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Is Tax Policy Costly Industrial Policy in Mozambique?

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Is Tax Policy Costly Industrial Policy in Mozambique?
Prepared by Santos Bila, Utkarsh Kumar, Alexis Meyer-Cirkel*

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ABSTRACT: This paper analyzes the use of tax policy as industrial policy in Mozambique. Despite significant foregone tax revenue due to industrial policy in the form of tax incentives, the effectiveness of Mozambique's tax policy remains questionable due to insufficient data and unclear public policy strategy. Through an examination of macro data, tax reports, and data from World Bank Enterprise Surveys, the note underscores the need for a thorough reassessment of existing tax measures. It advocates for a more strategic, targeted and evidence-based design of tax incentives that deliver on industrial policy goals.

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Glossary

CFB	Code of Fiscal Benefits
CPI	Investment Promotion Center
DRM	Domestic Revenue Mobilization
ENDE	National Development Strategy
FDI	Foreign Direct Investment
IMF	International Monetary Fund
PEI	Industrial Policy Strategy
PRONAI	National Program to Industrialize Mozambique
WBES	World Bank Enterprise Surveys
WTO	World Trade Organization
ZEE	Special Economic Zone
ZFI	Industrial Free Zone

1. Introduction

Tax advantages do not compensate for shortcomings in economic conditions. Taxes can be powerful tools that influence investment decisions. However, it is the economic, business, and governance setup of a country that determines the business viability of any project, particularly in developing countries. Since changing a country's long-term structural setup proves to be economically and politically costly, tax instruments often become the option of choice in less developed economies. This is mostly because at first glance they do not entail allocating tight budget space and appear to be an "easier to implement" way to offset disadvantaged business conditions (IMF and others 2015). Tax incentives, in the form of tax holidays and reduced tax rates in specific sectors or regions, have become prevalent and widespread in low-income countries (IMF 2024). In high-income countries, on the other hand, there is greater reliance on investment tax credits, accelerated depreciation, and tax incentives for research and development (IMF 2024).

Mozambique opted for a generous tax treatment across most sectors. The country's tax incentive scheme contains all the above components, with general tax incentives providing preferential treatment to encourage investment in all sectors through tools such as full expensing, accelerated depreciation, investment tax credits, etc. This likely results in market distortions and inefficiencies. Sector-specific tax incentives include reduction in the statutory tax rate for investment in agriculture, hospitality and tourism, as well as special economic zones. To better assess the fiscal impact, tax incentives can easily be translated into a tax expenditure accounting, which measures the extent to which the provisions in the tax code result in foregone tax revenues relative to the benchmark tax system in a direction favorable to the taxpayers.

Mozambique's generous tax incentives hurt domestic revenue mobilization (DRM), while no clear strategy is evident. Previous studies (e.g. Swistak and others 2017) concluded that the overly generous provisions contained in Mozambique's Code of Fiscal Benefits of 2009 undermine tax revenue collection. Furthermore, tax expenditure levels in Mozambique are well above its peer group of low-income and developing economies. When comparing tax strategies, Mozambique's peers have a more focused emphasis on supporting areas such as Research and Development (R&D), innovation, and scientific development, usually in the form of super deductions. Additionally, in order to mitigate tax incentive abuse, there are strategic checks in the form of clear caps on the support level, well-defined maturities, and a series of regulations on other aspects. Finally, the benefits provided under different programs are usually not cumulative. In the case of Mozambique though, many of these guiding principles are missing and an overarching development policy is not immediately evident.

Beyond Mozambique, there is a vast literature looking at various manifestations of tax policy as industrial policy. Many studies examine how governments use tax incentives and structures to

shape industrial development and economic growth. Scholars argue that tax policies, such as investment tax credits, R&D incentives, and export rebates, can effectively stimulate investment in strategic sectors, promote technological innovation, and create employment (Rodrik, 2004). Tax incentives tailored to specific industries, like green energy or advanced manufacturing, have been used to foster competitive industries and align with broader national economic goals (Rajan & Zingales, 2003). However, the literature also highlights risks, including resource misallocation, inefficiencies, and the potential for rent-seeking behavior, where businesses exploit tax breaks for private gain rather than contributing to long-term growth (Krueger, 1974).

While the benefits of tax policy as industrial policy are evident in cases such as East Asian economies (Japan, South Korea) and green energy initiatives (Germany, China), challenges remain. Critics argue that tax incentives can distort markets, benefiting incumbent firms over new entrants and exacerbating income inequality (Stiglitz & Greenwald, 2014). Empirical studies suggest that successful implementation of tax-based industrial policy requires good governance, targeted policy design, and periodic evaluation to ensure that tax incentives contribute to long-term national development goals while minimizing inefficiencies or misuse (OECD, 2010; Besley & Persson, 2011).

This paper focuses on Mozambique, while comparing across reference countries in the region and beyond. The objective of the paper is to identify if and how tax policy has been integrated into the wider industrial policy strategy of the country, and whether the available data allows any inference into tax policy effectiveness. The remainder of the paper is structured as follows, in Section 2, the paper provides an overview of the tax incentives and its different vintages in Mozambique, along with a comparison with relevant peers. Section 3 summarizes the different industrial policy strategies the country has pursued over the past few decades. Section 4 uses the World Bank Enterprise Surveys conducted in Mozambique in 2007 and 2018 to provide an overview of the structural change in the corporate landscape of the country and to assess what the existent data landscape allows in terms of inference of the impact of tax policy on companies' structure and corporate behavior. Section 5 concludes.

2. Tax based incentives

“Tax incentives targeted at sectors producing for domestic markets or extractive industries generally have little impact, while those geared toward export-oriented sectors and mobile capital appear to be relatively effective—but the former needs to be tempered by considerations of WTO consistency and both can be instances of mutually damaging tax competition. Enabling conditions—good infrastructure, macroeconomic stability, rule of law, etc.—are important for effectiveness” (IMF and others, 2015).

A lack of international coordination and a level-playing field creates unhealthy cross-national tax competition. International tax competition has been an important driver of the proliferation of tax

incentives, which suggests that supranational coordination mechanisms are broadly missing. Due to the attempt to appear as an attractive investment market, tax incentives have become prevalent and widespread in low-income countries (LICs).

