

Policy Brief

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Cannabis Taxation as a Revenue Source for Development: Opportunities and Challenges

by Max Gallien and Giovanni Occhiali

Introduction

Recent years have seen an increasing number of countries across the globe establish legal markets for the production, distribution, and consumption of medicinal or recreational cannabis. With this has come the expectation that more markets will follow suit. Malta has legalised recreational cannabis in 2021, Germany has recently presented an outline of how its legalisation process will look like.¹ The global legal cannabis market is currently estimated at over GBP 20 billion and expected to quadruple in the coming decade. Notably, while much of the attention has originally been directed toward high income consumption markets, like the US and Canada, there have been movements towards legalisation within low- and middle-income countries (LMICs) which traditionally have been large production centres supplying illegal markets across the globe: Morocco, Lesotho, Mexico, Colombia, to mention just a few.

In this latter group of countries, the discourse on the development potential of cannabis legalisation was at times hyper-optimistic, citing the potential for job creation, rural development, lowering crime and raising tax income. A huge range of estimates on the size and potential of the cannabis industry have further fanned this enthusiasm. In South Africa it was estimated that the sector could contribute up to 130,000 jobs and be worth as much as USD1.6 billion – about half of the minimum value that has been estimated for the Mexican market (USD3 billion).² While this might seem huge figures, there is evidence of substantial investments into these sectors in LMICs. Between 2015 and 2019, the medical cannabis sector in Colombia received more than USD600 million in investment, while Lesotho received more than USD40 million in 2020 alone.³

¹ Though it is worth noting that the current Maltese model, focused on home cultivation and social clubs, is likely going to be less relevant from a tax perspective.

² <https://newfrontierdata.com/cannabis-insights/mexico-the-worlds-largest-market/>
<https://www.bloomberg.com/news/articles/2022-02-10/south-africa-looks-to-cannabis-hemp-industry-to-create-jobs>

³ See <https://allafrica.com/stories/202201150144.html> for investments in Lesotho and for estimates of potential market size of different African countries. Figures for Colombia are from <https://www.brookings.edu/blog/order-from-chaos/2021/03/30/mexicos-cannabis-legalization-and-comparisons-with-colombia-lebanon-and-canada/>

And yet, these discussions can appear jarring, as they exist against a backdrop of the still widespread criminalisation of cannabis across much of the global south: glossy brochures on development and cannabis coexist with mass incarceration of consumers and vulnerable producers and distributors. What has been particularly notable, however, is that the policy discussion on legalisation in LMICs is accompanied by a relative scarcity of independent research.⁴

This is especially striking with respect to taxation. Taxes stand at the heart of many of the more optimistic accounts of what LMICs stand to gain from legalising. This is intuitive, as they can both be a crucial element of market building and generate substantial revenues – revenue from cannabis excises taxes represented more than 1.5% of total state tax revenue in Colorado, Nevada and Washington⁵. And yet, there is almost no research or policy discussion on the reality of cannabis taxation in LMICs. To the degree that they exist, discussions are focused around the practices adopted in the US and Canada, without reference to the specificities of LMICs, both with respect to tax administration and their global position in cannabis value chains. Interestingly, even in LMICs in which there are currently conversations around legalisation and some draft legislation is published, plans on taxation are almost entirely absent from public debate – Mexico, Morocco and Malawi all provide examples here.

The goal of this policy brief is to provide a framework for thinking about cannabis taxation in LMIC contexts – to outline the opportunities and trade-offs involved. Our focus here is not to provide definite policy prescriptions, but analogies and considerations that can structure and inform these discussions, which we think are overdue. We do this based on secondary literature and interviews with cannabis experts and policy makers in LMICs as well as by drawing on wider experiences of tax policy and administration in LMICs.

At the centre of this brief is the idea that cannabis taxation in LMICs needs an approach that is different from the US, Canada or Germany due to the specificities of LMICs' contexts. This includes a variety of factors, such as differences in state capacity to implement complex market design projects, the different fiscal treatment of existing small-scale farming, the context of cannabis production in many LMICs which includes both long-standing small-scale agricultural producers and incoming export-oriented producers, as well as the potential role of FDI in local market development.

