International / Chile / United Kingdom

Tax Progressivity in Developing Countries: Redistributive Reforms to Indirect Taxation

Sebastian Gazmuri Barker[*]

Developing countries' tax systems are characterized by a very high reliance on indirect taxation and a very low (if any) progressivity. In this article, the author tries to provide a deeper analysis linking these two characteristics by exploring what actions are available for developing countries to increase their tax progressivity through their indirect taxes. He also analyses the potential distributional gains of three reforms to the VAT in developing countries. Using Chile as a case study, the analysis is based on empirical data on consumption patterns to assess the distributional impact of these reforms, finding that they have a strong redistributive potential to enhance the tax progressivity in developing countries. It also emphasises the importance of following evidenced-based tax reforms and not simply follow the indirect taxation policies of developed countries. The author draws comparisons with the UK VAT to highlight the need to take a different approach to regressivity concerns of indirect taxation.

1. Introduction

Developing countries' tax systems are characterized by a high reliance on indirect taxes and a very low (if any) progressivity.[1] These two characteristics, however, are rarely discussed together in more than a superficial way. When faced with this lack of (sufficient) progressivity and the predominance of indirect taxation, the tax and inequality literature tend to simply conclude that direct taxes need to be increased and strengthened in order to achieve a more positive distributional result through the tax system. This, of course, is absolutely true. But it has also proven to be a policy that is extremely difficult to achieve for developing countries, especially in the presence of increased tax competition and capital mobility.

Thus, the author in this article tries to provide a deeper analysis linking these two stylized facts, taking into account the difficulties that developing countries face when trying to increase revenues from direct taxes. The author identifies actions available for developing countries to increase their tax systems' progressivity when acknowledging the fact that direct taxation is likely to remain only marginally relevant at least in the medium term. Or, from a more optimistic perspective, this article analyses available avenues for developing countries to increase their tax progressivity, which could be pursued simultaneously with efforts to increase direct taxes (in the event that these efforts take longer than anticipated to produce the intended results). With that goal in mind, the author focuses on analysing the distributional gains that could be achieved through reforms to the value added tax (VAT).

The author explores the equity gains that may arise from the implementation of three possible reforms: broadening the VAT base, introducing a preferential rate for necessities and introducing (or increasing) a VAT minimum registration threshold below which businesses are not required to charge VAT. To reduce the usual trade-off between equity and efficiency in tax reforms, the author imposes three efficiency conditions to the reforms analysed. He finds that in the context of developing countries relevant distributional gains may be achieved through the indirect tax system, casting serious doubts on the usual policy recommendation of disregarding this part of the fiscal system in the efforts to curb inequality.

---

1.   While OECD countries, on average, collect 31% of their revenues from indirect taxes (*see* OECD, *Revenue Statistics 2020: Tax Revenue Trends in the OECD* (OECD 2020), available at https://doi.org/10.1787/8625f8e5-en (accessed 19 June 2023) [hereinafter *Revenue Statistics 2020*]), in developing countries the proportion is substantially higher (50% in the case of Latin America and 52% in the case of African countries). *See* OECD, *Revenue Statistics in Latin America and the Caribbean 2020* (OECD 2020), available at https://doi.org/10.1787/68739b9b-en-es (accessed 19 June 2023) [hereinafter *Revenue Statistics in Latin America and the Caribbean 2020*]; and OECD, AUC & ATAF, *Revenue Statistics in Africa 2020: 1990-2018* (OECD 2020), available at https://read.oecd-ilibrary.org/taxation/revenue-statistics-in-africa-2020_14e1edb1-en-fr (accessed 19 June 2023) [hereinafter *Revenue Statistics in Africa 2020*]. The OECD average has been calculated by removing member countries from Latin America and the Caribbean.

To test the potential of these reforms, the author uses Chile as a case study to measure their distributional impact. By using empirical data from Chile, the author finds that the analysed reforms could achieve a considerable Gini coefficient reduction of almost 2 points. The author also highlights that developing countries should not simply follow the practices of advanced economies in their efforts to reduce the regressivity of the indirect tax system, and a comparison with the United Kingdom is made to highlight this point.

The article is divided into eight sections including this introduction, with section 2. briefly explaining why indirect taxes are not usually considered in the search for tax progressivity. Next, section 3. briefly describes Chile's VAT to provide the background for the reforms that are analysed. Section 4. focuses on the distributional potential of broadening the base of VAT, while section 5. analyses the possible gains from introducing preferential VAT rates for basic necessities. Section 6. deals with the last reform, which is the introduction (or increase) of a VAT registration threshold and its impact in the equity of the system. Section 7. brings together the distributional results from the reforms analysed to show their overall impact on the level of inequality of a country, while section 8. offers some concluding remarks.

2. The Weak Case for Progressive Indirect Taxation in the Literature

2.1. The argument from optimal taxation theory

Despite their massive importance in the tax mix in developing countries, it is commonly argued that tax progressivity should not be pursued through indirect taxation. Instead, equity goals should only be addressed through direct taxes on income and property, and this is a powerful and well-grounded argument building on lessons from the theory of optimal taxation. Starting from Atkinson and Stiglitz (1976)[2] and continuing with others such as Deaton (1979)[3] and Deaton and Stern (1986),[4] optimal taxation theory proves that, under certain assumptions, uniform (or no) commodity taxation is optimal.

The intuitions behind such results are hard to challenge: while Ramsey's inverse elasticity rule suggests a higher taxation on price-inelastic goods (which tend to be necessities),[5] the practical implication seems unclear when including distributional objectives implying a lower taxation on goods consumed more heavily by those with high net social marginal utility of income (most likely low-income households tending to spend larger portions of their income on necessities). As highlighted by Crawford, Keen and Smith (2010)[6] the case for differentiated commodity taxation is further complicated when cross-price elasticities are introduced into the analysis: there is little point in heavily taxing a price-inelastic good to reduce the deadweight loss of the tax system, *if* the increase in taxation of that good results in a reduced consumption on some other (more elastic) good. The key rule, then, is not the price elasticity of a commodity but rather their complementarity with leisure: since the tax system distorts choices away from labour (due to the unfeasibility of taxing leisure) it would be optimal to indirectly tax leisure by imposing a higher burden on the consumption of those goods that are complementary with it.

More problematic for the case of differential commodity taxation is the existence of an efficient and progressive income tax and benefit system, which systems have proven to be more efficient in achieving the distributional objectives. The intuition behind this is again quite robust: even if low-income households spend larger portions of their income on essential commodities, in *absolute* terms rich households still consume more of those essentials. Hence, an exemption or reduced (or zero) tax rate on those items would benefit more, in *absolute* terms, the rich than the poor, which highlights how blunt a tool for redistribution commodity taxation is. Thus, under those circumstances the only argument for rate differentiation would be to discourage leisure to offset the labour discouragement resulting from the rest of the tax system. However, as mentioned by Crawford, Keen and Smith (2010), not only is it not clear which commodities are complementary with leisure, it also seems that the efficiency gains would be small and therefore unlikely to be worth the administrative and compliance costs that rate differentiation would entail.

2.2. Does the case against progressive indirect taxation hold in developing countries?

The analysis, however, seems to change in the context of developing countries. There are at least three reasons which justify revisiting the case for equity-enhancing reforms to commodity taxation in developing countries. In the first place, inequality is a much more pressing issue, and therefore the gains from redistribution could be larger than in developed countries. Indeed, Gini coefficients in developed countries average 0.31, while in Latin America and Sub-Saharan Africa they are considerably

2.   A.B. Atkinson & J.E. Stiglitz, *The design of tax structure: Direct versus indirect taxation*, 6 Journal of Public Economics 1, pp. 55-75 (1976).
3.   A. Deaton, *Optimally Uniform Commodity Taxes*, 2 Economics Letters 4 (1979).
4.   A. Deaton & N. Stern, *Optimally Uniform Commodity Taxes, Taste Differences and Lump-Sum Grants*, 20 Economics Letters 3 (1986).
5.   Taxation of price-inelastic goods leads to lower changes in consumption preferences by consumers, thus reducing the deadweight loss of the tax. The opposite is true for price-elastic goods, taxation of which would produce (for the same revenue) a higher deadweight loss.
6.   I. Crawford, M. Keen & S. Smith, *Value Added Tax and Excises*, in *Dimensions of Tax Design: The Mirrlees Review* (2010).

higher, averaging 0.46 and 0.43, respectively.[7] Thus, gains from reducing such extreme inequality should be larger and might outweigh the bluntness argument against progressive reforms to commodity taxation.

Secondly, there is a theoretical argument that product diversity in an economy increases with income inequality (Gabszewicz and Thisse, 1979[8]). This, in turn, is likely to translate into increasingly different consumption bundles between households. Although empirical evidence is scant on the relation between differences in consumption patterns and inequality levels, there is evidence showing that inequality is correlated with product diversity: an increase in the level of inequality of a country (maintaining its income fixed) leads to an increase in product variety.[9] This evidence hints at the possibility that the composition of consumption bundles among different income groups is increasingly divergent as inequality increases. Thus, in countries with extreme inequality it is likely that differentiated taxation of consumption might be a more targeted distribution mechanism than in countries with more modest levels of inequality.

In addition (and this is maybe the most relevant argument), one of the crucial conditions on which the theory of optimal taxation advocates for uniform commodity taxation is hardly ever met in developing countries: efficient and progressive income tax and benefit systems are something seldomly found in developing countries. Indeed, personal income taxation (PIT) is particularly irrelevant as a revenue tool in these countries, and thus unlikely to be an effective device to bring the desired progressivity to the tax system. In Latin America, revenue raised through the PIT amounts to barely 8.7% of total tax revenues.[10] Sub-Saharan Africa also raises limited revenues from PIT, averaging 15.7%.[11] This compares quite poorly with OECD countries, where 25.6% of their taxes are raised through the PIT.[12]

Even more problematic is the relation between PIT and indirect taxes, as the PIT is supposed to offset the regressivity of indirect taxes: while in OECD member countries revenues from PIT represent 86% of indirect taxes, in Latin America they represent merely 17% and in Sub-Saharan Africa they amount to only 30% of indirect taxes. Furthermore, the case study represents a drastic example of these tax systems highly skewed towards indirect taxation: revenues from PIT in Chile represent barely 7% of total taxes, amounting to less than 13% of the revenues collected through indirect taxes.[13]

These uninspiring data regarding PIT revenues hide another problematic issue: the limited revenue raised through PIT seems to be at least partly explained by the fact that it represents almost exclusively withholding tax on labour income in the formal sector, which is considerably smaller than in developed countries.[14] This not only limits its redistributive potential (as income from capital – concentrated in richest households – largely escapes taxation)[15] but it also entails a serious violation of the horizontal equity principle of taxation (as households with similar income will face radically different tax burdens if operating in the shadow economy, the formal economy, or deriving their income from capital rather than labour).

