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Tax Incentives in Cambodia

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Abstract

Cambodia, like its regional peers, offers a number of tax incentives to investors. This paper reviews these incentives to assess their costs and benefits, including their likely effectiveness in attracting capital and in supporting the diversification strategy. It finds that an important incentive, the tax holiday, differs materially from practice elsewhere in offering a deferral rather than exempting from tax and may not be very effective. Moreover, other features of the tax system, such as the high withholding rate on dividends, imply relatively high effective tax rates for foreign investors. The paper discusses potential reforms that weigh revenue and other costs of tax incentives against the need for a competitive tax system, including a shift from tax holidays toward investment allowances.

JEL Classification Numbers: H25, H26.

Keywords: Tax incentives, Tax Competition, Tax holidays.

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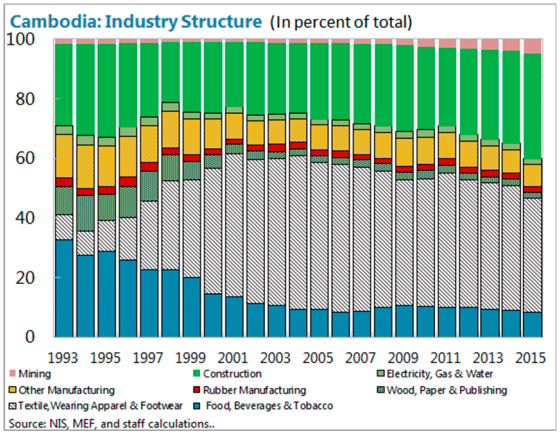
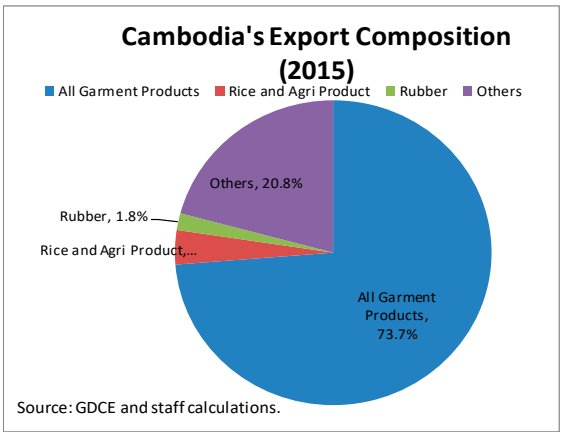
I. INTRODUCTION

During the past two decades, Cambodia has become one of the fastest-growing frontier economies with a slowly diversifying economy. Real GDP growth averaged nearly 8 percent during this period. The economic base changed from subsistence agriculture to light manufacturing and services, which accounted for around 80 percent of GDP at end-2015 (Figure 1, left panel). Dependence on the garment sector, both for growth and exports, remains heavy (Figure 1, right panel), but recent foreign direct investment (FDI) trends point to nascent signs of diversification into other manufacturing products. These include, small motors, electronics parts and auto-parts, bicycles helped by attempts of regional producers to diversify their supply chain. The diversification progress, however, remains slow.

Figure 1. Cambodia's Industrial Structure and Exports

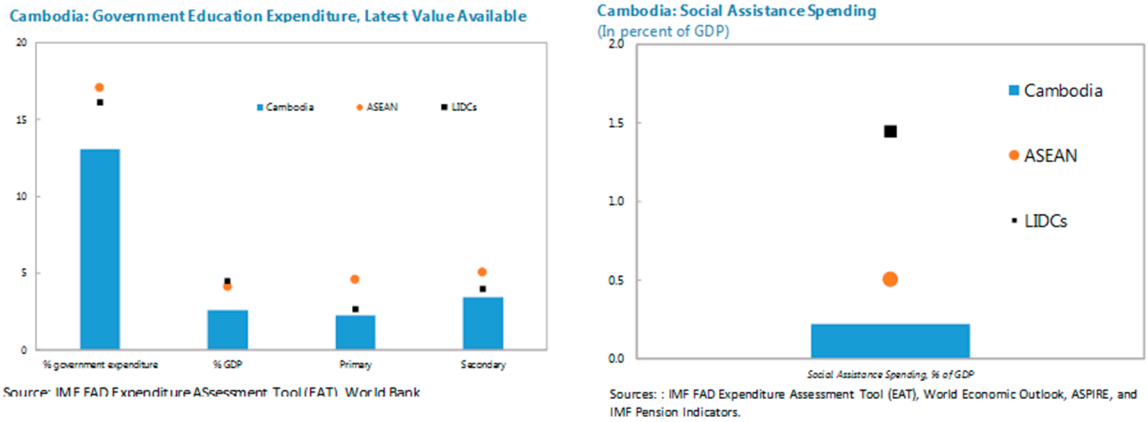




The key objectives of the government of Cambodia is to promote and further diversify the industrial sector. In 2015, the government launched the Industrial Development Policy (IDP, Royal Government of Cambodia (2015)), aiming to transform and modernize Cambodia's industrial structure, moving from labor-intensive to more skill-driven industry by 2025. The IDP includes key strategies on investment promotion and the development and modernization of small and medium-sized enterprises (SMEs).

A challenge faced by many countries, including Cambodia, is to maintain a competitive tax system, while also raising required revenues. Spending needs are enormous and include both the need for public investment in infrastructure as well as mounting pressures to increase social spending, which remains the lowest in the region (Figure 2). This means that there is pressure to raise tax revenues through tax administration, but also tax policy reforms. As is common in many countries of similar income levels, taxes from large businesses play an important role, reflecting a large informal economy as well as many low-wage workers. Investors, especially foreign ones, are however likely to be sensitive to the tax level, although other determinants of the investment climate are also, and for many investment decisions, more important. For Cambodia, other important factors include labor cost and availability and preferential treatment of trade and market access. This exerts pressures for low taxation, especially for FDI. This process, known as tax competition, has arguably been behind the corporate income tax cuts seen across the globe over the last few decades.