We argue that what is required in designing cannabis tax policies in LMICs is not the adaptation of high-income countries (HICs) best practices but rather holistic thinking about the role of taxes in market creation that is specific to local contexts and looks beyond cannabis taxation as a simple sin tax issue. In this paper, we highlight four considerations in particular that can structure such discussions: formalisation, industrial policy, equity and capacity. We argue that, based on previous experience with goods that share some features with cannabis, the more optimistic discourse on the developmental and fiscal upsides of legalisation is likely over-inflated, especially with respect to the impact on small producers. Benefits, fiscal or developmental, will not come automatically, but be dependent on careful and inclusive market and tax design.

⁴ Perhaps with the exception of Uruguay.

⁵ See <https://www.urban.org/policy-centers/cross-center-initiatives/state-and-local-finance-initiative/state-and-local-backgrounders/marijuana-taxes>

Cannabis and its Taxation

What is cannabis? Thinking about cannabis legalisation and cannabis tax policy requires an analysis on what aspects of the plant are produced, consumed, legalised and taxed. The cannabis plant is part of the value chains of a range of products. Most famous perhaps are recreational narcotics, but here too there are differentiations. Both dried buds and hashish, a substance produced by compressing a wider set of parts of the plant, are commonly smoked and require relatively little processing. Other forms, such as cannabis oils, cannabis-infused soft drinks or edibles such as cannabis gummies, all have a somewhat longer value chain. For the latter, the longer production process also often comes with more opportunities to finely regulate the content of the compounds primarily associated with the plant's desired effect, tetrahydrocannabinol (THC) and cannabidiol (CBD). Hence, given the heterogeneity of products, the exact definition of the taxable base(s) – weight or volume of crops, value or THC content of a wider set of goods – will have a significant impact on both how taxes are administered in practice on who will bear most tax burden.

It is also worth noting that legalisation debates right now are often differentiated by products. In many markets around the world, the use of cannabis for medical usage has been legalised, with strict standards on the production and concentration of key compounds. Even in markets where recreational consumption has been legalised, regulations on THC contents are common, while products that only include CBD are legal in a wider set of markets. Furthermore, while we mainly focus on cannabis as a recreational or medicinal drug here, there are a range of uses of the cannabis plant that are not at all associated with its psychotropic properties. For example, hemp is a durable soft fibre from the plant's stem which has a range of industrial applications, from textiles and construction materials to hemp milk, beauty products and biofuels. For many of these products, a comparatively more deregulated global market already exists. Considering these separate but intersecting markets and their domestic and global development is a critical consideration for market creation and cannabis tax policy in LMICs that already have a substantial production base.

“What is cannabis like?” – what at first sounds like the shy question of a prospective first-time consumer is in fact a critical question in the design of cannabis tax policy. As this is a largely new area of taxation, thinking about taxing cannabis is often guided, implicitly or explicitly, by analogies to other areas of taxation. While there are important insights to be gained, there are also limitations, and which analogy policymakers draw on can have substantial consequences. We note three relevant types of taxation here: sin taxes, other agricultural taxes, and taxes on mining and other rent-heavy forms of extraction.

Perhaps the most common tax analogy that has shaped the taxation of cannabis are sin taxes or other pigouvian taxes that focus on consumption products associated with negative health impacts such as alcohol, tobacco, or sugar. These measures are typically levied both to finance the societal costs of the consumption of these goods or to specifically drive up their price to reduce consumption. When looking at the taxation of cannabis in HICs and in particular in the US and Canada, the analogy to sin taxes is particularly visible. However, analogies to sin taxes are primarily helpful with respect to domestic consumption, as this is what gives rise to the societal damage that these taxes try to address. In LMICs, where a large part of domestic production has traditionally not been consumed domestically and the developmental discourse has

focused on legal production for export, this analogy is more limited. While sin taxes can coexist with other forms of production-focused taxation (tobacco is a classic example here), it is important to take a look at wider tax regimes.

