

6th World Bank | IFS | ODI Public Finance Conference

Driving Progress: Public Finance and Structural Transformation

Conference Proceedings

September 26-27, 2024 - Washington, DC, USA



Skatteforsk
Centre for Tax Research



Organizing Committee

Jaffar Al Rikabi, Annette Alstadsæter, Pierre Bachas, Anne Brockmeyer, Yvonne Edwards,
Pablo Garriga, François Gerard, Hazel Granger, Jonas Hjort, Christopher Hoy,
Oyebola Okunogbe, David Phillips, Juan Luis Schiavoni, Thiago Scot,
Mahvish Shaukat, Dario Tortarolo, Yani Tyskerud, Katia Vostroknutova, Mazhar Waseem.

Implementing Partners

Institute for Fiscal Studies

ODI

World Bank (DEC, Prosperity)

Co-Sponsoring Organizations

Norwegian University of Life Sciences – Skatterforsk Centre for Tax Research

UK Government Centres of Expertise– Public Finance

worldbank.org/publicfinanceconference

Introduction

As low- and middle-income countries grow, the structure of production, trade and employment changes; it is imperative for public finance policies to evolve in tandem with these changes. Depending on a country's development model and natural resources, **growth takes different forms**, but it typically consists of an expansion of manufacturing and tertiary sectors, diversification of trade, and more limited reliance on primary sectors. Growth is also accompanied by increasing formalization of firms and employment, human capital accumulation and demographic shifts. **The mix of tax instruments, the structure of unemployment insurance, and the financing of pension systems need to adapt during the process of structural change** and may also play an important role in fostering these changes.

The **2024 Public Finance Conference** showcased a range of presentations from micro and macro perspectives, focusing on policy design for low- and middle-income countries. Topics included tax policies tailored for countries on a growth trajectory, fiscal policies promoting structural transformation and industrial policy, strategies to address high levels of informality and foster rapid formalization through fiscal and labor market interventions, and the design of government pension systems in these contexts.

Key Takeaways

Fiscal policies play a pivotal role in addressing structural transformation challenges in low- and middle-income countries. As these economies grapple with persistent informality, regional disparities, and the need to promote industrial and labor market formalization, targeted tax policies and social programs have emerged as critical tools. **The 6th World Bank/IFS/ODI Public Finance Conference highlighted innovative approaches to enhance fiscal efficiency, support sustainable growth, and reduce inequality.** From leveraging electronic invoicing systems to encourage tax compliance in Rwanda, employing place-based tax incentives to reduce spatial inequality in Vietnam, advancing India's financial inclusion initiatives to reduce caste-based disparities, implementing Uganda's non-contributory pension program to ease intergenerational financial pressures, to Argentina's temporary payroll tax reductions that boosted formal employment, the conference showcased a diversity of policies and their impact on structural transformation. **Below is a summary of key takeaways from the presentations.**

Structural Transformation through Deliberate Policies

Structural transformation is not an automatic process but a result of strategic decisions. Keynote speaker Chang-Tai Hsieh illustrated how the role of top firms evolves

differently in developed versus developing countries, emphasizing the need for policies that support specialization, innovation, and competitiveness. Examples such as the role of bureaucrats in export policies in Korea and China's targeted industrial subsidies show how fiscal tools can catalyze this shift. These policies show the importance **of aligning public finance strategies with developmental needs** to foster long-term growth and structural transformation.

The Role of Fiscal Policies in Reducing Inequality

Inequality and informality present significant barriers to economic progress in many low- and middle-income countries. The conference showcased several policies aimed at mitigating these challenges. For instance, Vietnam's place-based tax incentives successfully addressed regional disparities by stimulating firm growth in less-developed areas, while India's bank branch expansion policy helped marginalized groups access formal credit and improve economic opportunities. Similarly, Argentina's payroll tax reductions encouraged formal employment, highlighting the role of tailored fiscal policies in addressing specific inequalities and promoting economic inclusion.

