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Development of a national broadband strategy in the Middle East and Africa

Part I – Understanding the local context and leveraging the available ICT technologies

9 June 2012 • David Eurin

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Analysys Mason has helped many countries to develop or refine national broadband plans

Wales 2004 -2010: *Commercial and technical strategy, business planning, procurement and implementation support as part of National fibre broadband initiative*

European Commission 2010-2011: *Developed a guide for investment in broadband infrastructure, covering small regional roll outs and national interventions alike*

Western Europe 2004: *Analysis of Internet access prices in Western Europe*

UK 2010 onwards: *Cost modelling of next-generation broadband and regional funding allocations*

US 2002-2003 : *Study of US broadband policy for TechNet*

Chile 2007-2009: *Broadband promotion study in Chile*

Libya 2009: *Provided commercial and technical fixed and wireless licence bid support addressing i.a. national broadband requirements.*

Norway 2002: *Assessed the potential social and economic benefits from a scheme to provide broadband to selected public sector sites*

Ireland 2006-12: Design, procurement and implementation support for the EUR 234m National Broadband Scheme

Malta 2011: Techno-economic feasibility of a national FTTH network

UK 2001 onwards: *Broadband planning for regional development agencies on the UK*

UK 2008: *Broadband stakeholder group models for efficient public sector interventions in next generation broadband*

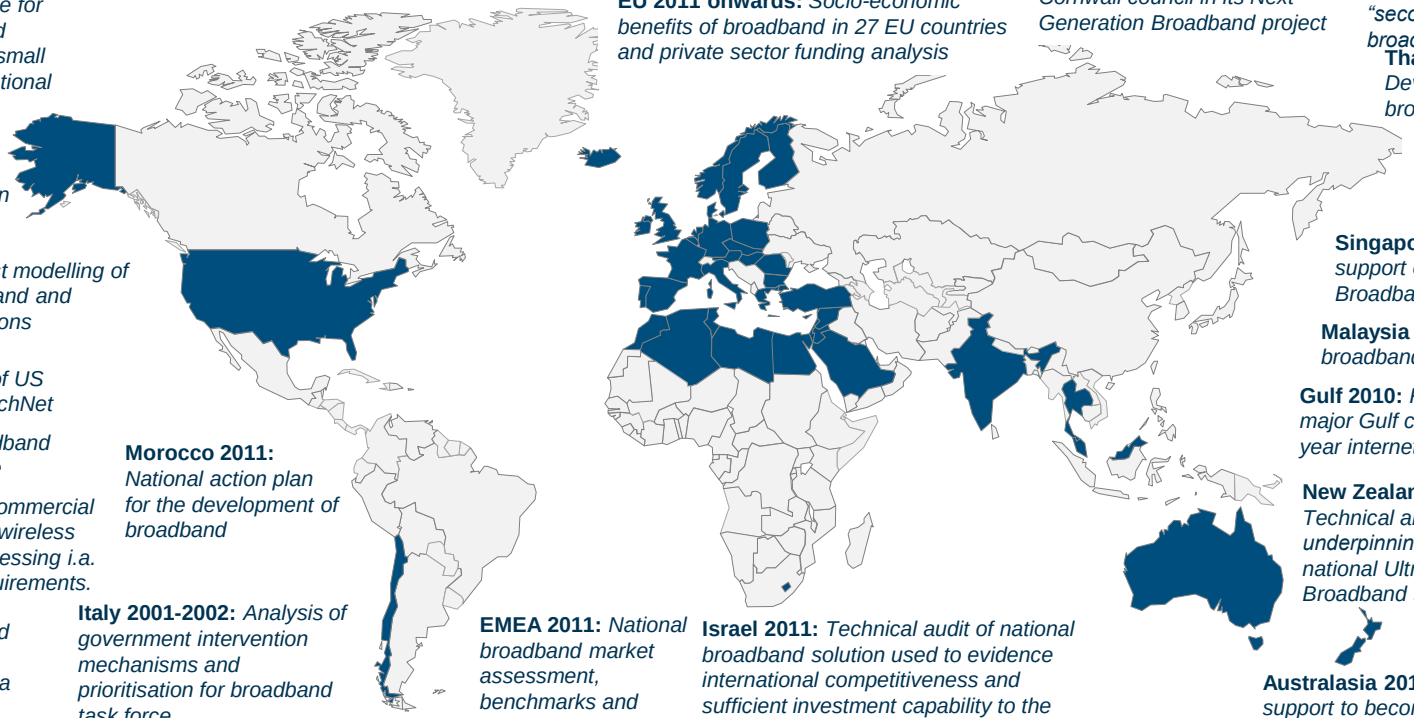
UK 2005-2006: *Development of broadband scenarios for the BSG in the UK*