Other agricultural taxes provide another common and somewhat obvious analogy for cannabis taxation. Especially if it is produced in a context of relatively limited technological investment, cannabis is a crop that is planted by a large number of farmers and then passed on to a smaller number of actors for further processing and export. This analogy is particularly productive in considering cannabis from an industrial and agricultural policy perspective – it places taxes in the context of the relationship between the state and small farmers as well as other producers, wholesalers and exporters. Given the generally lax approach to agricultural taxation in many LMICs – connected with complex and uncertain land tenure systems, a frequent overlap between commercial and subsistence cultivation, and a high tax enforcement cost in rural areas – this too points to caution and attention to detail in developing cannabis taxation. Furthermore, the analogy is in many ways imperfect: there is only a limited overlap between cannabis and other cash crops, especially from the point of view of the respective barriers to entering international markets. Cannabis may also be produced by rural communities that governments are historically particularly hesitant to tax.

Although this is perhaps somewhat less intuitive, a third useful analogy for cannabis taxation is the fiscal treatment of mining and hydrocarbons. Although rarely compared to the taxation of cannabis, a substantial set of research and experience exists around the economics and governance of hydrocarbons as a rent-heavy resource – meaning a resource that is sold at a price substantially above its production or replacement costs. Like mining or hydrocarbon extraction, the cannabis market can be described as a market in which rents play a substantial role – primarily through artificially limited supply, uncompetitive distribution structures and high barriers to entry. The prices that illegal suppliers have historically charged are not only due to their labour and production costs, or the particular skills involved in producing or trafficking cannabis, but also include high-risk premia that captured the costs of operating illegally. As markets are legalising, especially with production in lower-wage contexts, one question is whether prices will remain at levels allowing for a comparable rent, and if so, who is going to capture it. While there is potential for states to capture some of it through taxation, market dynamics are going to be crucial to examine.

Market structures are critical for another connection between cannabis and rents, as illegal distribution networks often divide up territories, routes or production centres, creating oligopolies and monopolies that can further increase prices in the absence of competition. Entry to markets has at times been policed violently. Although there is likely going to be less violence involved, there are clear indications that the legal production, processing, or distribution market in LMICs will similarly contain high barriers to entry. These are likely to be generated by policies that either set limited numbers of licences, set high technical regulatory barriers to entry, or set very high prices for licences, as it is the case in Lesotho, where a cannabis farming license cost of USD350,000 has allowed only five producers in the market. In the US and Canada, the developing legal markets for cannabis have similarly already shown a high propensity towards market concentration⁶ – as have the markets for cigarettes and tobacco products. This implies that there will likely be further opportunities for rent generation at these stages of the value chain, which tax policy design might seek to explicitly target.

⁶ See for example Gabriel Lévesque, *Cannabis Legalization in Canada. Case Studies: British Columbia, Ontario and Quebec*, 2020. Interestingly, some of the larger cannabis companies in Canada have seen their market share threatened in recent months, however it is unclear whether this is a wider trend. <https://mjbizdaily.com/analysts-cut-hundreds-of-millions-from-tilray-canopy-aurora-marijuana-sales-forecasts/>

Beyond this, there are also two further implications of the taxation of rent-heavy industries that make this analogy valuable for designing taxes on cannabis. First, rent-heavy industries have frequently been associated with negative governance implications – the impact that government policy, in particular around licensing, can have on the availability and distribution of rents means that the incentives for corruption are extremely high, and that safeguards against should be an explicit part of tax design. Even in the absence of corruption, the risks of tax policy being affected by aggressive lobbying of large industry actors is substantial – the parallels to tobacco are instructive here. Second, taxing rent-heavy industries often involves dealing with international tax issues, as many actors in these sectors operate as vertically integrated multinational companies. Once more, if ongoing legalisation developments are any indication, this is likely going to be a key part of the story of cannabis taxation in lower and middle-income countries. These issues highlight how closely tax policy will be tied into market and developmental dynamics more widely – a point this paper as a whole seeks to highlight.

Four Considerations

Cannabis tax policy should be embedded in a process of conscious and strategic market making that is focused on a wider set of developmental outcomes, but similarly notes the risks inherent in this process. In this section we outline four considerations that we think are important in guiding this process and that help us map some of the trade-offs involved. These are: the formalisation of a previously illegal market, equity concerns, industrial policy goals and capacity constraints.