Modernizing Tax Systems to Enhance Productivity

Modernizing tax systems is essential for increasing government revenue, improving compliance, and boosting economic efficiency. The adoption of VAT in Indian states demonstrated how simplifying tax structures can lead to increased productivity. Rwanda's electronic invoicing policy, which incentivized suppliers to comply with tax regulations, had positive spillover effects on formal employment and firm growth. Additionally, insights into global challenges such as profit shifting by extractive firms and crypto taxation emphasized the need for international cooperation and technological innovations to address revenue leakages and improve tax system equity.

Conference Structure

Across 1.5 days, the **2024 Public Finance Conference** included six sessions with 19 cutting-edge presentations, a dedicated policy session with contributions from policymakers, and discussions with participants through Q&A sessions. The event was opened by Manuela Francisco, concluded by William Maloney and featured **a keynote address by Chang-Tai Hsieh**, Professor of Economics at the University of Chicago, Booth School of Business. The presentations were chosen via an open call for paper submissions, reflecting key priorities for policy design in low- and middle-income countries. For more

information on the presentations and access to select session recordings, visit the [conference website](#).

The conference was organized by the **World Bank** –through the Prosperity Vertical and Development Economics (DEC) Vice Presidency-, the [Institute for Fiscal Studies](#) and [ODI](#) through [TaxDev](#) (The Centre for Tax Analysis in Developing Countries). The event was supported by the Norwegian University of Life Sciences (NMBU) - Skatteforsk Centre for Tax Research, and by the UK Government’s Public Finance Centre of Expertise, which is funded by UK International Development.

Participants

The conference was held at the World Bank MC building in Washington, DC, with livestreaming available on its website. Over the two-day event, 861 individuals registered for the livestream and 143 for in-person attendance. Online participation included 449 unique viewers on Day 1, with a peak of 140 concurrent viewers, and 278 unique viewers on Day 2. Across both days, the livestream attracted a total of 634 viewers from 91 countries. In-person attendance peaked at 75 participants on Day 1 and 45 on Day 2.

Keynote Speaker

Chang-Tai Hsieh

Professor of Economics at the University of Chicago Booth School of Business.

The **keynote speech by Professor Chang-Tai Hsieh** from the University of Chicago centered on a crucial yet often overlooked **aspect of structural transformation: the role of the largest firms in an economy**. He began by contrasting the activities of top companies in developing countries with those in advanced economies. **In developing economies, the largest firms tend to be highly diversified**, operating across numerous sectors, often focusing on local, non-traded goods and services. He illustrated this point using the example of Paraguay's largest company, the Vierci Group. This conglomerate, with roots in importing, expanded into a wide range of businesses including consumer goods, commercial real estate, cattle ranching, and media.

In contrast, **top firms in developed countries exhibit a high degree of specialization**. They focus on specific segments within their chosen industries, investing heavily in research and development to maintain a competitive edge. Hsieh posed the question of why these companies do not diversify into seemingly lucrative sectors. He argued that the structural transformation witnessed in developed economies, particularly the US, involved a shift from conglomerates to specialized companies, driven by competition and the emergence of new technologies that leveled the playing field.

Professor Hsieh presented evidence from the US, Mexico, and Korea, highlighting the trend of **top firms in developing economies operating across significantly more industries compared to their counterparts in developed nations**. He emphasized that this structural transformation is not an automatic process but rather a consequence of **deliberate policy choices and market forces**. He also underscored the crucial role of financial resources, access to technology, and managerial expertise in shaping the trajectory of top firms and their impact on a nation's economic development.

While acknowledging the need for further research, Hsieh's presentation illuminated the importance of understanding the dynamics of top firms in driving structural transformation. His insights **challenged the traditional view of structural change as a passive phenomenon and highlighted the role of strategic decision-making, access to capital, and technological advancements** in shaping the evolution of a nation's economic landscape.

Opening Remarks

Manuela Francisco

Global Director – Economic Policies, World Bank

Manuela Francisco opened the conference on Thursday morning by **highlighting three critical challenges facing the global economy**. The first one is the **slow economic growth expected** for 2024 and 2025. This sluggish growth is projected to be lower than the expansion seen in the 2000s, potentially impacting 60% of economies and roughly 80% of the global population. While advanced economies have started monetary policy adjustments, Francisco cautioned that returning to an era of easily available, low-interest capital remains unlikely.