UK 2008 onwards: *support to Cornwall council in its Next Generation Broadband project*

Wales 2006: *Study to promote public intervention in "second generation broadband" market*

Thailand 2009: *Development of national broadband plan*

EU 2011 onwards: *Socio-economic benefits of broadband in 27 EU countries and private sector funding analysis*



Brunei 2009-2010: *Development of national broadband strategy*

Singapore 2005-2006: *Provided support on Next Generation Broadband Network Initiative*

Malaysia 2002-2003: *National broadband policy development*

Gulf 2010: *Regulatory support in major Gulf country to define three-year internet development plan*

New Zealand 2010 - 2011: *Technical and cost reviews underpinning the Government's national Ultra-Fast and Rural Broadband strategies*

Australasia 2010- 2011: *Operator support to become national partner for ultra- fast broadband solution. Subsequently carried out review of solution and identification of global best practice*

Morocco 2011: *National action plan for the development of broadband*

Italy 2001-2002: *Analysis of government intervention mechanisms and prioritisation for broadband task force*

Egypt 2008: *Provided commercial and technical fixed licence bid support addressing i.a. national broadband requirements.*

EMEA 2011: *National broadband market assessment, benchmarks and forecasts*

Lesotho 2012: *Development of national broadband plan*

Israel 2011: *Technical audit of national broadband solution used to evidence international competitiveness and sufficient investment capability to the Government*

India 2010: *Strategic road-mapping and assessment of drivers for the deployment of a national fibre- optic backbone in India*

Australia 2009: *STEM license, training and modelling assistance for National Broadband project*

