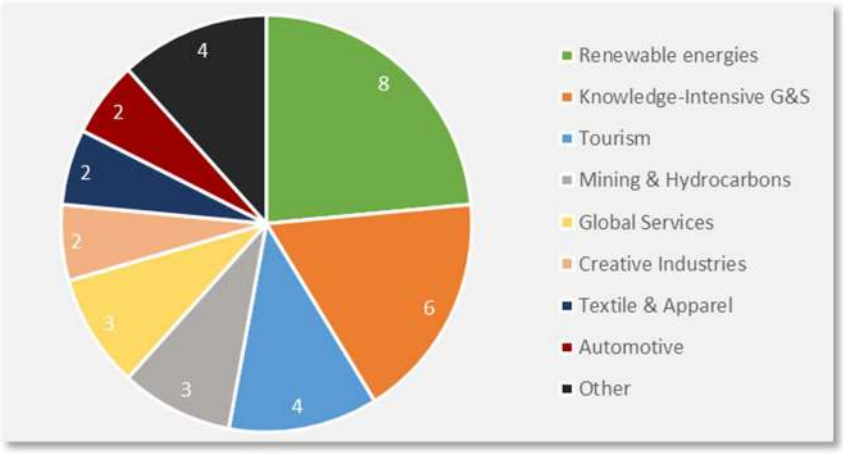

*Source: Own elaboration.*

The targeting of development goals in investment incentives is done in two non-exclusive ways. First, incentives can be granted to production sectors or subsectors considered strategic or to some combination of them. Strategic activities often include, among others, the production of renewable energy, information technologies, or more specifically, semiconductor production and knowledge-

[7] Situations with a general scope are classified as those that encompass activities within several large sectors—such as industrial, commercial, and service sectors—even if, for example, the agricultural sector or mining and hydrocarbons are excluded.

intensive goods and services. More generally, a sector can be prioritized in public policies also for its contribution to sensitive variables, such as employment or exports. In the LAC middle-income countries considered, the most observed sectoral promotion corresponds to the production of renewable energy, followed by a set of knowledge-intensive or high-tech goods and services, tourism, and global export services (Figure 14). Knowledge-intensive promoted sectors include biotechnology, nanotechnology, green mobility, semiconductors, and others typically associated with the knowledge economy.

**Figure 14. LAC: Sectoral targeting of investment promotion instruments in selected countries (as a percentage of total instruments with sectoral focus)**

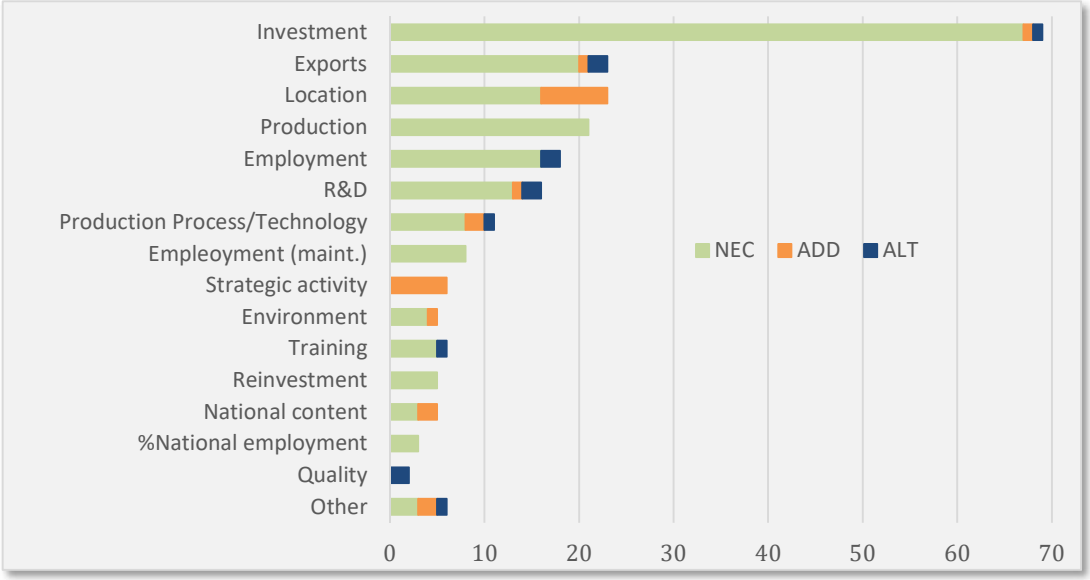



*Fuente: Own elaboration.*

Secondly, the granting or level of incentives may be conditional on meeting certain requirements or offsets, which aim to ensure a certain level of impact and/or the promotion of objectives prioritized in the development strategy. The most traditional cases involve making an investment that contributes to job creation, export expansion, or the location of projects in economically and socially underdeveloped regions. Requirements related to R&D and innovation, human resource training, environmental investments, certain production processes, the use of specific technologies, reinvestment of profits, incorporation of a certain percentage of national content, supplier development, and quality certification are also common.

In the 103 instruments surveyed, 227 requirements/offsets were identified, which were classified as necessary (NEC), additional (ADD), or alternative (ALT) (Figure 15). Necessary requirements are those that must be met to receive the incentive. Additional requirements are those that, if met, lead to a higher incentive benefit. Alternative requirements are included in a set of two or more requirements, of which only one or some need to be fulfilled, but not all of them.

**Figure 15. LAC: Requirements/Counterparts in instruments to promote investments in selected countries (number of requirements )**




*Source: Own elaboration.*

The most common requirement by far is to make an investment, which must be met in 67 of the 103 instruments. In general, this new investment can correspond to either a new company or an existing one. For existing companies, it is common to require a minimum expansion of production capacity, so benefits are usually applied directly to a specific investment project and not to the entire activity of the beneficiary company.

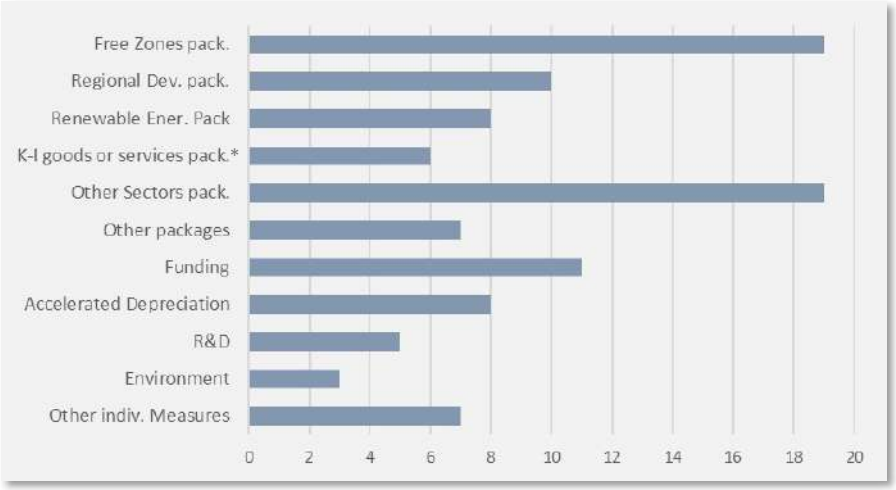
The next most frequent requirements relate to employment, exports, and the location of production. Regarding employment, various types of requirements are observed, including creating jobs, maintaining a minimum number of jobs for a certain period, or a minimum percentage of national citizens in the workforce. The "Production" requirement, shown in Figure 15, refers to situations where no specific offsets are required. In these cases, simply a production activity within the scope of the relevant instrument is sufficient to access its benefits.

Third in terms of frequency are requirements related to R&D expenditures, followed by technological requirements. Requirements related to training, environmental investments, local content, and quality appear in a few cases. Lastly, requirements with a single observation were grouped under the "Other" category, including supplier development, technology transfer, local linkages, and the hiring of individuals from vulnerable minority groups.

The implementation modalities of investment incentives distinguish between individual measures and incentive packages. In principle, any incentive could be applied as an individual measure or as part of a broader set. In the first case, the respective procedures and requirements allow the company to access a single benefit. For example, this is the case of a tax credit for R&D expenses, accelerated depreciation of a fixed asset, increased deductions for green or other promoted expenditures, or a loan on preferential terms. On the other hand, the most common incentive packages correspond to free trade zone regimes, development programs for specific areas or regions, and sectoral promotion regimes.

Intersections are feasible; for instance, a free trade zone regime could be restricted to certain regions of the territory and/or specialized in certain activities. In principle, packages could be designed around the various objectives that investment promotion seeks to address. In the 18 middle-income countries of LAC, 19 free trade zone regimes, 10 regional development regimes, and more than 30 sectoral promotion packages are being implemented (Figure 16). Approximately two-thirds of the free trade zone regimes are of general scope, while the rest are specialized in industrial or related activities and, to a lesser extent, services. The remaining packages, which do not fall into the above categories, consist of incentive regimes of broad or general sectoral scope, not restricted by location. Regarding individual measures, accelerated depreciation and financing-related instruments stand out.

**Figure 16. LAC: Implementation modalities of investment incentives in selected countries (number of instruments implemented)**




*Source: Own elaboration.*

* K-I goods or services: Knowledge-intensive goods or services

The promotion of R&D activities and those that contribute to the climate transition, which are often interrelated, is a central aspect of a modern investment promotion system. Among the investment incentives in the countries considered, only 16 measures are focused on promoting investments in R&D. According to the type of instrument used, the following situations can be distinguished: i) five instruments specifically aimed at promoting R&D expenditures with a general scope; ii) three instruments granting tax credits (one of them for incremental expenditures); iii) one instrument that provides an increased deduction; and iv) a scheme that operates through an incentive package that includes increased deductions, accelerated depreciation, grants, and other incentives. It is important to note that the five countries implementing these regimes are the largest economies in the region (Argentina, Brazil, Colombia, Mexico, and Peru).

From the analysis of the database information, six requirements related to R&D expenditures can be identified as part of the sectoral packages that promote investments in the production of knowledge-intensive or high-tech goods and services (five of these requirements are necessary, and the remaining one is alternative). Three of these requirements are part of free trade zone regimes (one necessary, one necessary for renewal, and the other alternative), while two are additional requirements in sectoral promotion regimes (renewable energy and capital goods).

Moreover, beyond the promotion of investments for the production of electricity from renewable sources, the incidence of measures fostering climate transition is very limited. In general, the applied stimulus measures consist of tax credits or increased deductions originating from environmental investments.