Figure 2. Cambodia: Social Assistance and Government Education Spending



In reaction to this challenge, countries have tried to find ways to lower effective tax rates for mobile (and hence very elastic) capital, while keeping a higher rate on less mobile capital. One strategy is to reduce tax rates while broadening bases, making the tax system more attractive for highly profitable investments, which are more likely to be the ones undertaken by multinationals (see Devereux and others, 2002). The scope for this strategy is, however, limited, and there are not many remaining options for major base broadening in many countries. Another strategy is the use of tax incentives.

The introduction of tax incentives for selected sectors can in principle allow a country to discriminate investors by the mobility of the tax base, but is fraught with risks. Granting generous tax incentives for mobile activities can achieve competitiveness, without the need to sacrifice revenues from less mobile sectors. This can even be beneficial globally, if it reduces tax competition over the main tax rate (Keen, 2001). There are, however, also huge risks: The presence of different tax regimes can lead to leakage even of immobile capital (or profits derived from it) into such schemes. The availability of preferential regimes can also create incentives for rent-seeking behavior, corruption, and, in general, makes tax policy less transparent and harder to enforce. Another important aspect is that certain preferential regimes may not be allowed under international agreements. Under WTO rules, developing countries have more leeway, but as Cambodia's income level rises, these constraints will become more binding.

Tax incentives have proved extremely popular in developing and emerging economies, including in Asia. In particular, tax holidays, which grant exemption from corporate income taxes for a number of years, especially in the export and manufacturing sectors, are very common in the region.

This paper assesses Cambodia's system of tax incentives and more generally its taxation of business capital using both international comparisons and insights from economic theory. It is structured as follows. Section II provides a short overview of the main benefits and risks of business tax incentives and discusses previous empirical findings. Section III describes and assesses the tax incentives currently available Cambodia, including with the

use of newly developed effective tax rates that take tax deferrals under Cambodian tax holidays into account. Section IV briefly concludes and discusses reform options.

II. Previous Findings on Business Tax Incentives

A. Theory

A range of papers looking at theory of tax incentives have come to similar views about the likely causes, benefits, and risks. The main arguments are set out below, drawing on Shah (1995), Zee and others (2002), Klemm (2010), and IMF, OECD, UN and World Bank (2015).

Tax competition is an important cause of tax incentives, especially in an international context, but there are also many other reasons for their introduction. As noted above, tax incentives allow countries to lure investors with very competitive effective tax rates, without the need for general tax cuts. Tax incentives are also often granted for political economy reasons: In many situations where countries suffer from some underlying weakness, such as a poorly educated workforce or lack of infrastructure, offering tax incentives is much easier than addressing the weakness directly. While less effective, this still allows policymakers to claim that they are "doing something" about a country's problems. A similar issue is fragmented policy making. Even if the Minister of Finance or an investment promotion agency were cognizant of the underlying weakness and willing to address it, it may not fall into their field of responsibility, while they may be able to introduce tax incentives. Another issue of fragmented policy making is a case where an investment promotion agency has the power to offer tax incentives, and is evaluated based on its success in attracting FDI, while the forgone revenue cost affects Ministry of Finance. Finally, there are situations where there is a strong economic case for tax incentives, such as when an activity entails positive externalities. The prime example are research and development (R&D) incentives, which attempt to internalize the social spillovers from R&D activity. As firms only consider their private benefits, they are likely to engage in less R&D than what is socially optimal.

The potential benefits of tax incentives include the support of economic development by facilitating investment, ideally with positive spillovers, but they are hard to reap. A temporary regime of tax incentives could ideally lure investment into a developing country, boosting employment, and having positive spillovers, such as training of the workforce. Accompanied with infrastructure investment, this could support the creation of industrial clusters, which would not require incentives anymore. Another benefit is the support of underdeveloped regions within a country, because tax incentives can reduce the tax rate locally, diverting investment into such areas and thereby reducing inequalities within a country. Finally, they can increase the amount of investment with positive spillovers if directly linked to externalities.

The risks of tax incentives are manifold. One acute risk is to give up tax revenues on investments that would have taken place anyway, so that the incentive is redundant. Another risk is the leakage of revenues even from activities that are not meant to benefit, for example because investors can shift profits into tax-favored operations. Tax incentives can also make

the system less transparent, more expensive to administer, and harder to enforce. Their presence may encourage rent-seeking activities including corruption, especially if there is some discretion or negotiation involved in granting incentives. Last, but not least, tax incentives—unless they correct for externalities—cause an inefficient allocation of capital that will be skewed toward the least taxed sectors, even if pre-tax returns are higher elsewhere.

Regarding the relative merits of different types of incentives, the risks of tax holidays are particularly high. Tax holidays encourage especially short-lived or footloose capital that may not stay once the holiday expires. They encourage rent-seeking behavior such as lobbying for extensions after the expiration of an initial holiday or simply closing and reopening under a different name to obtain the new tax holiday. Moreover, their costs are difficult to gauge, as taxpayers are either exempt from preparing tax returns, or even if they are obliged to provide them for information, tax administrations have no incentive to audit them as little or no tax revenue is at stake. Tax incentives that are directly linked to the size of an investment, such as investment allowances or tax credits, or accelerated depreciation, are much less likely to have major negative effects.

There are also some general insights regarding the administration of tax incentives. Theoretically, incentives would ideally be granted only when not redundant. To identify these cases, an omniscient and incorruptible tax administration would be needed. In practice, it is therefore preferable to have clear criteria for granting tax incentives, even if this leads to some redundancy. For transparency, it is also advised to keep all incentives in the tax law

Table 1. Tax Incentives Around the World

	Countries Surveyed	Tax Holiday/ exemption	Reduced Tax rate	Investment allowance /1	R&D Tax Incentive	Super deductions
East Asia and Pacific	12	92	75	67	83	33
Eastern Europe and Central Asia	16	88	38	25	31	0
Latin America and the Caribbean	25	88	32	52	12	4
Middle East and North Africa	15	80	40	13	0	0
OECD	33	21	36	64	76	21
South Asia	7	100	43	71	29	71
Sub-Saharan Africa	45	78	62	78	11	18

/1 Number of countries in percent of total in the group.
Source: James (2014).