The Formalisation of a Previously Illegal Market

As we note above, one of the key features of some of the LMICs that are currently considering legalising cannabis production is the existence of an established illegal production and distribution system. Critically, this illegal production is not typically aimed at meeting domestic demand, but is at least partially geared toward exports – Morocco, Lesotho, Mexico, Colombia all provide examples here. Some of these illegal exports have historically satisfied demand in HICs' markets which are now legalising, such as the US, Canada or countries in the European Union. Consequently, some of these producers are already exposed to more competition with new legal markets – a phenomenon that will intensify through the creation of new legalised production systems in LMICs themselves.

The formalisation of a previously illegal market is often associated with further positive externalities. Illegal cannabis production has long been the main and best source of revenue for smallholder farmer, which have consequently been drawn in partaking into inequitable interactions with organised crime groups. A legalisation process that allows them to emerge in the formal economy may then provide a diverse set of benefits, such as reducing the potential hold of criminal organisations over segments of the population with little livelihoods alternatives, withdrawing incomes from criminal groups, reducing pressure on security forces and the judiciary and ending the brutalisation of producers and users through overly securitised approaches.

However, illegal markets will not likely disappear automatically. The reactions of the various actors involved in the illegal production and distribution of cannabis to the establishment of legal markets is perhaps the most complex aspect of these market creation processes. Whether illegal producers will legalise their enterprises and supply

the legal market, or whether illegal markets will remain a cheaper competition to the illegal market is extremely difficult to predict ex-ante. Recent legalisation processes, such as in Canada and the US, have seen a variety of unexpected developments in their illegal markets, with illegal producers remaining important factors in meeting domestic demand. Some of this complexity is introduced by the fact that the landscape of legal and illegal markets is changing globally – with increases in legal supply in HICs having direct impacts on the business model of many producers in LMICs. Another complication is added through the fact that legalisation has at times coincided with de-criminalisation of illegal consumption and of production for personal consumption, which has a separate effect on the illegal market. Despite these complexities, we can make three broader observations on illegal markets, legalisation and tax policy.

First, well-established illegal production and distribution systems will not automatically disappear once a legal market is established. Consequently, the continuous existence of an illegal market alongside a legal one will remain a key variable and constraint in the development of the sector. Both for tax policy and wider market design, this is an argument for an incremental strategy that is able to react to these challenges, and that is accompanied by the collection of detailed information on illegal markets throughout. While the decrease of an illegal market should be part of the explicit policy goals of legalisation processes and tax policy, its complete disappearance is an unrealistic and unproductive policy goal. For example, despite the existence of a large global legal market, it is estimated that over 10% of the global tobacco market is still illicit.⁷ On that point, given the existence of a substantial and well developed literature in recent years on illicit markets and taxation with respect to tobacco consumption, there are important lessons to be learned for the context of cannabis.⁸

Second, illegal markets are likely going to undergo a substantial global transformation in the coming years. The creation of legal markets in some of the world's largest cannabis consumption areas is generating new competition, including from highly capitalised actors that can invest heavily in technology that is unavailable to some illegal actors. Furthermore, the existence of more closely monitored legal markets may shift consumer behaviours away from dried plants toward more highly processed products such as edibles, on which legal producers may have an advantage over illegal ones. At the same time, illicit markets can be dynamic and innovative, and their reaction to these dynamics is hard to predict. Consequently, while legalisation and tax policy in LMICs will have an impact on their illegal markets, some of these changes are going to be exogenous – we discuss this more in the section on industrial policy below.

Third, the status of illegal markets is not merely a function of the price of legal products. There is a tendency in discussions of cannabis taxation to see the current risk premium and the costs of illicit cannabis as a constraining factor of tax policy. For example, in the outline of its policy for the legalisation of cannabis, the German government explicitly noted that the maximum tax rate should lead to an overall price (including VAT) that approximates the price of illicit products.⁹ Broadly, this is sensible – it reflects both an interest in capturing the 'risk premium' discussed above through taxation, and to avoid a legal market that is substantially more expensive than its illegal alternative. However, a few points of caution are in order. As noted above, illegal markets are likely to undergo

⁷ Joossens, Luk, David Merriman, Hana Ross, and Martin Raw. 'The Impact of Eliminating the Global Illicit Cigarette Trade on Health and Revenue.' *Addiction* 105, no. 9 (2010): 1640–49. <https://doi.org/10.1111/j.1360-0443.2010.03018.x>.