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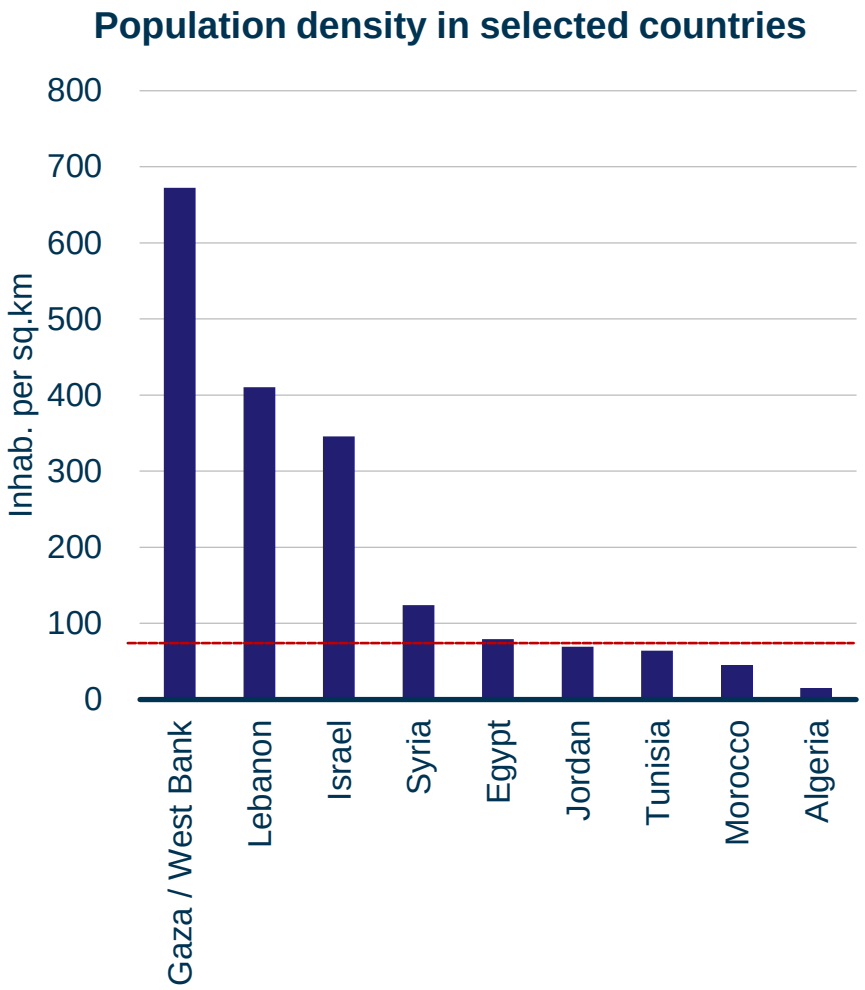
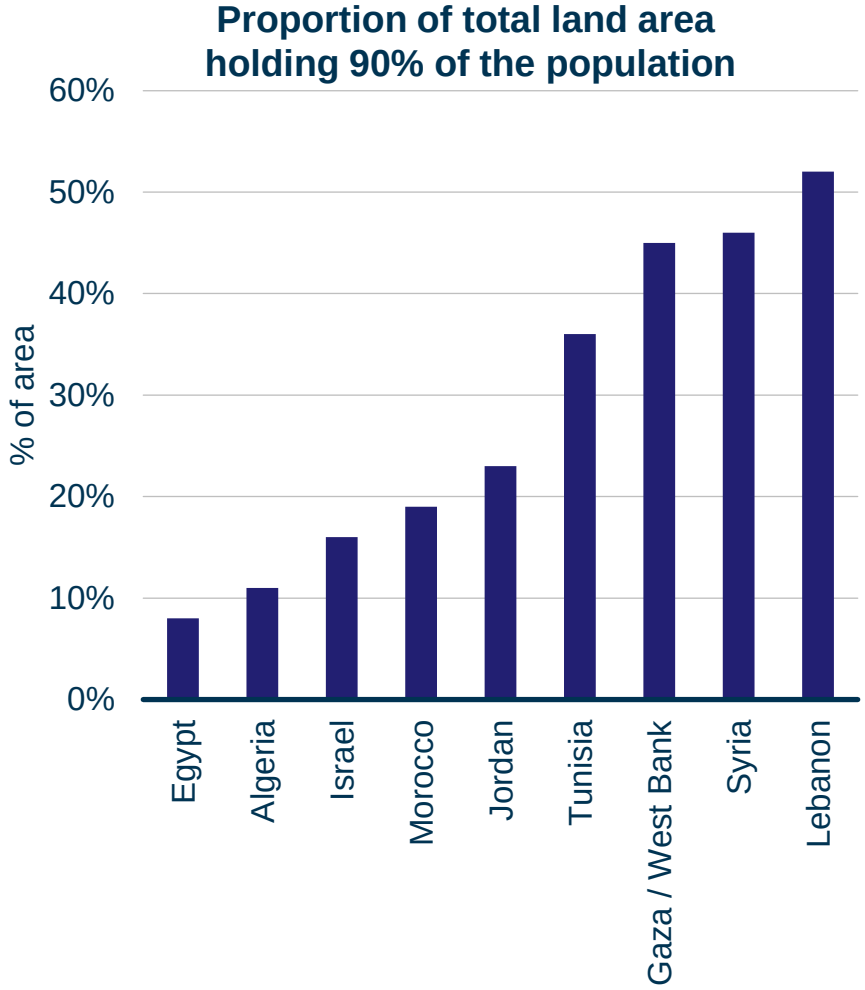
Governments and banks use simple indicators

- To make high-level investment decisions, different situations must be compared and benchmarked
  - Only consistent indicators are useful
  - Therefore few indicators are used in practice
- This does not reduce the need for an extensive set of indicators to be studied by academics and economists
  - Local issues
  - Specific reviews