Based on these reasons, the author in this article explores the idea that equity-enhancing tax reforms to the indirect tax system might offer some much-needed distributional gains in the context of developing countries. In order to perform such exploration, the author uses Chile's VAT as a case study to highlight the available gains that can result from equity-inspired and evidence-driven tax reforms to indirect taxation.

2.3. The efficiency requirement for the analysis

However, a valuable lesson from tax history is that equity-enhancing reforms should keep an eye on the efficiency costs that they entail. Indeed, in the pre-VAT era, when sales and turnover taxes were the main levies on consumption, they became so incredibly complicated (in many cases due to equity-enhancing reforms) that there was a consensus that they were unsustainable.[16] Thus, when VAT appeared as an alternative, governments across the world swiftly repealed their turnover systems and replaced them with VAT.

7. Author's own calculations based on latest data available on 2020 in OECD and World Bank. *See Revenue Statistics 2020*; *Revenue Statistics in Latin America and the Caribbean 2020*; and *Revenue Statistics in Africa 2020*.
8. J. Gabszewicz, J. and Thisse, J.F. (1979) 'Price Competition, Quality and Income Disparities', *Journal of Economic Theory*.
9. J. Falkinger & J. Zweimüller, *The Impact of Income Inequality on Product Diversity and Economic Growth*, 48 Metroeconomica 3, pp. 211-237 (1997); and D. Pennerstorfer et al., *Income inequality and product variety: Empirical evidence*. Working Paper 353. DICE Discussion Paper (2020).
10. *Revenue Statistics in Latin America and the Caribbean 2020*.
11. *Revenue Statistics in Africa 2020*.
12. *Revenue Statistics 2020*.
13. *Revenue Statistics 2020*; and *Revenue Statistics in Africa 2020*.
14. R. Bird & E. Zolt, *Redistribution Via Taxation: The Limited Role of the Personal Income Tax in Developing Countries*, UCLA Law Review 52, pp. 1627-1695 (2005).
15. This is particularly problematic from a distributional perspective as capital (wealth) is much more concentrated than income, *see* J. Roine & D. Waldenström, *Long-Run Trends in the Distribution of Income and Wealth*, in *Handbook of Income Distribution*, pp. 469-592 (A.B. Atkinson & F. Bourguignon eds., Elsevier 2015).
16. The efficiency problems of indirect taxes before VAT can be summarized as: (i) cascading effects; (ii) complexities from several different rates coupled with complicated tariff variations; and (iii) obstacles to exports due to non-neutrality of sales and turnover taxes.

S. Gazmuri Barker, Tax Progressivity in Developing Countries: Redistributive Reforms to Indirect Taxation, 34 Intl. VAT Monitor 4 (2023), Journal Articles & Opinion Pieces IBFD (accessed 7 August 2023).

3

For this reason, the analysis of redistributive reforms to VAT will be qualified by an efficiency requirement imposing three conditions: first, a "targeting condition" requiring any reform to be sufficiently well targeted so that the benefit arises predominantly (in absolute terms) to the less well-off. Second, a "revenue neutrality" condition requiring any potential reform to be at least revenue neutral, since the expenditure side also offers good redistributive potential. Lastly, the "simplicity condition" requiring avoiding over-complicating the VAT system while trying to reduce distortions of competition. Thus, distributional gains will be balanced against the complexities and distortions that they would entail, and only those that result in a more positive outcome in that balancing exercise will be regarded as worth pursuing.

3. The VAT within Chile's Tax System

The VAT is by far the most relevant source of public revenues in Chile. During the 21st century, it has raised on average 39% of total taxes. And this relevance is not declining as the last five years have seen an average of 41% of tax revenues raised through this tax.[17]

VAT was introduced in the early years of the Pinochet dictatorship as part of the economic reforms that closely followed the "Washington Consensus". It was to replace the convoluted sales tax that operated from 1954 until 1975, and immediately proved a powerful source of revenue. Given this context, it is not surprising that the exclusive focus of VAT has been on its efficiency: it was introduced (and has remained) with a single rate that has been set at 19% since 2003, and there are no broad categories of exempt items. Consequently, Chilean VAT has none of the common features that try to deal with the regressivity concerns of this tax: it has no reduced rates for any necessities, nor are any of them exempted.

This broad characterization of Chilean VAT seems to suggest that it is in line with the recommendations of the theory of optimal taxation, as mentioned in section 2.1. However, at least three aspects of Chilean tax system make it extremely doubtful that its design is close to optimal. First, there are many particularities of Chilean VAT which are frequently overlooked that make it fall well shorth of being a "uniform tax on consumption". Most importantly, there are several "minor' exempted categories which cause the tax to differ considerably from the "uniform commodity tax" advocated by the theory of optimal taxation. In contrast to most VAT systems in the world, none of these exemptions seem to respond to the alleged regressivity of VAT.

Secondly, the rest of the tax system looks significantly different from what the theory of optimal taxation assumes as a condition for the optimal uniform commodity taxation, the most significant difference being that the PIT shows little progressivity and even less efficiency as a revenue tool. Indeed, even though the statutory top rate of the PIT is set at 40% (seemingly close to the world average for PIT), the structure of the tax makes that the effective tax rates are considerably lower, even at extreme levels of income. Indeed, someone who is in the top 1% of the income distribution in Chile is only taxed at a marginal rate of 23%.[18] Furthermore, due to the multiple and wide tax brackets, people just inside the top 1% would be subject to an effective tax rate averaging barely 8.8%.[19] In addition, the exempt income under the PIT is set at a relatively high level, which means that more than 83% of the adult population are below it. Thus, the PIT is not only incapable of bringing *any* progressivity within such a massive part of the population, it is also only able to bring very modest progressivity within the richest 17% of the income distribution.

Lastly, Chile's VAT lacks a minimum registration threshold below which businesses are not required to register and charge VAT.[20] This opens the possibility of a potential reform that could achieve a "double-dividend" in terms of enhancing both the efficiency and the equity of the tax. From an efficiency perspective, there is considerable literature arguing in favour of having a minimum registration threshold that leaves small businesses out of the scope of the tax.[21] In addition, if low-income households are more intense users of these small businesses, the introduction of such minimum registration threshold would also (partly) remove a share of their consumption from the VAT net, increasing the equity of the tax. This will be further explored in section 6.

These three aspects of the Chilean tax system suggest that an equity-focused analysis of possible VAT reforms might show available distributional gains that would make them desirable, particularly in a context of a tax system that scores very poorly

---

17. Servicio de Impuestos Internos (SII), *Ingresos Tributarios Anuales Consolidados* (2022), available at https://www.sii.cl/sobre_el_sii/serie_de_ingresos_tributarios.html (accessed 21 Feb. 2023).
18. According to data on income taxpayers published by Chile's tax authority, to trigger the top marginal income tax rate of 40%, a taxpayer would have to be within the richest 0.05% of the adult population.
19. This estimated effective tax rate should definitely be considered a higher bound of the *actual* effective rate, since it is calculated assuming full compliance and that all income received by these taxpayers is taxable income subject to the general tax schedule (which is far from precise, as there are substantial exemptions and tax preferences for capital income in the Chilean tax code).
20. There is a simplified VAT system for small traders, based on the payment of a fixed amount depending on the level of output. However, it is rarely used as it usually results in a higher tax burden than would result from the general system (Resolution 33 of 1977 of the Chilean tax authority).
21. J. Mirrlees (ed.), *Tax by Design: The Mirrlees Review,* p. 178 (Institute of Fiscal Studies 2011); M. Keen & J. Mintz, *The Optimal Threshold for a Value-Added Tax*, 88 Journal of Public Economics (2004); L. Ebrill, M. Keen, J-P. Bodin & V. Summers, *The Modern VAT* (IMF 2001); R. Kanbur & M. Keen, *Thresholds, informality, and partitions of compliance*, 21 International Tax and Public Finance 4, pp. 536-559 (2014).

S. Gazmuri Barker, Tax Progressivity in Developing Countries: Redistributive Reforms to Indirect Taxation, 34 Intl. VAT Monitor 4 (2023), Journal Articles & Opinion Pieces IBFD (accessed 7 August 2023).

4

in any measure of tax progressivity.[22] Thus, sections 4., 5. and 6. analyse the equity gains that could result from three of such reforms.

4. VAT Base-Broadening Reforms

4.1. Potential distributional effects

Although Chile's VAT is usually described as a general tax on consumption at a single rate of 19%, there are several exemptions within the tax code. Some of the exemptions are common within VAT regimes (such as financial services) while others are specific to Chile (such as sporting events). The most relevant exemptions relate to cultural[23] and sporting events, passenger transport services, certain insurance services (life insurance and some property insurance), television and radio services, news services, second-hand vehicles, education, and financial services. In addition, due to the way in which Chilean VAT is drafted, there is a wide range of services that escape taxation (out of the scope of VAT), such as hairdressers, legal and advisory services, gyms, dental services, etc.[24] In addition, any services where physical effort predominates and which are individually provided are also exempt (even if the provider is aided by their family or by an assistant). It is difficult to identify an underlying principle for these exemptions, although some seem to respond to a logic of merit goods (education and cultural events) and some to the complexity of taxing them (insurances and financial services).

What is particularly interesting about these exemptions is that most are regressive: they benefit items more heavily consumed by the well-off. Thus, there also seems to be a case of reaping double dividends with base-broadening reforms to Chile's VAT, since base broadening would enhance both the VAT's efficiency (by reducing distortions in consumption choices) and its equity (since the incidence of the reform would be progressive, as will be shown in Tables 1., 2. and 4.). The regressivity of these exemptions is evidenced by data on their consumption by income levels, as shown in Table 1.