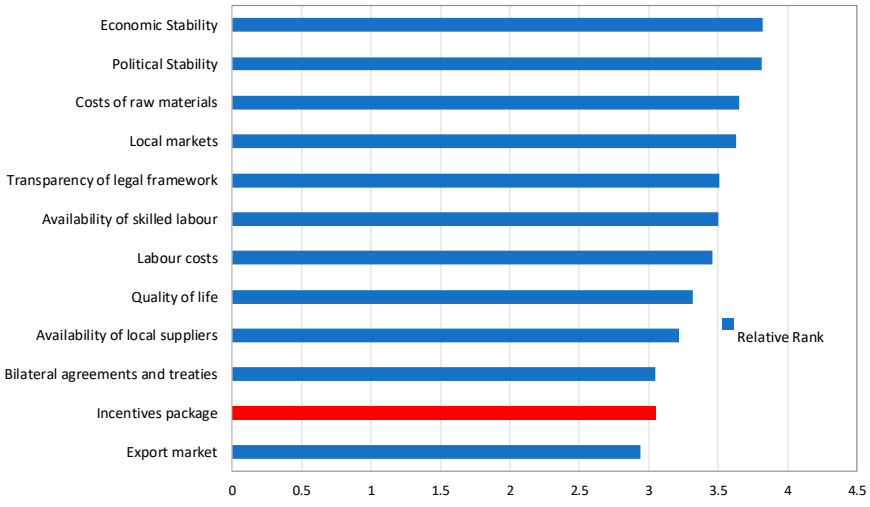
rather than in different places, such as in the investment code. Also, incentives should be offered only by one body, for example the Ministry of Finance, to avoid proliferation and the granting of incentives without consideration of their costs.

B. Empirical findings

Tax incentives are widespread, with tax holidays particularly popular in developing countries, especially in Asia (Table 1). Abbas and Klemm (2013) document a range of stylized facts about corporate income taxes in developing and emerging economies. They find that the trends of standard tax systems are similar to those in advanced economies, but that tax incentives have created a parallel structure with effective tax rates close to zero. Suzuki (2014) calculates effective tax rates specifically for Asian economies (not including Cambodia) and also finds that they are close to zero in small economies, and higher in large economies.

Business surveys conducted in Africa, Asia, and Latin America, suggest that tax incentives have limited impact on the investment decisions of multinationals. James (2014) reports survey results from countries around the world, which indicate that in most countries the share of investors who consider tax incentives redundant exceeds 50 percent by far. UNIDO (2011) reports that in Africa investors consider investment incentives only as 11th most important factor (out of 12) in determining location choices (Figure 3). It is important not to over-interpret these findings though. Even if tax incentives are redundant for many investment projects, they may be important for some projects which are marginal. In that case, they might affect the total FDI stock, by reducing the cost of capital at the margin. If policy cannot identify the marginal projects—and as noted above this is typically the case—then incentives necessarily are granted also to inframarginal projects.

Figure 3. Survey Evidence on Importance of Tax Incentives



Source: UNIDO (2011)

Empirical studies on the impact of tax incentives on investment have often found very small effects only. The literature using econometric techniques rather than case studies is

relatively small, but includes the following: Klemm and Van Parys (2012) find some evidence that tax holidays attract FDI, but there is no impact on aggregate investment (possibly because of crowding out, or because FDI includes purchases of existing capital). Van Parys and James (2010) study tax incentives in the CFA zone in Africa and find no impact of tax incentives on investment.

III. Current Tax Incentives in Cambodia

A. Main Business Taxes and Tax Incentives

Cambodia's business taxes in the standard system (i.e., before incentives) are generally low, but certain features can raise effective tax rates for some investors. Cambodia's CIT rate, at 20 percent, is below regional averages (Table 2). However, as many ASEAN countries have substantially lowered their CIT rates in the past decade to an average of 22.5 percent, it is not exceptionally low anymore. The depreciation schedules are comparable to those in the most economies (Table 3). For foreign investors, however, a relatively high additional withholding tax on repatriated earnings is levied at 14 percent.[2] Domestic investors do not face any additional dividend tax on companies taxed at the corporate level. Another feature that may raise effective taxation levels, especially in low-margin industries, is Cambodia's minimum tax at 1 percent of annual turnover. Since 2017 this has become less of a problem, as firms with strong accounting practices are now exempt from this tax.

Table 2. Main Taxes Relevant for Business in the Asia-Pacific Region, 2015
(percent)

	CIT	Withholding taxes[b]	
	Main rate	Dividends	Interest
Cambodia	20	14	14
China	25	10	10
Hong-Kong	16.5		
India	30/40.5[a]		15
Indonesia	25	10	10
Laos	24	10	10
Malaysia	25		10
Mongolia	25	5	10
Myanmar	25		15
Philippines	30[a]	15	15
Korea	23[a]	5	10
Singapore	17	8	15
Thailand	20	10	15
Vietnam	22	5	10

Notes: [a] Local or surtaxes apply, these are very low, except in India: 13.3 percent.
[b] Typical treaty rate, the rate may vary by home country, and the standard rate is often higher.
Source: IBFD

[2] Various double taxation agreements (DTAs) are at different stages of negotiation, with two agreements (Singapore and Thailand) active as of January 1, 2018 and two more agreements (China and Brunei) awaiting ratification. These DTAs reduce the withholding rate on dividends to 10 percent.