The second major challenge is the **narrowing fiscal space for governments**. This constraint results from expansionary fiscal policies during the COVID-19 pandemic and a pre-existing trend of increasing global debt. In the decade preceding the pandemic, global debt increased by over 100%, primarily because revenue collection could not keep pace with developmental needs.

The final challenge revolves around the **changing demographics of the youth population**. By 2030, an estimated 1.2 billion young individuals will enter the workforce, with 40% having completed some form of education. Despite their educational background and employment expectations, Francisco highlighted projections indicating that, without significant intervention, only four out of ten of these young people will secure jobs.

Francisco emphasized the importance of support from institutions like the World Bank, referencing the non-Paper joint initiative with the IMF, but she also stressed the **critical need for structural reforms to strengthen tax collection and revenue mobilization**, which are essential for achieving sustainable growth and advancing human development.

Session 1

Fiscal Policies to Promote Structural Transformation

“Place-based Policy, Migration Barriers, and Spatial Inequality”

Nghiem Q. Huynh (University of Oklahoma)

Nghiem Q. Huynh examined **the effects of place-based tax incentives and easing migration barriers on spatial inequality in Vietnam**. He argued that while economic growth is often prioritized in developing countries, it can exacerbate regional disparities, concentrating economic activity in more productive areas. Using Vietnam as a case study, Huynh demonstrated how the country's remarkable economic growth coincided with a decline in spatial inequality. His presentation **highlighted two key policies: tax incentives targeting specific locations, and reforms easing migration restrictions**. Drawing on establishment-level data from 2000 to 2015, Huynh's analysis revealed that **these policies stimulated firm growth across various locations, especially in regions with significant tax benefits**. He also showed that easing migration barriers positively impacted poverty reduction by enabling individuals to access better economic opportunities. Huynh concluded that strategically combining place-based tax incentives with policies that reduce migration barriers can effectively mitigate spatial inequality while supporting sustainable public service financing.

“The Spatial Production Network and Optimal Spatial Industrial Policies: An Application in the Context of China”

Yingyan Zhao (George Washington University) (joint work with Chong Liu)

Yingyan Zhao explored **how subsidies and tax policies targeting specific locations can influence industries differently based on their position in the national input-output network**. To investigate this, he employs a quantitative general equilibrium model to optimize spatial industrial policies and analyze the implications of place-based policies in China.. The study highlighted that optimal tax rates should account for a region's role in upstream or downstream production, **suggesting lower taxes for upstream industries to minimize distortionary effects**. Zhao applied this framework to evaluate the Great Western Development Strategy and Northeast Revitalization Plan, showing how these targeted areas could gain welfare improvements while slightly benefiting the rest of the country.

“Bureaucrats and the Korean Export Miracle”

Philipp Barteska (London School of Economics and Political Science) (joint work with Jay Euijung Lee)

Philipp Barteska focused on the role of bureaucratic capacity in implementing industrial policies, specifically analyzing South Korea’s export boom from 1960 to 2000. His research

examines **how the success of the Korea Trade Promotion Agency (KOTRA) depended heavily on the individual capabilities of bureaucrats**, who were tasked with increasing exports through various initiatives such as trade fairs and market demand reports. Using a rich dataset on KOTRA's overseas office operations and the rotation of managers, Barteska demonstrated that a **one standard deviation increase in manager ability led to a 37% rise in exports**. This effect was measured through quasi-random bureaucratic appointments and a staggered rollout of offices. He also showed that inexperienced or ineffective bureaucrats could diminish the impact of the policy. Additionally, Barteska highlighted that **bureaucrats' early exposure to import demand shocks shaped their subsequent effectiveness, underlining the path dependency of state capacity development**.

Session 2

Public Finances of Pensions & Social Protection

“Does Financial Inclusion Mitigate Social Exclusion?”