Table 1. Currently exempted items and their pattern of consumption

Exempted item	Consumption by quintiles of income[1] (CLP 1,000)				
	1st quintile	2nd quintile	3rd quintile	4th quintile	5th quintile
Sporting events	1.4	2.3	2.8	6.1	22.9
Cultural events	1.3	1.7	3.4	5.1	12.6
Transport	35.6	42.1	46.8	46.7	62.3
Exempt insurances[2]	1.9	3.0	4.9	12.9	46.4
Education	35.6	42.3	51.0	78.8	155.2
Financial services	4.0	5.6	8.0	16.7	47.0
Second-hand vehicles	6.7	11.8	12.0	23.7	64.4
Medical services	8.6	14.1	19.4	27.8	71.2
Dental services	8.2	6.7	8.4	17.7	26.9
Hairdresser	0.8	1.6	1.8	4.2	12.4
House-related services	2.1	2.5	4.2	13.8	55.5

---

22. Studies on tax incidence in Chile consistently show that it is slightly regressive or neutral at best. Indeed, O. Larrañaga, J. Encina & G. Cabezas, *A microsimulation model of distribution for Chile* in *Fiscal Inclusive Development: Microsimulation Models for Latin America* (C.M. Urzua, ed. 2012) conclude that the combined effect of indirect and direct taxes in Chile is to increase Gini by 2 percentage points, while E. Goñi, J.H. López & L. Servén, *Fiscal Redistribution and Income Inequality in Latin America*, p. 4487 (World Bank 2008) and E. Engel, A. Galetovic & C. Raddatz, *Taxes and Income Distribution in Chile: Some Unpleasant Redistributive Arithmetic*, NBER Working Paper 6828 (Dec. 1998), available at http://www.nber.org/papers/w6828 (accessed 19 June 2023) find that the tax system increases Gini by 1 percentage point.
23. CL: Ley Sobre Impuesto a las Ventas y Servicios [Tax Law on Sales and Services, hereinafter VAT Law], DL 825 (amended 1974) , art. 12(E)(1) exempts cultural events if they are "sponsored by the Secretary of Culture". However, this sponsorship requirement is little else than a formality mostly to ensure the participation of local artists.
24. Chile's VAT Law is convolutedly drafted when it comes to defining services under its scope. Up to January 2023, only services arising from the performance of activities under CL: Income Tax law (ITL), art. 20(3) and (4), are within scope. The ITL refers in art. 20(3) to industry, commerce, extractive activities, financial and insurance activities, construction, etc. and in art. 20(4) to brokers, education institutions, maritime trade, hospitals and entertainment enterprises. Thus, the general rule is that any service not within these activities will be exempted from VAT, unless a specific provision brings it into the tax. Conversely, many services within these activities are exempted by specific provisions contained elsewhere in the law (i.e. financial services, education services, etc.). Since January 2023 the scope of VAT has been expanded to some services, but they will continue to be exempted if they are provided through a partnership. This requirement for exemption (rendered through a partnership) is puzzling and difficult to reconcile with any underlying policy goal. The only likely effect will be to (i) massively reduce potential VAT revenues from services and (ii) distort the decision about the vehicle through which to organize economic activity for service providers. It will only be able to conclude with certainty the outcome with data arising in future years, but anecdotical evidence already suggest these likely effects are actually occurring.

S. Gazmuri Barker, Tax Progressivity in Developing Countries: Redistributive Reforms to Indirect Taxation, 34 Intl. VAT Monitor 4 (2023), Journal Articles & Opinion Pieces IBFD (accessed 7 August 2023).

5

Exempted item	Consumption by quintiles of income[1] (CLP 1,000)				
	1st quintile	2nd quintile	3rd quintile	4th quintile	5th quintile
Domestic services[3]	1.0	1.0	1.6	5.9	32.5
Total	*107.2*	*134.7*	*164.3*	*259.4*	*609.3*

1.   INE, *VIII Encuesta de Presupuestos Familiares* [*VIII Family Budget Survey*] (2018), available at: https://www.ine.gob.cl/estadisticas/sociales/ingresos-y-gastos/encuesta-de-presupuestos-familiares (accessed 19 June 2023), [hereinafter *VIII Family Budget Survey*].
2.   Exempt insurances are life insurance and earthquake insurance.
3.   As most domestic services are provided by individuals who are likely to be below the minimum threshold suggested in section 6. of this article, only 30% of the value of this category of consumption has been included.

Thus, for every GBP 1 forgone in taxes due to these exemptions, almost half benefits the richest quintile of households, while only 8% benefits the poorest. The other side of the coin is, of course, that a reform bringing these exemptions into the VAT net would be clearly progressive since half of the additional tax would burden the richest quintile of the population.

Of course, many readers might not be surprised by these results. After all, it is common that on almost any consumption item the rich will spend more in absolute terms as they have a higher overall spending power (especially in high inequality settings). However, the regressivity of these exemptions also holds on relative terms: they also make up a larger portion of the total consumption of the high-income households compared with low-income household, as Table 2. shows.

Table 2. Currently exempted items and their pattern of consumption relative to total expenditure

Exempted item	Consumption by quintiles of income[1] (% of total household expenditure)				
	1st quintile	2nd quintile	3rd quintile	4th quintile	5th quintile
Sporting events	0.23	0.31	0.32	0.51	1.04
Cultural events	0.22	0.23	0.39	0.42	0.57
Transport	5.98	5.66	5.33	3.89	2.84
Exempt insurances	0.32	0.40	0.56	1.08	2.11
Education	5.99	5.69	5.82	6.56	7.08
Financial services	0.68	0.76	0.91	1.39	2.11
Second-hand vehicles	1.13	1.58	1.37	1.98	2.94
Medical services	1.45	1.90	2.21	2.31	3.25
Dental services	1.38	0.90	0.96	1.48	1.23
Hairdresser	0.14	0.21	0.21	0.35	0.56
House-related services	0.36	0.33	0.48	1.15	2.53
Domestic services	0.16	0.14	0.18	0.49	1.48
Total	*18.03*	*18.12*	*18.74*	*21.60*	*27.77*

1.   *VIII Family Budget Survey.*

The failure to bring these items into the tax net means that 28% of consumption of the richest households goes untaxed, while it only represents a tax break for 18% of the consumption of the poorest households.

Furthermore, if equity is the guiding principle of a tax reform (as it arguably should be in countries with very high levels of inequality) the analysis could be much more granular. Indeed, the only exemption listed above which is progressive (in relative terms, exempting a larger share of consumption of the bottom quintile) is transport. Thus, removing that specific exemption would arguably not enhance the equity of the system, even though in absolute terms the top quintile receives almost twice as much of the benefit as the first quintile. However, transport services come in widely different varieties, from an extremely crowded bus commute to work to a luxurious first-class flight to a holiday destination. The consumption patterns of these two transport services are likely to be in stark contrast. Without needing to go into such extreme scenarios, Table 3. shows how diversely distributed among income levels different transport services are.[25]

25.   There are other, relatively irrelevant, forms of transport which have been left out of the disaggregated analysis of transport services (such as rail services, school bus services, etc.).

Table 3. Consumption patterns of different type of transport services

Exempted item	Consumption by quintiles of income [1] (CLP 1,000 and % of total expenditure)									
	1st quintile		2nd quintile		3rd quintile		4th quintile		5th quintile	
	CLP	%	CLP	%	CLP	%	CLP	%	CLP	%
Taxi services	1.4	0.23	2.3	0.31	2.4	0.28	4.0	0.34	8.1	0.37
Air transport	1.1	0.18	1.3	0.18	4.6	0.53	6.5	0.54	28.1	1.28
Bus services	8.7	1.46	7.6	1.02	6.7	0.77	5.4	0.45	2.2	0.10

1.   *VIII Family Budget Survey.*

Thus, while exempting taxi services and air transport is regressive both in absolute and relative terms (especially the latter, where more than two thirds of the forgone tax benefits the richest quintile), exempting bus services is actually progressive (also both in absolute and relative terms). This shows two things: firstly, there seems to be a good deal of potential for redistribution in indirect taxes if tax policy follows detailed evidence on consumption patterns. Secondly, it is important to look within the broad categories of consumption since divergent distributional patterns seem equally likely to be found in the type of consumption within a category as between different categories. There is, however, a limit on the level of granularity: the "simplicity condition" requires that resulting tax needs to be workable and competition between close substitutes should not be distorted. But taxing air transport (and arguably also taxi services, though this is less obvious)[26] and not buses does not seem to conflict with either such limitations.

By replacing the general category of "transport" by the more regressive items within it, the result of a reform removing these exemptions looks indeed very progressive, as Table 4. shows.

Table 4. Incidence of proposed broad-base reform

Exempted item	Consumption by quintiles of income[1] (CLP 1,000 and % of total expenditure)									
	1st quintile		2nd quintile		3rd quintile		4th quintile		5th quintile	
	CLP	%	CLP	%	CLP	%	CLP	%	CLP	%
Sporting events	1.4	0.23	2.3	0.3	2.8	0.3	6.1	0.5	22.9	1.0
Cultural events	1.3	0.22	1.7	0.2	3.4	0.4	5.1	0.4	12.6	0.6
Taxi services	1.4	0.23	2.3	0.3	2.4	0.3	4.0	0.3	8.1	0.4
Air transport	1.1	0.18	1.3	0.2	4.6	0.5	6.5	0.5	28.1	1.3
Exempt insurances	1.9	0.32	3.0	0.4	4.9	0.6	12.9	1.1	46.4	2.1
Education	35.6	5.99	42.3	5.7	51.0	5.8	78.8	6.6	155.2	7.1
Financial services	4.0	0.68	5.6	0.8	8.0	0.9	16.7	1.4	47.0	2.1
Second-hand vehicles	6.7	1.13	11.8	1.6	12.0	1.4	23.7	2.0	64.4	2.9
Medical services	8.6	1.45	14.1	1.9	19.4	2.2	27.8	2.3	71.2	3.2
Dental services	8.2	1.38	6.7	0.9	8.4	1.0	17.7	1.5	26.9	1.2
Hairdresser	0.8	0.14	1.6	0.2	1.8	0.2	4.2	0.3	12.4	0.6
House-related services	2.1	0.36	2.5	0.3	4.2	0.5	13.8	1.1	55.5	2.5
Domestic services	1.0	0.16	1.0	0.1	1.6	0.2	5.9	0.5	32.5	1.5
Total	*74.2*	*12.46*	*96.2*	*12.95*	*124.6*	*14.21*	*223.2*	*18.59*	*583.2*	*26.58*

1.   *VIII Family Budget Survey.*

To sum up, there seems to be clear potential for redistribution through VAT by expanding the tax base. This type of redistributive reform is particularly attractive for two additional reasons: firstly (as mentioned) base-broadening reforms also enhance the efficiency of the tax, so this could be one of those rare cases where equity and efficiency in taxation go hand in hand. Secondly, expanding the VAT base would result in additional revenues which can be used to fund additional redistributive

---

26.   The United Kingdom does exactly that: passenger transport is zero rated but only if the vehicle carries at least ten passengers, thus excluding taxi services from the preferential tax treatment (UK: Value Added Tax Act 1994, Schedule 8, Group 8).