Another important feature to consider about investment promotion instruments is their timeframes. In this regard, it is essential to distinguish between the duration of the incentives and the duration of the regime under which they are granted. In 66 of the 103 instruments analyzed, the incentives for projects have a specific term, but the regime itself has no expiration date. Configurations where there are timeframes in both cases or in neither are observed in 14 and 15 instruments, respectively. In the remaining 8 instruments, the regime has an expiration date, which also applies to the incentives. Therefore, a wide majority of the instruments (81 out of 103) are incentive regimes with no expiration date. Additionally, it is common for regimes that have a set expiration date to be extended without further discussion of the pertinence of such extensions. Regarding the timeframes for incentives, in most cases, they can be renewed with a new investment, although in some cases, fulfilling the original project's commitments may be sufficient.

The implementation of incentives in LAC countries has been presented only from the supply side perspective. Even when there is publicly available information of the main design features of the instruments in the legislation regulating tax incentives; information on the use of instruments has serious limitations in several countries and there is often a lack of updated public information. Notwithstanding, from publicly available information it is possible to infer that the free trade zone regimes are the most used instruments.

## V.2 Reference Experiences from Asia and Africa

To complement the results of the analysis of investment incentives in middle-income countries in LAC, the characterizations of the investment incentive systems in three other middle-income countries are presented: Malaysia, South Africa, and Thailand. The objective was to select a set of developing countries outside LAC, that are also middle-income countries, apply relatively high CIT statutory rates and have a solid track record in the implementation of investment incentives and FDi attraction. The selected countries provide also good online access to the updated legislation and institutional matters (see the Appendix for a more detailed description).

**Malaysia** implements a dense investment incentives scheme with multiple instruments, which makes intensive use of regional and sectoral targeting, and seeks to promote technological and innovation capabilities through knowledge-intensive sectors, investments in R&D and technical and vocational training[8]. A significant percentage of these instruments are intended exclusively for startups, SMEs, Bumiputera companies, firms majority-owned by Malaysians or companies whose management and control are exercised in Malaysia. Nevertheless, there are still several promotion instruments also available for MNCs with FDI projects. In most cases, tax incentives, specifically those related to the CIT, are the main benefits for investors.

[8] The Investments Incentives Portal of the Malaysian Investment Development Authority (MIDA) displays information about 129 investment incentives that are being implemented by the Federal Government (https://investmalaysia.mida.gov.my/incentives/). Information about other incentives can be found in MIDA regular publications (https://www.mida.gov.my/publications/).

Many of these instruments have a common core component of tax incentives corresponding to the Pioneer Status (PS) and the Investment Tax Allowance (ITA). Companies may apply for one or the other, but not both at the same time:

i) The PS consists of a 70% to 100% exemption to CIT for a period of 5 or 10 years, with the possibility of carrying forward unabsorbed losses for 7 consecutive years of assessment after the end of the exemption period; **or**

ii) The ITA allows for 60% or 100% of the qualifying capital expenditure -factory, plant, machinery and other equipment- incurred within a period of 5 years, to be offset against 100% or 70% of statutory income in each year of assessment, with the possibility of carrying forward unutilized allowances until fully absorbed[9].

Industrial/sectorial targeting focuses on machinery and equipment, value added products from oil palm biomass, renewable energies production and conservation, and high technology projects (design, advanced electronics, biotech, advanced materials and medical devices, among others). There are also specific industries targeted: Aerospace, Shipping, Automotive (energy efficient), Electric Vehicles charging equipment, Halal food, and building systems. Most of the incentives mentioned so far are aimed at new companies, while reinvestment allowances and accelerated depreciation apply to existing ones. Regional development is promoted through 5 economic corridors with several investment incentives that apply exclusively in each of these regions. R&D investments are promoted through several programs, including tax incentives, grants and soft loans, some of them not available for MNCs. Biotechnology activities are promoted by a particularly complete package of incentives for new and existing companies. Environmental management promotion is the target of specific tax incentives -the Green Investment Tax Allowance (GITA) and the Green Investment Tax Exemption (GITE).

**South Africa** appears to be a special case among the middle-income countries considered in this study in that there is relatively intensive use of financial incentives, particularly grants, and limited recourse to tax incentives. The latter represent the core benefits of the Special Economic Zones (SEZs) regime and are also used to promote the industrial upgrading and new investment in large-scale manufacturing as well as R&D activities. SEZs are intended for investments in value-added and export-oriented manufacturing industries, logistics and services and offer a preferential CIT rate and accelerated depreciation, among other tax incentives. The Additional Manufacturing Tax Allowance consists in the deduction of a percentage of the cost of new fixed assets. This percentage varies according to the contribution to certain development objectives -innovation, energy efficiency, local linkages, among others- and whether it is a greenfield or brownfield project. Promotion of R&D activities is based on a super deduction of qualifying R&D expenditure and accelerated depreciation in in the case of fixed assets. A top priority in promoting specific industries is the automotive sector, which benefits from a non-taxable cash grant equivalent to a percentage of qualifying investment in productive assets, that is available to new and existing companies. Other support schemes target agribusiness, aquaculture and clothing and textiles, but the caps suggest that the incentives would not be significant for MNC projects. In services sectors, the Global Business Services incentives program offers a grant for each job created and maintained over a five- year period, distinguishing between noncomplex, complex and highly complex jobs. In turn, green initiatives with a funding gap can access different types of financial support from the Green Fund (grants, loans and equity).

[9] The combination of exemption percentages and years of duration depends on the specific instrument.

**Thailand** implements a sophisticated investment incentives system with a targeting scheme that results from the intersection of 4 groups of industries and 6 categories of eligible activities. The groups of industries are: i) Agricultural, Food, Biotech and Medical Industries; ii) Advanced manufacturing Industries; iii) Basic and Supporting Industries; and iv) Digital, Creative Industries and High Value Services. The categories of eligible activities within the groups of industries are related to: i) technology development; ii) knowledge based activities; iii) infrastructures; iv) high technology; v) value addition to domestic resources; and vi) supporting industries important to the value chain.

Thailand's Investment Incentive Scheme distinguishes between Basic and Additional Incentives. The main benefits consist in tax incentives including CIT and import duties exemptions, and their levels vary according to the category of eligible activities (e.g. CIT exemption is not available for supporting industries). The basic package involves also non-tax incentives related to permits to own land, to remit foreign currency abroad and to enter the country for foreign nationals. Additional incentives consist in additional years of CIT exemption and/or other tax incentives and are granted in relation with measures for competitiveness enhancement, location or special programs. Competitiveness enhancement incentives target investments and expenditures in technology and innovation, human resources development and local suppliers development. There are many locations that generate rights to additional incentives, including promoted industrial estates or zones, provinces with low per capita income, Science and Technology Zones, Special Border Economic Zones, and 5 economic corridors. Among special programs, the Smart and Sustainable Industrial Upgrade Programs stands out. Beyond the extensive support within the framework just presented, R&D is also promoted through a super deduction of R&D expenditures.

Investment incentives in Malaysia, Thailand and LAC countries have in common the intensive use of tax-type measures and, among them, those based on the CIT, in particular, partial or total exemptions. Beyond these similarities, investment incentive systems in these Asian countries are much more sophisticated and targeted, in terms of activities and development objectives, than in the average LAC middle-income country. There is a detailed list of promoted industries and special attention is paid to the characteristics of the activities promoted within those industries, with a clear focus on technology development and knowledge intensity. In this same sense, it is observed that there is a much stronger focus on R&D promotion, that is no limited to some specialized instruments -e.g, increased deductions- but is present in the design of the whole system, in particular, in those industries with greater potential of competitiveness and growth. South Africa shares the main characteristics with Malaysia and Thailand, perhaps with a somewhat lower intensity, except that it makes relatively intensive use of direct subsidies.

These three countries have a different approach with respect to national investors in relation with what happens in LAC. There are significant incentives being implemented exclusively for national investors in general or those who meet a certain condition (e.g, Bumiputera companies in the case of Malaysia). On the contrary, in LAC countries, the relevant instruments are available to national and foreign investors under the same conditions. Most national legislation in LAC state as a general principle the no discrimination between investors and investments based on their origin.

Targeting and sophistication strongly demand government capabilities. But these capabilities are affected by significant economies of scale and consequently medium and large countries can build or draw on the necessary capabilities without significant budgetary efforts. For most LAC countries, being small economies, the implementation of administrative structures like those in Malaysia or Thailand is not feasible. However, the explanation based on resource asymmetries could be insufficient and, in at least some cases, there may be a different view regarding investment promotion policies.

A common characteristic of incentives schemes in Malaysia, South Africa and Thailand, which differs from the situation typically observed in LAC, is the existence of a more centralized administration of the instruments with key institutions involved: the Malaysian Investment Development Authority (MIDA), the Department of Trade and Industry in South Africa, and the Board of Investment (BOI) in Thailand.

# VI. CIT-BASED INCENTIVES: A REVIEW ON THEIR EFFECTS

Consistent and good-quality empirical evidence on the effects of tax incentives on investments faces several difficulties:

- Tax incentives can be of various types and are usually part of a broader set of investment incentives, which in turn constitute just one of the multiple potential determinants of investment decisions, in particular, those related to location.

- Studies use different investment measures such as FDI (the vast majority) or some proxy to gross fixed capital formation (GFCF) or private physical investment. FDI is not necessarily physical investment, which is the variable of interest, and FDI can occur without increasing the capital stock in the economy as a result of the acquisition of an existing company, typically, through mergers and acquisitions (Box 4).

- The impact of investment incentives can vary significantly depending on their interaction with several factors and characteristics of the investment, the company, the industry, the host country and the country of residence:

  - The motivations and objectives of the investment, e.g., whether it is market-seeking, resource-seeking, efficiency-seeking or strategic asset-seeking.

  - The characteristics of the investment, e. g., tangible or intangible assets, greenfield project or the expansion or acquisition of an existing company, short- or long-term investment (duration of capital assets), composition in terms of property, plants and equipment, among others.

  - The characteristics of the company in terms of its size, whether it produces goods or services and the market structure and business models prevailing in the industry.

  - The investment financing through debt, equity instruments and/or retained earnings.

  - The tax regime -credit or exemption- in the investor's country of residence.

- The studies use different proxies to tax burdens and tax incentives such as statutory CIT rates, effective marginal tax rates (EMTR), effective average tax rates (EATR), other aggregate tax indicators as well as proper incentive measures (tax holidays, tax credits, allowances, other tax exemptions or cuts).

- The same type of incentive, e.g., a tax credit, can promote different investor behaviors depending on the rules for granting it (requirements, offsets).

