Digitalization and Tax Reforms

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Outline

• Digitalization
• Strengthening tax administration
• Strengthening tax policy
• Revenue impact of new technologies
• New challenges
1. Digitalization

• Digitalization
• Computing power and the cost of collecting, storing, sharing, and analyzing information
• Both private and government sector collect information on individuals
• Governments have information on tax payers and beneficiaries of various social programs
• Scope for expanding tax base and improving compliance, thereby improving the efficiency and equity of the tax system
1. Digitalization

Tax Revenue (%GDP) in Latin America and the Caribbean

**Source:** International Centre for Tax and Development, The Government Revenue Dataset
1. Digitalization

• More households now have access to digital technology (such as the Internet and smart phones)

• Advent of 5G technologies

Source: IMF Fiscal Monitor April 2018

Access to Public and Digital Services in Developing Countries
(Percent of population in developing countries with access to services)
1. Digitalization

- EMCs and LICs lagging in digital areas
- Chile, Estonia, Singapore, Rwanda, and South Africa have taken lead regionally
2. Strengthening Tax Administration

Promoting e-filing:
• Reduces the cost of compliance and administration
• Tax filing can be linked to biometric identification

Pre-populated tax returns:
• Entering data before sending to taxpayers
  • 10 EU countries and Australia and California
  • But there is debate on risks of incorrect or incomplete information provided by revenue agency
• Could affect the credibility of the revenue authority and revenue take
2. Strengthening Tax Administration

The case of South Africa

• Since 2006, South Africa has automated administrative processes
• Almost 100% electronic tax submissions and customs declarations
• 95% of personal income tax refunds are paid within 72 hours
• 95% of personal income assessments done within 3 seconds
• 90% of customs declarations processed in less than 22 minutes
• VAT compliance gap reduced to 5% from 30%

Source: IMF Fiscal Monitor April 2018
2. Strengthening Tax Administration

Tracking sales through e-invoicing of indirect taxes

- VAT e-invoicing to improve compliance (Chile, Colombia, Mexico, and Peru)
- A clear framework needed for analyzing the data which is lacking in the region
  - By contrast in UK: data used to assess taxpayer risks
  - Russia: information on each retail transaction transferred to a tax authorities’ server
  - India: introduced a GST in 2017, but revenue yield below expectations because of multiple rates even when based is reported to have expanded
2. Strengthening Tax Administration

VAT C-Efficiency in Latin America and the Caribbean

Source: IMF
Notes: Lastest available year used, ranging from 2012 to 2017
Taxation of small businesses

• Emergence of independent work force and peer-to-peer business model has implications for tax collections
• A digital platform intermediates between buyers and sellers
• AirBnb, Cabify, and Rappi in Latin America, Casaferias and Zazcar in Brazil, Uber etc.
• Should taxation threshold be lowered to capture small taxpayers? Lowering would increase administrative burden
• Digital platforms present two other options:
  • Third party reporting (Uber in Estonia)
  • Withholding agent (Airbnb in 10 countries)
Revenues and Total Transaction Value Facilitated by the Sharing Economy Platforms in Europe, 2013-2015

Source: European Commission and PwC UK, Assessing the Size and Presence of the Collaborative
2. Strengthening Tax Administration

Automatic exchange of information to combat tax evasion

• High income individuals avoid paying taxes
• As much as 10% of global GDP held in low-tax jurisdictions
• Digitalization makes it possible to secure information on nonresident financial accounts—unthinkable some years ago
• Under a new initiative, participating jurisdictions send/receive information on nonresident financial accounts without the need for a specific request
• Important in light of heavy reliance on VAT in Latin America
• But the current system is porous and not all countries subscribe and the ultimate owners of securities not identified
2. Strengthening Tax Administration

![Diagram: PIT (%GDP) in Latin America and the Caribbean](source: International Centre for Tax and Development, The Government Revenue Dataset)
2. Strengthening Tax Administration

VAT (% GDP) in Latin America and the Caribbean

Source: International Centre for Tax and Development, The Government Revenue Dataset
Application of Blockchain and Cognitive Computing

• Blockchain for enhancing transparency and reducing the possibility of fraud and error
• Potentially replace VAT (the tax owed by each taxpayer stored on the blockchain and settled at every step)—no need to file tax
• Ongoing digitalization to reduce costs of trading (customs administration) and cross-border fraud
  • May require legal changes in countries where digital documents not accepted
• Cognitive systems and third party reporting for spotting under-reporting
• Tax administrations in South America adopting new tools for audit and compliance but their effects unclear
• Using taxpayer data to construct early warning systems to address taxpayer insolvency
More efficient tax design

Many options

- Income assessment to cover more than one year—more accurate for assessing people’s well being
- Assuming all transactions are digital, devising a consumption tax based on individual’s lifetime consumption
- Expanding the use of property taxes—by using digital registers or satellite technologies—thereby making tax system progressive
- Reducing reliance on reduced VAT rates for necessities (which benefit rich more) and providing targeted subsidies using biometrics
3. Strengthening Tax Policy

Property Taxes (% GDP) in Latin America and the Caribbean

Source: International Centre for Tax and Development, The Government Revenue Dataset
4. Revenue Impact of Adopting New Technologies

Trade taxes and VAT

- Trade taxes constitute a large share of total revenues in EMs and LICs
- Evidence of considerable trade misreporting in developing countries (trade gaps)
- Third-party information facilitated by digitalization can reduce these gaps

Source: IMF Fiscal Monitor April 2018

Source: IMF, World Economic Outlook.
Note: AEs = advanced economies; EMEs = emerging market economies; LIDCs = low-income developing countries.
4. Revenue Impact of Adopting New Technologies

Potential Revenue Gains from Closing Half the Distance to the Digitalization Frontier, 2016

(Percent of GDP)

Source: IMF Fiscal Monitor April 2018

Note: The panels in the figure show gains from reducing the distance to the digitalization frontier by 50 percent. AEs = advanced economies; EMEs = emerging market economies; LIDCs = low-income developing countries; VAT = value-added tax.
Strengthening personal income and wealth sheltered in low-tax jurisdictions

• Estimates of additional revenue small (0.1% of GDP)
• But combined with residence based taxation of capital, it could yield additional revenue
• Equity enhancing and giving the right signal
5. New Challenges

- Privacy Considerations
- Cybersecurity
- Digital Inclusion
- Institutional Capacity
Thank You