S. Gazmuri Barker, Tax Progressivity in Developing Countries: Redistributive Reforms to Indirect Taxation, 34 Intl. VAT Monitor 4 (2023), Journal Articles & Opinion Pieces IBFD (accessed 7 August 2023).

7

policies (whether that is through the tax or expenditure side): the suggested base-broadening reform would bring around an additional 20% of total national consumption into the tax net.

4.2. Complexities of the proposed reform

Although the redistributive potential seems clear, the proposed reform entails a few complications which should be assessed before reaching any conclusions about the desirability of this reform. Firstly, it is likely it would encounter substantial political resistance as it targets goods and services which are usually perceived as merit consumption which governments should encourage, such as education and medical services. However, the marked regressivity of these exemptions should persuade that encouragement would be more efficient and fairer through other policies. Earmarking VAT revenues arising from medical and educational services to increase funding of public health and education could be a way of overcoming this political challenge.

In addition, the taxation of some of the items currently exempted entails particular technical challenges which should also be weighed against the benefits of such a reform, most noticeably insurance and financial services. Indeed, most VAT systems were originally designed exempting financial services due to the difficulties that a transaction-based VAT encounters when applied to financial transactions. The problem arises as banks do not directly charge a price for their services, but instead their fee is effectively the difference between the interest charged to borrowers and the interest paid to depositors.[27] This "spread" is not readily identifiable in each transaction. Taxing insurance services runs into similar problems: although a premium is charged when insurance is sold, most of the premium does not represent compensation for the financial intermediation provided but rather an amount to pool risks.[28] The compensation for the services is only the difference between the premiums received and the claims paid, which is also not easily identified in each transaction. Thus, when VAT was originally designed it may have been a good decision to simply exempt these services (which is, in fact, partly taxing them, as financial institutions do not recover the VAT charged on their inputs).

However, more than half a century has elapsed since and many solutions have been identified for successfully implementing VAT on financial services. As mentioned by Mirrlees et al. (2011),[29] cash flow taxation of financial services has been suggested since at least 40 years and the mechanism has been extensively refined and discussed.[30] In addition, the desirability of bringing financial services into the VAT net has been widely acknowledged.[31] Advocating for the most suitable way of bringing financial services into the VAT net escapes the purpose of this article, but international practice increasingly suggests that it is possible. The most promising approaches seem to be following the addition method of taxing value added (taxing cash flow profits and wages) which is applied in several countries such as Denmark, France, Iceland, Israel and Norway. Moreover, the IMF (2010)[32] has also advocated for an addition-based VAT for financial services.

5. Preferential Rates for Necessities

The most common answer to the regressivity of VAT is to introduce reduced (or zero) rates targeting items more heavily consumed by low-income households. This usually translates into preferential rates for foodstuff, domestic fuel, etc. However, when analysing zero-rated items in a particular jurisdiction, it tends to be surprising how many other (less expected) items have made their way into the zero-rated categories. In the United Kingdom, for instance, zero-rated items include foodstuff (except some such as savoury snacks, hot food, ice creams, most drinks, etc.), prescribed medicines, sanitary products, water, passenger transport, books, music, magazines and newspapers, children's clothes and footwear, and the construction and sale of residential properties. This (by no means complete) list of zero-rated items is a good example of two of the main criticisms of preferential rates.

27. Mirrlees, *supra* n. 21.
28. S. Cnossen, *Modernizing VATs in Africa,* ch. 13 *Financial Services*, pp. 193-220 (Oxford University Press 2019).
29. Mirrlees, *supra* n. 21.
30. A cash-flow method was presented by L.A. Hoffman, S.N. Poddar & John Whalley, *Taxation of banking services under a consumption type, destination basis VAT*, 40 National Tax Journal 4 (1987); later discussed by S. Poddar & M. English, *Taxation of financial services under a value-added tax: Applying the cash-flow approach*, 50 National Tax Journal 1, pp. 89-111 (1997)); and more recently by M. Keen, R. Krelove & J. Norregaard, *Policy Forum: The Financial Activities Tax*, 64 Canadian Tax Journal 2, pp. 389-400 (2016) and J. López-Laborda & G. Peña, *A new method for applying VAT to financial services*, 71 National Tax Journal 1, pp. 155-182 (2018).
31. The main benefit is that it reduces distortions by leaving relative consumer prices unchanged, *see* A.J. Auerbach & R.H. Gordon, *Taxation of Financial Services under a VAT*, 92 American Economic Review (Papers and Proceedings) 2, p. 411 (2002). In addition, it removes the implicit tax on business inputs resulting from the current exemption. It has also been argued that taxing financial services under a VAT improves trade openness, *see* J. López-Laborda & G. Peña, *Financial VAT may improve trade openness*, 54 Applied Economics 19, pp. 2148–2160 (2022), available at https://doi.org/10.1080/00036846.2021.1985072 (accessed 19 June 2023)) and, as this article also suggests, that its incidence is progressive, *see* J. López-Laborda & G. Peña, *Efectos Sobre la Redistribución de la Renta del Gravamen de los Servicios Financieros en el IVA* [*Effects on Income Redistribution of the Tax on Financial Services in VAT*] (u Zaragoza 2017).
32. International Monetary Fund (IMF), *Fair and Substantial Financial Sector Contribution* (2010), available at https://publicintelligence.net/imf-g20-report-fair-and-substantial-financial-sector-contribution/ (accessed 25 Jan. 2023).

S. Gazmuri Barker, Tax Progressivity in Developing Countries: Redistributive Reforms to Indirect Taxation, 34 Intl. VAT Monitor 4 (2023), Journal Articles & Opinion Pieces IBFD (accessed 7 August 2023).

8

First, as it is evident from the previous list, many of these items do not seem to respond to distributional objectives of governments, suggesting that preferential VAT rates are subject to substantial political lobbying. Thus, it is not unusual to find incredibly extensive lists of preferentially taxed items where some are very difficult to reconcile with any underlying principles.

Secondly, the list also reflects that preferential regimes may result in a considerable narrowing of the tax base. This, in turn, means that preferential rates are often extremely expensive public policies and very blunt tools for redistribution. Indeed, it is often argued that although low-income families might spend larger shares of their income on reduced-rate items, rich households spend more in those items in *absolute* terms. Thus, the benefit from preferential rates arises predominantly to the rich. This has been, indeed, one of the mains criticisms of the UK VAT.[33]

5.1. Potential distributional effects

However, as mentioned in section 1., these arguments need to be reassessed in the context of developing countries given their different inequality and tax systems' structure. With that in mind, this section shows the distributional potential of introducing preferential rates designed based on evidence on consumption patterns in Chile. The analysis looks at divergences in consumption patterns by quintile of income based on Chile's family budget survey, trying to identify commodities that do not only represent a larger share of income of the poorest quintiles (relative progressivity), but also represent a larger expenditure for those quintiles in *absolute* terms (absolute progressivity). This second condition should considerably limit the scope (and the cost) of preferential rates, as the high inequality found in Chile means that the poorest quintiles have much smaller spending power in the first place. This also guarantees that preferential rates are not a blunt and expensive tool for redistribution, since most of the benefit in money terms would arise for the poorest quintiles.

After a first analysis, it became evident that the "simplicity condition" would require some relevance criteria to be added to the list of potentially redistributive items of consumption, as there were multiple items which met the above-mentioned criteria (both relative and absolute progressivity) but on which households spend a very negligible part of their income. Thus, the benefit arising from reduced taxation would be outweighed by the complexity it would entail to have such a large list of preferentially taxed consumption. The relevance requirement introduced consists in the poorest quintile spending on average at least CLP 500 per month on such item (around 0.1% of total expenditure of such quintile). Once this relevance condition is added, the list is reduced from 112 to 36 items.

However, as required by the "simplicity condition" identified in section 2.3., when designing the structure of preferential rates there needs to be a balance between the distributional gains and the distortion of competition which arises when different rates apply to close substitutes. Such a balancing exercise led to the conclusion that it was preferable to remove some of the items with redistributive potential based on the fact that they were too specific or too close in their consumption to other items with no redistributive potential (or alternatively, to include in the preferential categories items that showed less distributional potential but were very close substitutes to those meeting the criteria). As a result, only 22 items remain for a potentially redistributive reform, which is, at the same time, simple and workable while substantially limiting the distortion of competition between close substitutes. These 22 items are grouped in the following 14 categories (*see* Table 5.).

Table 5. Incidence of proposed preferential regime

Proposed preferential category	Consumption by quintiles (CLP 1,000)				
	1st quintile	2nd quintile	3rd quintile	4th quintile	5th quintile
Rice	2.1	1.9	1.9	1.6	1.2
Bread (fresh)	21.9	20.6	18.8	14.5	6.8
Uncooked pasta	2.5	2.6	2.6	2.2	1.9
Wheat flour	0.9	0.8	1.0	0.7	0.4
Chicken meat	8.1	9.3	9.4	7.8	6.7
Eggs	4.0	4.1	4.2	3.7	3.6
Dried pulses	1.4	1.2	1.2	0.9	0.8
Potatoes	4.3	4.0	3.3	2.7	1.8
Sugar	1.4	1.7	1.4	1.0	0.8
School clothes and shoes	5.8	4.7	4.1	4.0	4.6
Firewood	4.0	4.6	4.1	3.5	2.8

---

33. Mirrlees, *supra* n. 21, at ch. 9.

S. Gazmuri Barker, Tax Progressivity in Developing Countries: Redistributive Reforms to Indirect Taxation, 34 Intl. VAT Monitor 4 (2023), Journal Articles & Opinion Pieces IBFD (accessed 7 August 2023).