Table 3. Depreciation Allowances in the Asia-Pacific Region

	Industrial Buildings		Intangibles		Machinery	
	Method	Rate (%)	Method	Rate (%)	Method	Rate (%)
Cambodia	**SL**	**5**	**SL**	**10**	**DB**	**20**
China	SL	5	SL	10	SL	10
Hong Kong, SAR	SL	4+ 20	SL	100	DB	20 + 60
India	DB	10	DB	25	DB	15
Indonesia	SL	5	DB	12.5	DB	12.5
Laos	SL	2	SL	50	SL	20
Malaysia	SL	3 + 10	SL	20	SL	14+20
Mongolia	SL	2.5	SL	10	SL	10
Myanmar	SL	15+3*	SL	10	SL	10
Philippines	SYD	var	SYD	var	SYD	var
Korea	SL	2.5	SL	10	DB	45.1
Singapore					SL	33.33
Thailand	SL	5	SYD	var	SYD	var
Vietnam	SL	3.333	SL	10	SL	14.2857
Japan	SL	2.6316	SL	12.5	DB	25

Notes: * 15% (10%) initial deprecation allowance in year of construction and 3% (3.1%) annually afterwards.
SL: straight line; DB: declining balance; SYD: sum of years' digit; var: varying depreciation rate.
Additional first year allowances are marked with a "+".
Source: Wiedemann and Finke (2015), based on IBFD.

Cambodia provides many investors with tax incentives, with the most prevalent ones granted under the Qualified Investment Project (QIP) status. The status is granted by the Council of Development of Cambodia (CDC), subject to minimum investment amounts varying by activity. The provisions are contained in the Law of Investment rather than the tax law. QIPs are exempt from certain import and export duties,[3] as well as the minimum tax on turnover. Moreover, QIPs are entitled to a CIT holiday for 3-6 years,[4] depending on the sector and the size of the investment.[5] Instead of the holiday, companies can also choose an increased depreciation rate of 40 percent (if not using tax holiday). One notable, and unusual, feature of the Cambodian tax holiday is that it grants a tax deferral rather than exemption. When a company distributes profits, the 20 percent tax rate is due (in addition to the standard withholding tax in case of foreign investors) at that time.

Special Economic Zones (SEZs) are another important vehicle for granting tax incentives in Cambodia. Cambodia has approved 36 SEZs, of which 12 are in operation. Most firms in SEZs are also QIPs. In addition to the standard QIP incentives, firms in SEZs are also exempt from VAT on certain imports and various nontax benefits. Moreover,

[3] All QIPs are exempt from duties on production equipment and construction materials. Additional exemptions vary by the precise type of QIP, e.g., projects with an export share of at least 80 percent or located in SEZs are additionally exempt from duties on intermediate goods, raw materials, and spare parts.

[4] The total period under the status may last 9 years, because an investment is allowed a three year "trigger period" between registration and the first profit. However, as there would be not tax liability without profit anyway, these first three years do not reduce taxes, they merely prevent the holiday period from being used up before a firm becomes profitable.

[5] The General Department of Taxation (GDT) made some improvements to the registration process by scrutinizing investors' finger prints to identify their identity.

properties in SEZs are exempt from property tax as part of the property tax law and not under the tax incentive package within the investment law.

Cambodia's tax incentives appear at first sight to be broadly comparable to those in neighboring countries. Both the types of investments offered and the targeted activities are similar to those in neighboring countries (See for example Table 1 in Wiedemann and Finke (2015)). One difference is that Cambodia does not offer R&D incentives, even though they are granted in most other countries and have the strongest theoretical justification. While cross-country comparisons are useful for a first assessment, an important caveat is the need for detailed analysis of the applicable provisions, which cannot be summarized in simple tables. Hence, Cambodia's tax holiday is not unusual in terms of length or availability (Table 4), but as noted it differs from other countries by granting only a deferral of tax.

Table 4. Taxes and Incentives in Cambodia and neighboring countries, 2015

	Cambodia	Lao PDR	Thailand	Vietnam	Myanmar
Standard CIT	20%	24%	20%	20%	25%
Personal Income Tax	-Progressive; 0-20% depending on amount of taxable income	-Progressive; 0-24% depending on amount of taxable income	-Progressive; 0-37% depending on amount of taxable income	-Progressive; 0-35% depending on amount of taxable income	-Progressive; 0-25% depending on amount of taxable income
Sectors, geographical areas and labor qualified for incentives	Pioneer or high-tech, job creation, export, tourism, agro and processing infrastructure, energy, rural development, environment and SEZs	Agriculture, industry, handicraft and services and in zone 1,2& 3	Activities that enhance national competitiveness, environment protection, regional value chain, growth outside Bangkok and SEZs	High technology, production of new and clean energy, electronics, industrial products, agriculture development, education, medical, infrastructure development and in classified zone	Sectors associated with power, agriculture, manufacturing, tourism, industrial and metallic minerals
Tax holiday	- 3-6 years after up to 3 years of until profitable. - 5-year loss carry forward	- 4-10 years - 3-year loss carry forward	3-8 years from the commencement of operation - 5-years loss carry forward	- 2-4 years - 5-years loss carry forward	- 5-7 years - 3-year loss carry forward
Reduced CIT rates and other incentives	-9% (QIP's) for five years after tax holiday -40% special depreciation if not using tax holiday.	Reduced tax rates for a company that has an official investment agreement	-50% reduction for 5 years in Zone III	-50% reduction for 9 years in some zones.	-50% reduction for 5 years in Free Zone or Promotion Zone
Import duties and VAT exemption	-100% duty and VAT exemption on inputs for qualified sectors under II.1 - Exempt from 1% turnover tax for QIPs - VAT exemption on both inputs and sales of supporting industries to export-oriented garment and footwear sector	-Exemption from import duties for the importation of raw material, equipment, spare parts and vehicles which are directly used for production -Exemption from export duties for exportation of general goods and products	Exemptions and reduced import duty and VAT rates on inputs on exports and in certain sector	VAT and import duty exemption: -Goods that cannot be produced in Vietnam and are imported to form fixed assets in encouraged projects; - Certain goods imported by BOT enterprises and their contractors -Certain goods imported for oil and gas activities -Goods temporarily imported for carrying out ODA projects	-Customs duty relief and/or exemption for certain imports -Relief from income-tax up to 50 percent on the profits for goods produced and exported

Source: IMF staff compilation based on various sources, including IBFD, DFDL, and official websites.