International evidence demonstrates that tax incentives are often found to be redundant in attracting investment. As business surveys show, taxes are of second-order relevance for investment decisions in developing countries, while economic and political stability and other doing-business factors are critical decision aspects (IMF and others., 2015). In several instances, investment decisions are not conditional on tax incentives, resulting in redundant tax expenditures. There are potential additional revenue losses if the system is vulnerable to abuse and discrimination. For example, if incentives are available only for new investments, or capital with foreign origin, local companies may try to modify their corporate identity or shift taxable income from non-qualified activities or locations to qualified ones. And finally, enforcing anti-abuse practices may require additional administrative capacity and resources (see also Klemm and others, 2012, Cubbeddu and others, 2008, Parys and others, 2017).

Mozambique: The Code of Fiscal Benefits (1993, 2002 and 2009)

The Code of Fiscal Benefits (CFB) has its legal foundation in the Law of Investment (1993). The first CFB was created by Decree law in July 1993 and the main fiscal benefits were tax holidays for defined periods of time along with certain duty exemptions for specific capital goods. Depending on the region, this translated to corporate tax reductions of 80% for 10 years, and 50% for an additional 6 years in the northern provinces. The South received additional 10 years of 65% corporate tax reductions followed by 40% reductions in the following 3 years. Industrial free zones enjoyed VAT and custom duty exemptions for inputs associated with exports, along with royalty fees instead of income taxes. The provisions applied to a wide range of economic activities, but excluded commerce, unless being tied to infrastructure building and rural areas (Bolnick and Bruce 2009).

The CFB 2002 reshaped the prevailing Code in critical aspects. It was designed to rationalize the incentives regime and improve cost-effectiveness by concentrating on investment tax credits and accelerated depreciation, while scaling down tax holidays. However, tax holiday incentives were retained for agriculture and Industrial Free Zones. The latest beneficiaries also retained VAT and import duty exemptions. The CFB 2002 also retained the special negotiation regime for large projects, born under the Investment Law of 1993, by which, qualification for specific fiscal benefits required the approval of the Center for Investment Promotion (CPI). Investments over US\$ 50,000 for foreign companies and US\$ 5,000 for domestic, were eligible, conditional on management and financial standards being met (Bolnick and Bruce 2009).

Further need to improve the CFB led to the approval of the CFB of 2009. As it was necessary to reformulate the CFB 2002 and to rationalize the fiscal benefits for investments by making them more effective, the Assembly of the Republic of Mozambique approved the new CFB in June 2009. It entailed a major transformation compared to the 2002 version. However, as a matter of general design, as was the case for CFB 2002, specific benefits applied to designated sectors, while general benefits applied to qualifying investments. The specific sectors in CFB 2009 include basic public infrastructure, hotels and tourism, agriculture and fisheries, industrial free zones, rapid development zones, science and technology parks, rural commerce and industry, manufacturing and assembly industries, large-scale projects.

Regarding the specific sectors, the major changes were:

- Under article 4 of the CFB 2009, specific benefits cannot be accumulated with other specific nor general benefits, unless allowed by law.
- Regarding large projects:
 - Elimination of ‘exceptional incentives’, negotiated with the Council of Ministers. This step prevented the extraordinary administrative involvement of authorities, and replaced it with a more neutral, rules-based approach.
 - Incorporation of these projects under the regular framework of the tax code.
 - Extension of VAT exemptions, in addition to the custom duty exemption.
- Deep discounts in tax rates for:
 - Infrastructure investments extending through 2025.
 - Science and technology parks, ZEEs and ZFIs, extending over 15 years.
 - More generous reductions in agriculture and IFZs.
- Elimination of the 25% reduction in corporate income tax rate for the first 8 years in the mining sector.
- Extension of duty-free benefits to a broader set of goods besides capital goods.
- For most specific categories, addition of VAT exemption to the previous import duty exemption.
- The general benefits are cumulative and with ample sectoral coverage and include, mostly:
 - Import duty exemptions, investment tax credits, accelerated depreciation,
 - Deductions for modernization and new technology adoption.
 - Deductions for professional training, and certain public infrastructure investments.
 - Scaling back the accelerated depreciation from 200% to 150% of normal rate.

Under the new regime, fiscal incentives are treated as fiscal expenditure and every beneficiary is subject to a regular inspection and audit. As laid out in Article 2.3 “Fiscal benefits are considered to be fiscal expenditure, and the appropriate declaration of benefits used in each fiscal year is required for the purpose of their determination and control”. Article 8 defines that “All economic agents with the right to enjoy fiscal benefits as provided under this Code are subject to regular inspection and audit. This is carried out by the Tax Administration and other competent entities for the purpose of controlling compliance with the prerequisites for the respective fiscal benefits and compliance with the obligations established for such holders.”

Finally, Article 3.4 states that “The effective enjoyment of fiscal benefits may not be revoked, nor may the acquired right to the benefit be abrogated, except where is provided for in this Code, the beneficiary has not complied with its obligations or if the benefit was improperly granted”. These provisions together indicate that the enjoyment of benefits under the Code requires a certain level of sophistication, transparency, and compliance. These features could bias effective benefit enjoyment toward the more established and modern firms in the economy. They also contain an element of liability contingency, as the benefits are not revocable.

The CFB 2009 undermines tax revenue by reducing the tax burden on the largest companies. Swistak and others (2017) argue that the overly generous provisions contained in the CFB 2009 are redundant, especially where the main tax incidence is concentrated. An initial analysis suggests existence of significant gaps between potential and actual corporate income tax (CIT). The calculations are made at an aggregated level, suggesting that the combined effect of accelerated depreciation, investment tax credits, and sectoral incentives is to reduce the average effective tax rate to 22 percent, and to 12 percent overall level for companies with positive CIT liability -- compared to the statutory rate of 32 percent.

Evolution of the Tax Expenditure (TE) in Mozambique

Understanding tax expenditures¹: Following the definition of the IMF’s Fiscal Affairs Department², “Tax expenditures are alternative policy means by which governments deliver financial support to individuals and companies.” Tax expenditures related to the economic provision of goods and services in Mozambique have been fluctuating over the past years, ranging between 15 and 9 percent of total revenue (see Exemptions (% of Total Revenue) in Table 1) and 1.9 to 3.9 percent of GDP (see Exemptions (% of GDP) in Table 1). However, despite a drop in tax expenditure over the past decade, the ratios remain high by international standards. For example, while sub-Saharan African (SSA) countries recorded an average of 1.8 percent of GDP in exemptions, in 2022, Mozambique fiscal benefits recorded 2.6 percent of GDP.

¹ Please note that international comparisons of tax expenditures levels are inherently difficult, given that benchmarks, data availability, scope of the estimates, etc. widely vary across countries.