- Investment tax incentives are often introduced as part of broader packages of measures aimed to promote private investment, making it difficult to isolate the effect of these incentives.
- There is no generally accepted theory of FDI and studies employ different econometric methodologies with different sets of control variables.
- Differences in characterization together with differences in analysed periods and countries make it difficult to interpret and compare results between studies.
- More precise impact evaluations of tax incentives usually address specific programs with firm level data and a control group that allows to differentiate the performance of treated and untreated firms (it is frequently observed in R&D program evaluations).
- The studies that include developing countries face greater difficulties in obtaining adequate data and even more so in the case of firm level data. The often absent activities of systematic monitoring and control can be critical to the availability of the necessary information.

## VI.1. A general review of the effectiveness of tax incentives on investment

There are many studies on the effects of tax incentives on investment. However, taking into account the intensity with which these instruments are used all over the world, available studies are relatively few. This shortage is much more pronounced for developing countries. Among developing regions, LAC stands out for the scarcity of such exercises.

Emphasis has been placed on the consideration of studies that include developing countries. However, about one third of more than 50 studies considered refer exclusively to developed countries and correspond, for the most part, to relatively more recent works or those that have been widely referenced in the literature.

One ample set of studies tries to estimate the sensitivity of investment to changes in the tax system in advanced economies, using aggregate investment data and controlling for different sets of variables. De Mooij and Ederveen (2008) review this literature and perform a meta-analysis based on 31 empirical studies and broadly conclude that taxes have a negative and significant impact on FDI and investment[10]. The median semi-elasticity is -2.9, which means that an increase in the tax rate by 1 percentage point would reduce FDI by 2.9 percent. Specifically, the semi-elasticity with respect to EATR (-5.9) is larger than the semi-elasticity with respect to EMTR (-4.0) and studies using statutory tax rates produce significantly smaller semi-elasticities than those using effective rates (-2.4). The semi-elasticities of investment -property, plant and equipment- are larger than semi-elasticities of FDI. This is consistent with the result in De Mooij and Ederveen (2003) establishing that studies using data on mergers and acquisitions report smaller elasticities than those using data on new investments and pant capacity expansions. However, several of the studies included in the meta-analysis do not find a significant impact: 221 of 427 semi-elasticities are significant (about one half of the elasticities of FDI and one third of the elasticities of investment). Results of similar nature in terms of tax effectiveness, although with some variation in the FDI elasticities levels, can be found in Egger et al. (2008), Feld and Heckemeyer (2009), Bellak and Leibrecht (2005), Overesch and Wamser (2008) and Bénassy-Quéré et

[10] Similar conclusions were extracted from the surveys of related literature by Hines (1999) and Devereux and Griffith (2002).

al (2003 and 2005), among others. Bénassy-Quéré et al (2003) conclude that high relative corporate taxation discourages FDI inflows, working with a bilateral panel data of 11 OECD countries and approximating tax burden through bilateral tax differentials. They find that this impact is not symmetric to the sign of tax discrepancies: while lower tax rates in the host countries fail to significantly attract FDI, higher taxes tend to discourage new FDI inflows. In turn, narrow tax differentials do not much discourage inward FDI, while large tax discrepancies produce proportionally more important FDI outflows.

Most of the aforementioned studies find that higher corporate income tax burden (including EATR, EMTR and statutory tax rates) has a significant negative impact on FDI flows, although there is a wide range of elasticities (James, 2013). But these studies refer to developed countries and their results cannot be extrapolated to developing countries because the effectiveness of tax incentives in attracting FDI depends on the host country development level (Klemm and Van Parys, 2010).

Some studies at the macroeconomic level report similar results for developing countries, although the effects tend to be somewhat smaller on average:

- Chai and Goyal (2008) consider a sample of 80 developed and developing countries and find that FDI restrictiveness is negatively and significantly correlated with FDI, but there is no evidence of a relationship between incentives and FDI[11].
- James and Van Parys (2009) consider a sample of 80 developed and developing countries and find that a lower EMTR has limited impact on FDI in countries with weak investment climates. The average response of FDI to a lower EMTR is much more pronounced in countries with good investment climates than in countries with weak investment climates, according to Doing Business rankings (an EMTR of 20 percent instead of 40 percent raises FDI by 1 percent of GDP for countries ranked in the bottom half in terms of investment climate, but has an effect eight times greater for countries in the top half).
- James and Van Parys (2010) consider the African countries belonging to the Economic Community of West African States (UMEOA) and the Economic Community of Central African States (CEMAC) and find that more generous tax incentives, proxied by changes in tax holidays, do not have any effect on FDI or gross private fixed capital formation. Tax holidays targeted to exporting firms tend to have a positive small impact on investment, but it is not statistically significant for some specifications.
- Klemm and Van Parys (2012) consider 47 countries from Latin America, the Caribbean and Africa and find that lower corporate tax rates and longer tax exemptions are effective in attracting FDI in LAC, but not in boosting private gross fixed capital formation or economic growth (10 percentage point increase in CIT lowers FDI by 0.45 percentage point of GDP; 10-years tax holiday extension increases FDI by 1 percentage point of GDP).
- Stausholm (2017) considers 51 developing countries (the sample includes the 47 countries of Klemm and Van Parys, 2012) and finds that the effect of tax holidays on FDI is significant but negligible and decreasing, and there are no significant effects of neither changing the tax rate nor implementing a tax holiday on gross private capital formation. There are also no significant results in relation with GDP and total factor productivity growth.

[11] The authors employ FDI restriction index and FDI incentive index of Wei (2000).

- Munongo and Ribinson (2017) consider the Southern Africa Development Community Countries, classified according to resource richness, and find that CIT has a significantly negative effect on net FDI inflows, while tax holidays have mixed results (in the resources-poorer SADC countries, increasing tax holidays attracts more foreign capital while in the resources-rich countries of SADC, tax holidays discourage investors from investing in the region). Reduced CIT in specific sectors negatively influences FDI inflows in resources-rich countries and positively influences FDI inflows in resource-poorer countries.
- Revilla and Laarni (2016) consider 5 ASEAN countries and find that the EATR is negatively related to FDI, while Aprian and Irawan (2019) considering 9 ASEAN countries find that CIT rates have a negative impact on FDI inflows, but tax holidays have no statistically significant effect.

According to these studies, corporate tax rates tend to have a negative and significant effect on FDI inflows in developing countries, but more limited in average than in advanced economies. Evidence at the macroeconomic level is not conclusive on the effects of either taxes or tax incentives on real investment (gross fixed capital formation) and is mixed in relation with the effects of tax incentives on FDI, specifically, tax holidays (tax holidays are specifically addressed below). Most of these studies tend to stress the importance of country level characteristics in promoting FDI and real investment, in terms of general economic, political and institutional conditions. Tax incentives are likely to be more effective in countries with a conducive investment climate (James, 2013; Cui, Hicks and Xing, 2022; Holland and Vann, 1998). One main conclusion of these studies is that there is no "compensation effect" in the sense that more generous incentives offered by developing countries are unlikely to compensate a weak investment climate (James and Van Parys, 2010; IMF OECD UN World Bank, 2015).

### Box 4 – FDI vs. real investment

The empirical studies use different measures of investment such as FDI or some proxy to real investment understood as gross fixed capital formation (GFCF) or a similar definition of physical investment. The vast majority of the econometric studies consider FDI as the dependent variable, while some of them try to explain (also) physical investment. The variable selection is not neutral to the results since there are substantive differences between both concepts.

FDI is a balance of payments category that records foreign currency movements. FDI includes four modes of financing cross-border projects: capital contributions (in tangible or intangible assets); debts with the parent company and other intra-corporation transactions; gains reinvestments; and purchase and sale of capital shares (García et al, 2021). Therefore, FDI is not necessarily equivalent to physical investment made by foreign companies, since the latter can be financed using other sources of external savings (portfolio investment and/or debt) or locally. In turn, there are inflows that are recorded as FDI in the balance of payments that do not increase the level of physical investments in the economy, such as when a non-resident investor buys an existing company (FDI project channeled through mergers and acquisitions, in contrast to greenfield projects).

The meta-analysis performed by De Mooij and Ederveen (2008) concludes that PPE (property, plant, and equipment) tends to produce larger semi-elasticities with respect to taxes than FDI (there are 208 semi-elasticities of FDI and 73 semi-elasticities of investment). One possible explanation is that PPE better reflects greenfield investments, while FDI also contains investments through mergers and acquisitions. Hebous et al (2010) find that the tax elasticity for greenfield investments is negative and in absolute value significantly larger than that associated with mergers and acquisitions investments. This is consistent with the result in De Mooij and Ederveen (2003) establishing that studies using data on mergers and acquisitions report smaller elasticities than those using data on new plants and plant expansions.

Some empirical studies analyze the impacts of taxes on FDI and on investment in developing countries, and in some cases the results differ depending on the variable (James and Van Parys, 2010; Klemm and Van Parys, 2012; Stausholm, 2017). For example, Klemm and Van Parys (2012) consider 47 countries from Latin America, the Caribbean and Africa and find that lower corporate tax rates and longer tax exemptions are effective in attracting FDI in LAC, but not in boosting private gross fixed capital formation or economic growth. The period considered (1985-2004) in this study coincides with the wave of privatizations that took place in several countries of the region, particularly during the 1990s. Again, the difference could be explained by the role of mergers and acquisitions.

The above conclusions are consistent with the typical results of investment climate surveys for developing countries where the availability of tax incentives generally ranks low among the top reasons for investing. Investors place more importance on factors such as economic stability, political stability, regulatory quality, transparency of legal framework, costs of raw materials, local market and labor costs in the host countries (UNIDO, 2011; UNIDO, 2013)[12]. Investors surveys conducted by the Investment Climate Advisory of the World Bank and USAID (Jordan, Nicaragua, Serbia and Mozambique) overwhelmingly conclude that factors related to the investment climate -such as ease of import and export, availability of local suppliers, regulatory framework, adequate infrastructure and geographic location- rank higher than incentives as initial location considerations (James, 2013). In a survey of 159 multinational firms operating in the Caribbean, tax concessions were not among the top 15 of the 40 areas that firms considered critical for their investments (Foreign Investment Advisory Service, 2004; Chai and Goyal, 2008).