B. Assessment of main Incentives

Evidence from surveys suggests a positive role for tax incentives in attracting labor-intensive FDI to Cambodia. UNDP (2014) performed a survey-based SWOT (strengths, weaknesses, opportunities, threats) analysis of the Cambodian manufacturing sector and found that tax incentives were considered the second most important strength after the labor market. On the other hand, 75 percent of firms in the garment, footwear, and other manufacturing sectors did not consider any alternative locations to Cambodia (World Bank, 2017).

Tax expenditures are estimated to be high in Cambodia. In many developing countries, the costs of tax incentives are unknown because governments do not provide reliable periodic estimations of their tax expenditures.[6] According to estimates reported in World Bank (2017), tax expenditures resulting from existing exemptions and incentives reached at least 5.7 percent in 2015,[7] compared to total tax revenue of 14.5 percent of GDP.

Tax incentives in Cambodia are prone to considerable uncertainty and tax avoidance. Because the incentive packages in Cambodia are project based, it is relatively easy for firms to game the system and extend tax holidays indefinitely by re-classifying existing investment as new projects. Indeed, tax evasion by companies, in terms of de-registering and changing the name of the company to get further tax exemptions as a "new" project to prolong and retain their tax incentives and import subsidies was observed (UNDP, 2014). A recent study argues that selected multinational enterprises, especially from OECD countries, have expressed concerns around transparency of investment incentives in Cambodia (UNDP, 2014). The approval process of tax incentives may involve several stakeholders (for example, CDC, Ministry of Environment, and Ministry of Agriculture).

C. Evidence from Effective Tax Rates

Effective tax rates allow an assessment of the impact of the overall tax system, taking into account tax rates, selected determinants of the tax base, and special provisions such as tax incentives. In this analysis, forward-looking effective tax rates are used,[8] which are calculated for hypothetical investment projects (i.e., assumed types of assets, sources of finances, and profit rates) using the tax laws as they apply in the year of investment. The intuition behind effective tax rates is simple: The effective average tax rate (EATR) is defined as the net present value of tax liabilities, divided by the net present value of profits. The effective marginal tax rate (EMTR) is a special case and applies when profits cover exactly the cost of capital, i.e., when there are only normal profits, but no economic rents. In a domestic context, the EMTR is the more relevant rate, because it determines investment incentives at the margin. In an international context, where global investors may have technology that allows them to reap economic rents, the EATR becomes very important as a factor for discrete location decisions.

To calculate effective tax rates, a number of assumptions need to be made, so that effective tax rates are more useful for comparisons than for their actual values. Calculating tax liabilities precisely would be impossible, given the complications of most countries' tax codes. Hence, for simplification, the most pertinent aspects of a tax system need to be chosen, typically the CIT rate, depreciation rules, deductibility of interest, and

[6] CIAT (2011). CIT revenue losses are almost 1 percent of GDP in 15 Latin American countries.

[7] This may be somewhat overestimated, because it may include taxes that would be refunded or recovered, most importantly VAT exemptions on inputs, but on a smaller scale CIT that is paid on distributions. Also, the benefits of job creation by such investments are not quantified and hence not included in these estimated.

[8] The method used is based on Devereux and Griffith (2003) and the extension by Klemm (2012), which adds tax incentives to the calculation.

major tax incentives. For cross-border investments, withholding taxes can also be taken into account.[9] Moreover, some assumptions need to be made, for example on the discount rate (to obtain present discounted values), on true economic depreciation and inflation (to gauge the generosity of tax depreciation), on the share of debt finance (to calculate the benefit from interest deductibility), on the asset distribution (to reflect different depreciation rates by asset types), and, in case of the EATR, the profit rate. Indirect taxes (and any incentives related to them) are ignored, not least because they are not directly related to the profit level of a firm.

Previous work on effective tax rates in the region suggests that Cambodia's effective tax rates can be comparatively high in some cases, despite the low statutory tax rate. Botman and others (2010) calculated effective tax rates for 7 Southeast Asian economies in 2008. For the standard tax system, they found that under most circumstances Cambodia had the lowest effective tax rates. However, once tax incentives are considered, other countries offered even more generous tax treatment. Wiedemann and Finke (2015) calculated effective tax rates for 19 Asia-Pacific economies. They confirmed that the standard Cambodian effective tax rate is among the lowest in the region, but once withholding taxes are accounted for, the Cambodian effective rate is above the median (Table 5). Under tax incentives, they also find that the Cambodian rates are less competitive in relative terms (Figure 4). Neither paper appears to take into account that the Cambodian tax holidays is just a deferral, though.

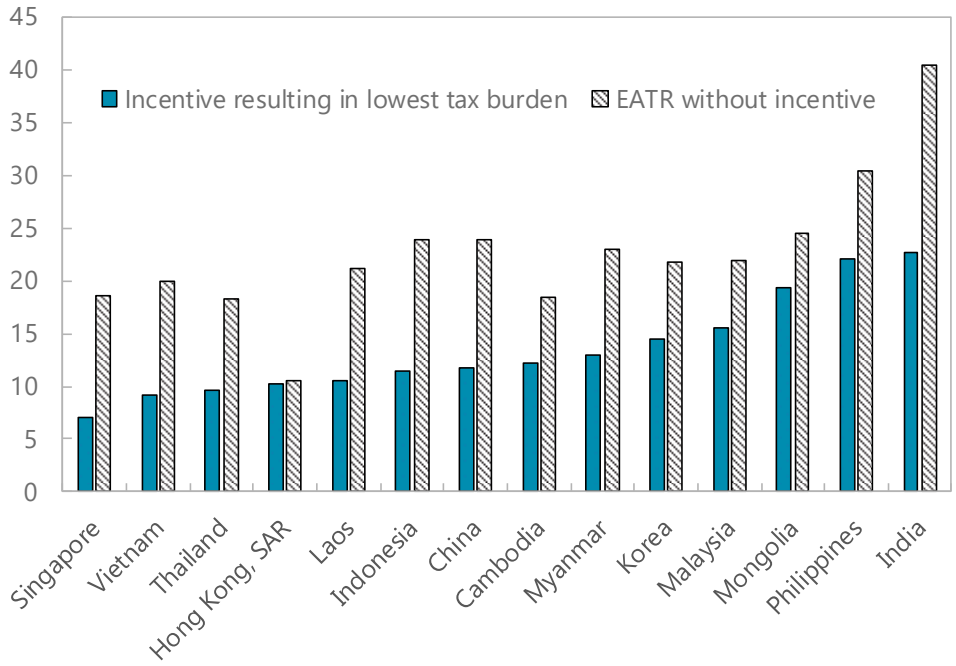
Table 5. EATRs in Asian Countries for Domestic and Cross-Border Investment, without Incentives (in percent)