² <https://www.imf.org/-/media/Files/Publications/HowToNotes/HTNEA2019002.ashx>

The Mozambique Tax Authority defines TE as any advantage or simply a tax relief compared to the normal regime, taking the form of exemptions, rate reductions, deductions from the taxable base, amortizations, and/or other tax measures of that nature. Broadly in line with the US definition.

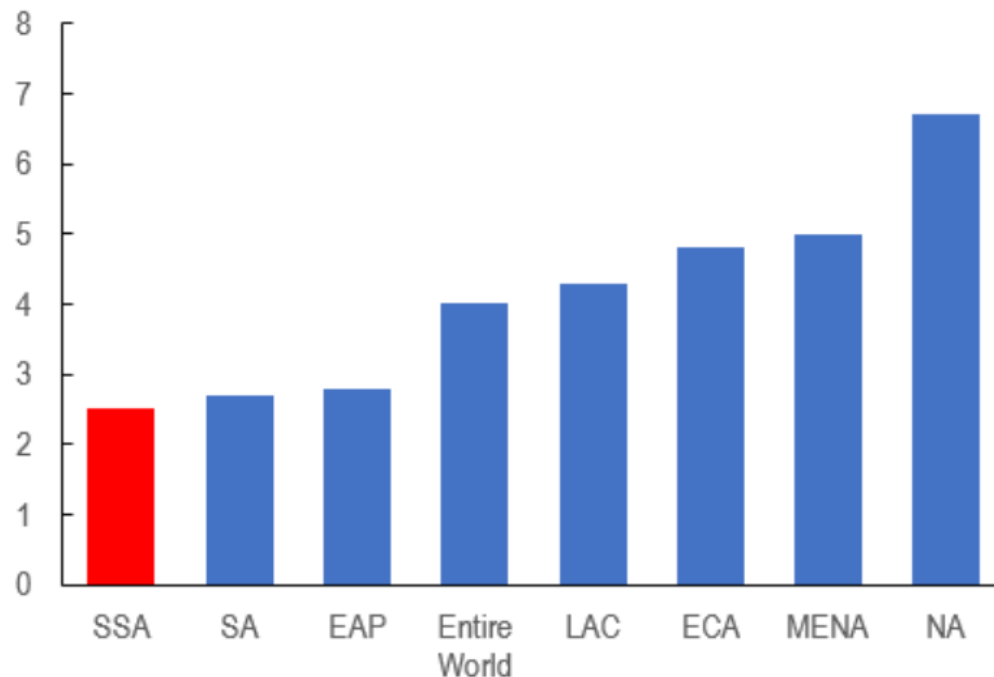
Table 1: Total exempted value of domestic and external transactions (Billions MZN and %)

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Total Fiscal Revenue	98.5	126.3	156.3	158.5	167.6	192.81	211.9	222.3	235.7	265.6	283.1
Total Exemptions	13.1	18.9	17.5	22.9	22.8	6.1	16.9	21.3	21.9	40.7	31.0
---- Domestic Transaction	4.6	5.2	4.2	6.0	7.1	6.2	4.7	4.6	5.2	8.2	15.0
---- Foreign Transaction	8.5	13.7	13.3	16.9	15.7	9.8	12.2	16.7	16.7	32.5	16.0
Exemptions (% of Total Rev.)	13.3%	15%	11.2%	14.5%	13%	8.8%	8.7%	9.6%	9.3%	15.3%	11%
Exemptions (% of GDP)	3.1%	3.77%	3.3%	3.87%	3.3%	1.9%	1.9%	2.2%	2.2%	3.8%	2.6%

Source: Mozambican Tax Authority (Autoridade Tributária)

SSA presents a lower revenue foregone compared to other regions. Figure 1 shows global and regional averages of Tax Expenditures accrued to business between 2010-2018, according to The Global Tax Expenditures Database. Those regional averages have fluctuated around 4 percent, with the exception of North Africa, which has countries close to 7 percent. Sub-Saharan Africa exhibits the lowest averages in the last decade, close to 2.5 percent.

Figure 1. Revenue foregone across regions
(Percentage of GDP)

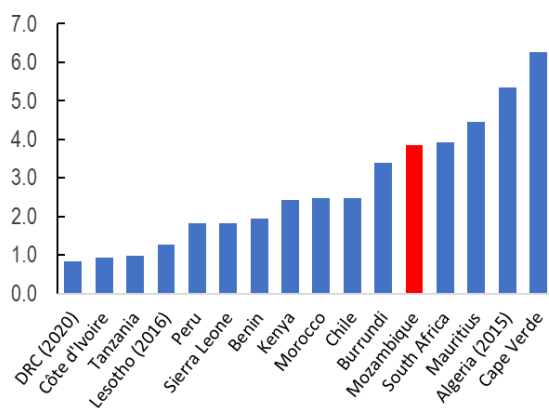


Source: Redonda, et al. (2023): Global Tax Expenditures Database [data set], Version 1.1.5, <https://doi.org/10.5281/zenodo.7825791>

Note: SSA- Sub-Saharan Africa, SA-South Asia, EAP-East Asia and Pacific, LAC-Latin America and Caribbean, ECA-Europe and Central Asia, MENA-Middle East and North Africa, NA-North America

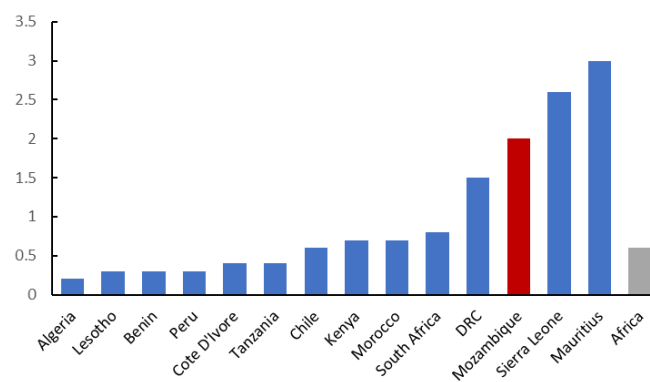
While SSA exhibits the lowest tax expenditure, Mozambique is one of the highest in this cluster. When placed in the international context, Mozambican tax expenditures are significant and fall within the higher end of the distribution for benchmark developing countries. For better comparison, Figure 2 uses the latest available data to show the distribution of tax foregone from domestic businesses for a selection of developing countries. The choice of countries has been guided by data availability, similarities of economic structures, and geographic proximity. As plotted, the latest available data suggest that revenue foregone as a percentage of GDP due to special tax treatment has been 0.9 percent for DRC and Cote d'Ivoire, 1.0 percent for Tanzania, and 1.3 percent for Lesotho, on the low end; while those located at the higher end of the distribution comprised Cape Verde with 6.3 percent, Algeria with 5.4 percent, Mauritius 4.5 percent, and Mozambique with 3.9 percent (same as South Africa).