Beyond the well known limitations of surveys, the consistency of the answers between surveys suggests that their results should be taken into account, but even the results of well-designed surveys should be interpreted with due care. A second-order role for investment tax incentives, as suggested by surveys, does not necessarily contradict the econometric results in which such incentives have a significant effect on FDI. On the one hand, econometric technics identify the effects of taxes after controlling for other determinant factors. On the other hand, tax incentives can play an important role in the final stage of the selection process, making a difference among similar locations in terms of their fundamentals that are included in the investor's short list (Bolnick, 2004; Freund and Moran, 2017). That is, the effectiveness of incentives is likely conditional upon the factors that determine whether a country is included in the short list (Andersen et al, 2018). This is supported by empirical evidence showing a higher sensitivity to taxes within regional blocs or federal countries.[13]

Additionally, investor surveys also suggest that in many instances incentives are redundant, that is, investment would have been undertaken without them. The redundancy ratios -percentage of investor who claimed that they would have invested even without tax incentives- exceed 70 percent in 11 out of 15 investor motivation surveys and is less than 50 percent for only two countries (James, 2013; IMF OECD UN World Bank, 2015). Redundancy should be a major concern in designing and implementing investment incentives.

The econometric studies mentioned so far use macroeconomic data for estimating investment functions, with the corresponding limitations to account for the complexity of investment decisions

[12] In UNIDO (2011) tax incentives rank 11th out of 12 in importance while transparency of the legal framework ranked 5th.

[13] Devereux and Griffith (1998) show that the EATR plays a significant role in the choice of US firms to locate within Europe, but does not greatly influence the decision to locate in Europe or an alternative location. Villela and Barreix (2002) review 75 studies on the role of taxes on various variables in the US and conclude that taxes tend to have little effect on firm behavior but that intra-regional studies give elasticities that are four times higher than those of inter-regional studies.

and the granting of incentives. Firm level data produce far larger sample size and more discerning statistical tests. The studies based on microeconomic data generally find that variables reflecting the user cost of capital, including tax effects, are statistically significant and quantitatively important as determinants of investment (Bolnick, 2004). Again, this is not necessarily the case for developing countries. For example, Kinda (2014) considers 30 sub-Saharan African countries and finds that taxation is not a significant driver for the location of foreign firms in Sub-Saharan Africa while other investment climate factors -infrastructure, human capital and institutions- are significant (taxation is not significant for both horizontal and vertical FDI). On the contrary, Azémar and Delios (2008) consider Japanese firms implantations in Africa, Latin America and Asia during the decade 1990-2000 and find that the statutory tax rate is statistically significant with a negative sign and economically relevant for developing countries[14].

There are studies that target an specific country and attempt to approximate the effects of changes in tax incentive policies or to estimate the effects of tax incentives based on the existence of different treatments in different regions:

- Amuka and Ezeudeka (2017), Nigeria (1995-2014), finds that a tax policy change consisting in a CIT rate reduction and investment allowances expansion significantly affect FDI inflow into the Nigerian economy, in particular, a reduction in CIT rate by 1percent increases the flow of FDI by 0.12 percent to the non-oil sector (an increment in investment allowance by 1 percent, increases FDI by 0.01 percent and the effect is not significant at the 5% level).

- Fowowe (2013), Nigeria (1970-2006), finds a negative relationship between tax incentives (proxied by two indexes) and private investment in the long-run (results for FDI broadly corroborate the findings on private investment).

- Lohdi (2017), Pakistan (1990-2014), finds that CIT rate is significantly negatively associated with domestic investment and FDI (import tariff rates have no statistically significant relationship with FDI or domestic investment).

- Muthitacharoen (2020), Thailand (2009-2016), finds a robust and significant impact of the tax cut on investment, specifically, after the tax cut the investment of local firms (in percent of fixed assets), rises on average by 1.9 percentage points relative to that of foreign affiliates (foreign firms are likely to be less sensitive to the host country's headline tax rate than local firms due to international tax avoidance opportunities and tax incentives aimed at attracting FDI).

- Chaurey (2016), India regions (2000-2008), finds large increases in employment, total output, fixed capital and the number of firms in treated regions as a result of an incentives packages (the increases are due to both the growth of existing firms as well as the entry of new firms). There is supporting evidence that the new firms entering the treated regions are larger and more productive. However, this study does not show any specific relation between tax incentives and such real economic impact.

- Cheng and Kwan (2000), China regiones (1985-1995), find that Special Economic Zones and the other key policy designations for attracting FDI have a positive effect on FDI, but the impact of the former is far greater than that of the latter. There is also a strong self-reinforcing effect of FDI on

[14] The statutory tax rate plays a more important role in the location choice of Japanese firms in developing countries than in developed countries (the difference between both coefficients is statistically significant).

itself. The size of a region's market, its wage, infrastructure, and education variables are also more or less significant.

- Tung and Cho (2001), China regions (1988-1994), find that tax rates and incentives are important determinants of regional investment decisions in China, after controlling for potential confounding variables covering infrastructure, unemployment rate, wage rate and agglomeration economics. Specifically, areas offering lower tax rates and increased tax incentives are found to attract greater amounts of FDI. More favorable tax incentives provided by the 1991 tax law are effective in increasing FDI during the 1992–1994 period as compared to the 1988–1991 period. Results suggest that infrastructure variables are important determinants of regional investment decisions.

## VI.2. Specific considerations on the design of tax instruments

### *a) Tax holidays*

Tax holidays or CIT exemptions (total or partial) are the most widely used tax incentives in developing countries. The evidence on tax holidays effectiveness in developing countries is mixed. Some studies find impacts that are statistically significant and substantial in magnitude. Azémar and Boonaiem (2023) consider tax holidays granted to MNCs and domestic firms in Thailand and find that they have a substantial positive effect on their investment in tangible assets (MNCs about 17% and Thai about 47%). Pham (2020) studies the effects of a temporary 30 percent CIT cut in Vietnam and find that investment of foreign and domestic firms increases during the policy year between 63–225 percent, depending on the investment measures, and comes back to its pre-policy level after the policy ended. James and Van Parys (2010) consider the tourism sector in the countries of the Organization of Eastern Caribbean States (OECS), analyze the effects of the extension of a tax holiday in Antigua and find that this extension is associated with a jump in tourism-related FDI of several times the average for the rest of the region.

Other studies are much less conclusive about the effectiveness of tax holidays. James and Van Parys (2010) consider a sample of African countries and find that tax holidays targeted to exporting firms tend to have a positive impact on investment, but the economic significance is low. Stausholm (2017) considers 51 developing countries and find that the effect of tax holidays on FDI is significant but negligible and decreasing. Wells and Allen (2001) analyze the elimination of tax holidays in Indonesia in 1984 and find no significant difference in relation with the growth rate of FDI inflows and the number of projects approved, between the periods before and after the policy change. Aprian and Irawan (2019) find that tax holidays have no significant impact on FDI inflows for a sample of ASEAN countries.

A particular relevant case involving tax holidays, among other tax incentives, is that of free zones. Artana and Templado (2015) analyze the free zones regimes in Costa Rica, El Salvador and Dominican Republic. In the case of Costa Rica they find that there is no conclusive evidence that the tax exemptions have a positive impact on investment or employment. In El Salvador the companies included in the regime do not perform better than those not included. Only in Dominican Republic free zones, the companies under the regime perform better (sales evolution) and have higher labor intensity. Even well-known and recognized regimes with very high levels of utilization and relevant participation in national economic activity such as that of Costa Rica may not be success stories of the implementation of tax incentives.

### b) *Expenditure-based tax incentives*

Developed countries use more intensively expenditure-based tax incentives such as accelerated depreciation and investment tax allowances or credits. Evidence generally supports the better performance of expenditure-based tax incentives compared to income-based tax incentives and there is evidence suggesting that accelerated depreciation and immediate expensing have been effective in increasing real investment in OECD countries (OECD 2022):

- Maffini et al (2019) consider UK CIT returns for the decade 1997-2007 and find that more generous capital allowances (accelerated first year capital allowance) increases firms' investment by between 2.1 and 2.5 percentage points and that the reaction of firms to the tax policy change is rather quick (within a maximum of between 12 to 18 months).
- Zwick and Mahon (2017) consider 120,000 US firms during two periods of time and find that bonus depreciation has a substantial effect on investment with a response of 10.4 percent on average between 2001 and 2004, and 16.9 percent between 2008 and 2010 (small firms are substantially more responsive).

As usual, the evidence is more mixed in developing countries. Liu and Mao (2019) consider a policy reform in China with implications similar to an immediate write-off for capital expenditure as depreciation allowance and find that this reform, on average, increased investment and productivity of the treated firms relative to the control firms by 38.4 percent and 8.9 percent, respectively. Also in relation with China, Cui et al (2022) consider CIT returns and find that the introduction of accelerated depreciation failed to meaningfully stimulate investment. In particular, firms failed to claim the benefit on over 80% of eligible investment. The authors explain this due to the taxable positions of the firms and their lack of tax sophistication, and the need to improve the awareness of the policy. Amuka and Ezeudeka (2017), based on macroeconomic data, consider the effects of an investment allowance in Nigeria and find that its increment by 1 percent increase FDI by 0.01 percent and the impact is not significant at the 5% level.

### c) *R&D tax incentives*

In 2020, R&D tax incentives accounted for around 55% of total government support for business R&D in the OECD area, up from 30% in 2000 (OECD 2023). Among developed countries, evidence on the effectiveness of expenditure-based R&D tax incentives is much more conclusive than for income based tax incentives (OECD, 2022). Hall and Van Reenen (2000) review the accumulated evidence on the effectiveness of tax incentives and find that they are generally effective, with a price elasticity of -1 or higher in absolute terms. More recent empirical findings suggest that this elasticity can be above one:

- Appelt et al (2023) consider a sample of 21 OECD countries and find a gross incrementality ratio (IR) of around 1.4 (one extra unit of R&D tax support translates into 1.4 extra units of R&D). The effect of tax incentives on experimental development is found to be more than three times as large as the effect on basic and applied research.
- Guceri and Liu (2017) consider more than 30,000 R&D qualified firms in the UK and find that companies that benefit from the reform (increments in enhanced deductions) increase their R&D

expenditure by an average of 26.4%. The estimated elasticity of R&D spending with respect to user cost is around -1.55.