Ashish Sedai (University of Texas at Arlington) (joint work with Rikhia Bhukta, Debayan Pakrashi and Sarani Saha)

Ashish Sedai examined the impact of India's 2005 bank branch expansion policy on reducing caste-based social and economic disparities. Sedai argued that **improved access to formal financial services would reduce the reliance of marginalized castes on informal credit markets, where they faced discrimination**. Using a regression discontinuity design to evaluate an Indian policy to encourage banks to open branches in underbanked districts, Sedai found that **the policy led to increased access to formal financial services for all caste categories, but that the impact was particularly pronounced for marginalized caste households**. His evidence suggests that increased access to formal credit enabled **these households to make investments in agricultural activities, while non-marginalized caste households shifted towards non-agricultural enterprises**. This shift led to increased labor demand and higher wages for workers from marginalized castes, ultimately reducing welfare disparities between caste groups.

“Old-Age Pension and Labor Market Outcomes of Younger Individuals: Evidence from Uganda”

Nathan Sunday (University of Michigan)

Nathan Sunday presented his research **on the effects of a non-contributory old-age pension program on earnings and labor supply of ineligible adults in the household** in Uganda. The program provided a monthly pension to individuals aged 65 and older, regardless of their work history, with the goal of reducing poverty among the elderly. He hypothesized that this program would influence the earnings and labor supply of ineligible household members through mechanisms such as the relaxation of the household budget constraint, a reduction in financial dependence of the elderly on younger individuals, the reallocation of household tasks, and the investment of pension grants by ineligible adults in the household. His analysis employs a difference-in-differences methodology, comparing households with and without elderly members in pilot and non-pilot districts. His findings indicate **that the pension program had a positive impact on the earnings and labor supply of self-employed, ineligible adults, particularly among women**. The results are largely driven by an increase in working capital, suggesting that the pension program may have freed up resources for younger individuals to invest in their own economic activities. Notably, he observed that **the effect on earnings and labor supply was more pronounced in households where the male elder received the pension**.

“Mitigating the Consequences of Job Loss: Experimental Evidence from Ethiopia”

François Gerard (University College London) (joint work with Girum Abebe, Stefano Caria and Lukas Hensel)

François Gerard’s presentation explored the design and impact of government-provided or mandated programs aimed at supporting workers financially following job displacement in the context of developing countries. The research highlights that **while severance pay is prevalent in many low-income countries, unemployment insurance is relatively rare**. This disparity, he argued, stems from **challenges associated with monitoring informal employment**, which is widespread in low- and middle-income countries. Gerard presented findings from a randomized control trial conducted in Ethiopia, **comparing the effects of traditional severance pay with those of a lump-sum payment equivalent to double the statutory severance amount**. His research focused on workers displaced from a garment factory, examining their subsequent labor market outcomes and consumption patterns.

The results indicate **that job displacement led to prolonged periods of unemployment and reduced earnings, even with the provision of severance pay.** The findings also revealed that the lump-sum payments had a positive and persistent impact on consumption levels, suggesting that such interventions could help mitigate the financial hardship associated with job loss.

Egg-timer 1

Taxes in a Changing World

Luis Felipe Sáenz (University of South Carolina) - “**Structural Transformation and Tax Administration: Development and the Changing Tax System**”. Sáenz investigates the **connection between structural transformation and public finance**, analyzing the **established pattern of developing economies transitioning from sales and consumption taxes to income taxes.** His presentation examined this pattern through a theoretical model that incorporates long-run Engel curves and considers public goods as an input into production, with its financing evolving along the development path.