Figure 2: Revenue foregone in Africa and selected developing countries (% GDP)



Source: Author's own calculations based on database by Redonda and others (2023) and Mozambique Tax Authority publications. Reference year is 2021, unless otherwise noted.

Figure 3: Tax loss due to corporate tax abuse (% GDP)



Source: Author's own plot based on the Tax Justice Network data base. Reference year is 2021.

Tax expenditure is exacerbated by high corporate tax abuse (Figure 3). While countries, such as Algeria, Chile and South Africa, exhibit a considerable tax expenditure due to fiscal benefits, their corporate tax abuse is low. Mozambique's tax abuse is high in absolute rankings and is substantially higher than Africa's average. Hence, when adding the 3.8 percent of GDP for revenue foregone with the recorded tax loss due to corporate tax abuse of 2 percent of GDP, Mozambique stands out in terms of missed tax collection.

Fine tuning tax policy is crucial to safeguard growth and investment. Corporate income tax (CIT) statutory rates, depreciation allowances, and carry-forward provisions are vital to optimizing fiscal policy, as they directly influence investment, economic efficiency, and revenue generation. Lower statutory rates can attract footloose investment and enhance global competitiveness, while depreciation allowances, especially accelerated ones, incentivize capital investments, fostering growth and productivity. Carry-forward provisions help mitigate business risks by allowing firms to offset losses against future profits, encouraging entrepreneurship and innovation. Balancing these elements ensures a tax system that promotes economic growth, maintains equity, and secures stable revenues, while minimizing distortions and fostering a competitive, investment-friendly environment. A review of the international headline rates (Table 2) indicates that Mozambique is not very competitive, which could increase pressures to compensate with tax incentives. But providing special tax incentives triggers a series of potential issues such as resource misallocation, governance and rent-seeking problems, and inefficiency considerations, as already discussed.

Table 2: Standard Corporate Income Tax Rate in selected SSA

	2024
Mozambique	32
Low-Income	
Burundi	30
Ethiopia	30
Malawi	30
Tanzania	30
Uganda	30
Zimbabwe	25
Average	29
Middle-Income	
Botswana	22
Kenya	30
Lesotho	25
South Africa	27
Swaziland	27.5
Average	26

Source: IMF

3. Taking a step back – What has been the industrial policy strategy

Over the last two decades, Mozambique has introduced several industrial policy strategies, beginning with the first Industrial Policy and Strategy (PEI) from 1997 to 2006. This initial framework focused on several key pillars (Matusse 2022): promoting public investment, attracting foreign direct investment, providing industry financing, establishing industrial free zones, developing social infrastructure, and protecting the domestic industry. Ross (2014) notes that the emphasis on foreign direct investment led to large-scale projects that benefited from reduced electricity tariffs and tax incentives. In 2007, the government launched an updated PEI that expanded on these pillars by including support for the business environment, fostering national production and exports, and revising investment incentives, which revitalized significant industrial free zones like Beluluane and Nacala. Building on the principles of structural transformation, the PEI (2016-2025) introduced further measures such as tax and customs incentives, improved access to financing, and promoted public-private partnerships (PPPs). All these strategies aimed to enhance the competitiveness of the domestic industry and attract

foreign direct investment through favorable tax policies. However, despite the economic shifts associated with the discovery of liquefied natural gas (LNG), no policy adjustments were made to align with the changing fiscal incentives that would influence foreign direct investment.

The National Development Strategy (ENDE) and the Five-Year Government Program (PQG) for 2020-2024 underscore the focus on industrialization as a cornerstone for economic development in Mozambique. The ENDE serves as a comprehensive framework guiding the country's long-term socioeconomic progress, emphasizing industrialization as a fundamental pillar. It is structured around four key components: i) human capital development; ii) production-based infrastructure development, which includes investments in industrial parks, special economic zones, and essential transport networks; iii) research, innovation, and technological advancement; and iv) effective institutional coordination. These components build upon previous industrial policies, particularly underscoring the significance of fiscal incentives as determinants of foreign direct investment (FDI) attraction. The strategy also highlights the necessity for efficient management of these fiscal incentives. In alignment with the ENDE, the PQG (2020-2024) identifies industrialization as a priority objective, viewing it as a catalyst for national structural transformation and improvements in the population's well-being, while enhancing competitiveness for better integration into regional and global markets. To further this development agenda, the Mozambican government launched the National Program to Industrialize Mozambique (PRONAI) in 2021.

PRONAI aims to stimulate production and commercialization to enhance the national industrial sector, thereby fostering job creation and economic transformation. The program builds upon prior industrial policies and development strategies, particularly the National Development Strategy and the Five-Year Government Program (2020-2024). The program envisions an expansion of national industrial parks through the utilization of local inputs, encouraging both production and commercialization, which are expected to catalyze economic transformation and contribute to income and employment generation. Specifically, PRONAI focuses on establishing a value chain that integrates key sectors, including agriculture, fisheries, and natural resources, thereby reducing reliance on traditional sectors, and generating employment opportunities for vulnerable groups, such as women and youth, which is essential for poverty alleviation and economic resilience. The overarching objective of the strategy is to enhance the competitiveness of local enterprises. However, although the industrial policy is underpinned by favorable domestic and international economic conditions, it lacks a robust evidence-based strategy critical for driving its success. While the strategy encompasses a range of operational mechanisms, it inadequately addresses a comprehensive tax collection strategy in the context of recent liquefied natural gas (LNG) discoveries and does not sufficiently articulate measures to attract foreign direct investment.

While there has been no shortage of industrial policy strategy documents, questions remain about how efficiently and effectively they are integrated in governing. The various referenced documents intended to guide public policy in Mozambique's development strategy encompass critical elements recognized by economic theory and practice as essential for fostering socioeconomic development. Since the inception of the first Industrial Policy and Strategy (PEI) from 1997-2006, subsequent PEIs have consistently included pillars such as developing social infrastructure, establishing industrial parks and special economic zones, providing fiscal incentives, attracting foreign direct investment (FDI), financing industry, promoting public investment, and encouraging national production and export, as well as import substitution. However, these documents lack specificity in guiding and prioritizing investment and tax policy. While they aim to improve the industrialization process through fiscal incentives, these efforts have led to negative outcomes due to a lack of funding, resource misallocation, and a neglect of coherent long-term growth strategies. Moreover, the PEIs failed to outline pathways for enhancing tax collection, which is undermined by excessive and poorly targeted fiscal incentives.