However, the referred evidence is about advanced economies with developed innovation systems. Again, these results cannot be extrapolated to developing countries. There are some studies, relatively few, that address the effectiveness of R&D tax incentives in developing countries:

- Crespi et al (2016) consider the tax credit scheme of Argentina (1998-2004) and find that the elasticity of R&D investment to its user cost of capital is greater than 1 in absolute terms. When innovation investment is divided into innovation related capital goods expenditures and only R&D, the results suggest that the absolute value of the elasticity for the R&D component of the innovation investment is less than 1.
- Jia and Ma (2017) consider a panel dataset of Chinese listed companies (2007 to 2013) and find that a 10 percent reduction in R&D user costs leads firms to increase R&D expenditures by 3.97% in the short run. Tax incentives have little influence on state-owned enterprises' R&D expenditures.
- Ivus et al (2021) consider firm level data in India (2001-2016) to evaluate the impact of the R&D tax credit scheme reform (2010-2011) on the innovation activity of the country's private firms and find that eligible firms for the R&D tax credit increase R&D expenditures by up to 113% and the frequency of patent applications by up to 20%.

### *d) International tax competition and race to the bottom*

A growing concern following the proliferation of tax incentives in all regions of the world, in particular of income-based tax incentives, is that tax competition to attract investments can lead to a race to the bottom -that is, the process in which a country introduces lower taxes or new incentives and triggers similar actions by a competing country, eroding the effects of the original actions and reducing both countries fiscal revenues (setting up a prisoner's dilemma situation). Studies show that tax competition involves both developing and developed economies:

- Devereux et al (2008) consider 21 OECD countries and find evidence that governments of open economies compete over statutory rates for mobile profits and over EMTR for capital (specially the first): a 1 percent reduction in the average legal rate of neighboring countries results in a 0.7 percent decrease in the rate of the originating country.
- Klemm and Van Parys (2012) consider 47 countries from LAC and Africa (1985-2004) and find that there is evidence of strategic interaction in tax holidays, in addition to the known competition over the corporate tax rate, but there is no robust evidence for competition over investment allowances and tax credits.
- Abbas and Klemm (2013) consider 50 emerging and developing economies (1996-2007) and find that there is evidence of a partial race to the bottom among special regimes (particularly, in Africa), creating a parallel tax system where rates have fallen to almost zero, but not among standard tax systems. In this last case the effective tax rate reductions have not been larger than those witnessed in advanced economies, and revenues remained relatively stable over the sample period (except for Sub-Saharan Africa).
- Knoll et al (2021) analyze R&D activity of MNCs in Europe and find that R&D tax incentives -tax credits, accelerated depreciation or super-deductions- are associated with higher R&D investments

in the policy-changing country but the sum of the host and foreign country tax effect turns out to be small and not statistically different from zero. That is, MNCs respond to R&D tax incentives by relocating R&D activity across group locations rather than by increasing their aggregate R&D investments. In this sense, the authors state that in a global context, particularly in the case of mobile activities, tax incentives may act as 'beggar-thy-neighbour' instruments leading to no significant increase in global investment but simply to a relocation of investment across jurisdictions.

- Bénassy-Quéré et al (2003) state that, although tax differentials do matter for FDI flows these should not lead to a race to the bottom because other factors such as market potential and public investment also matter, because FDI reacts asymmetrically to positive and negative tax differentials so that the incentive to cut taxes essentially falls on high tax countries, and because the incentive for tax competition should depend on tax regimes in home countries (exemption or credit). Other argument in this same line, states that market size and agglomeration economies create location rents that induce to maintain higher taxes.

#### *e) Characteristics of investments and investors*

There is some empirical evidence that certain characteristics of the investment or the investor interact with tax incentives, affecting their effectiveness:

- James and Van Parys (2010), African countries: Tax holidays targeted to exporting firms tend to have a positive impact on investment, although the statistical significance disappears in some specifications and the economic significance is rather low.
- Grubert and Mutti (2004), US MNCs: empirical estimates indicate that investment in manufacturing geared toward external markets is particularly sensitive to host country taxation (statutory CIT level), that this sensitivity appears to be greater in developing countries than developed countries, and that it is becoming greater over time.
- Hebous et al (2010), German outbound FDI to 58 countries: the tax elasticity for Greenfield investments is negative and in absolute value significantly larger than that associated with mergers and acquisitions (M&A) investments (an increase in the statutory CIT rate of 10 percent reduces the probability of choosing a country to host a Greenfield (M&A) investment by about 6.4 (3.6) percent).
- Overesch and Wamser (2008), German outbound investments in European countries: vertically integrated investments are more sensitive to host-country taxation than horizontal FDI; larger tax rate elasticities are estimated for business activities that are considered highly mobile (e.g. financial services); subsidiaries of more internationalized companies are less tax responsive to host taxation.

The characteristics above mentioned are consistent with efficiency-seeking FDI and the findings generally confirm that this investment motivation is more responsive to tax incentives (Andersen et al, 2018). FDI that is resource-seeking, market-seeking or strategic asset-seeking is generally found to be less responsive to tax than efficiency-seeking FDI that tries to exploit cost advantages in production for external markets. Tax incentives targeted at sectors producing for domestic markets or based on location-specific factors generally have little impact, while those targeted at export-oriented sectors and mobile capital tend to be relatively effective (IMF et al, 2015; Grubert and Mutti, 2004).

In efficiency-seeking sectors such as IT and electronics, machinery and equipment, automotive, air- and spacecraft, biotechnology and pharmaceuticals, competition for FDI is high, incentives are commonly offered and most FDI projects are clustered in a limited number of host countries, those that are the most competitive locations. Therefore, efficiency-seeking FDI is also particularly sensitive to the investment climate characteristics and requires more favorable economic, political and institutional conditions than resource- or market-seeking FDI (Andersen et al, 2018).

There is some empirical evidence that confirms that the location decision of greenfield investments is more sensitive to taxes than the location decision of M&A projects. One of the reasons is that a M&A project located in a high tax country would capitalize part of the taxes by reducing the acquisition price (this effect is less pronounced in the case of a greenfield investment). Other reason is that M&A decisions depend on the availability of appropriate targets, while the set of potential locations for a new plant might be larger (Hebous et al, 2010).

It has also been stated that large firms, firms that are part of MNEs, or those that have a large proportion of intangibles in their total fixed assets will be more sensitive to tax-related investment measures (Hannappi et al., 2023).

# VII. GloBE RULES AND OPTIONS FOR DEVELOPING COUNTRIES

The GloBE rules (Global Anti-Base Erosion) have been developed within the political framework of advanced countries, and their design reflects the defense of the economic and fiscal interests of the more developed nations of the OECD. This observation arises not only from the analysis of the two-pillar model rules but also from the way the implementation process of these initiatives has unfolded. In general, advanced countries have made more or less significant progress in applying the new disciplines. On the other hand, developing countries from the Global South have not, to date, taken an active stance in internalizing the GloBE rules.

Some notable exceptions among the LAC countries include Colombia, which has made strides in creating an alternative national minimum tax, and Brazil, which has adopted a provisional measure that will need to be ratified, with the implementation of the QDMTT (Qualified Domestic Minimum Top-up Tax) expected to begin in 2025.

These developments highlight the contrast between the proactive implementation of the GloBE rules in advanced economies and the relatively slower pace of adoption in the Global South, where countries face different economic, fiscal, and institutional challenges. While some LAC countries are taking steps toward compliance, broader regional alignment with the GloBE rules remains a complex issue, influenced by various factors including economic priorities, sovereignty concerns, and the capacity to adapt to global tax reforms.

## VII.1. Progress on the Implementation of GloBE Rules

The most notable global adherence to the GloBE rules comes from the European Union (EU). In Directive 2022/2523, adopted on December 14, 2022, regarding the guarantee of a minimum global

tax rate for multinational enterprises and large national groups, EU authorities explicitly expressed their commitment to this initiative. Article 1 of the directive sets out common measures related to the effective minimum taxation of multinational groups and large national groups.

The Directive 2022/2523 first establishes a rule for the inclusion of business income, whereby a parent company of a multinational group or a large national group calculates and collects its share of the complementary tax with respect to the entities of the group that are subject to low tax rates. Secondly, it defines a rule for insufficiently taxed income, under which an entity within a multinational group incurs an additional tax expense equal to its share of the complementary tax that was not applied under the income inclusion rule for entities with low tax rates within the group.

Furthermore, member states are allowed to apply an admissible national complementary tax, which will be levied on the excess profits of all constituent entities located within their jurisdiction that are subject to low tax rates. Article 2 sets the minimum tax rate at 15% and establishes an implementation timeline for EU countries, requiring them to incorporate this definition into their national laws by December 31, 2023.

This decision directly impacted the tax systems of all EU countries. In October 2024, the European Commission decided to take Spain, Cyprus, Poland, and Portugal before the Court of Justice of the European Union for failing to notify the measures transposing the Directive into national law. To date, almost all EU member states have complied with these obligations, though Spain, Cyprus, Poland, and Portugal have yet to notify the transposition measures. In Spain, for example, the government had adopted a 15% minimum tax rate in 2022 on the taxable income base, but the EU Directive required that this new tax rate be applied to the adjusted net accounting result of large companies. In November 2024, the Spanish Congress finally approved the necessary reform, creating a complementary corporate tax to implement the 15% global minimum tax on multinational companies with revenues exceeding €750 million.

Thus, while the adaptation of internal national regulations may vary in speed, it is expected that Pillar Two will come into effect in 2024, with the implementation of the IIR, UTPR, and QDMTT rules. The IIR and QDMTT rules is generally intended to be applied apply to fiscal years beginning after December 31, 2023 (in 2024), and the UTPR rules will apply to fiscal years beginning after December 31, 2024 (in 2025).

Indirectly, the EU Directive will have consequences in third countries with multinational companies headquartered in EU Member States. If no measures are taken in these countries, starting in 2024, benefits originating from exceptional investment promotion regimes for multinational companies will no longer benefit the shareholders of these companies but will automatically result in a loss of fiscal revenue (not just taxable bases) for the public finances of the source countries.

In addition to the EU, a number of advanced countries have begun to partially or fully implement the rules of Pillar Two, including Australia, Canada, Japan, New Zealand, South Korea, the United Kingdom, Norway, and Switzerland. Another group of countries, both advanced and developing, has also adopted measures for the implementation of GloBE rules or is at least conducting public consultations to amend their domestic legislation. These countries include, among others, Bahamas, Bahrain, Barbados, Bermuda, Gibraltar, Guernsey, Jersey, the Isle of Man (joint statement), Hong Kong, Indonesia, Israel, Kazakhstan, Kenya, Kuwait, ti, Malaysia, Mauritius, Qatar, Singapore, South Africa, Thailand, Turkey, United Arab Emirates, Vietnam, and Zimbabwe (PWC, 2024).