	Subsidiary Investment	Cross-border Investments		
		German	Singaporean	US
Cambodia	**18.4**	**29.4**	**29.3**	**30.7**
China	23.9	31.5	28.4	31.8
Hong Kong, SAR	10.6	12.1	11.9	29.1
India	40.4	42.9	43.2	41.4
Indonesia	23.9	31.6	31.6	31.9
Laos	21.1	29	29	30.1
Malaysia	21.9	23.4	23.4	30.1
Mongolia	24.5	28.9	29	36.5
Myanmar	23	24.4	24.4	31
Philippines	30.4	37.3	40.3	38.4
Singapore	18.6	20.1	18	32.9
Korea	21.8	26.5	29.7	30.6
Thailand	18.3	26.6	26.5	30.7
Vietnam	20.0	21.4	21.4	30.7

Source: Wiedemann and Finke (2015)

[9] In principle, the framework also allows including taxes at the level of the shareholder (or the home country). We ignore those, however, because they differ by the origin of investor, and because they are often avoided, for example, by holding investments through a country that exempts foreign earnings.

Figure 4. EATRs in Asian Countries with and without Incentives (in percent)



Source: Wiedemann and Finke (2015).

A further analysis of effective tax rates by sources of finance reveals very high rates for investment financed by new foreign equity, as well as a debt bias. Wiedemann and Finke (2015) assume that investment is financed by 55 percent retained earnings, 10 percent new equity and 35 percent debt. To reveal separately the effective tax rates for each source, we have calculated our own estimates of effective tax rates (see Appendix for details), assuming for now that the standard tax system applies and no incentives are granted (Table 6): Foreign investors face much higher EATRs, especially if they use new equity as a financing source. This is driven by the high withholding tax on dividends (which leads to the "trapped equity" effect). For retained earnings the impact is much smaller, but first-time investors in Cambodia will not have access to them. Effective tax rates are always lower for debt finance. This is the result of deductibility of interest as an expense. The EMTR even turns negative under debt finance, because the combination of depreciation allowances that exceed true economic depreciation and interest deductibility implies that investment is subsidized at the margin. This is not unusual and occurs in many countries. In practice, tax rates are bound at zero, unless firms are able to offset tax losses against profits from some other activity, though.

Table 6. Effective Tax Rates for Investors under Standard Tax System (in percent)

Finance	Retained Earnings	New Equity	Debt
EATR, foreign	27	38	20
EATR, domestic	19	19	11
EMTR, foreign	17	47	-22
EMTR, domestic	17	17	-22

Notes: Assumptions: assets: tangibles subject to 20 percent depreciation allowance; inflation: 3 percent; real interest rate: 5 percent; true economic depreciation 12.25 percent; Cambodian withholding taxes are included, but any additional home country taxation is not; pre-tax profit rate: 20 percent (EATR).
Source: Authors' calculations.

When tax holidays apply, effective tax rates rise under various circumstances. These calculations take into account that during the holiday period, any distributions will be subject to the CIT that was deferred. This has some surprising effects, notably it raises the effective tax rate on investment financed by new equity (Table 7). The intuition behind this is that an investor who puts funds into a qualified investment will lose the value of depreciation allowances during the CIT holiday, while any distributions will be charged the full tax rate. Projects financed out of retained earnings, however, benefit from a tax holiday. This is because, by retaining earnings, an investor is avoiding the tax on the distribution. In practice this will not help for new projects, which will require outside financing, but it means that as soon as projects are profitable, these profits can be reinvested at these lower tax rates (provided the tax holiday has not run out). Debt-financed investment is not much affected.

Table7. Effective Tax Rates for Investors under Tax Holiday (in percent)

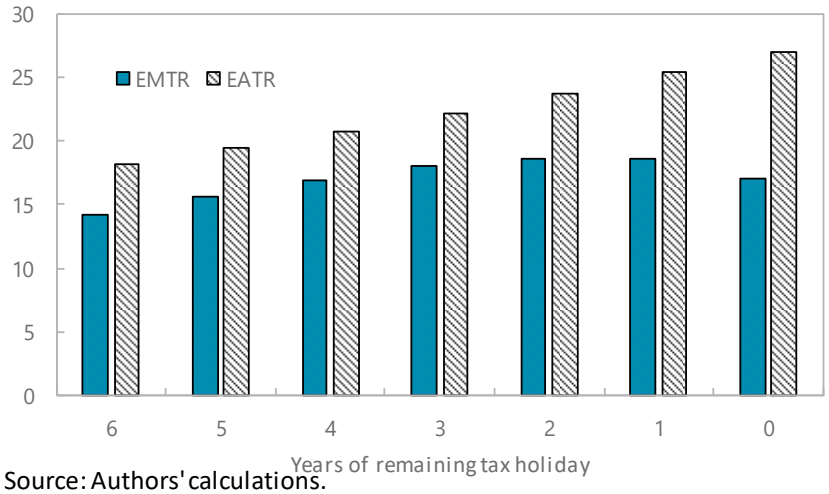
Finance	Retained Earnings	New Equity	Debt
EATR, foreign	22	51	20
EATR, domestic	12	30	10
EMTR, foreign	-19	61	-42
EMTR, domestic	-12	43	-32

Notes: Assumptions: assets: tangibles subject to 20 percent depreciation allowance; inflation: 3 percent; real interest rate: 5 percent; true economic depreciation 12.25 percent; Cambodian withholding taxes are included, but any additional home country taxation is not; pre-tax profit rate: 20 percent (EATR); Tax holiday of 6 years with distributions taxed at 20 percent if paid out of untaxed profits.
Source: Authors' calculations.