An inefficient tax collection strategy could diminish industrial policy effectiveness. The current growth strategy presents a trilemma involving competing objectives: protecting national firms while attracting FDI through industrial policy, maintaining financial and fiscal stability, and promoting economic growth. To address this, it is crucial to rectify coordination mismatches observed among public entities, particularly the potential misalignment between industrial policy and tax policy. Adjusting industrial policy strategies to align with new economic dynamics is essential. Furthermore, recognizing that national development includes the provision of quality public services, it is vital to integrate development and industrial strategies with tax policy instruments to achieve a balance between attracting investment and ensuring financial and fiscal stability.

4. Structural Changes in Mozambique Enterprises

In this section, we document changes in the likelihood of take-up of key business investments that were explicitly incentivized in the CFB 2009, by different groups of firms, over time, to demonstrate the structural changes in the composition of formal enterprises in Mozambique that benefitted from CFB 2009. To do so, we use two cross-sectional rounds from the World Bank Enterprise Surveys (WBES) representing relevant enterprise level information for Mozambique for 2007 (pre-CFB 2009) and 2018 (post CFB 2009). This reveals several relevant insights about the combined effect of government policies on firm outcomes between 2007 and 2018.

The two WBES rounds are the only publicly available data to study firm outcomes in Mozambique but are sparse both temporally and cross-sectionally. The WBES is a firm-level survey that is representative of an economy's private formal sector. These surveys collect

information on firms in manufacturing, construction, retail, wholesale, hotels, restaurants, transport, storage, communications, professional services, and IT. The two WBES rounds for Mozambique we use in this study include information on 599 firms in 2007 and 601 firms in 2018, that have at least 5 employees, are formally registered, and have at least 1 percent private ownership. Table 2 presents descriptive statistics on this sample. We see that over time, the firms surveyed in WBES are becoming more likely to invest in fixed capital and worker trainings – two key variables that determine a firm’s eligibility for fiscal benefits under CFB 2009. The rates of tax inspections for formal firms increased slightly from 72 percent to 77 percent. Firms in WBES 2018 are also more internationally integrated, as demonstrated by higher fraction of exporters and utilization of foreign inputs. The firms also appear to be growing. The likelihood of a firm being a Small and Medium Enterprise has decreased, and the number of employees and annual sales have increased. Firms are also more likely to be financially included in 2018 in terms of having a bank account and overdraft facilities. Finally, firms in 2018 are more productive in terms of real sales to employee ratio than in 2007.

Table 3: Descriptive Statistics – Mozambique WBES (2007 and 2018)

	Mean	Std. Dev.	Bottom 10%	Median	Top 10%	Firms
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Year 2007						
Invest Fixed Cap.	0.331	0.47	0.00	0.00	1.00	599
Formal Training	0.182	0.39	0.00	0.00	1.00	599
Tax Inspection	0.720	0.45	0.00	1.00	1.00	599
% Foreign Inputs	22.5	37.4	0.00	0.00	100	461
Applied Import License	0.135	0.34	0.00	0.00	1.00	599
Exporter	0.047	0.21	0.00	0.00	0.00	599
SME	0.937	0.24	1.00	1.00	1.00	479
Annual Sales (Const. MZN Millions)	39.65	224.9	0.16	1.20	27.50	599
Number Employees	24.5	54.20	2.0	8.0	54.0	599
Sales Growth (%)	2090.3	3181.5	-19.6	42.56	7042.0	599
Employee Growth (%)	127.8	150.2	0.0	42.8	334.0	595
Foreign Ownership (%)	15.08	34.3	0.00	0.00	100	599
Maputo	0.71	0.45	0.00	1.00	1.00	599
Has Govt. Contract	0.14	0.34	0.00	0.00	1.00	599
Has Overdraft Facility	0.13	0.33	0.00	0.00	1.00	599
Has Bank Account	0.74	0.44	0.00	1.00	1.00	599
Firm Age	13.54	11.7	3.0	10.0	31.0	597
Whether any female owner	0.25	0.44	0.00	0.00	1.00	599
Part of multi-establishment	0.092	0.29	0.00	0.00	0.00	599
Revenue Productivity (sales/workers in Millions)	0.879	3.78	0.03	0.13	1.40	599
Panel B: Year 2018						
Invest Fixed Cap.	0.43	0.49	0.00	0.00	1.00	601
Formal Training	0.21	0.41	0.00	0.00	1.00	601
Tax Inspection	0.77	0.42	0.00	1.00	1.00	599
% Foreign Inputs	26.17	36.91	0.00	0.00	95.00	597
Applied Import License	0.18	0.39	0.00	0.00	1.00	600
Exporter	0.21	0.41	0.00	0.00	1.00	601
SME	0.80	0.40	0.00	1.00	1.00	601
Annual Sales (Const. MZN Millions)	64.09	190.37	0.21	3.14	177.51	601
Number Employees	54.04	109.41	5.00	16.00	132.00	601
Sales Growth (%)	1035	2429	-46.7	14.7	7042.0	601
Employee Growth (%)	77.4	154.1	-20.0	0.00	334.0	599
Foreign Ownership (%)	16.65	34.2	0.00	0.00	100.00	599
Maputo	0.39	0.49	0.00	0.00	1.00	601
Has Govt. Contract	0.15	0.36	0.00	0.00	1.00	599
Has Overdraft Facility	0.17	0.38	0.00	0.00	1.00	597
Has Bank Account	0.83	0.38	0.00	1.00	1.00	600
Firm Age	16.32	14.0	4.00	13.0	31.0	598
Whether any female owner	0.27	0.45	0.00	0.00	1.00	597
Part of multi-establishment	0.24	0.43	0.00	0.00	1.00	601
Revenue Productivity (sales/workers in Millions)	0.87	2.15	0.02	0.16	2.22	601

Notes: The table presents descriptive statistics on firm characteristics from the WBES 2007 and WBES 2018 rounds for Mozambique.