It is important to highlight that, while the decision by the United States to support the political process for the implementation of a global minimum tax was a decisive event in 2021, it did not result in the adoption of Pillar Two rules in the U.S. domestic legislation due to the lack of political agreements. In 2017, the United States introduced a similar minimum tax regime, the Global Intangible Low-Taxed Income (GILTI) tax, as part of the Tax Cuts and Jobs Act. Subsequently, in 2023, a legislative proposal was introduced that included tax changes, incorporating an extraterritorial tax focusing on the Undertaxed Profits Rule (UTPR) and a discriminatory tax inspired by Digital Services Taxes (DST). Proposals for reformulating the GILTI and incorporating the UTPR in line with the GloBE rules were also presented but did not progress.

In any case, significant progress has been made at the international level regarding the implementation of Pillar Two, particularly with the effects of the initiative becoming apparent in 2024. This suggests that further reforms to domestic tax legislation will continue to be observed, particularly in developing countries.

The uncertainty about the speed of global change and these OECD reforms is tied to the situation of three major economies—China (Avi-Yonah, 2024), the United States, and India—that are still lagging in the implementation of Pillar Two rules.

Thus, within the framework of the United Nations, and alongside the progress in applying Pillar Two in advanced countries, efforts are being made to reach agreements that enable more effective international cooperation on tax matters, aiming for universal coverage, particularly taking into account the situation of countries with lower levels of development.

In August 2024, negotiations finalised in New York to establish the Terms of Reference for the UN Framework Convention on International Tax Cooperation. These terms outline, among other aspects, the goals, commitments, deadlines, and resource needs, and were adopted in December 2024 by the United Nations General Assembly

The United Nations Resolution of November 2023, based on a project from the African Group, declared the "Promotion of inclusive and effective international tax cooperation in the United Nations." Referring to Resolution 77/244 from December 2022, the aim was to strengthen the capacity for inclusion and effectiveness in international tax cooperation, establishing that it must be recognized that "the increase in legitimacy, stability, resilience, and fairness of international tax rules serves the common interest of all stakeholders in tax systems and requires expanding international cooperation on tax issues by establishing the legal basis for fully inclusive and more effective international tax cooperation, both substantively and procedurally, duly considering the value of ensuring international tax rules are coherent and uniform, while simultaneously respecting the tax sovereignty of each Member State." The text also establishes that "respect for tax sovereignty means that international tax cooperation enables all countries to effectively participate in the development of rules, on their own right and without preconditions, and adapt and implement them in accordance with their needs and preferences."

These statements highlight the lack of consensus in achieving global systems that recognize the diversity of interests and the implications stemming from the significant heterogeneity between the economic and social development levels of the countries involved. It is clear that Pillar Two has made significant real progress in its application among advanced countries, although progress has been virtually nonexistent among less developed countries.

For example, in the Latin American region, the situation faced by some countries suggests potential advances in the implementation of GloBE rules. However, changes are occurring based on the position taken by multinational companies, which appear to have abandoned their initial reactive stance against the process.

Indeed, starting in 2023, and with greater intensity in 2024, multinational companies began to lose the benefits for their shareholders resulting from the application of Pillar Two. These changes imply that, due to the application of GloBE rules, companies are starting to pay the complementary tax for the multinational group, leading to an increase in the total amount of corporate income tax until reaching the 15% rate, regardless of whether they are located in countries with promotional regimes or low or zero-tax jurisdictions. This shift in position occurs alongside claims, not always made public, regarding the need to adapt existing tax systems, establishing new mechanisms or agreements that would allow recovering, at least partially, the benefits and incentives lost. Ultimately, the progress in implementing Pillar Two in advanced countries is gradually driving progress in less developed countries.

## VII.2. Alternatives for Developing Countries

In the case that developing countries proactively engage in the process of adapting to the GloBE rules, a set of opportunities could arise, involving combinations of the following options.

Firstly, countries could adopt the 15% effective rate as the minimum corporate income tax rate and capture the additional potential revenue resulting from the application of the global agreement, for example, by incorporating the QDMTT, as defined in GloBE.

Secondly, countries could opt to apply an alternative general minimum national tax (AMT) with a 15% effective rate, which would achieve results consistent with the GloBE rules but go beyond and operate as a minimum taxation threshold for all large companies. This solution, while possibly presenting greater political economy challenges, would provide an opportunity to implement tax reforms, even in countries that currently have legal rates higher than the 15% set in the agreement, but which, as a result of adopting promotional investment regimes with very broad benefits based on substantive exemptions from corporate income tax, do not, in practice, reach the minimum effective threshold for large companies. This option could provide greater equity to the overall tax system and could avoid or at least mitigate the complexity of implementing the GloBE rules, which may be a limiting factor for the tax administrations of some countries in the short term.

Thirdly, and possibly in parallel with the first option, countries could selectively review their current national tax incentives and investment promotion regimes. In doing so, they could reduce the likelihood that, since the new system will apply in the jurisdiction where the headquarters of major multinational companies operating in the country are located, a certain revenue would be lost and help moderate any potential adverse effects on the multinational group. Presumably, this last option would require, in parallel, proposing alternative benefits in harmony with the GloBE rules to avoid losing existing productive investment or new projects that could be considered of national interest.

The first challenge for developing countries relies in taking a decistion to redesign their CIT and/or related tax incentives considering the loss of effectiveness of the latter in a context of growing implementation of the IIR by countries hosting parent companies of multinatinal companies.

The second challenge that developing countries face is related to the decision of whether to implement a qualified complementary national minimum tax (QDMTT), apply the income inclusion rule (IIR), and the under-taxed payments rule (UTPR) to benefit from under-taxed earnings made by subsidiaries of their companies in other countries. While the choice may seem trivial, as it would increase domestic tax resources, it must be evaluated considering the cost of managing complexity and the growing demand for data processing of a global tax, which requires investments in technology and capacity development within their tax administrations (IDB, 2024).

Another challenge relates to the possible redesign of CIT and related tax incentives without obtaining new benefits derived from FDI. This could be even more serious if an excessively low effective rate were applied, as it could increase the earnings of the parent company, allowing the country housing that entity to collect more.

Most developing countries house subsidiaries of multinational companies within the scope of GloBE that are already subject to the global minimum tax, as the rules have been implemented in the European Union and other developed countries.

In general terms, the conclusion noted in the South Centre's Fiscal Cooperation Policy Report (Eze et al., 2023) is shared, where it is stated that, "the GloBE rules disproportionately favour developed countries, and their implementation has the potential negative impact on the tax bases of developing economies as income left untaxed by the source jurisdiction up to 15% ETR will be taxed by resident jurisdictions, mostly developed economies. Source jurisdictions, including most countries in the Global South, often have high headline tax rates but low ETR owing to tax incentives and unhealthy tax competition."

The starting situation of most countries in the Global South is characterized by the existence of legal rates clearly above 15% (between 20% and 30%) and effective rates (on taxable bases or fiscally adjusted accounting bases) below that threshold. This stems from the presence of investment promotion regimes with tax holidays, tax-free jurisdictions or enclaves, and investment incentives channeled through tax credits.

The current situation is not politically neutral from the perspective of the least developed countries. It stems, of course, from a system of harmful tax competition that seeks to attract FDI, but also reflects corporate interests and the actions of business lobbies within countries. The reality shows that there are significant political economy restrictions when discussing potential reforms in the national tax legislation of countries, particularly regarding the approval of new national legislation that includes the widespread application of a legal CIT rate ensuring that the effective rate is at least 15%.

Therefore, when evaluating the political feasibility of implementing tax reforms that adapt to the Global Minimum Tax rules, one should consider, on one hand, the case of advanced countries and, on the other hand, the broad range of situations found in developing countries. In particular, it is important to consider the type and size of the companies they house in their economies (multinational companies or local companies, source-based or headquarters-based companies, companies with substance or intermediaries, among others). It is also important to consider the economic size of the countries and the characteristics of the multinational companies on which the new taxes will fall. This implies that the rigorous analysis of how to implement the GloBE rules should be done on a case-by-case basis, country by country.

The South Centre Report (Eze et al., 2023) acknowledges that, while measures to end the “race to the bottom” could benefit developing countries by reducing pressure to offer tax incentives to attract FDI

and encouraging behavioral changes to reduce the shifting of excess benefits of multinational companies to low-tax jurisdictions, the very design of the GloBE Rules makes them inadequate for most developing countries (Reitz, 2023; Hugger et al, 2024).

Among the difficulties faced by countries in adopting the GloBE rules are aspects related to the size of the multinational companies affected, the complexity of the rules, implementation challenges, and minimum returns on substance-based excess income. These dimensions must be expressly considered in tax reforms, particularly if the goal is to achieve improvements in distributive equity and thus generate increased revenue in developing countries. Given the technical difficulties involved in designing and implementing national tax system reforms, it is possible that AMT-type solutions may not be a simple solution in the case of some developing countries.

If the analysis is approached considering the number of multinational companies involved, one should not overlook what the global standards are for these companies to invest in developing countries, nor should it be forgotten that tax administrations in developing countries often have limited capacity to design, implement, and properly control a CIT in line with new international tax regimes (with informational filings by multinational companies).

If technical complexities are combined with political economy constraints to implement tax reforms outside global standards, it is possible that, in some developing countries. Particularly those of smaller relative size, adopting a QDMTT, in line with the rules established in the Pillar Two framework, could be a reasonable solution. In case such jurisdictions are low or null tax jurisdictions, multinational companies based in their territories would end up being taxed at a substantially higher minimum effective rate than the current one. Even when the effective rate would not reach 15%, due to substance-based deductions (physical asset returns and labor compensation costs), it would be higher than the effective rates currently in place, which in many cases are 0%.

The initial adoption of this alternative could later facilitate the implementation of reforms introducing national minimum tax regimes (non-qualified) targeting large companies that are not multinational. The adoption of a QDMTT for multinational companies would not be an obstacle to dual regimes that allow for minimum tax thresholds for all large companies based in the economy of a developing country. In political economy terms, this option would offer certain advantages, as the implementation of Pillar Two standards would likely allow for faster legislative approval and provide time to launch training and technical assistance programs for Tax Administrations by the OECD Inclusive Framework.