⁸ Gomis, Benoit. 'Cannabis Regulation: Lessons from the Illicit Tobacco Trade.' IDPC Briefing Paper. London, UK: International Drug Policy Consortium, 2021. <https://idpc.net/publications/2021/09/cannabis-regulation-lessons-from-the-illicit-tobacco-trade>.

⁹ Eckpunktetpapier der Bundesregierung zur Einführung einer kontrollierten Abgabe von Cannabis an Erwachsene zu Genusszwecken, https://www.bundesgesundheitsministerium.de/fileadmin/Dateien/3_Downloads/Gesetze_und_Verordnungen/GuV/C/Kabinetttvorlage_Eckpunktetpapier_Abgabe_Cannabis.pdf

substantial changes. Consequently, prices on the illegal market could undergo some fluctuations that make them a poor target for tax policy. In LMICs that have historically exported most of their production, these changes are going to be even more strongly driven by global dynamics.

Consequently, the existence of illegal markets will likely not be primarily dependent on tax arrangements. Research on tobacco smuggling in recent years provides a fitting illustration of the fact that prices and taxes are often overstated factors in shaping illegal markets.¹⁰ Instead, a wider set of policy tools is of relevance here. For actors used to illegal markets, and particularly producers, switching to operating in formal environments will likely not be frictionless. They might encounter a range of issues around navigating the administrative procedures of legalisation, have difficulties managing procedural or financial barriers to entry to new markets, or might find that debts, familiarity, or coercion still tie them to their previous illegal supply chains. Addressing this will require strategic plans and conversations around the role of the illegal market (as has been visible, for example, in Mexico or Colombia) and the creation of new structures that are easy to understand and have low barriers to entry. Furthermore, tools for supply side control, such as tax stamps, will also facilitate the control of the legal market going forward and limit opportunities for legal-illegal hybrids.

As this section has argued, while the price of cannabis in illegal markets is an important data point for cannabis tax policy, policy makers should not allow illegal prices to dominate their tax agenda, but cautiously monitor the development of the illegal market both nationally and globally, and consider a broader range of policy tools beyond taxation to engage with it.

Equity

The legalisation of cannabis and creation of formal production channels in LMICs has frequently been framed as a potential boon for small producers and as a “pro poor policy” – Morocco’s announcement on legalisation for example have been quite emphatic on this point. This seems sensible and particularly desirable given that previously illegal markets have often been a source of both opportunities and hardship for economically marginalised agricultural communities that should benefit from legalisation. However, a brief look at other agricultural markets – and markets like tobacco that have a broader set of similarities with cannabis – quickly shows that equitable production arrangements which benefit small producers do not emerge automatically. In fact, there is quite a sharp contrast between legalisation being framed as a pro-poor policy on the one hand, and the frequently high capital requirements to market entry, on the other. Legalised markets in HICs have already seen both an increasing concentration of the domestic market and efforts by large actors to expand internationally.¹¹ Consequently, equity concerns will need to be explicitly addressed during the market creation processes in LMICs. We highlight a few considerations for tax policy in this context.

¹⁰ See for example: Joossens, Luk, and Martin Raw. ‘From Cigarette Smuggling to Illicit Tobacco Trade’. *Tobacco Control* 21, no. 2 (1 March 2012): 230–34. <https://doi.org/10.1136/tobaccocontrol-2011-050205>. Gallien, Max. ‘Cigarette Smuggling: Trends, Taxes and Big Tobacco’. In *The Routledge Handbook of Smuggling*. Routledge, 2021.

¹¹ For example, Canada-based “Canopy Growth” has already established medical presences through subsidiaries in Australia, Europe, Africa and South America. See Transform Drug Policy Foundation, “How to Regulate Cannabis: A Practical Guide”, 2022, p.300. See also <https://www.tni.org/en/publication/corporate-capture-of-the-latin-american-medical-cannabis-market>