Broadband economics are driven by density





Source: Euromonitor, Analysys Mason

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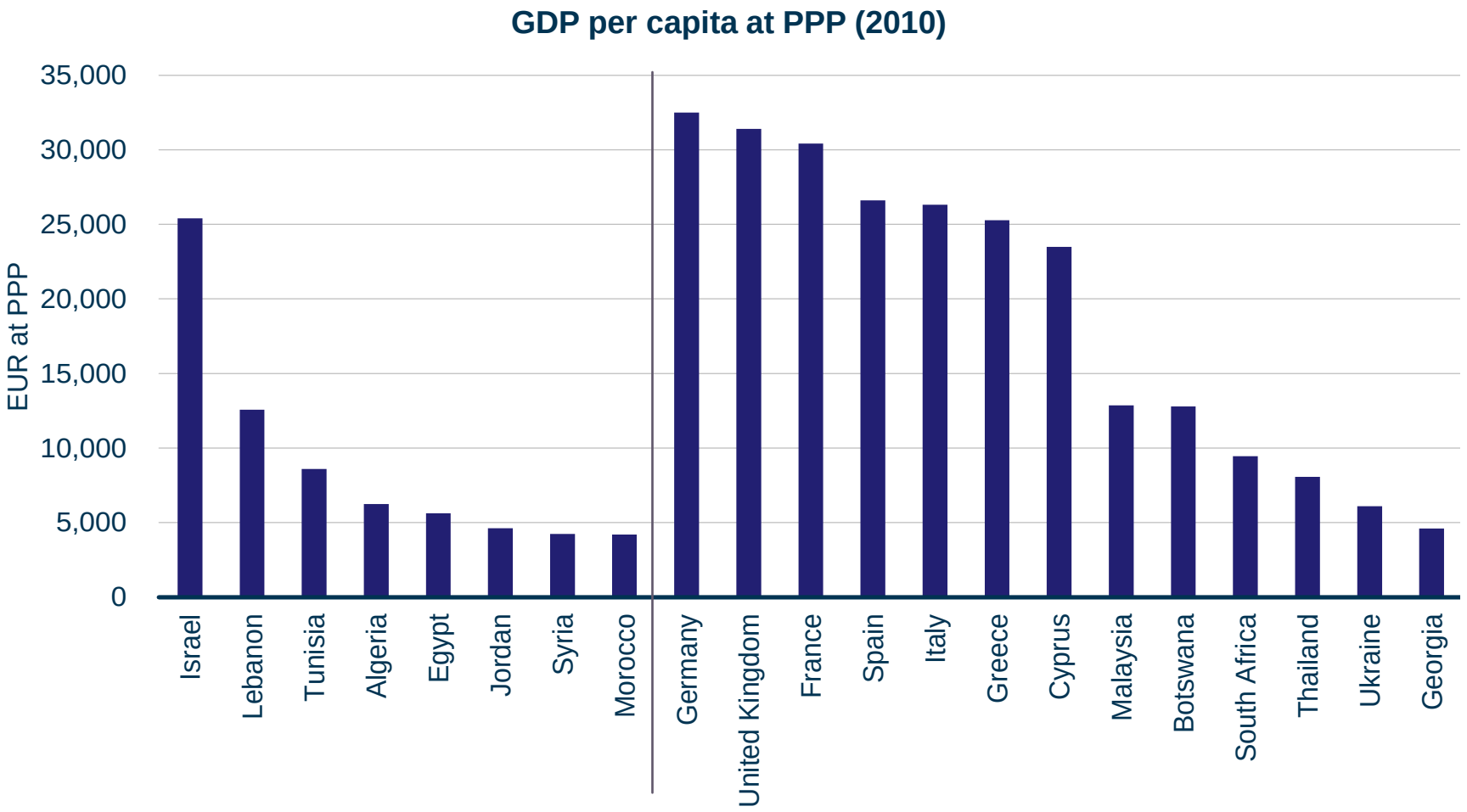
Demand for broadband is driven by wealth