These changes represent both within sector changes as well as the changing composition of firms in the WBES across the two rounds. Table 3 presents results from a regression of firm characteristics (taken one at a time) on sector fixed effects and a dummy variable that takes value 1 if the year is 2018 and 0 otherwise. The sectors include Food, Retail, Manufacturing, and Services. We see that the change in probability of capital investments and worker trainings within sectors is statistically insignificant. This implies that the higher rate of capital investments and worker trainings in the descriptive statistics in 2018 represent a change in the sectoral composition of firms in Mozambique as opposed to a general increase. Furthermore, we find that in 2018, within sectors, firms are more likely to be exporters, less likely to be small, have higher sales (although not statistically significantly different from 2007), productivity and financial access.

Table 4: Within-sector changes in firm characteristics

	Fixed Capital Investment	Formal Worker Training	Tax Inspection	Exporter	SME	Employees	Annual Sale Millions (Const MZN)	Bank Account	Revenue Productivity
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Post	0.044 [0.038]	-0.046 [0.032]	0.006 [0.034]	0.178*** [0.027]	-0.125*** [0.026]	20.973*** [7.072]	21.290 [17.329]	0.059* [0.031]	0.019 [0.255]
Adjusted R^2	0.011	0.007	0.012	0.047	0.078	0.041	-0.001	0.032	0.003
Dep. Var. Mean	.35	.2	.74	.06	.94	30.11	49.39	.76	1.01
Sector FE	Y	Y	Y	Y	Y	Y	Y	Y	Y
Observations	1080	1080	1078	1080	1080	1080	1080	1079	1080

Notes: The table presents regression results from a regression of a dependent variable listed in columns on a dummy variable that takes a value 1 for year 2018 and 0 otherwise, while controlling for sector fixed effects. The square brackets represent standard errors. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Lack of panel data as well as the broad coverage of the CFB 2009 prevent us from precisely attributing statistical changes among firms between 2007 and 2018 to the policy. The various incentives under CFB 2009 were conditional on two main kinds of activities: investments in fixed capital and worker trainings. The incentives included tax benefits on expenses on these activities, as well as custom exemptions for importing capital and other investment goods. Using the limited cross-sectional data, we document qualitative statistical facts in our data that are informative about the general structural changes in the economy between 2007 and 2018, pertaining to firms undertaking investments in fixed capital and worker trainings. However, because of the broad scope of CFB 2009, we are not able to credibly attribute these structural changes, specifically to the said policy. This inability to assess the impacts of sweeping changes in fiscal policies creates considerable uncertainty about their effectiveness (or lack thereof). Specifically, we use the following regression specification to study the change in the likelihood of firms to invest in fixed capital formation (or conduct worker trainings) by a given characteristic across 2007 and 2018:

$$y_{it} = \beta_0 + \beta_1 Post_t + \beta_2 X_{it} + \beta_3 (X_{it} \times Post_t) + \gamma_s + \epsilon_{it} \#(1)$$

where y_{it} includes our two outcome variables: whether firm invested in fixed capital and whether firm conducted formal trainings, that vary at the level of a firm i and year t . $Post_t$ is a dummy variable that takes value 1 for year 2018 and 0 otherwise. X_{it} represents the characteristic of interest that we want to evaluate (either discrete or continuous). γ_s are sector dummies that control for any unobserved sector specific characteristics that do not change over time. A sector level fixed effect implies that our coefficients only compare firms within same sectors, effectively controlling for the potential change in firm compositions across WBES rounds. β_2 captures the likelihood that a firm with a certain characteristic X_{it} was more or less likely to invest in fixed capital (or worker training) in year 2007, relative to the omitted category. β_3 captures the differential change in the likelihood that a firm with a certain characteristic X_{it} was more or less likely to invest in fixed capital (or worker training) in 2018 relative to year 2007. We present our results for fixed capital investments in Table 4 (and for investments in worker trainings in Appendix Table A1).

Table 5: Within-sector: Who invests in Fixed Capital in 2018

	Whether Firm Invested in Fixed Capital							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Post	0.044 [0.038]	-0.192* [0.102]	-0.001 [0.054]	0.049 [0.040]	0.026 [0.039]	0.042 [0.039]	0.109* [0.056]	0.017 [0.040]
SME		-0.325*** [0.092]						
Post X SME		0.238** [0.104]						
Firm Age			-0.003 [0.002]					
Post X Firm Age			0.003 [0.002]					
Multi Estb.				0.153** [0.072]				
Post X Multi Estb.				-0.107 [0.086]				
Rev. Prod.					0.009* [0.005]			
Post X Rev. Prod.					0.021** [0.011]			
Govt. Contract						0.163*** [0.061]		
Post X Govt. Contract						0.092 [0.083]		
Maputo							0.056 [0.051]	
Post X Maputo							-0.110* [0.065]	
Exporter								0.231** [0.096]
Post X Exporter								-0.062 [0.107]
Adjusted R^2	0.011	0.023	0.012	0.014	0.022	0.034	0.012	0.026
Sector FE	Y	Y	Y	Y	Y	Y	Y	Y
Observations	1080	1080	1075	1080	1080	1078	1080	1080

Notes: The table presents regression results estimating Equation 1, using fixed capital investment as the outcome variable and several firm-level characteristics taken one at a time, while controlling for sector fixed effects. The square brackets represent standard errors. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

We find that between 2007 and 2018, there was a considerable change in the characteristics of firms that were investing in fixed capital and worker trainings. We find that the small and medium enterprises, that were 32.5 percentage points (pp) less likely to invest in fixed capital in 2007 relative to large firms, are only 8.7 pp ($\beta_2 + \beta_3$) less likely to invest in fixed capital in 2018 (see Column 2 of Table 4) relative to the baseline of large firms in 2007.³ Moreover, Column 4 in Table 4 shows that while multi-establishment firms were 15.3 pp more likely to invest in fixed capital in 2007 than firms with single establishments, this difference fell to 4.6 pp in 2018⁴ relative to the baseline of single establishment firms in 2007. This suggests that smaller and less established firms are increasingly more likely to invest in fixed capital and therefore benefit from the CFB 2009 in 2018 relative to 2007. This is suggestive evidence that large firms

³ Interestingly, in 2018, SMEs in Mozambique are about 10 pp more likely ($\beta_2 + \beta_3 - \beta_1$) to invest in fixed capital than large firms.

