The Impact of Taxation on the Digital Economy

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Digital economy taxation entails multiple issues

- Should governments tax mobile and broadband devices and services?
- What is the appropriate level of taxation imposed on capital equipment purchased by telecommunications operators?
- How should double taxation of international services be tackled?
- How should consumption of digital goods be taxed?
- Should the providers of digital platforms be taxed at the country location where revenues are generated?

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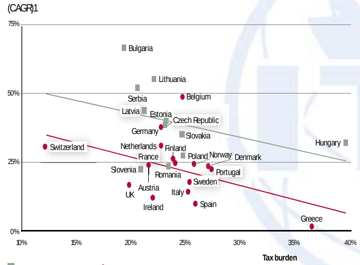
Should governments tax mobile services and handsets?

- Countries follow four service and handset taxation approaches
  - Universalization: reduce taxes as much as possible to increase adoption
  - Protectionism: similar as above but substantial increase in service VAT
  - Sector distortion: include sector specific taxes
  - Tax maximization and sector distortion: high service and handset taxes to maximize government revenues
- The global average import duty rate for a PC is 2.1% ranging between 0% to 35%, while sales taxes can reach 27%
- Cumulative impact of duty, sales and specific taxes can have a 50% impact on price

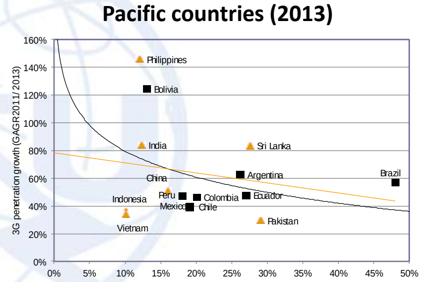
The higher the tax burden, the lower mobile adoption

Tax burden and 3G penetration in selected European countries (2013)



[1]3G penetration growth as a percent of population when comparing the fourth quarters of 2009 and 2012

Tax burden and 3G penetration in selected Latin American and Asia Pacific countries (2013)



Source: Telecom Advisory Services analysis

- Tax exemptions generate more economic benefits and tax revenues than the losses incurred by the tax exemption

Should governments tax broadband services?

- Broadband penetration faces an affordability barrier
- In general, it is considered that a broadband consumption tax increases the cost of ownership, thereby reducing adoption
- Lower subscription prices triggered by tax reduction, imply higher demand

IMPACT ON FIXED BROADBAND PENETRATION OF PRICE REDUCTION

Region	2013 Household Penetration	5% Price Reduction	10% Price Reduction
Sub - Saharan Africa	3.12%	3.62%	4.11%
Americas	54.87%	57.79%	60.70%
Arab States	27.93%	30.10%	32.28%
Asia & Pacific	31.05%	33.35%	35.65%
Europe	72.02%	75.13%	78.24%
CIS	36.94%	39.44%	41.94%

Source: Estimates by the author based on ITU 2013 data

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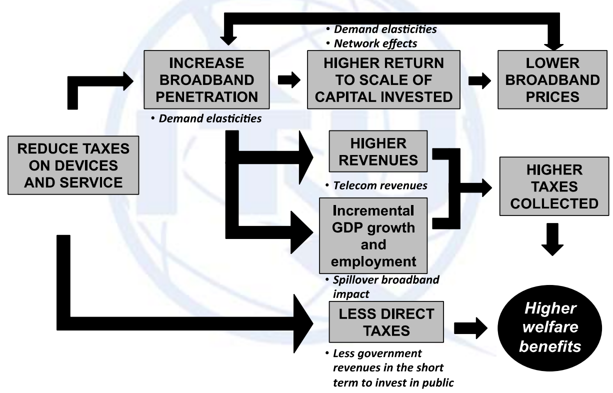
Lowering taxes on broadband triggers spillovers that are larger than the foregone taxes

VIRTUOUS CIRCLE OF TAX REDUCTION ON BROADBAND SERVICES AND DEVICES



Source: Telecom Advisory Services analysis

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Should governments collect taxes on equipment purchased by broadband providers be?

- Broadband service providers are imposed a range of taxes
  - Conventional corporate taxes (approximately 35% on gross profits)
  - Sales tax (up to 10%) and customs duty (up to 15%) on purchased equipment
  - Indirect taxes on CPE
  - Property taxes for physical assets (1.6% of assessment value)
- Sales taxes on purchased equipment have a negative impact on network deployment and, therefore, on broadband economic impact
- Accordingly, some governments have exempted ISPs from paying taxes on purchased equipment
  - Malaysia approved 100% tax allowances on "last mile" broadband equipment
  - 20 states in the US exempted sales tax from broadband equipment purchasing

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Should production and consumption of digital goods be taxed?

- A country has a right to tax income by way of where the good is generated (source-based) or where it is being consumed (residency-based)
  - Digital advertising: determining the source of the income remains a critical taxation issue
  - E-commerce: a provider does not pay taxes in a country if it does not fulfill the "permanent establishment" condition
  - Video-streaming: some countries are moving to collect a tax on video-streaming services to protect local cable-TV industries
- Arguments for and against taxation of production and consumption of digital goods
  - Digital advertising: loss of tax revenues <-> erosion of spill-over
  - E-commerce: unfair advantage <-> enforcement difficulty
  - Sales tax on digital goods: cultural protectionism <-> lack of harmonization

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Several dimensions of taxation asymmetry

- Asymmetry between industries
  - Within the digital sector, Internet firms have a 5 (Europe) to 7 (emerging countries) percentage point lower effective tax rate (ETR) than telecommunications operators
  - Global internet players have a lower ETR than telecommunications players
  - Telecommunications players are taxed more than other service players
- Double taxation of international telecommunications services taxation of digital players with no physical presence
- The design of an efficient tax structure in the digital space needs to consider three requirements
  - Ensure proper collection of taxes for income generated at source
  - Avoid over taxation of digital activities when compared to other industries
  - Provide selective exemptions to facilitate investment in infrastructure and promote adoption by end-users

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Maximizing impact on the digital economy

- Extensive evidence that digitization has impact on economic growth
- Taxation can have a detrimental impact on digitization growth
  - On consumption of digital goods
  - On equipment and other production inputs
- Taxation of digital goods and services should be approached preventing any erosion of their economic impact
- Balance short-term revenue generation and long term support of innovation and economic growth
  - Imposing “luxury taxes” on smartphones and tablets does not have any redistributive impact
  - Import duties have no clear impact in protecting domestic industries
  - Sector specific policies may be distortive

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