Source Euromonitor

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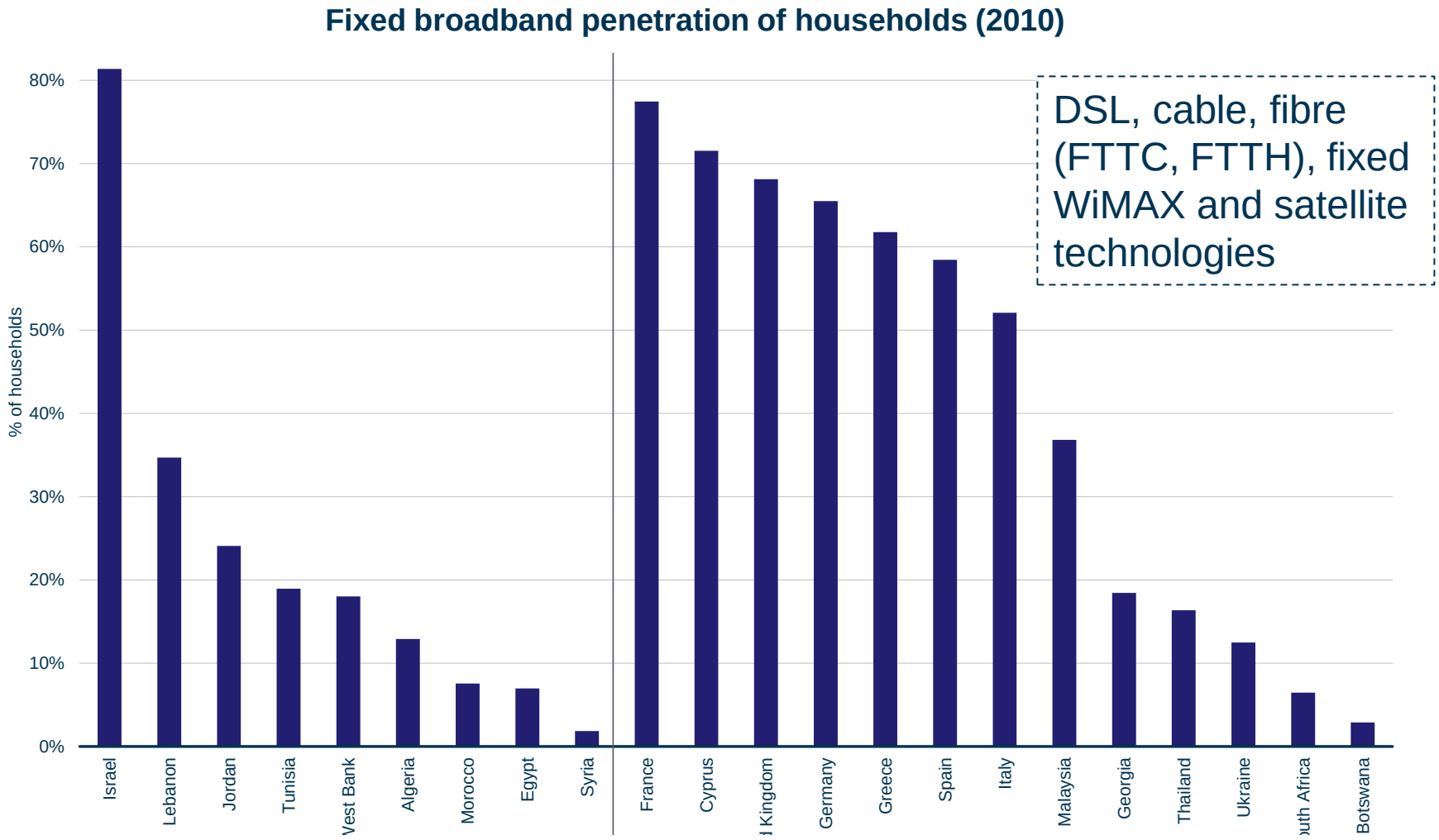
Fixed broadband is rare in the region …