First, cannabis taxation, especially with a view to production, should be designed in a way that focuses on the parts of the value chain that see the greatest opportunities for value addition and, as discussed before, rents. The precise tax structure will depend on how value chains around cannabis develop in LMICs, however, a likely focus here would be on processing and on export rather than raw material production. In countries like Morocco, where production is regulated through a state monopoly, sufficient margins for small producers need to be ensured. Second, in many LMICs, the more capital-intensive parts of the cannabis value chain are those that will likely be most attractive to international investors. For example, early instances of this can already be seen in Colombia or in Lesotho. Consequently, taxing cannabis in LMICs equitably will also entail from the very beginning decisions on how to tax FDI and international capital influx. Here, the fact that markets are in such an early state provides a regulatory advantage – however, LMICs should be careful not to sign away substantial tax opportunities in a bid to make their cannabis production more attractive to international actors. Third, especially with respect to small producers and agricultural communities, new tax structures should be designed in the most participatory way possible. There are a range of equity concerns here. As noted above, clear communication and training around new market processes, including tax measures, can lower the barriers to entry to the legal market, and consequently support small producers in breaking potentially dependent relationships with illicit actors. Furthermore, because this industry previously operated illicitly, the typical structures of communication through which governments collect sectoral information – chambers of commerce, reports in ministries, lobbies – are mainly absent for small cannabis producers. Consequently, the need for governments to gather data and information in order to design genuinely progressive and equitable tax policy is critical.

Fourth, as we have noted above, the highly regulated nature of this market will likely provide substantial opportunities for rent extraction to politically well-connected actors. Here, the taxation of other rent-heavy industries is instructive: the transparency of fiscal arrangements will be key to ensure that social benefits are created. It also makes an argument for extracting government revenue from this sector more through taxation than through para-fiscal measures such as licencing, which tend to require more up-front capital and consequently to create larger barriers to access, as previously noted for the case of license prices in Lesotho. Fifth, market concentrations highlight the importance of timing in these discussions. An early introduction of some cannabis tax system before markets are highly concentrated, or as part of the public messaging around legalisation, might help limit the influence of highly capitalised actors on the cannabis tax policy process. Finally, it is important to take a wider view of equity throughout the wider cannabis production value chain. In many LMICs, the introduction of new strains of cannabis and the demand for more frequent harvests have resulted in serious environmental degradation and have increased the pressure on communities' water resources. Ensuring the protection of communal resources will be critical, especially in regions where cannabis production is a substantial part of the local use of land, such in Morocco's northern Rif region. While this is primarily an issue to address through regulatory measures, there are however some fiscal policies that can be useful here, such as tax breaks for sustainable and organic farming, or the use of earmarked cannabis tax income to address the environmental impact of its production.

Industrial Policy

One of the key features that distinguishes a range of LMICs that are currently considering cannabis legalisation from European and North American counterparts that have already done so, is their role as cannabis exporters. Morocco, Lesotho, Mexico, Colombia, Malawi – just to name a few – all have a large pre-existing cannabis producer base that have long relied on illegal export for demand. For example, cannabis growers in Morocco's Rif mountains, for many years the largest producers in the world, were not primarily supplying Moroccans, but Europe's illegal market. Hence, for all these countries, legalisation mostly implies thinking beyond the domestic market. The policy challenge, if domestic producers are included as stakeholders of the process, lies not just in building a legal supply chain for domestic demand, but in building a legal demand for domestic suppliers. This has substantial implications for the respective industrial policy dimension.

In part, this has been one of the sources of enthusiasm and high expectations around legalisation of cannabis markets in LMICs. A simple comparison between the production output of countries like Mexico or Morocco and the prices of legalised cannabis in North American consumption markets implies the possibilities of astronomical profits. However, the actual development of legal supply chains, particularly around recreational cannabis, suggests that these expectations may be vastly overstated. Legal international trade structures for recreational cannabis are at best in their infancy, while high income legalised markets are building up domestic suppliers that are highly capitalised. Consequently, the actual demand for cannabis from LMICs in these markets, legal or illegal, may decrease substantially. If these same actors begin investing in legalising processes in LMICs, as discussed above, we would have observed a swift and dramatic global shift in where the ownership of cannabis production is located and where its profits are accrued. Consequently, there is plenty of reason for LMICs governments to approach legalisation with an explicit industrial policy strategy that thinks beyond the previous illegal export volumes.

