Mobile taxation as a barrier to
digital inclusion in Ghana

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AGENDA

- Overview of the GSMA’s Digital Inclusion programme
- The benefits of mobile and the link with taxation
- Taxation on mobile is higher than on standard goods
- Transitioning to a taxation structure where mobile is treated equally to standard goods
THE GSMA’S DIGITAL INCLUSION PROGRAMME:

SUPPORTING THE CONNECTION OF AN ADDITIONAL 1B PEOPLE TO THE MOBILE INTERNET BY 2020
DIGITAL INCLUSION IN GHANA: AN OVERVIEW

- The mobile sector in Ghana has enabled 12.6 million Ghanaians, about 50% of the population, to access the benefit of mobile communications.
- Only 12% of the population are regular internet users.

Source: GSMA Intelligence Database
BRIDGING THE DIGITAL DIVIDE IN GHANA

- Coverage gaps and quality of service issues remain, requiring infrastructure investment

- Even where coverage exists, many Ghanaians cannot afford mobile devices and services, lack awareness of mobile’s benefits, or aren’t offered relevant content

- GSMA’s Digital Inclusion programme aims to reduce these barriers

Improving networks and coverage, and encouraging Ghanaians to access mobile services, are challenges for both operators and the government
THE BENEFITS OF MOBILE AND THE LINK WITH TAXATION
MOBILE DELIVERS SOCIO-ECONOMIC BENEFITS

Mobile supports digital inclusion

Mobile supports long-term economic growth and fiscal stability through the industry’s supply chain and by increasing productivity

Mobile helps the government of Ghana achieve its ICT and wider social objectives

Digital inclusion enables millions to benefit from exchange of ideas and information

Mobile is critical to achieving connectivity and economic growth
WHAT DO THESE BENEFITS MEAN FOR TAX POLICY?

Consuming mobile services creates numerous positive impacts, i.e. positive spillovers

To benefit from these positive spillovers, governments tend to encourage consumption (e.g. through a subsidy)

In industries such as tobacco and alcohol ("economic buds"), governments use taxation to discourage consumption

Is mobile taxation in Ghana discouraging consumption of mobile services?
MOBILE IS TAXED ABOVE STANDARD RATES

Mobile operators contribute 40% of their revenues to the government through taxes and fees.

The turnover of the mobile sector directly contributes 3.2% of Ghanaian GDP.

The mobile sector provides over 9% of Ghanaian tax revenues.
TAXATION ON MOBILE IS HIGHER THAN ON STANDARD GOODS
# Taxes on Mobile Sector: Consumer Taxes

<table>
<thead>
<tr>
<th>Tax Base</th>
<th>Tax Type</th>
<th>Tax Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Devices</td>
<td>VAT</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>Customs Duties (and additional charges)</td>
<td>Up to 25%</td>
</tr>
<tr>
<td></td>
<td>National Health Insurance Levy</td>
<td>2.5%</td>
</tr>
<tr>
<td>Services</td>
<td>VAT</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>Communications Service Tax</td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td>National Health Insurance Levy</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

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Key:
- **Consumer taxes on devices**
- **Consumer taxes on services**
- **Mobile-specific**

Source: Deloitte analysis based on mobile operator data

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TAXES ADD TO MOBILE OWNERSHIP COSTS

Taxation as a share of the total cost of mobile ownership

## Taxes on Mobile Sector: Operator Taxes

<table>
<thead>
<tr>
<th>Tax Base</th>
<th>Tax Type</th>
<th>Tax Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imported network equipment and SIM cards</td>
<td>VAT</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>Customs Duties (and additional charges)</td>
<td>Up to 20%</td>
</tr>
<tr>
<td></td>
<td>National Health Insurance Levy</td>
<td>2.5%</td>
</tr>
<tr>
<td>Taxes</td>
<td>Corporation tax</td>
<td>25%</td>
</tr>
<tr>
<td></td>
<td>National Fiscal Stabilisation Levy</td>
<td>5%</td>
</tr>
<tr>
<td>Taxes on Operators</td>
<td>SIIT</td>
<td>GH¢ 0.19</td>
</tr>
<tr>
<td>Annually regulatory fees</td>
<td>CST on Interconnection</td>
<td>6%</td>
</tr>
<tr>
<td>Net revenues (gross revenue - interconnection - NHIL - VAT - CST)</td>
<td>Ghana Investment Fund for Electronic Communications (GIFEC)</td>
<td>1%</td>
</tr>
<tr>
<td>Fixed amounts</td>
<td>Variable licence fee</td>
<td>1%</td>
</tr>
<tr>
<td>Per phone number</td>
<td>International Gateway Licence</td>
<td>$100k</td>
</tr>
<tr>
<td></td>
<td>Right of way fees for fibre rollout</td>
<td>$4000/km on average</td>
</tr>
<tr>
<td></td>
<td>Microwave fees</td>
<td>Per link</td>
</tr>
<tr>
<td></td>
<td>Numbering fee</td>
<td>Up to $0.50 per number</td>
</tr>
</tbody>
</table>

**Key:**
- Operator taxes on equipment
- Other operator taxes
- Mobile-specific

**Source:** Deloitte analysis based on mobile operator data
TRANSITIONING TO A TAX REGIME WHERE MOBILE IS TREATED EQUALLY TO STANDARD GOODS
Taxation on the mobile sector is an important source of revenue for the government and delivers short term benefits to government revenues.

However this comes at the cost of long-run socio-economic development and growth and is thus counter productive.