Source: TeleGeography, Euromonitor

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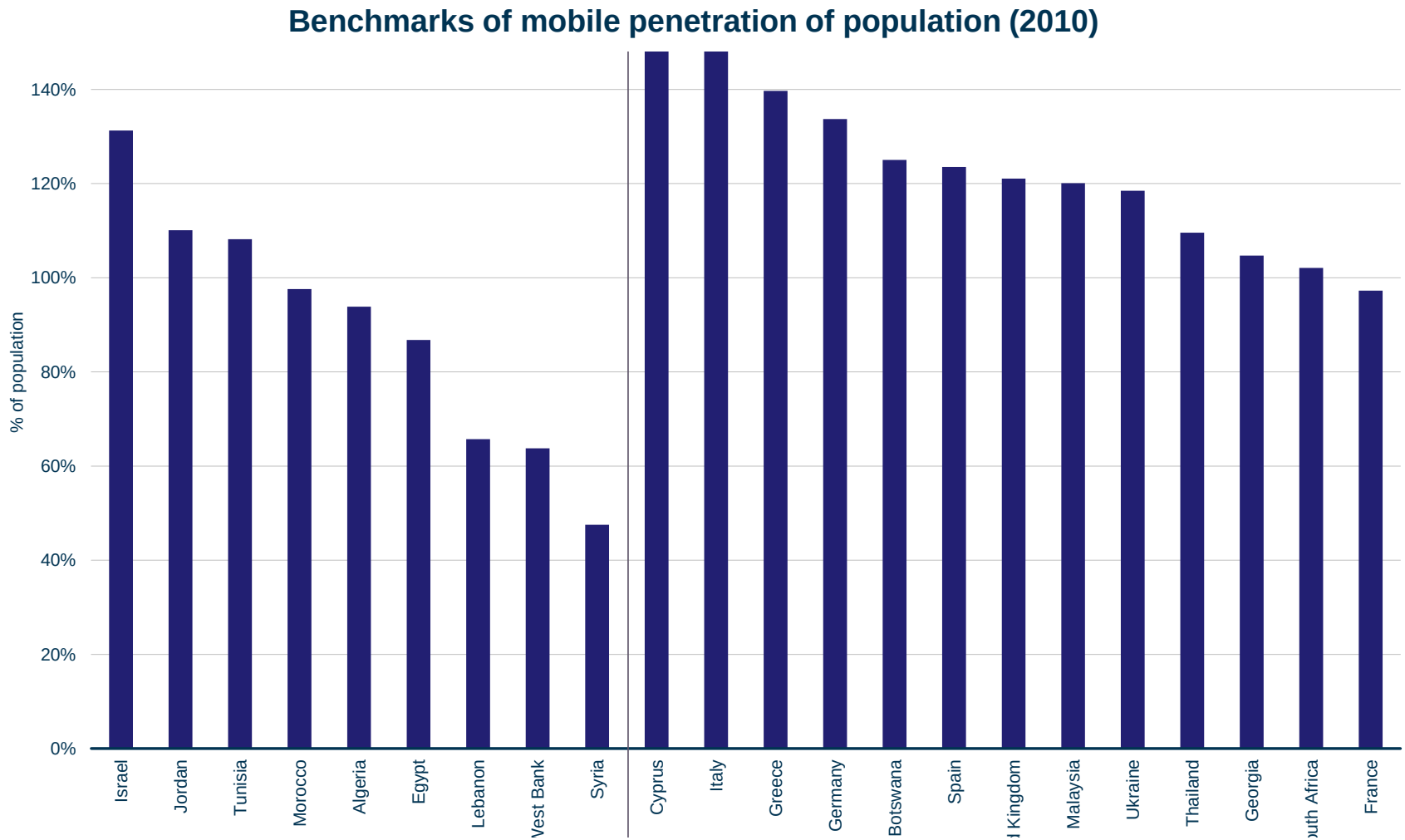
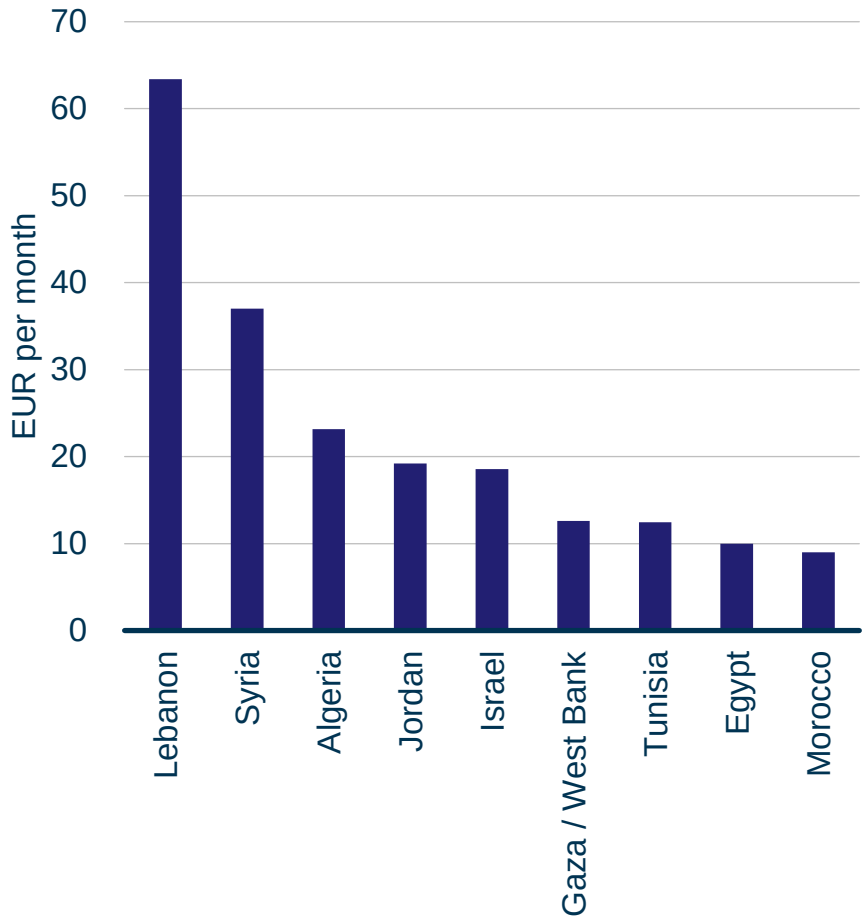
… but mobile networks reach most people