Needless to say, the shape of such strategies will depend both on the local context and on how the global cannabis market will develop. One of the key issues here will likely be the differentiated markets around diverse cannabis outputs beyond recreational products: mixed strategies could for example include focusing on medicinal production for the international market and industrial or skincare products for domestic markets. Similarly, rather than global legalised trade channels, regional trade and industrial policy strategies might emerge, especially in areas such as Latin America or Southern Africa in which a few countries have been legalising – or are looking to – in recent times. This will have important downstream impacts on price and consequently tax policy: for example the difference in export strategies between purely medical and recreational cannabis might affect the degree to which price vis-à-vis other forms of product differentiation acts as a market driver.

From a tax perspective, industrial policy considerations with a view to exports are often framed as a limitation on taxation to maintain competitiveness. However, given the current structure of global markets and the emerging political economy of cannabis supply in high income countries, there are good reasons to believe that access and competition within global markets will not be primarily determined through price alone. Consequently, export ambitions might provide less of a limitation on taxation than is commonly presumed. Furthermore, it is worth noting that taxation can play a wider role within a range of industrial policy strategies, from setting or reducing barriers to entry, protecting sections of domestic consumption, from encouraging particular forms of cultivation or processing to regulating the access of international actors and investment.

Capacity Constraints

Finally, tax policy for the cannabis sector in LMICs should be guided by the capacity of both state actors charged with assessing tax liabilities of different actors and of these actors themselves. Currently, two main modes of cannabis taxation prevail in HICs: ad-valorem or specific excises based on weight, both of which in some cases vary according to cannabis THC-potency. These excises, which can be either paid by consumers and remitted by retailers or charged directly to the cultivators and processors, are generally conceived as 'sin taxes'. In addition, cannabis products not destined for medical purposes are often subject to general sales or value added taxes, and the income of the economic operators in the value chain is also subject to taxation.

Clearly, not all of these set ups will be equally fitting and feasible for the context of LMICs. Needless to say, there is huge variation in this group, both in resource mobilisation capacity and in the context of the respective domestic cannabis markets. To start with, without the existence of a local market for the respective excisable products – that is, any processed good containing THC – the theoretical justification for charging a sin tax is absent. This does not however imply that a tax on a cannabis product destined for export cannot be imposed, but rather that this is more likely to take the form of a royalty, which is also generally levied as either an ad-valorem or a specific charge. Regardless of how such tax will be conceived, appropriate consideration should be given to existing administrative capacity both within the revenue authority – or the equivalent agency charged to assess and collect tax liabilities – and across the economic actors involved in the value chain. In this respect, ad-valorem taxes might be easiest to comply with during the initial phases, as determining the appropriate specific charge could be complex without a well-established market for comparison.

Furthermore, having a tax rate varying with the THC content would be unadvisable in the absence of regular biochemical analysis on the crops, which might however already be required to obtain export certificates for HICs. If this is the case, then tax rates varying with THC contents could be more feasible, and provide an additional reason to focus more on product-specific taxes on processors and exporters – the stage of the value chain where the controls are more likely to happen – than on those at the producers' level. Charging producers often highlights particular capacity challenges: rural taxation especially in low income country contexts is frequently inefficient and hard to enforce due to the relative sparseness of taxpayers. While cannabis production might be more geographically concentrated than that of other type of crops, it will still likely take place far from the main urban centre in which most tax administrative capacity of LMICs currently lies. In addition, both normal profit margins across small-scale cash-crop growers and the fact that these actors are more likely to have previously been engaged in illegal markets suggests to concentrate fiscal efforts on higher stages of the value chain.

A final consideration based on the current patterns of industry investments across the world can also be made. To this date, most of the biggest investors in cannabis markets of LMICs are vertically integrated companies from HICs, especially the UK, US and Canada. Given this industry structure, and the fact that (legal) international cannabis trade is in its infancy, with quite a few bureaucratic processes still needing to take place – for example, most cannabis product do not have a harmonised standard code – trade amongst related parties is likely to be predominant. Consequently, the risk of transfer pricing issues – related companies transacting at below or above market prices – will be high. Transfer pricing audits are generally difficult to address across many tax administrations of LMICs, and those for products for which international reference prices do not exist, such as cannabis, even more so. Consequently, LMICs which aims

to develop their markets through high levels of foreign investment should consider starting to build this specific audit capacity, as well as a set of comparable prices from other jurisdictions.