Alice Chiocchetti (Paris School of Economics) - “**The Global Allocation of Extractive Windfalls**”. Chiocchetti explores the taxation of the extractive sector, emphasizing the challenges of profit shifting by multinational firms. Her research investigated whether extractive firms are more prone to profit shifting compared to other multinational corporations. Using data from Orbis and country-by-country reports mandated by the OECD for extractive firms, the analysis suggested **that profits reported by extractive firms in tax havens are more sensitive to commodity price fluctuations than profits reported in non-haven jurisdictions**, also finding a **higher likelihood of profit shifting by extractive firms.**

Jiancong Liu (Bocconi University) - “**Biased Tax Enforcement as a Trade Barrier: The Role of Mandated Transparency at Customs**”. Liu examines the **influence of information asymmetry in tax enforcement on firm behavior.** Using data from China's 2002 corporate income tax sharing reform, which resulted in different tax authorities overseeing firms based on their establishment date and found that **information bias in tax enforcement negatively affects firms' export performance.** This effect manifests as higher domestic sales and reduced export volumes, suggesting firms may shift focus away from international markets when facing greater information asymmetry with tax authorities. Liu argued that **this behavior is driven by the desire to minimize interactions with less-informed tax**

officials. These effects were more pronounced in smaller firms and in regions with constrained state capacity.

Mona Barake (Skatteforsk, NMBU) - “**Crypto Crackdown: Insights into Tax Compliance**”. **Barake** analyzes the **challenges of taxing crypto assets and the need for global cooperation.** Using data from Danish cryptocurrency exchanges, tax records, and cross-border transfers, she found that crypto holdings are evenly distributed across wealth levels, yet **93% of sellers fail to report gains to tax authorities.** When Danish platforms increase transparency, **investors shift activity to foreign platforms,** highlighting the ease of circumventing domestic enforcement. Barake stressed that global information exchange on crypto income is essential, though decentralized trading remains a significant hurdle for tax compliance.

Krisztina Kis-Katos (University of Göttingen) - “**Mobile Technologies and Firm Formalization: Evidence from Uganda**”. Kis Katos’ research explores the relationship between mobile internet access and tax compliance in developing countries: using data from Uganda and the staggered rollout of 3G network coverage, the study estimates the **impact of improved internet connectivity on tax payments by firms.** She discussed the potential benefits of mobile internet access for tax compliance, finding that **firms with increased internet access experienced a rise in reported sales and tax payments.** However, this positive effect **was primarily observed in newly registered firms, while existing firms did not show significant changes** in reported sales or tax payments despite increased internet access.

Policy Session

*Sector- and location-specific fiscal policies:
challenges, opportunities and lessons*

The Policy Session at the conference brought together policymakers and individuals with recent policy experience to share their insights on the session theme: *Sector- and location-specific fiscal policies: challenges, opportunities and lessons.*

To start the session, **Paula Szenkman**, Former Secretary of Productive Transformation at the Ministry of Production and Labour in Argentina in 2018-2019, presented on the use of **public-private dialogue as a tool for designing and implementing industrial policies.** Szenkman highlighted Argentina's experience from 2015-2019, when these dialogues

helped to **identify sector-specific obstacles to productivity and coordinate the implementation of solutions**. She emphasized the importance of involving high-level political leadership and building consensus among stakeholders, including labor unions. This approach also improved transparency through clear roadmaps with actionable and measurable milestones that could be monitored. Key challenges included resisting lobbying for tax and spending concessions, resolving opposing views of business and unions on labor market issues, and ensuring continuity in participation.

Mary Jean Yasol, Chief Financial Analyst at the National Tax Research Center in the Philippines, discussed the **Corporate Recovery and Tax Incentives for Enterprises (CREATE) Act**, enacted in 2021 to **reform the country's corporate income tax and incentive system**. The Act aims to ensure that tax incentives are granted according to the guidelines produced by the OECD, including providing a legal framework for all tax incentives, consolidated under a single government body, and ensuring incentives are monitored and reviewed systematically. They must also align with the Strategic Investment Priority Plan (SIPP), which outlines priority activities eligible for tax incentives based on their potential for job creation, contribution to industrial development, and alignment with the Philippines' long-term development goals. Yasol's presentation highlighted that building capacity and political will across responsible government agencies to ensure effective implementation and monitoring of the CREATE Act may pose some challenges, but that the increased transparency and commitment to review the effectiveness of incentives via the Act provides a clear framework to address these challenges.