On the other hand, if the perspective is shifted and the issue is approached in terms of equity and generating the maximum possible revenue, a situation explained by the current reality of fully perforated CIT regimes and the existence of tax-free zones in many countries in the Global South, the options for developing countries should be seen as an opportunity to redesign the benefits offered to attract FDI, generating better benefits in terms of development goals. The adoption of a global taxation standard for multinational companies could also be relevant in terms of improving revenue and facilitating internal political agreements for its legal approval. In this way, substantial progress could be made in the short term, laying the groundwork for continued CIT reform in the medium term. It should be noted that 2024 is a pivotal year for the loss of relative benefits for multinational companies based in the European Union or other advanced countries that have begun implementing Pillar Two.

Additionally, when evaluating the issue of tax benefits and the incorporation of GloBE rules into the domestic regulatory framework of developing countries from the perspective of sovereignty infringement, it should not be overlooked that, in practice, the full exercise of sovereignty in these matters is quite relative. The reality is that, for many years, several multinational companies based in

developing countries have been taxed at an effective CIT rate close to 0%. In the case of larger developing countries, the situation can be addressed and analyzed jointly, considering multinational companies and large domestic business groups. However, for many developing countries with smaller economies, the challenges may be different, as the multinational firms subject to the Global Minimum Tax are often only a few.

For a more rigorous analysis of these issues, which necessarily involves the evaluation of specific alternatives for each country, the experience of the OECD Global Forum on Transparency and Exchange of Information for Tax Purposes should be taken into account. This forum allowed advances in terms of access to information, which ended banking secrecy for tax purposes and enabled the implementation of beneficial ownership registers, among other radical changes, in jurisdictions that had for many years maintained internal regulations permissive of opacity and tax avoidance. Furthermore, the incorporation of a global standard for the exchange of financial information for tax purposes, with peer reviews and international technical assistance, enabled the possibility of discussing within some Global South countries the reimplementation of wealth or asset taxes, and the possibility of beginning to tax personal income and assets abroad, which had been excluded from the scope of national tax systems that maintain the territoriality principle in their tax laws.

The proposals included in the GloBE rules reinforce the need for case-by-case analysis, determining the most appropriate options for countries to move towards a global minimum taxation in CIT as quickly as possible. The best options for each country depend on its starting point. Available options include the adoption of a qualified national minimum tax to capture the additional fiscal potential created by the new GloBE framework, or the adoption of an alternative national minimum tax that achieves results consistent with GloBE.

In any case, developing countries face the challenge of improving investment promotion and FDI attraction regimes, abandoning strategies that rely heavily on tax incentives based on CIT loopholes. So far, the adoption of GloBE rules by these countries has been limited, revealing that “doing nothing” seems to be the preferred option for many. This implies maintaining a set of inefficient incentives that are incompatible with the GloBE rules. It would mean missing out on the favorable scenario created by the process of implementing the Global Minimum Tax to advance in a series of gradual reforms that allow multinational companies to be taxed through a QDMTT, or for countries to independently redesign their CIT to achieve alternative national AMT taxes that contribute to setting effective minimum rates of 15%.

Given these options, another level of analysis requires considering the implications of adopting a QDMTT, with regard to the condition that no new benefits should be granted that are related to or in contradiction with the GloBE rules. The redesign of FDI attraction mechanisms should, in no case, involve replacing current benefits with other types of mechanisms that end up leaving unchanged the amounts of benefits received by multinational companies in many developing countries.

Governments that aim to continue using tax instruments to attract FDI should replace tax incentives incompatible with the GloBE rules with other effective and transparent mechanisms, which may include deferral measures, investment deductions, and transferable tax credits (IISD, 2023). Additionally, new options for tax benefits not covered by GloBE should be considered, for example, benefits related to workers' compensation payments or contributions to social security, including property taxes and exemptions or partial refunds of indirect taxes.

# VIII. CHALLENGES FOR INVESTMENT PROMOTION POLICIES

The adoption of the GloBE rules by developing countries should be seen as an opportunity for these countries to move forward in redesigning their investment incentives based almost exclusively on mechanisms that imply the erosion of the CIT tax bases.

Empirical evidence indicates that the current design of promotion and attraction incentives in developing countries is often inadequate and has dubious effectiveness with very limited benefits for the countries that implement them.

However, the mere observation of the limited effectiveness of CIT-based incentives in achieving their objectives in most of developing countries should not be considered as a definitive argument regarding the inconvenience of resorting to the use of tax incentives to promote investment.

If the design and implementation mechanisms of these instruments were to overcome the deficiencies currently observed in many developing countries, it would not be appropriate to completely eliminate this type of instrument from their toolbox of industrial policies.

Although there is a broad consensus *a priori* about the hierarchy and relative effectiveness of different fiscal and tax instruments to promote investment and attract FDI, the convergence of national tax policies towards GloBE rules should not mechanically lead to the redesign of incentive systems by eliminating the use of certain instruments in favor of others.

There is empirical evidence that the almost exclusive use of certain types of incentives, such as tax holidays, accounts for the unsatisfactory results that industrial policies in low- and middle-income countries tend to present.

A tax credit has the capacity to eliminate some of the most relevant disadvantages associated with tax holidays, but not necessarily any type of tax credit represents a superior alternative to tax holidays from the point of view of the realization of certain investments and the potential spillovers expected from the project.

When redesigning investment incentive systems, the focus should not be placed exclusively on the specific type of incentive offered to investors, since the effects also depend on a set of rules that define the conditions for access to the benefits (requirements/returns for their granting).

The way in which each developing country will determine the method of convergence to the GloBE rules must simultaneously take into account the way in which the new investment promotion systems are defined, both in terms of the type of incentives to be considered and in terms of the management and oversight mechanisms of the different instruments used.

National specificities are fundamental when it comes to making decisions, insofar as they determine, on the one hand, the number and type of multinational companies involved in the application of Pillar 2 and, on the other hand, consideration of the structural characteristics of the different economies defines the menu of most appropriate options for designing an effective and efficient system that establishes the conditions for access to the benefits granted within the framework of the new investment promotion and attraction systems.

Tax incentive programs are often based on the expected contribution to a set of development objectives, according to statements that are often similar in content regardless of the specific instruments or the country in question.

However, just as often, the design of the programs does not include specific requirements that promote the contribution to these objectives. The result consists in instruments with broad or general scope and little focus on development objectives, which drastically reduces the chances of attracting the right projects and that their implementation generates the expected spillovers.

The traditional strategy of promoting manufacturing in developing countries as a way of generating sufficient good jobs is no longer valid. In these countries, industrial policy has to be understood as productive development policy.

The relevant approach is to promote activities with relatively better prospects for productivity growth and that are capable of generating the good jobs needed in the context of new technologies and the climate transition.

Rather than requiring the creation of a certain number of jobs or their maintenance to grant an incentive, the aim is to promote activities with the best prospects for sustained demand for workers.

One possible explanation for the intensive use of tax incentives, in particular, tax holidays, with a broad sectoral scope and low targeting, is the limitations of the available capabilities to design, monitor, control, evaluate and review the instruments.

The limitation in capabilities may explain the departure conditions, but it is also critical for a good reformulation of the incentives system. Compliance with the GloBE Rules does not ensure that countries will move towards better designed and evaluable incentives with the possibility of being periodically improved based on the interaction between design and implementation.

It is strictly necessary to generate the conditions so that low and middle income countries can establish solid foundations for the learning processes for a good and sovereign administration of their instruments. In this sense, small countries face even greater challenges as these capacities are affected by significant economies of scale and face relatively stronger lobbying pressures from MNCs.

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# APPENDIX - Reference Experiences from Asia and Africa

## A.1. Investment Incentives in Malaysia

Malaysia implements a highly targeted investment promotion based on tax incentives related to CIT (exemptions and investment allowances). A first approach to industry targeting relates to the promoted activities and products by two regimes: i) Special Incentives for Investments in Selected Industries; and ii) Incentives for High Technology Projects. The first one applies to investments in the production of Machinery and Equipment (M&E) and Specialized M&E (industry-specific and packaging), utilization of oil palm biomass to produce value added products, generation of renewable energy and conservation of energy. The conditions include M&E with high value add and high technology, and manufacturing processes that involve design and R&D. On the other hand, the list of promoted activities and products by the second regime includes: design, development and manufacture of advanced electronics and computing; medical, professional, scientific and measuring devices; biotechnology; advanced materials; alternative energy technology; and iron and steel (super fine wire). A certain level of R&D has to be met, as measured by local R&D expenditure to gross sales on an annual basis by the third year of operation. In both regimes, to enjoy the incentives a company cannot have started production prior the date of application.

Other instruments target, individually, specific industries and activities: Aerospace industry; Shipping industry; Automotive industry; Manufacture of electric vehicle charging equipment; Halal food products; Tourism projects; Hotels; Cold chain facilities and services for food products; and Industrialized building system components (in some cases only the ITA is available). These incentives are usually available for new and existing companies, except in the case of the automotive industry, which requires that production has not started. The activities promoted within the automotive industry are the assembly and manufacturing of Energy Efficient Vehicles, Next Generation Vehicles and their critical components and systems.

In general, the investment incentives for the industries above mentioned are subject to specific requirements relating to minimum levels of value-added percentage and technology, or the use of modern and state-of-the-art machinery or technology.

In addition to the instruments targeted to specific activities and products there are other tax incentives with a broader sectoral scope, in particular, related to the relocation of manufacturing production and reinvestment allowances. The Special Tax Incentive targets manufacturing companies intending to relocate their operations to Malaysia with a 0% CIT rate for 10 or 15 years, depending on the amount of the capital investment, for new companies, and a 100% ITA for 5 years for existing companies relocating overseas facilities into Malaysia. The Reinvestment Allowance (RA) is available for existing companies engaged in manufacturing and selected agricultural activities that reinvest within the same industry. The RA is given for 15 consecutive years beginning from the year the first reinvestment is made, at the rate of 60% of the qualifying capital expenditure and can be offset against 70% of statutory income for the year of assessment. After this 15-year period of eligibility for RA, a company that reinvests in the manufacture of a broad range of products is eligible for the Accelerated Capital Allowance (ACA), where by the capital expenditure can be written off within three years (an initial annual allowance of 40% plus annual allowance of 20% for the first and the following two years).