None of the above implies that the taxation of the cannabis industry in LMICs should not be attempted or confined to simple instruments. Rather, the suggestion here is to build capacity as the industry develops, starting by establishing a tax treatment which is easy to understand and administer, potentially building on prior experiences with sectors sharing some characteristics, such as agriculture or mining, and then evaluate and adjust over time. This will also be important to ensure that tax rules are transparent, which we have previously mentioned is quite relevant in a sector in which opportunities for rent-seeking will likely abound.

Conclusion: Looking for a Model

The creation of new markets, nationally and globally, presents a unique window of opportunity for policy makers. It brings developmental possibilities, but also risks and substantial path dependencies. If current trends continue, we can expect a further substantial expansion of legalised cannabis markets both in HICs and LMICs in years to come. This policy brief has departed from common discussions of cannabis taxation in recent years by focusing on the unique situation of LMICs from a tax perspective. It has argued that lessons from legalisation processes in the US or Canada cannot easily be transferred, and that new models, shaped by the context, challenges and strategies of LMICs, are needed.

This policy brief does not outline or propose a particular model – too much of its features will be specific to the particular contexts of any one LMIC, including its capacity, industrial policy goals, existing producer bases, and on ongoing developments of the global market. Instead, what we have sought to highlight are some of the considerations and trade-offs involved, and the points that can shape LMIC conversations on cannabis tax policy. We conclude by highlighting four criteria that can be used to evaluate emerging models.

First, they should be holistic. Cannabis taxes need to be seen as a component of market building and be designed as a part of a clear plan for the wider cannabis sector in the respective country. They should be formulated – and published – alongside explicit goals on market structure, access, equity and industrial policy.

Second, they should be transparent. The likely challenges around rent seeking and market access in the sector provide the most striking reasons why transparency is particularly important in this context, but they are not the only ones. Potential capacity constraints on the side of both tax administrators and domestic producers, as well as eventual environmental consequences of increased intensity of cannabis cultivation, all point to transparency as a crucial aspect of an effective sectoral tax policy. Small producers and civil society organisations alike should have access to information and be consulted in the policy process.

Third, they should be equitable. While the discourse around cannabis legalisation in many LMICs has stressed its developmental potential, this will not come automatically. The structure of legal cannabis markets in HICs has already demonstrated that the sector exhibits a strong tendency toward capital concentration. High licencing costs, especially in developing countries, can re-enforce these tendencies. Taxes provide a route to government revenue that is less detrimental to market entry. The design of cannabis taxes, as well as their collection and potential earmarking, can all contribute

to increase or decrease an equitable access to the sector. This is particularly critical where local producers and international investment interact, hence especially in countries with a long history of domestic production.

Fourth, they should be realistic. This refers both to the potential developmental and fiscal benefits and the tax structure itself. Cannabis taxation will provide political and capacity challenges for many LMICs. Rather than mimicry the taxation strategies taken by HICs as ‘best practices’, LMICs might be better served by developing strategies that fit their context. This could include building on domestic administrative processes that are already in place in sectors that share some features with the cannabis industry.

As we have highlighted throughout, there is currently an almost complete absence of research on cannabis legalisation strategies and experiences in LMICs, including cannabis taxation. There is substantial scope here for research on the experience of LMIC revenue authorities, on the political economy of market creation in these contexts, and on the experience of local producers. Critically, these are not merely academic priorities. Revenue authorities may benefit from explicitly recognising this process as iterative and accompanied by research and continuous evaluation – in the words of one cannabis producer in Malawi, to ‘invest into the learning curve.’

Credits

Max Gallien is a Research Fellow at the International Centre for Tax and Development (ICTD), where he co-leads the research programme on informality and taxation. He is also a Research Fellow at the Institute of Development Studies (IDS) based at the University of Sussex.

Giovanni Occhiali is a Research Fellow at the International Centre for Tax and Development, where he works on different projects related to tax administration and compliance, as well as co-leading ICTD teaching and learning activities. His work focuses on sub-Saharan Africa.

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ICTD is based at the Institute of Development Studies, Brighton BN1 9RE UK.

Tel: +44 (0)1273 606261

E-mail: info@ictd.ac

Web: ictd.ac

Twitter: @ICTDtax

Facebook: fb.com/ICTDtax

LinkedIn: ICTDtax



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