9

Proposed preferential category	Consumption by quintiles (CLP 1,000)				
	1st quintile	2nd quintile	3rd quintile	4th quintile	5th quintile
Technical education	1.7	1.4	2.0	1.5	0.1
Total CLP	*58.0*	*57.0*	*54.0*	*43.9*	*31.5*
Total as % of expenditure	*9.7%*	*7.7%*	*6.2%*	*3.7%*	*1.4%*
Total as % of income	*16.2%*	*9.3%*	*6.3%*	*3.6%*	*1.1%*

As Table 5. shows, the distributional gains from such a reform are substantial. Indeed, the chart suggests that when preferential rates are applied in a setting of high inequality and following empirical evidence on consumption patterns, the bluntness that is usually criticized seems to be considerably reduced. The benefit from reduced (or zero) rates of the reform would mainly benefit the worst-off both in absolute and relative terms. The poorest quintile receives twice as much benefit as the richest quintile, and it would be progressive through the entire income distribution, and increasingly so on approaching the richest quintiles. In relative terms, the progressiveness is even clearer: this reform would untax (or reduce taxation on) almost 10% of the expenditure of the poorest quintile, while only forgoing taxation of little over 1% of the expenditure by the richest. In other words, relative to total consumption, the benefit to the poorest quintile is seven times the benefit to the richest. Relative to income, the poorest quintile's benefit is 15 times more than that arising to the richest.

Furthermore, reducing the bluntness of preferential rates also means that the policy is incredibly less expensive than it would otherwise be. Indeed, if Chile were to implement the same zero rating policy as that currently existing in the United Kingdom, it would be: (i) less progressive (indeed, the argument claiming that it benefits more – in absolute terms – high-income households would also hold in the Chilean case) and (ii) extremely more expensive (the forgone revenue would be almost six times the revenue loss from the proposed reform). Table 6. clearly shows this.

Table 6. Incidence and costs of following UK VAT preferential system

Preferential category following UK zero rating	Consumption by quintiles (CLP 1,000)				
	1st quintile	2nd quintile	3rd quintile	4th quintile	5th quintile
Food[1]	154.2	178.2	186.6	189.7	220.6
Medicines	8.8	16.0	19.1	30.2	54.4
Sanitary products	0.6	0.7	0.8	1.1	0.8
Water utility	15.5	16.2	16.5	17.5	23.4
Transport services [2]	26.6	30.8	36.8	35.0	50.7
Books, newspapers and music	1.7	1.8	2.4	4.9	16.5
Children clothes and shoes	13.0	12.8	12.3	11.5	12.4
Total CLP	*220.4*	*256.5*	*274.7*	*289.9*	*378.7*
Total as % of expenditure	*37.0%*	*34.5%*	*31.3%*	*24.1%*	*17.3%*
Total as % of income	*61.5%*	*42.0%*	*32.1%*	*23.8%*	*12.9%*

1.   Following UK legislation, ice creams, savoury snacks, chocolates and confectionary, and most soft drinks are excluded.
2.   2. Following UK legislation, transport services such as taxis and shared taxis are excluded.

The drawbacks of following standard practice in some developed countries are eloquently shown in Table 6. Although consumption patterns may be more differentiated between income levels in contexts of higher inequality, the bluntness of the tool still results in the richest quintile benefitting more from preferential rates: the (absolute) benefit to the poorest quintile is only 58% of that obtained by the richest quintile. In terms of redistributive potential, it also performs significantly worse than the proposed reform: under a UK-style zero rating reform, the ratio between the share of total expenditure removed from tax for the poorest and the richest quintile is only 2.1, while under the proposed reform the same ratio is 6.8. Relative to income, this ratio is 4.8 under a UK-style zero rating reform, compared with a 15.1 under the proposed reform.

5.2. Complexities of the proposed reform

As previously mentioned, there are several arguments against introducing preferential rates, which are worth keeping in mind when designing the preferential rate structure, to mitigate the risks highlighted by these arguments. This section deals with the most relevant of such risks.

5.2.1. Bluntness

One of the main criticisms of preferential rates is that they are poorly targeted and therefore achieve little redistribution at very high costs in terms of revenues forgone. This issue has been addressed by the above distributional analysis, which clearly shows that, provided empirical data is used to identify the preferential categories and the benchmark used is that of absolute progressivity, redistribution can be achieved in a targeted and cost-effective way.

Moreover, the suitability of redistributive policies needs to be assessed in comparison with other available redistributive measures. Thus, the analysis is not the same in advanced economies as in developing countries. Indeed, the limited redistributive capacity of developing countries has been highlighted by many studies analysing both the tax and the expenditure side of government's budgets. Indeed, Clements, Faircloth and Verhoeven (2007)[34] find that, on average, social spending in Latin America benefits the richest quintile more than twice as much as the poorest quintile. Similarly, Goñi, López and Servén (2011) find that social protection transfers are very badly targeted in Latin America: they calculate that the two richest quintiles receive 70% of the total transfers, while the poorest quintile receives as little as 8% of them.

These empirical studies have also shown how little (or no) redistribution is achieved through the tax system: they find that taxation is roughly neutral overall (direct taxes being slightly progressive or neutral and indirect taxes being regressive). The case study is by no means the exception: the study finds that in Chile the tax system actually increases Gini by one point, as direct taxes do not affect inequality and indirect taxes are regressive.[35]

Against this bleak redistributive background, it is not difficult to understand that the bluntness criticism to preferential rates is weakened. On the other hand, revenues are also considerably lower in these countries so redistributive policies ought to be as inexpensive as possible. As shown in Table 5., this is precisely what the proposed reform achieves: its distributional effect is clearly (and not negligibly) positive while keeping its costs relatively low.

5.2.2. Pandora's box effect

Another argument against preferential rates is that their introduction opens the door to political lobby from different industries to get new items into the preferential categories.[36] Of course, it is hard to guarantee that similar political pressures would not arise, but measures could be taken to minimize such risks.

One possible way of limiting this risk is to follow a principle-based drafting of the legislation. As Avery Jones (1996)[37] argued, legislation can be simple if drafted in a principled way. Principle-based legislation might also considerably reduce the scope of political lobbying in defining preferentially taxed items. Indeed, it seems advisable that legislation introducing the preferential regime should explicitly include guiding principles that shall be followed in the process of updating the list of preferentially rated items. In other words, the legislation could clearly establish what is the policy goal of the preferential rate and what are the benchmarks for an item to be included.

For instance, the legislation could establish that preferential rates are introduced solely for distributional purposes and that any item to be included shall be supported by empirical evidence showing that its consumption is concentrated on lower-income people. Furthermore, updates to preferential items on periodic reviews could be limited to their being revenue neutral. Based on these criteria, periodic reviews to preferential items would determine whether some items should be included or removed from the preferential regime, after empirical data on consumption is presented by the national statistics office or the tax authority. This legislative practice of enacting restrictions for future reforms would not be entirely novel, as it would be similar to the experience of the European Union in harmonizing turnover taxes and introducing VAT, where EU Member States could maintain the zero or reduced rates of their turnover taxes in their VAT systems as long as they are "for clearly defined social reasons and for the benefit of the final consumer".[38] Moreover, the EU experience has also shown that this legislative practice can be effective as a control mechanism for fiscal policy.[39]

EU VAT legislation is also a good example of a tax law that is extremely principle-based (Roxan, 2010[40]), showing that such an approach is not only possible, but also workable. Indeed, the EU VAT Directive[41] sets in its preamble and article 1 the guiding

---

34. B. Clements, C. Faircloth & M. Verhoeven, *Public Expenditure in Latin America: Trends and Key Policy Issues*, IMF Working Paper (2007).
35. Goñi, López and Servén, *supra* n. 22.
36. *See* Mirrlees, *supra* n. 21, at p. 154; and A. Panagariya & D. Rodrik, *Political-Economy Arguments for a Uniform Tariff*, 34 International Economic Review 3, pp. 685-703 (1993). For a political choice view of tax legislation to ground this, *see* J.M. Buchanan, *Tax Reform as Political Choice*, 1 Journal of Economic Perspectives 1, pp. 29-35 (1987).
37. J. Avery Jones, *Tax Law: Rules or Principles?*, 17 Fiscal Studies 3, pp. 63-89 (1996).
38. Second Council Directive 67/228/EEC of 11 April 1967 on the harmonization of legislation of Member States concerning turnover taxes – Structure and procedures for application of the common system of VAT, art. 17.
39. The United Kingdom was forced to remove items from its zero rating list after the Court of Justice of the European Union (ECJ) ruled that they failed to meet these conditions. *See* UK: ECJ, 21 June 1988, Case 416/85, *Commission of the European Communities v. United Kingdom of Great Britain and Northern Ireland*, Case Law IBFD (accessed 17 July 2023), para. 14.
40. I. Roxan, *Interpreting Exceptional VAT Legislation; or, Are There Principles in Pringles?*, British Tax Review 6, pp. 699-716 (2010).

S. Gazmuri Barker, Tax Progressivity in Developing Countries: Redistributive Reforms to Indirect Taxation, 34 Intl. VAT Monitor 4 (2023), Journal Articles & Opinion Pieces IBFD (accessed 7 August 2023).

11

Exported / Printed on 9 Aug. 2023 by IBFD.

principles for all EU domestic VAT legislation. The seventh recital establishes the neutrality of competition principle, which is further specified in several other recitals (e.g. eleventh recital, twentieth recital, etc.). In the same way, article 1 also establish the guiding principle that VAT is a general tax on consumption "exactly proportional to the price of the goods and services, however many transactions take place in the production and distribution process...".