⁴ While this change is substantial and economically meaningful, it is not statistically significant.

did not necessarily exclusively capture the benefits from industrial policy. Another criticism of industrial policy is that low productivity firms that are politically connected may benefit from fiscal benefits. We find that while securing a government contract increasingly makes firms more likely to invest in fixed capital in 2018 (see Column 6 of Table 4), it is not necessarily the case that real revenue productivity (ratio of real sales to number of employees) of firms benefitting from the CFB 2009 is declining. In fact, as Column 5 in Table 4 shows, the firms investing in fixed capital have significantly higher revenue productivity. While this is promising, it does not rule out the possibility that politically connected firms do benefit disproportionately from CFB 2009. Finally, Columns 7 and 8 in Table 4 show that while firms in Maputo and firms that were exporters were more likely to invest in fixed capital in 2007, firms outside of Maputo were more likely to invest in fixed capital in 2018 and the difference between exporters and non-exported in the likelihood of investing declined. These patterns are broadly similar⁵ for firms' decision to train workers as discussed in Annex I (see Appendix Table A1).

These difference-in-differences findings across firms with varying characteristics account for broad economic changes that affect all firms similarly but do not account for economic developments that differentially affect certain groups of firms. For instance, the finding that SMEs are becoming more likely to invest in fixed capital relative to large enterprises in 2018 than they were in 2007, takes into account the economic changes that affected the SMEs and large enterprises similarly. However, it is plausible that this finding is driven by positive economic developments that disproportionately benefit the SMEs. For example, these can include public policies that target financial inclusion of SMEs or place-based policies that primarily facilitated the development of SMEs. Concretely, we see that firms outside Maputo appear to be increasingly investing in fixed capital. If most firms outside Maputo are SMEs, then it could be the case that place-based policies targeting areas outside Maputo are driving the increase in fixed capital investments for SMEs.

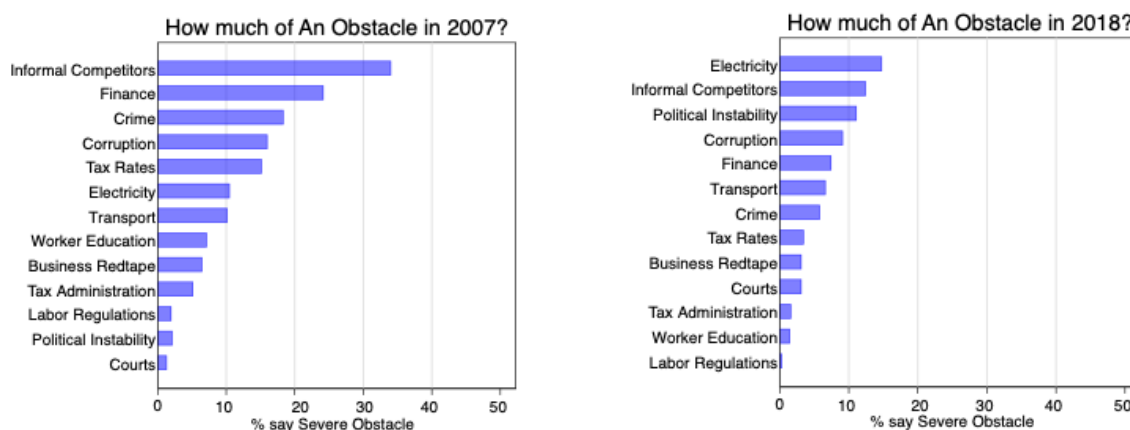
Going forward, better targeting of incentives and investments in data collection would enable researchers to uncover the effects of large industrial policies to be able to chart an evidence-based path forward. In the current analysis, we used the WBES data that spanned a small cross-section of firms in Mozambique across two years spaced over a decade apart. This data only contained indirect measurements on which firms would likely benefit or be eligible for benefits under CFB 2009. A country specific recurring dataset, ideally one where firms can be linked over years, would greatly help evaluate large and often expensive industrial policies, and build accountability. Moreover, the sweeping eligibility of firms to benefit from CFB 2009, are further prevented within-country comparisons of firms, because of a lack of comparable non-eligible firms. Therefore, a more targeted approach to industrial policy, will not only be fiscally sound, but also present opportunities for credible economic analysis of policies for informed

⁵ With the notable exception of the characteristic that evaluates differences between firms in Maputo versus outside Maputo.

decisions. A broadly simple first step would be for the relevant government entities to coordinate with the World Bank on the next Enterprise Survey exercise to safeguard a firm specific identifier, which would then allow robust panel econometrics. Furthermore, any tax policy measure intended to support broader industrial policy objectives needs to be carefully designed between the different ministries and the Tax Authority, and include clear methodologies to test expected outcomes.

Furthermore, the government should very carefully consider the importance of tax policy as industrial policy. On the one hand, available data does not allow assessing how firms are reacting, if at all, to these tax policy measures. On the other hand, businesses have not been reporting taxation as a major obstacle to their operations, but claim that infrastructure (electricity, finance, and transportation) and institutions (informality, political instability, and corruption) are currently the major obstacles. While in 2007 tax rates were ranked in fifth place as an obstacle for firms, in 2018 they fell further in importance to eighth place and were reported by much fewer firms as an obstacle for business (see Figure 4). This can be either because of the widespread use of tax incentives currently in place, or due to the urgent need for improvements in infrastructure and institutions to enable firms to compete globally, as Mozambique's exports grow (World Bank World Development Indicators).

Figure 4: Self-reported obstacles for businesses in Mozambique



Notes: The figure shows the self-reported obstacles to doing business, as reported by the firms. Each bar represents the fraction of firms in the sample that mentioned the corresponding reason as being a “severe obstacle” to doing business. The left figure shows this data for 2007 and the right figure represents 2018.

5. Conclusion

Mozambique has allocated significant fiscal resources through foregone tax revenues to support industrial policy measures. The level of resources diverted is notably higher than that of regional and many global peers. While many cash-strapped countries implement tax policies as a quick

way to attract foreign investors and boost domestic businesses, it's vital that these measures are guided by a well-structured strategy, targeted effectively, and supported by robust evidence.

In Mozambique, the lack of available data complicates the assessment of the effectiveness of these tax measures. Additionally, the absence of a clear strategy and proper targeting raises several important questions. Interestingly, businesses in Mozambique rank tax rates as a lesser concern among their operational challenges. Thus, it is essential for the government and tax authorities to dedicate time to review the relevance of existing tax measures. They should focus on protecting limited public resources by directing them toward areas that are likely to yield the greatest impact on socioeconomic development.

Annex I. Which firms are conducting worker training

Table A1 presents regression results from Equation 1 in the same pattern as Table 4, but using a dummy variable “Whether Firm Conducted Formal Worker Training” that takes value 1 if the firm invested in worker trainings in a given year and zero otherwise, as the outcome variable. The patterns of findings are broadly in line with the results in Table 4.