Dennis Mukama, Commissioner for Strategy and Risk Analysis at the Rwanda Revenue Authority, focused his presentation on **the role of tax incentives in Rwanda's development agenda**, as outlined in the country's Vision 2050 and the National Transformation Strategy. Mukama highlighted **the Government of Rwanda's goal of increasing the tax-to-GDP ratio and promoting specific sectors**, including agriculture, health, and ICT. He discussed challenges related to the persistence of some incentives that were initially intended as temporary measures, and the balancing of competing policy objectives and needs in the context of limited fiscal space. He concluded the session by highlighting the benefits of improved tax expenditure reporting, which can start the process of evaluation to inform how to best to reform potentially "sticky" or ineffective incentives.

Session 3

Aggregate Effects of Public Finances

“Size-Dependent Policies, Informality and Misallocation”

Alexandre Sollaci (International Monetary Fund) (joint work with Era Dabla-Norris, Laura Jaramillo-Mayor and Frederico Lima)

Alexandre Sollaci’s presentation focused on **the impact of size-dependent policies on firm behavior, particularly in the context of informality in Peru**. Peru has regulations, such as profit-sharing mandates and requirements for safety committees, that only apply to firms with more than 20 salaried employees. **These policies incentivize firms to remain small or to hire non-salaried workers to avoid triggering the regulations**. With data from a national survey of firms and administrative data from the Peruvian tax authority, this analysis explored the effects of these policies on production, wages, and profits, considering the extent to which non-salaried labor can mitigate the distortions caused by the regulations.

“The Macroeconomic Effects of Cash Transfers: Evidence from Brazil”

Steven Pennings (World Bank) (joint work with Arthur Mendes, Wataru Miyamoto, Thuy Lan Nguyen and Leo Feler)

Steven Pennings examined **the impact of Brazil's Bolsa Familia program**, one of the world's largest cash transfer programs, **on regional economic outcomes**. His research utilized an instrumental variable approach to estimate the relative GDP multiplier of the program, exploiting the variation in cash transfer amounts across 27 Brazilian states between 2004 and 2019. The study revealed **a large and persistent positive effect of the program on relative state-level GDP**, with a multiplier of approximately 2.3. This impact was primarily driven **by growth in non-tradable sectors** and associated with increased employment in both formal and informal sectors, showing large effects on both.

“Taxation when Markets Are Not Competitive: Evidence from a Loan Tax”

Felipe Brugués (Instituto Tecnológico Autónomo de México) (joint work with Rebecca De Simone)

Felipe Brugués presented research on **how the market structure of financial intermediaries**, and particularly the level of competition among lenders, **influences the**

economic impact of financial transaction taxes. Brugués argued that the traditional assumption that firms compete solely on price might not accurately reflect the reality of the commercial lending sector, and this could lead to biased estimates of tax effects. Focusing on a 2014 reintroduction of a loan transaction tax in Ecuador, the work provides empirical evidence of **incomplete pass-through of the tax onto borrowers, implying that banks absorbed a portion of the tax burden.** He attributes this finding to the presence of market power and potential collusion among banks. To quantify the impact of market structure, the research team developed a structural model of the commercial lending market that incorporated the possibility of collusion among lenders. The analysis suggests that the **loan transaction tax was less distortionary than it would be under perfect competition due to the effect of market power on the tax incidence on borrowers.**

Egg-timer 2

Fiscal Policy, Firms, and Labor Markets

Linda Wu (University College London) - ***“Formal Employment Dynamics and Development”***. Wu’s research examines the relationship between formal employment and economic development using employer-employee administrative data from eight countries. The research showed that **formal employment growth was primarily driven by more people joining the formal sector, rather than staying longer in formal jobs.** Wu also found that higher development levels were associated with greater job mobility within the formal sector, leading to higher returns to tenure and greater wage growth over a worker's career.

Guillermo Cruces (CEDLAS-UNLP & University of Nottingham) - ***“Effects of Hiring Credits on the Argentine Labor Market”***. Cruces’ work analyzes the impact of temporary payroll tax reductions for new permanent workers in Argentina. **The policy boosted employment growth in smaller firms,** with a four-percentage-point increase in employee growth rates compared to larger firms, and **a significant increase in formalization for workers transitioning from informal or semi-formal employment** under the local simplified tax regime.