A similar legislative technique could be followed when introducing a preferential rate in order to minimize the risks of political lobbying and increasingly shrinking the tax base: the legislator could establish the guiding principles on which the preferential items are defined, leaving it to the tax authority to periodically update the preferential category in accordance to them.[42] The principles, in turn, could be those mentioned above: absolute progressivity, reduced distortion of competition between close substitutes and revenue neutrality. These principles should be fairly straightforward to implement as the available information is mostly available. In effect, Chile's National Statistics Institute already undertakes a detailed survey on household consumption that can provide the information for assessing the criteria of progressiveness and revenue neutrality. In addition, the competition authority could provide a report on close substitutes of potentially preferential items to ensure that competition distortion is reduced.

5.2.3. Definitional issues

Maybe the last usual argument against preferential rates is that they will inevitably lead to disputes regarding the exact nature of similar items in respect to a preferred category. This also ties in with the issue of distorting competition: if substitute items are subject to different taxation, there will not be a level playing field among them. Several legal disputes are usually mentioned to support this criticism such the *Jaffa Cake*,[43] *Pringles*,[44] *Snowball*[45] or *Subway* cases,[46] which are clear examples of the definitional risks that preferential rates can entail.

However, this risk may be sometimes overstated by highlighting the amusing details which can make some of these cases sound rather ludicrous. Firstly, being the drafter aware of the definitional risks can in itself help reduce it: a conscious legislator (following appropriate guiding principles) will foresee the risk of preferentially taxing a specific item and not others in close competition and will avoid making those fine distinctions when drawing lines between preferred and standard-rated items. This is part of the designing exercise done in the previous section, when the potentially redistributive items were reduced from 36 to 22 items that seem to offer a workable and simple preferential regime. For instance, the consumption data showed that consumption of pork chops was concentrated on the poorest quintiles, while pork ribs showed the opposite pattern. Naturally, if only one gets the preferential treatment it is clear that distortion of competition and tax avoidance risks are increased, so both items were excluded from the preferential regime (the category of pork meat did not have good redistributive potential). Conversely, consumption of chicken drumsticks is skewed towards the poor households, while the opposite is true for chicken breast. In this case, however, the entire "chicken" category still had good redistributive potential, so both items were included in the preferential regime. The legislative exercise is about striking a good balance between goals that can come into tension: redistributive gains should not always trump tax simplicity.

Secondly, the often-mentioned risk of legal disputes around definitional issues might be more of an anecdotal nature than empirically relevant. Indeed, an analysis of VAT cases in the United Kingdom shows that definitional disputes are actually rare and by no means an abundant area of litigation. The analysis done covered all civil cases relating to VAT since 2010 (included) which were heard by the Supreme Court or the Court of Appeal. It covered 100 cases,[47] and only six of them referred to definitional issues in respect of preferential rates or exemptions.[48] In contrast, disputes regarding procedural

---

41. Council Directive 2006/112/EC of 28 November 2006 on the Common System of Value Added Tax, OJ L347 (2006), Primary Sources IBFD.
42. It could be argued that the political pressures are as likely to interfere with the legislative process introducing the preferential regime as with updating the regime afterwards. However, the effectiveness of political lobbying is likely to be reduced in the introduction of the regime, as this legislative debate would be very much under public scrutiny, whereas periodical reforms are likely not to be under such (level of) public scrutiny. Thus, it seems crucial to restrict political lobbying in the future by adopting a principle-based legislation in the introduction of the regime.
43. UK: London VAT Tribunal, 21 Aug. 1991, *United Biscuits (UK) Ltd v. The Commissioners of Customs and Excise*, LON/91/160.
44. UK: England & Wales Court of Appeal, 20 May 2009, *Procter & Gamble UK v. HMRC* [2009] EWCA Civ 407.
45. UK: First-Tier Tribunal (Tax Chamber), 10 and 11 Mar. 2014, *Lees of Scotland Ltd & Thomas Tunnock Ltd v. The Commissioners for Her Majesty' s Revenue & Customs* [2014] UKFTT 630 (TC).
46. IE: Supreme Court, 29 Sept. 2020, *Bookfinders Ltd v. The Revenue Commissioners* [2020] IESC 60. This is the Irish case regarding Subway sandwiches, which is arguably the most amusing. There was also a case involving Subway sandwiches in the United Kingdom (*see* UK: England & Wales Court of Appeal, 10 June 2014, *Sub One Ltd (t/a Subway) (in Liq) v. Revenue and Customs Commissioners* [2014] EWCA Civ 773).
47. Those cases heard by both the Supreme Court and the Court of Appeal are counted only once.
48. These cases related to whether: (i) online news services benefitted from zero rating as "newspapers" (*see* UK: England & Wales Court of Appeal, 28 Jan. 2021, *News Corp UK & Ireland Ltd v. Revenue and Customs Commissioners* [2021] EWCA Civ 91); (ii) the sale of a fractional interest in a property benefitted from the land exemption (*see* UK: England & Wales Court of Appeal, 17 May 2019, *Fortyseven Park Street Ltd v. Revenue and Customs Commissioners* [2019] EWCA Civ 849); (iii) the supply of prefabricated accommodation units benefitted from the land exemption (*see* UK: Scotland Court of Session, 13 July 2018, *SiBCAS LTD v. The Commissioners for her Majesty's Revenue and Customs* [2018] CSIH 49); (iv) Spot the Ball was a game of chance (*see* UK: England & Wales Court of Appeal, 4 May 2016, *IFX Investment Company Ltd & Ors v. Revenue and Customs* [2016] EWCA Civ 436); (v) slot machines were "gaming machines" and thus not within the gaming and betting exemption to VAT (*see* UK: Supreme Court, 8 July 2015, *Commissioners for Her Majesty's*

S. Gazmuri Barker, Tax Progressivity in Developing Countries: Redistributive Reforms to Indirect Taxation, 34 Intl. VAT Monitor 4 (2023), Journal Articles & Opinion Pieces IBFD (accessed 7 August 2023).

12

matters, missing-trader frauds, personal exemptions or exempt financial services are all much more common (14, 12, 12 and 11 cases, respectively).

Thus, although definitional risks should be something that legislators should bear in mind when drafting preferential regimes, they do not seem to be sufficiently serious to outweigh the much-needed distributional gains in the context of developing countries. Although legal disputes regarding definitional issues have produced very amusing case law, an empirical analysis strongly suggest that they are not a source of frequent litigation.

6. A (Higher) Registration Threshold

The last reform analysed by the author in this article relates to the distributional effects of introducing a minimum registration threshold below which businesses are not required to charge VAT. The literature has usually focused on its optimal level from an efficiency perspective, and here the author tries to build on that literature by shedding some light on the distributional effects that thresholds might have in developing countries.

From an efficiency perspective, it seems fairly undisputed that a minimum registration threshold should be included when designing a VAT. The basic idea is that below a certain level of turnover the compliance and administration costs exceed the revenue that would arise from VAT.[49] Thus, leaving those small businesses outside the VAT net and focusing the administrative resources on larger taxpayers is advisable. The application of this simple rule usually results in a threshold level higher than those in most VAT systems.[50] Based on the estimations by Cnossen (1994), adapted to Chile's VAT rate, this would result in an optimal level of around USD 32,000.[51] Ebrill et al. also give an additional argument to support a high registration threshold: there seems to be an empirical regularity in the size distribution of enterprises such that a relatively small portion of firms account for a vast majority of VAT revenues (they estimate as a rough rule that the largest 10% of firms usually collect around 90% of all VAT revenues).

However, Keen and Mintz (2004)[52] correctly point out that the above-mentioned rule is incomplete as it (i) does not account for the fact that firms below the threshold still pay some VAT (as they are unable to deduct their input VAT) and (ii) does not account for the behavioural responses of firms near the threshold level. These responses can be both positive and negative. For example, increasing the threshold will result in a productivity gain from those businesses hovering just below it, since they will be able to raise their output to the new (higher) threshold. At the same time, those businesses just above the original threshold level will drop from the VAT net, losing its VAT revenue (though not entirely, as they will be burdened with the VAT on their inputs). As Keen and Mintz show, considering these additional elements results in a substantially higher registration threshold: they estimate that the threshold is somewhere between six and seven times what it would be by applying the simple rule described above, leaving between 45% and 50% of the firms outside the scope of the VAT. Yet, the firms within the scope of VAT would account for more than 93% of the total output.[53]

More importantly for developing countries, high levels of informality should also lead to higher registration threshold levels.[54] The simple intuition behind this is that the cost of raising the threshold is lower in these settings since many of the businesses that would be removed from the scope of VAT were not paying tax in the first place as they operate in the informal economy. Furthermore, if the VAT registration threshold level is placed sufficiently above the income tax threshold, this could induce some of the informal businesses to become formal and pay their income tax liabilities. Looking at the evidence on informality in the case study, policymakers should definitely have these considerations in mind as evidence points out that both levels of formality and tax compliance are deteriorating among small enterprises: between 2016 and 2019 informality among small businesses increased from 48.7% to 53.1%, while the level of VAT compliance also dropped as those filing their VAT returns decreased from 77% to 67%.[55]

Revenue and Customs v. The Rank Group PLC [2015] UKSC 48); and (vi) Subway's toasted sandwiches were zero-rated food or hot takeaway food (*see Sub One Ltd v. Revenue and Customers Commissioners* [2014] EWCA Civ 773).

49. Ebrill et al., supra n. 21.
50. Id.
51. The author is replacing Cnossen's assumed 15% tax rate for Chile's 19%, *see* S. Cnossen, *Administrative and Compliance Costs of the VAT: A Review of the Evidence, Tax Advisors' Forum*, Tax Notes Int'l , pp. 193-200 (20 June 1994).
52. Keen & Mintz, *supra* n. 21.
53. The author here only mentions the results of their simulations using a tax rate of 15%, since the other rates that they use (5% and 10%) seem to be outliers for VAT in developing countries (except for some rare exceptions such as Indonesia, Malaysia, Mongolia, Myanmar, Nigeria, Panama, Paraguay, Thailand and Vietnam).
54. Kanbur & Keen, *supra* n. 21.
55. Ministerio de Economía, *Sexta Encuesta de Microemprendimiento (EME6)* [Sixth Survey on Micro-enterprise] (2020), available at https://www.economia.gob.cl/2020/03/11/sexta-encuesta-de-microemprendimiento-eme6.htm (accessed 29 June 2023).

6.1. Potential distributional effects

Beyond this very strong efficiency argument, what is even more interesting for the purpose of this article is that including such a registration threshold also seems to have very positive distributional effects in developing countries, which makes it all the more difficult to reconcile the inexistence of a threshold in Chile's VAT with any underlying principle.