The popularity of tax holidays appears puzzling, given these findings on effective tax rates, and could be suggestive of related avoidance activities. Firms that qualify for a tax holiday have the option to choose instead a 40 percent investment allowance. Given that most choose the tax holiday, they may have some way of avoiding the tax on distributions. One possibility is that they are able to postpone distributions until after the holiday, and then to claim that they are paid out of taxed income. In the calculations above, it was assumed that any profit beyond interest costs is always distributed. To allow for avoidance of the tax distributions, we have repeated the calculation with the extreme opposite assumption, which

is that no tax is paid on distributions (Figure 5). In that case, it would be a classical tax holiday and have all of the typical features. Specifically, while it would reduce effective tax rates, the EMTR in the final years of the holiday can be higher than in the absence of a holiday, a phenomenon first described by Mintz (1990). This is explained by the loss of depreciation allowance, which for projects with low rates of return can be more valuable than a zero percent tax rate (an unused allowance can be carried forward to the next year, but an allowance that is used but worthless due to a zero percent rate is lost).

Figure 5. Effective Tax Rates under Tax Holidays with Avoidance of Deferred Tax



Source: Authors' calculations.

IV. Conclusions and Reform Options

The current system of taxing investors, and especially foreign investors, with its combination of (i) a low tax rate, (ii) high withholding taxes, and (iii) complicated incentives is unlikely to be optimal.

- The high withholding tax on dividends raises effective tax rates in Cambodia for foreign investors and undoes much of the benefit of a low tax rate. As few investors are likely to obtain a foreign tax credit for this withholding tax, this creates a real disincentive to invest or an incentive for tax avoidance activities.

- The system of tax incentives is complicated and its impact is hard to gauge. The tax holiday, which only offers deferral of tax until distribution, appears not to be very costly or competitive. Its popularity, however, is indicative that firms find a way around at least some of the deferred tax, in which case it is a nontransparent way of reducing tax liabilities. Moreover, in this case it has all the usual disadvantages of tax holidays, including an encouragement of footloose, low-capital density sectors, as well as encouragement of rent seeking activities.

Given the need to maintain a competitive tax system while safeguarding revenues, reform should be conceived as a package containing tightening and loosening elements. Individual tightening reforms, such as abolition of tax holidays might send a negative signal to investors, while loosening reforms, such reductions in withholding tax would lose revenue.

Reforms should be based on a package of elements supported by careful revenue analysis requiring detailed company data, and appropriate communication to reduce risks.

One component of reform could be a move away from tax holidays and toward incentives more directly linked to the level of investment. As noted, tax holidays have in general negative features, and their preference for short-term, highly profitable, labor-intensive sectors is not aligned with Cambodia's strategy toward more capital-intensive industries. Moreover, their attractiveness is not clear, given the deferral element, so they may not even be competitive with the tax holidays of neighboring countries. If the aim is to use tax incentives to encourage capital investment, then a more efficient approach than the current tax holidays, would be incentives, such as accelerated depreciation or investment allowances, that are directly linked to the level of investment. Advantages of such an approach would include that (i) it would require less discretion and could be granted automatically to all investors, (ii) it would avoid rent-seeking activities as there is no time limit, and any additional investment would also qualify. To benefit small or high-tech industries, investment allowances can be made refundable in selected sectors. There is no limit on the generosity of investment allowances, and they can exceed 100 percent[10] of the investment. The case for high allowances would be particularly strong in sectors with particularly high benefits to society, such as R&D.

Another component would be a reduction in withholding taxes on dividends. In a way, this is already under way, as recently-signed DTAs reduce these taxes to 10 percent. A general cut to 10 percent would therefore not cost any additional revenues, as investors are very likely to structure their activities to benefit from the treaty rates in any case. Further cuts could be considered, to raise the attractiveness as a location for foreign investment and to reduce the difference in the treatment of foreign and local investors. Withholding tax can play an important role in safeguarding revenues for countries that have given away too much locally with tax holidays or other incentives. Hence a cut in the withholding tax rate should be combined with reductions in incentives and improvements to the enforcement of domestic taxes.

Structural improvements to the governance of tax incentives could lay the foundation for further improvements in the future. Currently the cost of tax incentives is not regularly estimated, although some estimates were prepared with support by the World Bank (see World Bank (2017)). A regular tax expenditure budget could improve transparency and monitoring, and would form the foundation for future improvements to tax incentives, as well as ensuring full competition between tax and other expenditures. Institutionally, there are advantages to unifying all aspects of granting and administering tax incentives. Transparency would be improved by keeping all tax incentives in the tax law. To ensure that revenue costs of incentives are duly taken into account, policy should be coordinated by the Ministry of Economic and Finance, and granting and monitoring performed by the tax

[10] Investment allowances, tax credits, and depreciation are all related. The difference between an allowance and a credit is simple algebra: the value of a tax credit equals the value of an allowance times the tax rate. The allowance can either be granted in addition or instead of depreciation. Ultimately what matters is the present discounted value of the combination of all applicable features.

administration. Sunset clauses for tax expenditures can also play a useful role, not to least to avoid maintaining incentives out of inertia.

Some tax incentives currently address problems of the tax system, which would be better improved directly. These include policy issues, such as the imposition of import duties or excises on intermediate goods. Under the current system, it makes sense to grant exemptions to investors who require such inputs, but it would be even more efficient and transparent not to impose such taxes in the first place. There are also administrative issues. World Bank and ADB (2015) notes that over one quarter of managers see taxes as a major or severe constraint to doing business, reflecting not so much the direct cost of mandatory contributions, but the large administrative burden and the prevalence of informal payments. Reducing compliance costs and abolishing informal side payments would remove one reason why companies require QIP status. Another very important issue is the delay or incompleteness of VAT refunds. Addressing this would remove the need for VAT exemptions.