Katia Vostroknutova (World Bank) - ***“When Are Innovation Support Programs Effective? Examples from Chile and Colombia”***. Vostroknutova’s research **evaluates the impact of innovation funding programs on firm-level innovation activities.** In Chile, supported firms increased innovation investment by 2–3.5 times more than non-supported firms, with a 22–30% higher likelihood of investing in innovation. Beneficiaries were also 13–25% more

likely to introduce product or process innovations, with large firms focusing on process and organizational changes, while SMEs leaned toward new products. In Colombia, results were similar but less robust due to sample limitations. The analysis revealed stronger effects in high-competition sectors and noted significant intra-sector and inter-sector spillovers, particularly for large firms.

Session 4

Major Tax Reforms

“The Effects of Adopting a Value Added Tax on Firms”

Laura Zimmermann (University of Georgia) (joint work with David Agrawal)

Laura Zimmermann focused on the impacts of the transition from a sales tax to a VAT system in Indian states between 2000 and 2008. Her research highlights the complexities associated with VAT implementation, particularly in developing countries, where deviations from the standard design are common. Despite these deviations, Zimmermann's findings reveal **a substantial production increase among Indian manufacturing firms following the adoption of the VAT**. This growth is attributed to the **elimination of double taxation, the lowering of statutory tax rates, and the simplification of the tax system**. Zimmermann emphasizes that the complexity reduction associated with the VAT adoption, independent of tax rate changes, played a crucial role in driving this positive production response.

“Technology, Tax, and Domestic Trade: Evidence from Rwanda's Electronic Invoicing Expansion”

Lucas Zavala (World Bank) (joint work with Pierre Bachas, Kieran Byrne, Florence Kondylis and John Karangwa)

Lucas Zavala examined the effects of a 2020 policy in Rwanda **that mandated large firms to validate their expenses with electronic invoices issued through Electronic Billing Machines (EBMs)**. This policy incentivized smaller suppliers to adopt EBMs and comply with tax regulations to avoid losing business with their larger clients. The research demonstrates

that **suppliers facing stronger incentives were indeed more likely to adopt EBMs and pay taxes**. The study also revealed positive spillover effects, including increased connections with large clients and higher levels of formal labor employment among these suppliers. He also cautioned about the costs imposed by the policy, such as increased tax burdens for large firms and potential client losses for non-compliant small firms.

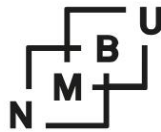
Closing Remarks

William Maloney

Chief Economist for Latin America and Caribbean, World Bank

In his closing remarks on Friday afternoon, **William Maloney** delivered an analysis **of Latin America's persistent shortcomings in achieving structural transformation**. He argued that the region's **primary error has been prioritizing *what is produced over how it is produced***, compounded by fiscal policies and expenditure regimes that hinder economic growth. Inefficiencies in public spending, amounting to roughly 4% of GDP, are a key obstacle, as well as low infrastructure investment, an underperforming education system, and escalating pension costs that risk crowding out productive investments. Addressing labor informality, Maloney asserted that it stems not from tax burdens but from low formal sector productivity, which drives individuals to self-employment where they prefer autonomy despite diminished economic returns. He further noted that universal social programs inadvertently subsidize informal work, creating a de facto tax on formal employment and deterring labor market formalization. Combined with a narrow income tax base, where only the wealthiest 1% contribute significantly, the current tax structure stifles innovation and investment.

To counter these systemic challenges, Maloney advocated for **strengthening national learning capabilities, implementing property tax reforms, enhancing the efficiency of public spending, and creating fiscal incentives** to foster collaboration between universities and the private sector. He also emphasized the importance of external learning initiatives, such as export promotion and international skill transfer programs, to cultivate the networks and capabilities necessary for economic transformation. Additionally, he urged the development of innovation ecosystems and robust evaluation mechanisms to ensure that fiscal policies align with long-term growth objectives.



Skatteforsk
Centre for Tax Research



2024
Tax Data
Analytics *Week*