Investing in Telecommunications and ICTs in Developing Markets
*Shifting the Paradigm*

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Investing in Telecommunications and ICTs in Developing Markets: *Shifting the Paradigm*

- Why Focus on Telecommunications/ICTs?
- What’s the Role of Private Investment?
- What Are the Trends in Private Investment?
- What Are Risk Factors in Developing Markets?
- How Can the Risk Factors be Mitigated?
- What are the Opportunities in Developing Markets?
- Conclusions
- Where Do We Go from Here?
Why Focus on Telecommunications/ICTs?

- Economic Development
- Governance
- Education
- Health
- Environment
- Social interaction/cultural identity
- Entertainment
What’s the Role of Private Investment?

• More than half of the countries in the world have privatized their incumbent operator
• Another quarter of the countries in the world have allowed private participation in new mobile/fixed networks
• Less than one fifth of the world have no private participation in their telecom sector
What are the Trends in Private Investment?

(US$ billions)

Source: World Bank, PPI Database

Source: World Bank, PPI Database

Total $US331 Billion

Source: World Bank, PPI Database
What Are Risk Factors in Developing Markets?

• Overarching civil/governmental/institutional factors
• Macroeconomic factors
• Infrastructure factors
• Human capital
• Intellectual property protection
• Supply and distribution channels
• Sector dynamics
Sector Dynamics

• Size of market
• Potential profitability
• Regulatory risks and costs
• Time to market
• International bandwidth constraints
How Can the Risk Factors be Mitigated?

• Roles of international and regional organizations
• Investors’ technology choices
• Investors’ business models
• Financial considerations
Developing Market Groupings

- Large urban markets
- Large rural markets
- Small urban markets
- Small rural markets
- Small low-income island markets
Large Urban Developing Markets

- **Market characteristics**
  - Telephone subscribers increased 32% from 1.4 million in 1999 to 1.8 million in 2001
  - Teledensity increased from 8.48 per 100 inhabitants to 10.52
  - PCs in use increased 39% from 301,000 to 419,000
  - Internet users increased 271% from 163,000 to 605,000

- **Investment climate**
  - Relative high literacy rate—88%
  - Relatively high electricity access—83%
  - GDP per capita—$1,270
  - High unemployment rate—32%
  - Only 57% live above poverty level
  - Manageable business start-up costs—59% of GDP/capita
  - Relatively negative governance indicators
Large Rural Developing Markets

• Market characteristics
  – Telephone subscribers increased 67% from 1.3 million in 1999 to 2.2 million in 2001
  – Teledensity increased from 2.80 per 100 inhabitants to 4.40
  – PCs in use increased 26% from 223,000 to 282,000
  – Internet users increased 298% from 47,000 to 187,000

• Investment climate
  – Relative low literacy rate—52%
  – Relatively low electricity access—30%
  – Low GDP per capita—$542
  – Relatively modest unemployment rate—19%
  – Only 55% live above poverty level
  – High business start-up costs—136% of GDP/capita
  – Relatively negative governance indicators
Small Urban Developing Markets

• Market characteristics
  – Telephone subscribers increased 332% from 2.1 million in 1999 to 9.2 million in 2002
  – Teledensity increased from 10.87 per 100 inhabitants to 44.67
  – PCs in use increased 34% from 357,000 in 1999 to 478,000 in 2001
  – Internet users increased 134% from 281,000 in 1999 to 657,000 in 2002

• Investment climate
  – Relative high literacy rate—81%
  – Relatively high electricity access—80%
  – GDP per capita—$1,877
  – Relatively modest unemployment rate—18%
  – Only 63% live above poverty level
  – Modest business start-up costs—29% of GDP/capita
  – Modestly negative governance indicators
Small Rural Developing Markets

- **Market characteristics**
  - Telephone subscribers increased 305% from 333,000 in 1999 to 1.4 million in 2002
  - Teledensity increased from 2.78 per 100 inhabitants to 8.80
  - PCs in use increased 435% from 88,000 in 1999 to 471,000
  - Internet users increased 750% from 24,000 in 1999 to 514,000

- **Investment climate**
  - Relative modest literacy rate—64%
  - Low electricity access—24%
  - Low GDP per capita—$532
  - High unemployment rate—24%
  - Only 48% live above poverty level
  - High business start-up costs—91% of GDP/capita
  - Fairly negative governance indicators
Small Low-Income Island Developing Markets

• Market characteristics
  – Telephone subscribers increased 176% from 49,000 in 1999 to 135,000 in 2002
  – Teledensity increased from 1.00 per 100 inhabitants to 2.70
  – PCs in use increased 25% from 72,000 in 1999 to 90,000 in 2001
  – Internet users increased 75% from 12,000 in 1999 to 21,000
• Investment climate
  – Relative modest literacy rate—62%
  – Very low electricity access—17%
  – Low GDP per capita—$472
  – High unemployment rate—25%
  – Only 42% live above poverty level
  – Significantly negative governance indicators
The Case for Low-Income Countries

- Fixed-line subscribers grew 46% from 47 million in 1999 to 69 million in 2002.
- Mobile subscribers grew 518% from 7 million to 41 million.
- Number of PCs grew 82% from 9 million to 16 million.
- Number of Internet users grew 540 percent from 5 million to 32 million.
Growth of Fixed and Mobile Subscribers in Low-Income Countries

Source: ITU
1999-2002 Growth Rate Comparisons Between Low-Income and High-Income Countries

Source: ITU
Conclusions

• Telecommunications and ICTs are essential for human development
• Attracting private investment is key to sector development
• Risk factors facing investors in developing markets need to be well understood by governments, investors and int’l organizations
• All stakeholders have a role to play in mitigating risk factors
• There are significant investment opportunities in developing markets
### Where do we go from here?

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<thead>
<tr>
<th>Nat’l Governments</th>
<th>Investors</th>
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<tbody>
<tr>
<td>• Develop a national strategy</td>
<td>• Promote telecom/ICT applications</td>
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<td>• Establish advisory group of stakeholders</td>
<td>• Identify ways to achieve economies of scale</td>
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<tr>
<td>• Establish necessary political, legal, regulatory, trade, investment climate</td>
<td>• Partner with other stakeholders</td>
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<td>• Develop human capital</td>
<td>• Create trade associations</td>
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<td>• Encourage development of renewable energy</td>
<td>• Carefully evaluate technology options</td>
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<td>• Promote telecom/ICT usage</td>
<td>• Consider creative business models</td>
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<tr>
<td>• Encourage creative business models for foreign/local investors</td>
<td>• Identify qualified local partner</td>
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<td>• Encourage partnerships among stakeholders</td>
<td>• Get involved in helping nat’l government develop nat’l strategy</td>
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<tr>
<td>• Promote strategies that enable economies of scale</td>
<td>• Contribute to efforts to develop human capital</td>
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**ITU**

**International Telecommunication Union**
What about the role of the ITU?

• Work with governments on national strategies
• Stimulate partnerships among stakeholders
• Conduct appropriate additional research related to attracting investment in developing markets
• Develop “tool kits” for countries wanting to attract investment
• Develop appropriate databases that facilitate matchmaking between investors and opportunities
• Develop additional indicators that more clearly portray telecom/ICT diffusion
• Assist countries with technical advice
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THANK YOU

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