Table A1: Within-sector: Who invests in Formal Worker Training in 2018

	Whether Firm Conducted Formal Training							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Post	-0.046 [0.032]	-0.330*** [0.084]	0.020 [0.044]	-0.031 [0.033]	-0.053 [0.033]	-0.038 [0.033]	-0.091* [0.047]	-0.042 [0.032]
SME		-0.426*** [0.075]						
Post X SME		0.282*** [0.085]						
Firm Age			0.002 [0.002]					
Post X Firm Age			-0.004** [0.002]					
Multi Estb.				0.213*** [0.060]				
Post X Multi Estb.				-0.187*** [0.071]				
Rev. Prod.					0.009** [0.004]			
Post X Rev. Prod.					0.008 [0.009]			
Govt. Contract						0.172*** [0.051]		
Post X Govt. Contract						-0.004 [0.069]		
Maputo							-0.074* [0.042]	
Post X Maputo							0.059 [0.054]	
Exporter								0.655*** [0.077]
Post X Exporter								-0.515*** [0.086]
Adjusted R^2	0.007	0.044	0.010	0.018	0.015	0.028	0.009	0.079
Sector FE	Y	Y	Y	Y	Y	Y	Y	Y
Observations	1080	1080	1075	1080	1080	1078	1080	1080

Notes: The table presents regression results estimating Equation 1, using worker training as the outcome variable and several firm-level characteristics taken one at a time, while controlling for sector fixed effects. The square brackets represent standard errors. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

We see that small and medium enterprises as well as single establishment firms have become more likely to invest in worker trainings in 2018 (relative to 2007) and therefore be eligible for fiscal benefits under CFB 2009. We also see that firms with government contracts are still more likely to invest in worker trainings, but the productivity of firms that invest in worker trainings is not declining. Finally, non-exporting firms appear to be increasingly investing in formal worker trainings in 2018 relative to 2017 and exporting firms.

References

- Altenburg, T. (2011). Industrial policy in developing countries: overview and lessons from seven country cases, Discussion Paper, No. 4/2011, ISBN 978-3-88985-533-6, Deutsches Institut für Entwicklungspolitik (DIE), Bonn.
- Besley, T., & Persson, T. (2011). Pillars of Prosperity: The Political Economics of Development Clusters. Princeton University Press.
- Bolnick, B and Bruce, B. (2009). PARPA II Review of the Tax System in Mozambique. Report Prepared by Nathan Associates for USAID/Mozambique Technical Assistance to CTA and MIC Project.
- Boletim da República (BR) Mocambique. (1993). Law on investment, in Legislation_on__Investment_in_Mozambique, pp: 1-17
- Boletim da República (BR) Mocambique (2009): Regulation of the investment law, in the Legislation on Investment in Mozambique, pp: 18-52
- Cubeddu, L., Bauer, A., Berkmen, P., Kandil, M., Nassar, K and Mullins, P. (2008). Tax Incentives and Foreign Direct Investment: Policy Implications for the Caribbean. In: Panth, Mr Sanjaya P., Mr Paul Cashin, and Mr WA Bauer. The Caribbean: enhancing economic integration. International Monetary Fund.
- International Monetary Fund, OECD, United Nations and World Bank. (2015). Options for Low Income Countries Effective and Efficient Use of Tax Incentives for Investment: A Report to the G-20 Development Working Group by the IMF, OECD, UN and World Bank
- IMF. (2024). Industrial Policy coverage in IMF surveillance – Broad Considerations. International Monetary Fund, Washington DC.
- Klemm, A and Stefan, V.P. (2012). Empirical evidence on the effects of tax incentives. International Tax and Public Finance 19, 393-423.
- Krueger, A. O. (1974). "The Political Economy of the Rent-Seeking Society." American Economic Review, 64(3), 291–303.
- Matusse, MAA. (2022). Industrial Policy in Southern Africa: Mozambique's experience. UNCTAD/BRI PROJECT/PB 03
- McDonald, B., Ruta, M and Heuvelen, E. (2024). Industrial Policy: Trade Policy and World Trade Organization Considerations in IMF Surveillance. International Monetary Fund, NOTE/2024/002.
- OECD (2010). Tax Policy Reform and Economic Growth. OECD Publishing.
- OECD (2021). Global Minimum Tax Proposal. OECD Publishing.
- Redonda, A., von Haldenwang, C., and Aliu, F. (2023). Global Tax Expenditure Database (GTED) (1.1.5) [Data set]. Zenodo. <https://doi.org/10.5281/zenodo.7825791>
- Rodrik, D. (2004). "Industrial Policy for the Twenty-First Century." CEPR Discussion Paper No. 4767.
- Stiglitz, J. E., & Greenwald, B. (2014). Creating a Learning Society: A New Approach to Growth, Development, and Social Progress. Columbia University Press.
- Swistak, A., Li, L., and Varsano, R. (2017). Mozambique. Towards More Efficient Non-Resource Taxation: A Strategy for Reform. IMF Technical Assistance Report.

- Parys, Stefan van, and James, S. (2010). The effectiveness of tax incentives in attracting investment: panel data evidence from the CFA Franc zone. *International Tax and Public Finance* 17, 400-429.
- Tax Justice Network (2021). The state of Tax justice 2021. Executive Director of UNAIDS and Under-Secretary-General of the United Nations.
- Dietsche, E.; Esteves, A. (2018). Que perspectivas tem Moçambique de diversificar a sua economia com base no 'conteúdo local'? Documento de Trabalho WIDER 2018/113. UNU-WIDER.
- Doris C. Ross (2014). Moçambique em ascensão, construir um novo dia. Fundo Monetário Internacional, Departamento de África.
- Moçambique, Ministério da Planificação e Desenvolvimento (2014). Estratégia Nacional de Desenvolvimento 2015-2035.
- Moçambique, Assembleia da República (2020). Programa Quinquenal do Governo para 2020--2024. Resolução n.º 15/2020 de 14 de Abril.
- Moçambique, Conselho de Ministros (1997). Política e Estratégia Industrial. Resolução nº 23/97 de 19 de agosto.
- Moçambique, Conselho de Ministros (2007). Política e Estratégia Industrial. Resolução nº 38/2007 de 18 de dezembro.
- Moçambique, Conselho de Ministros (2016). Política e Estratégia Industrial. Resolução nr. 23/2016 de 12 de setembro.
- Zucman, G. (2015). *The Hidden Wealth of Nations: The Scourge of Tax Havens*. University of Chicago Press.



PUBLICATIONS