More generally, improving the business climate would reduce the need for tax incentives, and boost the effectiveness of remaining incentives. Using cross country data James (2013) finds that fiscal incentives are particularly ineffective in attracting investment in countries with poor investment climate. Hence the benefits of improving the business climate will go beyond the direct effect this has on investment. IMF (2017) identifies the weak business climate, reflected in a high cost of doing business, poor infrastructure, weak governance and low competitiveness among the top constraints to Cambodia's growth. Continued focus on reforms to provide low-cost, reliable and adequate electricity, enhancing transportation links, addressing skill gaps, as well as strengthening the rule of law and increasing transparency of business regulation would create the potential for greater private investment and diversified production and exports.

APPENDIX: EFFECTIVE TAX RATES WITH TAX DEFERRAL

Klemm (2012) extends Devereux and Griffith (2003) to allow for tax holidays. It assumes, however, that tax holidays change only the corporate income tax. In the case of Cambodia, the tax holiday is a deferral of tax, which is recovered at the time of distribution. That means that profits from the tax holiday period face a different tax treatment on distributions than profits that are earned after holiday period. Below we derive the effective tax rates for this case.

Klemm (2012) assumes an infinite horizon and defines the EATR as the ratio of the present value of taxes over the present value of profits:

$$\mathrm{E}ATR = \frac{R^{*}-R}{p/(r+\delta)} \tag{1}$$

where R^* is the present value of the economic rent earned in the absence of taxation, R is the same in the presence of taxation, p is the pre-tax net profit, r is the real interest rate, and δ is true economic depreciation.

Considering first financing by retained earnings (superscript *RE*), the rent is shown to be (equation (10) in Klemm (2012)):

$$R^{RE} = \gamma\left[\sum_{s=1}^{\infty}\frac{(p+\delta)(1-\tau)(1+\pi)^{s}(1-\delta)^{s-1}}{(1+\rho)^{s}} - \sum_{s=0}^{\infty}\frac{dI_{t+s}}{(1+\rho)^{s}} + \tau\phi\sum_{s=0}^{\infty}\frac{dI_{t+s}+dK^{T}_{t-1+s}}{(1+\rho)^{s}}\right] \tag{2}$$

where $\gamma = (1- m^{d})/(1-z)$ is a factor measuring the difference in treatment of new equity and distributions, with m^{d} the personal tax on dividends and z the accrual-equivalent tax on capital gains, p is net real profit, τ is the corporate tax rate, π is inflation, $\rho = (1- m^{i})/(1-z)$ is the investor's discount rate, with m^{i} the personal tax rate on interest and i the nominal interest rate, I is the investment undertaken, ϕ is the official depreciation allowance, and K^{T} is the tax-written-down value of capital.

This formula needs to be adapted to changing CIT rates and dividend tax rates. Klemm (2012) (equation (14)) shows the impact of a changing CIT rate on the first sum in equation (2) above. The new aspect is that in Cambodia also the tax on distributions changes, which implies a change in γ so that there are two distinct values γ_1 and γ_2. The product of the first sum of (2) and γ can now be written as:

$$\begin{aligned}&\gamma_1\sum_{s=1}^{Y}\frac{(p+\delta)(1+\pi)^{s}(1-\delta)^{s-1}}{(1+\rho)^{s}} + \gamma_2\sum_{s=Y+1}^{\infty}\frac{(p+\delta)(1-\tau)(1+\pi)^{s}(1-\delta)^{s-1}}{(1+\rho)^{s}}\\ &= \frac{(p+\delta)(1+\pi)}{\rho-\pi+\delta(1+\pi)}\left(\gamma_1\left(1-\left(\frac{(1-\delta)(1+\pi)}{1+\rho}\right)^{Y}\right) + \gamma_2(1-\tau)\left(\frac{(1-\delta)(1+\pi)}{1+\rho}\right)^{Y}\right)\end{aligned} \tag{3}$$

where Y is the number of years of tax holiday.

The second sum of (2) is simply 1, as by assumption there is no further investment or disinvestment in the future. The change in the rate on distributions is also irrelevant, as only the only transaction here occurs in the first period, so the produce is simply γ_1.

The third sum of (2) is the present discounted value of depreciation allowances (A). This will also be affected by the tax holiday as there is no corporate tax liability, as shown in Klemm (2012). The only new aspect to note is that it should be multiplied by γ_2, because it will only be relevant after the tax holiday period.

Putting all together, we obtain:

$$R^{RE} = \frac{(p+\delta)(1+\pi)}{\rho-\pi+\delta(1+\pi)}\left(\gamma_1\left(1-\left(\frac{(1-\delta)(1+\pi)}{1+\rho}\right)^Y\right)+\gamma_2(1-\tau)\left(\frac{(1-\delta)(1+\pi)}{1+\rho}\right)^Y\right)-\gamma_1+\gamma_2 A \quad (4)$$

For financing by sources other than retained earnings, a financial effect (F^D for debt or F^{NE} for new equity) will need to be added to (4). For new equity, this is unchanged from Klemm (2012), except that we need to be careful to pick the correct dividend tax rate, i.e., the one that applies during the tax holiday:

$$F^{NE} = \gamma_1 - 1 \quad (5)$$

For debt financing, we need to take into account that interest deducibility is worthless during the tax holiday, as well as the changing effect on dividend taxes. This yields:

$$F^D = \frac{\gamma_1(\rho-i)+\left(\gamma_2(\rho-i(1-\tau))-\gamma_1(\rho-i)\right)\left(\frac{(1-\delta)(1+\pi)}{1+\rho}\right)^Y}{\rho-\pi+\delta(1+\pi)} \quad (6)$$

The cost of capital is obtained by setting the sum of (4) and any financing effects to 0 and solving for p. Labelling the cost of capital $\tilde{p}$, the EMTR is then obtained as usual $((\tilde{p}-r)/\tilde{p})$.

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