How do we balance these two factors?
REBALANCING TAXES ON MOBILE

Policy implemented

Short-run impacts

Long-run impacts

Tax reform enforced

Fall in government revenues in the short-run

Increase in government revenues and penetration in the long-run which spurs economic growth
BEST PRACTICES FOR REBALANCING TAXES

1. In general, taxation should be broad based

2. Taxes should account for sector and product externalities

3. The tax system should be simple, understandable and enforced:

4. Incentives for competition and investment should be unaffected

5. Taxes should not be regressive:
## TAXATION IN PRACTICE IN GHANA

Alignment of taxes on the mobile sector in Ghana with these principles

<table>
<thead>
<tr>
<th>Tax</th>
<th>Broad-based</th>
<th>Accounts for externalities</th>
<th>Simple and enforceable</th>
<th>Incentives for competition and Investment</th>
<th>Equitable (not regressive)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAT</td>
<td>✅</td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NHIL</td>
<td>✅</td>
<td>✅</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>CST</td>
<td>✅</td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customs duty on handsets</td>
<td>✅</td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>GIFEC</td>
<td>✅</td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Licence fee</td>
<td>✅</td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>NFSL</td>
<td>✅</td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate tax</td>
<td>✅</td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customs duty on equipment</td>
<td>✅</td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIIT</td>
<td>✅</td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interconnection fees</td>
<td>✅</td>
<td>✅</td>
<td></td>
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</tr>
</tbody>
</table>
The Kenyan government exempted mobile handsets from VAT as of June 2009, in order to promote mobile phone usage and allow increasing numbers of Kenyans access to the benefits it entails.

Penetration rates increased from 50% to 70% of the population in Kenya, above the average penetration rate in Africa in 2011 (63%).

Source: Deloitte/GSMA Mobile telephony and taxation in Kenya 2011
CASE STUDY: LUXURY TAX IN CROATIA

- In 2009 the Government introduced a 6% tax on MNOs’ gross revenue from mobile calls and SMS.
- Volumes of mobile calls and SMS decreased (for the first time) in 2010 by 4% and 14% respectively.
- This led to a reduction in investment in network expansion and other capital expenditure.
- The 6% tax on calls and SMS was removed in 2012 by the Croatian government.

Source: Operator data. 2011 figures are based on scaled up data from the first half of the year.

MNOs' capex expenditure, HRK millions

- 2008: 1200
- 2009: 1000
- 2010: 700
- 2011: 500
OPTIONS FOR TAX REFORM
MODELLING OPTIONS FOR TAX REFORM

**Sector impacts**

1. **Tax and Fee Proposal**
   - *Pass-through*: A percentage of the tax and fee payments is reflected in the retail price of mobile services.

2. **Price of Mobile Services**
   - *Price Elasticity of Demand*: Changes in prices and consumption lead to a new level of revenue generated from mobile services. *Tax and fee payments* and labour demand will also adjust accordingly. *Changes in profitability* will influence the level of investment.

3. **Profitability of Mobile Services**
   - *Investment*
   - *Employment by Operators*
   - *Taxes and Fee Payments*

**Economy-wide impacts**

4. **Multipliers**
   - *Core Impacts*: Real GDP, Tax Revenue, Employment, Mobile Penetration

5. **Estimates**
   - *Spill-over Impacts*: Productivity, Growth, Inequality, Investment

*Direct impacts* are extrapolated onto the economy using multiplier factors, adjusted for the size of the country and market structure. Other metrics use concepts well-developed in research, including previous GSMA/Deloitte work on the impact of penetration on economic growth, to quantify spill-over effects.

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Economic impact in 2020 of removing the CST on mobile data

- Market Penetration: +0.4m connections
- Productivity: 0.12% more productive
- 3G: +0.4m connections
- Investment: +$47m
- GDP: +$140m
- Employment: +3,400
- Tax revenues: +$8.8m

Source: Deloitte analysis based on mobile operator data
Economic impact in 2020 of removing the CST on all services

- **Market Penetration**: +2.2m connections
- **Productivity**: 0.84% more productive
- **3G**: +0.95m connections
- **Investment**: +$360m
- **GDP**: +$1.1bn
- **Employment**: +32,500
- **Tax revenues**: -$12.9m

Source: Deloitte analysis based on mobile operator data
Economic impact in 2020 of removing the CST on mobile data and reducing the CST to 3% on voice and SMS services

**Removal of the CST on Data and Reduction of the CST to 3% on Voice**

- **Market Penetration**: +1.3m connections
- **Productivity**: 0.48% more productive
- **3G**: +0.69m connections
- **Investment**: +$202m

**Impact**

- **GDP**: +$598m
- **Employment**: +18,000
- **Tax Revenues**: +$0.67m

*Source: Deloitte analysis based on mobile operator data*
Economic impact in 2020 of removing customs duties on handsets

- **Market Penetration**: +1.5m connections
- **3G**: +0.46m connections
- **Productivity**: 0.3% more productive
- **Investment**: +$120m
- **GDP**: +$370m
- **Employment**: +11,000
- **Tax revenues**: +$38m

*Source: Deloitte analysis based on mobile operator data*
Removing the SIIT & CST on interconnect

**Costs of the SIIT**

- **+USD 0.75m annually in corporate tax**
- **+USD 1m annually in remittances, bringing a wider knock-on contribution in the wider economy**
- **Over USD 5 million annually from international trade**
- **Growth of Ghanaian businesses and attraction of international investors**
Investment projects, including quality of service upgrades and extension of 2G and 3G coverage, must be economically viable for operators.

Especially in rural areas, investment may be economically unviable.

Operators already face pressure on revenues due to declining ARPU and high taxes.

Customs duties on network equipment also put pressure on operators.