When analysing data on food consumption, it is clear that high-income households are more intensive users of hypermarkets and supermarkets than low-income households. Indeed, the richest decile acquires up to 93% of their food in these types of retailers, while such a percentage drops to 67% for the bottom five deciles.[56] The other side of the coin is more contrasting: while the lowest decile acquires more than 12% of their food consumption from farmers' markets[57] and neighbourhood corner stores, the richest decile acquires less than 1% of their total food from those retailers.[58]

This potentially positive distributional effect is also suggested by the location of farmers' markets: while 81% of these markets are located in low socioeconomic neighbourhoods, only 2% are located in high socioeconomic boroughs.[59] Moreover, surveys of consumers in farmers' markets also show that they are mostly marketplaces for low and middle-income families: in a 2013 survey the average income of the participants was 35% lower than the average income in that region.[60]

As a consequence of this pattern of consumers of farmers' markets and small neighbourhood stores it seems that the registration threshold also offers the chance to reap a "double dividend": not only would it enhance the efficiency of the system by releasing small traders from the VAT compliance burden and by freeing scarce administrative resources, it would also result in reducing the tax burden of low-income households who more intensively purchase from them.

6.2. Complexities of the proposed reform

The existence of a registration threshold will create behavioural responses from taxpayers, but there are policy alternatives to minimize them. The responses to the incentives introduced by the threshold can be either real or artificial, depending on whether there are genuine (and legal) changes in economic activity (e.g. restricting real output) or rather avoidance or evasion schemes to obtain the benefit of the threshold without the economic substance required by it (e.g. splitting a large business into several small ones or failing to report cash transactions).

Although real responses are for a good part unavoidable, there are alternatives in the design of the registration threshold that could minimize them.[61] Some of these try to reduce the compliance costs of becoming a VAT-registered business,[62] such as introducing a simplified scheme for businesses close to the threshold (such as the UK Flat Rate Scheme, which reduces compliance costs by charging VAT at a fixed rate to overall turnover for businesses with turnover not exceeding GBP 150,000).[63] Other alternatives aim at reducing the financial costs arising from becoming liable to VAT, such as granting a gradually reducing relief on the first VAT returns (e.g. the United Kingdom grants a 1% reduction on the rate at which the Flat Rate Scheme applies on the first year of VAT registration). A third alternative considers that different businesses face different incentives in respect of VAT. Thus, it has been shown (theoretically and empirically) that businesses with low VAT inputs relative to sales and those with reduced share of sales to VAT-registered businesses have higher incentives to avoid registration.[64] In response to this evidence, tax authorities could focus on enforcing efforts or impose a lower threshold on industries with those

56.　Data on consumption from the type of business comes from market studies which use seven socioeconomic groups (based on income, education and occupation). The first three groups represent the highest 10% on the ranking, while the bottom two represent the lowest 45%. Thus, the information on the bottom five deciles actually comes from the bottom 45% in this socioeconomic classification, but these should be closely correlated. Information on the socioeconomic classification can be found in AIM, *Actualización Grupos Socioeconómicos* [*Socioeconomic Groups Update*] (2012), available at https://www.udd.cl/wp-content/uploads/2013/06/Informe-Actualizaci%C3%B3n-GSE-2012.pdf (accessed 19 June 2023); and Criteria Research, *Clase media: diversidad y distinciones tras el estereotipo* [*Middle class: diversity and distinctions behind the stereotype*] (2012), available at https://msgg.gob.cl/wp/wp-content/uploads/2017/04/2011-10-Estudio-externo-de-tendencias_Clase-Media.pdf (accessed 19 June 2023).
57.　Farmers' markets in Chile do not involve a direct sale of agricultural products from local farmers. Instead, sellers acquire their products from small family farmers. *See* Observatorio Feria Libre [Free Fair Observatory], *Características Económicas y Sociales de Ferias Libres de Chile: Encuesta Nacional de Ferias Libres* [*Economic and Social Characteristics of Free Fairs in Chile: National Survey of Free Fairs*] (2013), available at https://www.asof.cl/wordpress/wp-content/uploads/2013/04/INFORME-ESTRUCTURAL-ENFEL-2013-final-1.pdf (accessed 19 June 2023).
58.　M.S. Anigstein, *Estrategias familiares de provisión de alimentos en hogares de mujeres-madres trabajadoras de la ciudad de Santiago de Chile* [*Family strategies for provision of foods in households with working mothers in the city of Santiago*], 46 Revista chilena de nutrición 2, pp. 129-136 (2019).
59.　Observatorio Feria Libre, *supra* n. 57.
60.　F. Gallardo et al., *Tipos de consumo en ferias libres: Un estudio en la ciudad de Temuco - Chile* [Types of consumption in Free Fairs: A Study in the City of Temuco, Chile], Estudos do ISCA 9 (2014), available at https://doi.org/10.34624/ei.v0i9.5902 (accessed 31 July 2023).
61.　HM Treasury, *VAT registration threshold: call for evidence* (2018), available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/689228/PU2151_VAT_threshold_web.pdf (accessed 19 June 2023).
62.　Avoiding compliance costs can be the main incentive for staying below the threshold, even more than avoiding tax liability. *See* J. Harju, T. Matikka & T. Rauhanen, *Compliance costs v. tax incentives: Why do entrepreneurs respond to size-based regulations?*, Journal of Public Economics 173, pp. 139-164 (2019).
63.　*See* UK: Value Added Tax Act, 1994, sec. 26B; and HMRC, VAT Notice 733 (2022).
64.　L. Liu et al., *VAT Notches, Voluntary Registration, and Bunching: Theory and U.K. Evidence*, 103 The Review of Economics and Statistics 1, pp. 151-164 (2021).

S. Gazmuri Barker, Tax Progressivity in Developing Countries: Redistributive Reforms to Indirect Taxation, 34 Intl. VAT Monitor 4 (2023), Journal Articles & Opinion Pieces IBFD (accessed 7 August 2023).

14

characteristics.[65] The benefit of these measures, however, needs to be balanced with the complexity that they create in the tax system.

On the other hand, tax avoidance and evasion schemes are largely dependent on the existence and enforceability of anti-avoidance measures and the effectiveness of auditing VAT returns. However, most VAT avoidance and evasion practices are not unique to a VAT registration threshold. Indeed, underreporting sales is also a risk for income tax and general VAT (as it would reduce the VAT liability). Likewise, artificially splitting a business into several "small" businesses is a risk faced by all size-based regulation, which is far from exclusive to tax policy. Indeed, many labour regulation measures have size-based requirements, and thus efforts to identify artificial divisions of businesses are not unfamiliar.[66] In Chile, in fact, a law was enacted in 2014 precisely to tackle artificial division of businesses to avoid labour regulation, allowing authorities to treat as a single employer different legal entities that met certain criteria.[67] Similar rules could be applied if a VAT registration threshold is introduced.

7. Overall Distributional Impact of Proposed Reforms

The analysis so far has shown that the proposed reforms appear to be very progressive, as benefits concentrate on the lower-income households and the new tax burdens would concentrate on the top quintile. However, the overall progressivity of the reform needs to be assessed in comparison with the original Gini index for the distribution of incomes (i.e. before the proposed reforms). As usual in the literature, the author uses the Kakwani index to test whether the seemingly progressive reforms are indeed equalizing against the original income distribution.[68] When analysing a reform that imposes an additional tax liability (as the base-broadening reform proposed here) the concentration index of the new tax must be higher than the Gini index of the underlying income distribution to conclude that the reform will reduce the original inequality (i.e. the new tax burden is distributed more unequally than income). On the other hand, if a new transfer (or tax break) is analysed, its Gini concentration should be lower than the Gini index of income distribution for the transfer to have an egalitarian effect on the income distribution.

Also relevant for understanding the redistributive potential of a policy is to assess its redistributive effect, usually measured by using the Reynolds-Smolensky index. This corresponds to the difference between the Gini index of the income distribution before and after the intervention (a positive result showing a redistributive policy).[69] Although these two measures might seem very similar, they provide complementary information. The simple intuition is that a very progressive tax might have little or no redistributive potential if it raises only very minimal revenue. Thus, the redistributive measure captured by the Reynolds-Smolensky index depends on both the progressivity and the magnitude of the policy.

The Kakwani index for the net effect of the three reforms (assuming zero rating for the preferential regime) is very positive at 0.30, showing that the net new tax is substantially more concentrated (0.71) than the underlying concentration of income (0.41), as shown in Figure 1.

---

65. France and Ireland, for instance, have a lower threshold for business supplying services (*see* HM Treasury, *supra* n. 61). The VAT threshold in Australia does not apply to taxi drivers (or to ride-sharing apps).
66. For a good analysis of size-based regulations and their economic impact, *see* L. Garicano, C. Lelarge & J. van Reenen, *Size-based regulations and firm growth: is small beautiful?*, Rue de la Banque 50 (2017).
67. CL: Law 20,760, 2014. The criteria relate to common ownership, common address and external appearance of a business unit.
68. N.C. Kakwani, *On the measurement of Tax Progressivity and Redistributive Effect of Taxes with Applications to Horizontal and Vertical Equity,* Advances in Econometrics 3 (1984).
69. M. Reynolds & E. Smolensky, *Post-Fisc Distributions of Income in 1950, 1961, and 1970*, 5 Public Finance Quarterly 4, pp. 419-438 (1977).

Figure 1. Representation of Kakwani index of proposed reforms.