Malaysia Federal Government promotes the development of specific regions through 5 economic corridors: Northern Corridor Economic Region (NCER), East Coast Economic Region (ECER), Iskandar Malaysia, Sabah Development Corridor (SDC) and Sarawak Corridor of Renewable Energy (SCORE). There are several investment incentives that apply exclusively to each of these regions. From an FDI perspective, the relevant incentives are of a tax nature and correspond mainly to the NCER and the ECER. In the NCER the incentive packages target manufacturing -green technology, medical devices, additive manufacturing, aerospace products and petrochemicals-, tourism, education, logistics, agriculture and bio-industries, and R&D with focus on medical sciences. There are also incentive packages for some thematic industrial parks: Kedah Rubber City, Kedah Science & Technology Park and Chuping Valley Industrial Area. The configuration of tax incentives relays on the

alternative between CIT exemption and ITA, adding in some programs or subregions a 50% reduction on Stamp Duty on instruments of transfer or lease of land and an Import Duty exemption on plant and machinery, equipment, spare parts, raw materials and components which are not produced locally. According with the instrument, the requirements include a substantial creation of employment, a minimum 80% of Malaysians in full-time employment and/or source at least 50% of raw material, components and/or services produced in Malaysia. As stated above, MNCs cannot have started production prior the date of application. In the ECER similar incentive packages focus on manufacturing, agriculture and related services, tourism, knowledge education and ICT development, oil and gas and petrochemical, and industrial parks and free zones development. To a company to enjoy the ECER incentives, it cannot have started with the qualifying activity in the region more than one-year prior the date of application.

R&D investments are promoted through several programs, including tax incentives, grants and soft loans, some of them not available for MNCs. The ITA for companies that provide R&D services -R&D Companies- applies to FDI projects of new companies and their clients may enjoy double deduction on their qualified R&D expenditure. Additionally, existing R&D companies undertaking reinvestments are eligible for CIT exemption or ITA. The Strategic Research Fund is open to MNCs and offers matching grants -up to RM 15 million- for the financing of high impact projects on new technologies, processes, innovative products or value added.

Biotechnology activities are promoted by a particularly complete package of incentives for new and existing business -BioNexus Status- that include the alternative between CIT exemption and ITA, a CIT rate of 20% for a period of 10 years upon the expiry of the CIT exemption, an industrial Building Allowance, exemption of import duty and sales tax on imported raw materials, components, and machinery and equipment, double deductions on R&D and export promotion expenditure, and specialized funds.

Tax incentives also play a leading role in environmental management promotion. The Green Investment Tax Allowance (GITA) for business purposes consists in an ITA of 100% of the qualifying capital expenditure within a period of 5 or 10 years to be offset against the 100% or 70% of statutory income in connection with: green hydrogen; integrated waste management; electric vehicle charging station and renewable energy projects. There is also a GITA that considers the purchase of green technology assets for own consumption: battery energy storage system; green building; renewable energy system; energy efficiency. Additionally, the Green Investment Tax Exemption (GITE) introduces a CIT exemption of 70% of statutory income for solar leasing activity for 5 or 10 years based on the installed capacity.

## A.2. Investment incentives in South Africa

Tax incentives in South Africa represent the core benefits of the SEZs regime and are also used to promote the industrial upgrading and new investment in large-scale manufacturing as well as R&D activities.

SEZs may be sector-specific or multiproduct and are intended for the location of investments in value-added and export oriented manufacturing industries, logistics and services. The main incentives include: i) a preferential CIT rate of 15% instead of 28%; ii) an accelerated depreciation allowance of 10% on cost of any new an unused buildings or improvements; iii) the Employment Tax Incentive (ETI); iv) import duty rebate and VAT exemption on imports of raw materials, machinery and assets to be used in production; and v) VAT suspension for supplies procured in South Africa. The ETI reduces the costs of hiring employees through a reduction of the Employee's Tax (it applies also outside the SEZs but only if the employee is between 18 and 29 years of age).

The Additional Manufacturing Tax Allowance grants the possibility of deducting an amount equal to 35% (55%) of the cost of new manufacturing assets -buildings, plant of machinery- used in an industrial project approved by the Minister of Trade and Industry as an industrial policy project (with preferred status). These percentages increase to 75% and 100% for projects located within SEZs, respectively. The achievement of a qualifying or preferred status depends on the extent to which the project implements innovative processes, improves energy

efficiency, provides skills development, creates business linkages within the Republic and procures good and services from SMEs, among other factors. Minimum levels of investment in new manufacturing assets and maximums levels of additional allowance are established for projects with and without preferred status, depending on whether they are greenfield or brownfield. In addition, a company may deduct an amount equal to the cost of training provided to employees for the implementation of the industrial policy project -Additional Training Allowance-, with maximum levels of additional allowance and cost per employee.

For the purpose of determining the taxable income a company is allowed a super tax deduction of 150% of qualifying R&D expenditure, subject to approval of the Minister of Science and Technology. In the case of machinery, plant or improvement for purposes of carrying on R&D corresponds a deduction of 50% of the cost in the first year of assessment that the capital asset is used for the first time, 30% in the second and 20% in the third year of assessment.

The promotion of specific industries is based on financial incentives. The Automotive Sector Investment Schemes has 3 subcomponents: Light Motor Vehicles; People-Carrier Automotive; Medium and Heavy Commercial Vehicles. The incentive consists in a non-taxable cash grant equivalent to a percentage -between 20% and 35%- of qualifying investment in productive assets, that applies to new and existing manufacturers. According to the subcomponent, the requirements include achieving a minimum production volume, R&D in South Africa, employment creation/retention and certain industrial processes, among others.

Other support schemes target agribusiness -food and beverage, furniture manufacturing, fiber processing, feed production and fertilizer production-, aquaculture and clothing and textiles through cost-sharing grants but with caps that suggest they would not be significant incentives for FDI projects. The Clothing and Textiles Competitiveness Program also includes a Production Incentive Program that offers an upgrade facility grant equivalent to 7,5% of a company's manufacturing value addition in a defined financial year. In services sectors, the Global Business Services incentives program offers a grant for each job created and maintained over a five-year period, distinguishing between noncomplex, complex and highly complex jobs. Green initiatives that demonstrate a funding gap can seek financial support from the Green Fund through grants (recoverable and non-recoverable), loans (concessional rates and terms) and equity, with a limit of up to R70 millions for investment funding.

## A.3. Investment incentives in Thailand

Thailand's investment incentives are largely designed in the framework of the Investment Promotion Act and administered by the office of the Board of Investment (BOI). Promotion efforts target certain eligible activities within 4 Investment Promotion Divisions (IPD):

- IPD1: Agricultural, Food, Biotechnology and Medical Industries.
- IPD2: Advanced Manufacturing Industries
- IPD3: Basic and Supporting Industries (mineral, materials, steel and iron, chemical, petrochemical and plastic industries; public utilities and environment, real estate development for industrial use).
- IPD4: Digital, Creative Industries and High Value Services.

In turn, within each division the eligible activities are classified in 6 groups:

- A1+: upstream industries utilizing advance technology and innovation, targeted technology development activities (biotechnology, nanotechnology, advanced material).
- A1: knowledge-based activities focusing on R&D and design to enhance competitiveness.
- A2: infrastructure activities, activities using advanced technology to create value, with no or very few existing investments in Thailand.
- A3: high technology activities with a few investments already existing in Thailand.
- A4: activities with lower technology than A1-A3 but which add value to domestic resources and strengthen the supply chain.
- B: Supporting industry that does not use high technology, but is still important to the value chain.

The Investment Incentive Scheme distinguishes between Basic and Additional Incentives. The basic package contains tax and non-tax incentives. The tax incentives include: i) CIT exemption; ii) exemption of import duties on machinery; and iii) exemption on import duties on raw materials used in R&D or in production for exports. The CIT exemption is not available for the activities in group B and its duration varies between 3 and 13 years for the rest of the groups (3 years for A4 and 10-13 years for A1+). In the cases of activities in A1 and A1+ the CIT exemption has no cap. Non tax incentives are related to permits to own land, to remit foreign currency abroad and to enter the country for foreign nationals.

The Additional Incentives consist in additional years for CIT exemption and/or other tax incentives and are granted in relation with measures for competitiveness enhancement, location or special programs.

The Competitiveness Enhancement Incentive considers eligible investment/expenditures in technology and innovation, human resource development and local supplier development. The additional CIT exemption varies from 1 to 5 years, according to the percentage of investment/expenditures to sales or the amount of investment/expenditures, in the first 3 years (with a limit of 200% of investment/expenditures). In case investment/expenditures on R&D account for at least 1% of total sales or at least 200 million baht, in the first 3 years, the project will be eligible for CIT exemption with no cap. The total CIT exemption period (basic + additional) cannot exceed 13 years (this limit applies in general).

The locations that generate rights to additional incentives are: promoted industrial estates or zones; 20 provinces with low per capita income; Science and Technology Zones (21 locations); Special Border Economic Zones (SEZ); The Eastern Special Development Zone (EEC); and Economic Corridors (Northern, Northeastern, Central-western, Southern). According to the specific location and targeted activities the additional incentives consist in additional years of CIT exemption, 50% reduction of CIT on net profit for up to 5 years, double deductions of the costs of transportation, electricity and water supply for 10 years and/or additional 25% deduction of the costs of installation or construction facilities. The SEZ, the EEC and each Economic Corridor target specific industries and activities (the SEZ incorporates some activities that are not considered by the general regime).

The Smart and Sustainable Industrial Upgrade Programs grant additional incentives in relation with efficiency enhancing measures for existing projects or for group's B new investment projects. According to the case, the targeted measures include: machinery replacement; adoption of automation and robotics; digital technology adoption; Industry 4.0 transformation; energy conservation, alternative energy utilization, or environmental impact mitigation; international sustainability certification. The additional incentives consist in the exemption of machinery import duties and CIT exemption for 3 years with a cap of 100 percent of the investment capital, excluding cost of land and working capital.

R&D is also a promoted activity under the Investment Promotion Act. Private companies are allowed to a 200% tax deduction of their R&D expenditures. The maximum deduction depends on the company´s income, with a 6% limit for large companies.

In 2018, a new investment promotion category -International Business Center (IBC)- was introduced to align with the OECD's Inclusive Framework on BEPS. An IBC is a company that provides services to its associated companies in overseas countries and/or in Thailand including international trade. The requirements include minimum levels of paid up capital, operating expenditure in Thailand and qualified employees. The tax incentives consist in: i) a CIT rate between 3% and 8%, according to expenditures paid to recipients in Thailand; ii) CIT exemption on dividends received from associated enterprises in Thailand or overseas; iii) Specific Business Tax exemption on gross receipts from providing financial management services; iv) Withholding Tax exemption on dividends and interests under certain conditions; v) import duty exemption on machinery used for R&D and training services; and vi) reduction in personal income tax to 15% for expatriate employees. There are also non-tax incentives related to the possibility of majority or 100% foreign ownership and 100% foreign shareholding, the right to own land and VISA and work permits.