Lorenz curve income distribution and new (net) tax burdens
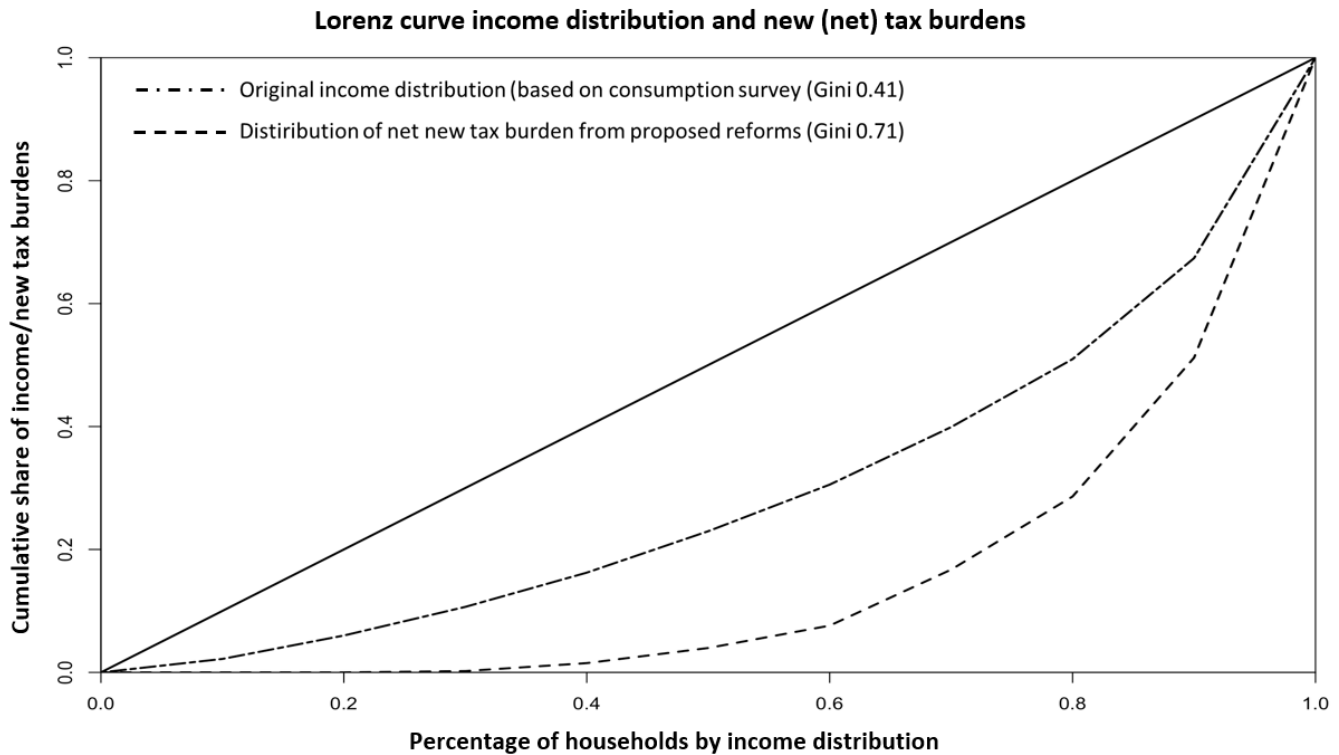
The distribution analysis also results in positive results (although not very large, as expected from a tax reform only focusing on VAT). The author has calculated the post-reform Gini coefficient at four cumulative levels. First, after broadening the VAT base, then after introducing the preferential regime (assuming a zero-rated regime). On a third level it was considered the equalizing effect of the introduction of a registration threshold. The last step considers the fact that this is a revenue-raising reform package and therefore measures the Gini coefficient also considering a lump-sum transfer back to the taxpayers for an amount equal to the additional revenues.[70]

Table 7. Reynolds-Smolensky index of proposed reforms

	Gini (%)	Reynolds-Smolensky
Original income Gini index	40.6	–
After base broadening reform	40.5	0.1
Plus preferential regime	40.1	0.4
Plus threshold reform[1]	39.9	0.2
Plus lump-sum transfer of additional revenues	38.8	1.1
Overall distributional impact	–	*1.8*

1.   The estimations of the distributional impact from the introduction of the thresholds are likely to be the less reliable ones, as data on places of consumption by income level is sparser than the data used to estimate the base-broadening and preferential regime reforms.

The analysis shows two interesting findings. First, the reform package has the potential to produce a relevant reduction in income inequality, as reducing the Gini index by 2 percentage points is by no means negligible. The second finding also

---

70.   The transfer is assumed to be a universal transfer for the same value to every household.

highlights how relevant it is that tax reforms in most developing countries aim at being (at the very least) revenue neutral, even if their exclusive goal is to increase progressivity. Indeed, over half of the reduction in inequality arises from the lump-sum transfer that the additional revenues from the reform can finance.

The second finding might be interpreted as pointing that it could be convenient to only focus on tax reforms that could raise additional revenues in order to have larger sums to transfer back to the households. This could be used to argue against the introduction of the preferential regime, as it reduces the additional revenues that could be used to fund the lump-sum transfer. This argument, however, does not seem convincing for at least three reasons. The first one is simply an empirical one: removing the preferential regime and increasing the lump-sum transfer with the additional revenues is a less progressive reform as the one suggested. Indeed, removing the preferential regime has two opposite effects: losing the equalizing effect that it produces (the 0.4% reduction in the Gini coefficient, as shown above), and increasing the redistributive effect of the lump-sum transfer. However, the latter effect is insufficient to fully offset the former loss of progressivity.[71]

Secondly, there is uncertainty on the feasibility of a universal lump-sum transfer. Not only do there seem to be political economy challenges that lead to regressive expenditure policies in developing countries[72], problems relating to the take-up of benefits also cast serious doubts on the ability to effectively implement universal transfers. Indeed, evidence from developed countries suggests that non-take-up of benefits is a severe problem of social policy.[73] It is likely that non-take-up is even more problematic in developing countries.

Lastly, the introduction of a preferential regime with the explicit policy goal of alleviating the tax burden on the less well-off also has a valuable symbolic value, beyond its redistributive impact. Indeed, it is a message to taxpayers stating that the equity of the tax system is a concern for policymakers, which might lead to higher levels of acceptance of taxes and improved tax morale.

To conclude this section, it is appropriate to state that the distributional impact presented here is only a referential estimation, as it has various limitations. First, it does not take into consideration any behavioural response to the reform. Secondly, it is only based on the data available, which is not complete to conduct a more precise estimation of the incidence analysis, in particular regarding the impact of the introduction of a registration threshold. Thirdly, it does not consider the impact of the informal economy on the incidence of the proposals.[74]

8. Conclusions

The author in this article has tried to explore whether there is potential in the VAT system to enact efficient progressive reforms in developing countries. The analysis of progressivity gains has been qualified with an "efficiency" requirement imposing three conditions relating to targeting (progressive in *absolute* terms), revenue neutrality and tax simplicity (including limiting distortion of competition).

By analysing empirical data on consumption patterns in Chile, the author has tried to estimate what redistribution outcomes could be achieved and the results seem to be positive. The work has found that there appear to be several potential reforms to Chilean VAT which meet the criteria of both progressivity and efficiency: base-broadening reforms, introduction (or reform) of preferential rates and the introduction (or increase) of minimum VAT registration thresholds all show good distributional potential. This strongly suggest that developing countries could achieve some tax progressivity by following evidence-based tax reforms of their indirect tax systems, instead of simply waiting to achieve tax progressivity through their resiliently poorly performing direct taxes.

The work has also highlighted that two of the proposed reforms (broadening the base and introducing or raising the registration threshold) also enhance the efficiency of the system, so the case for introducing such reforms is even stronger. In the case of base broadening, the reform would reduce distortions to consumer behaviour and might increase productivity as it would remove the implicit input tax of financial services for businesses under the current exemption. In the case of the minimum registration threshold, the economies of developing countries usually have a large informal sector, which justifies an even higher threshold level. Moreover, the gains from redeploying administrative resources from policing small businesses might also be larger in the context of developing countries: the very low levels of revenues from PIT in these countries suggest that

---

71. The overall effect on redistribution is to have a less equalizing reform: whilst the original proposal reduces the Gini coefficient by 1.8 percentage points, this alternative (not introducing preferential regime and having a larger lump-sum transfer) reduces Gini by only 1.7 percentage points. The difference might seem negligible, but this is only because the amounts of revenue are not large. In terms of progressivity, the preferential regime achieves an additional third of redistribution compared to the additional lump-sum transfer.
72. Clements, Faircloth & Verhoeven, *supra* n. 34.
73. S. Szeintuch, *Homeless without benefits: the non-take-up problem*, Housing Studies 37, pp. 673-692 (2022).
74. Informality might mainly impact the distributional effect of the introduction of the threshold. However, that reform was proposed both on efficiency and equity grounds, so it seems like a sound policy even if the distributional gains are reduced by informality. In addition, having a threshold would remove any equity concerns of efforts to tackle the informal economy, which would also be a positive outcome of the proposed reform.

S. Gazmuri Barker, Tax Progressivity in Developing Countries: Redistributive Reforms to Indirect Taxation, 34 Intl. VAT Monitor 4 (2023), Journal Articles & Opinion Pieces IBFD (accessed 7 August 2023).

17

increasing administrative resources to target compliance of direct taxes might help reduce the widespread avoidance and evasion of PIT.

The third proposed reform (preferential rates for necessities) entails the usual trade-off between equity and efficiency. Although the proposal tries to minimize the efficiency costs by choosing a preferential regime which does not discriminate between close substitutes, it is workable and simple. The author has also suggested that a principle-based legislative approach when drafting preferential regimes might minimize the political risks of introducing such regimes.

Moreover, the overall reform package is estimated to substantially increase revenues,[75] which could further increase its redistributive potential if the additional revenues are used to fund public programmes targeted for the less well-off. This is particularly relevant for developing countries, which usually trail well behind developed economies in terms of their tax share.

To finish, it seems important to go back to the lessons from the theory of optimal taxation: a well-functioning PIT system will always achieve progressivity in a more efficient way than any differentiated structure of commodity taxation. Thus, reforms such as those proposed should always be understood as second-best solutions, and therefore should ideally be only a temporary stage while developing countries are able to build an efficient and progressive structure of PIT. That should be the ultimate goal, but it is one that has proven to be very elusive for developing countries. As long as such elusiveness persists, the reforms proposed here achieve distributional gains that seem worth pursuing.

---

75. 22% of the additional revenues from the base-broadening reform would suffice to fund the suggested preferential regime. The introduction of a threshold should not entail a reduction in net revenues (considering there are savings in administrative resources and additional revenues from larger taxpayers being more closely monitored).

S. Gazmuri Barker, Tax Progressivity in Developing Countries: Redistributive Reforms to Indirect Taxation, 34 Intl. VAT Monitor 4 (2023), Journal Articles & Opinion Pieces IBFD (accessed 7 August 2023).

18