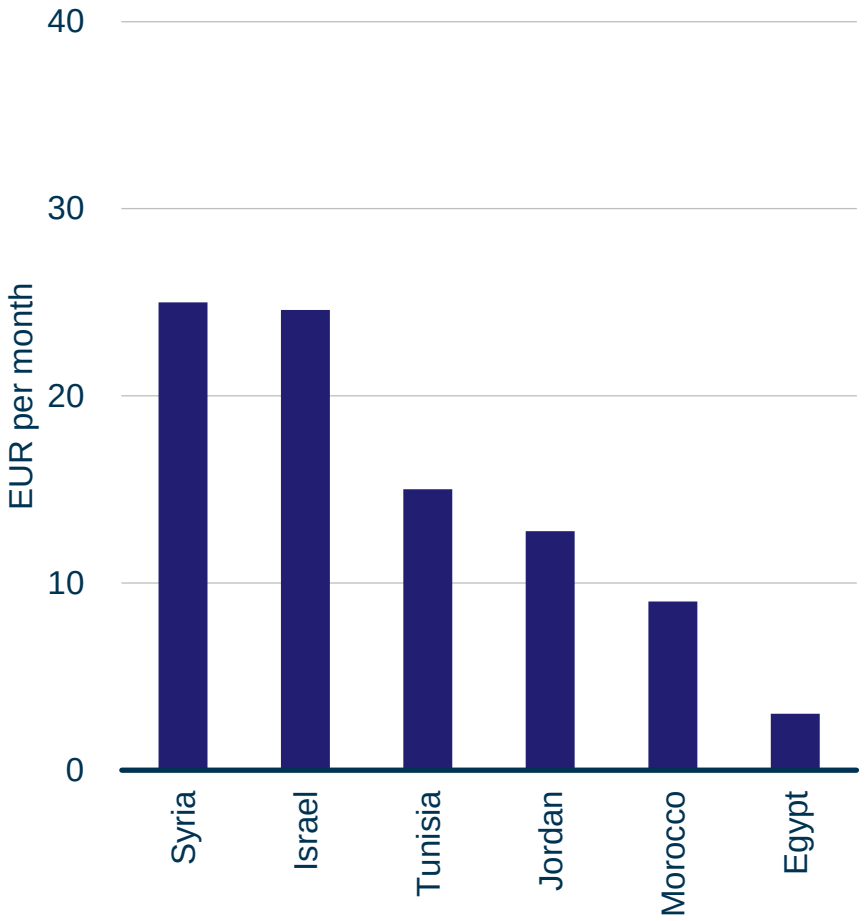


Prices are a lead indicator for take-up

Prices for fixed broadband offers of up to 1Mbit/s



Prices for the cheapest mobile broadband offers



All in 2011 (mid-year)

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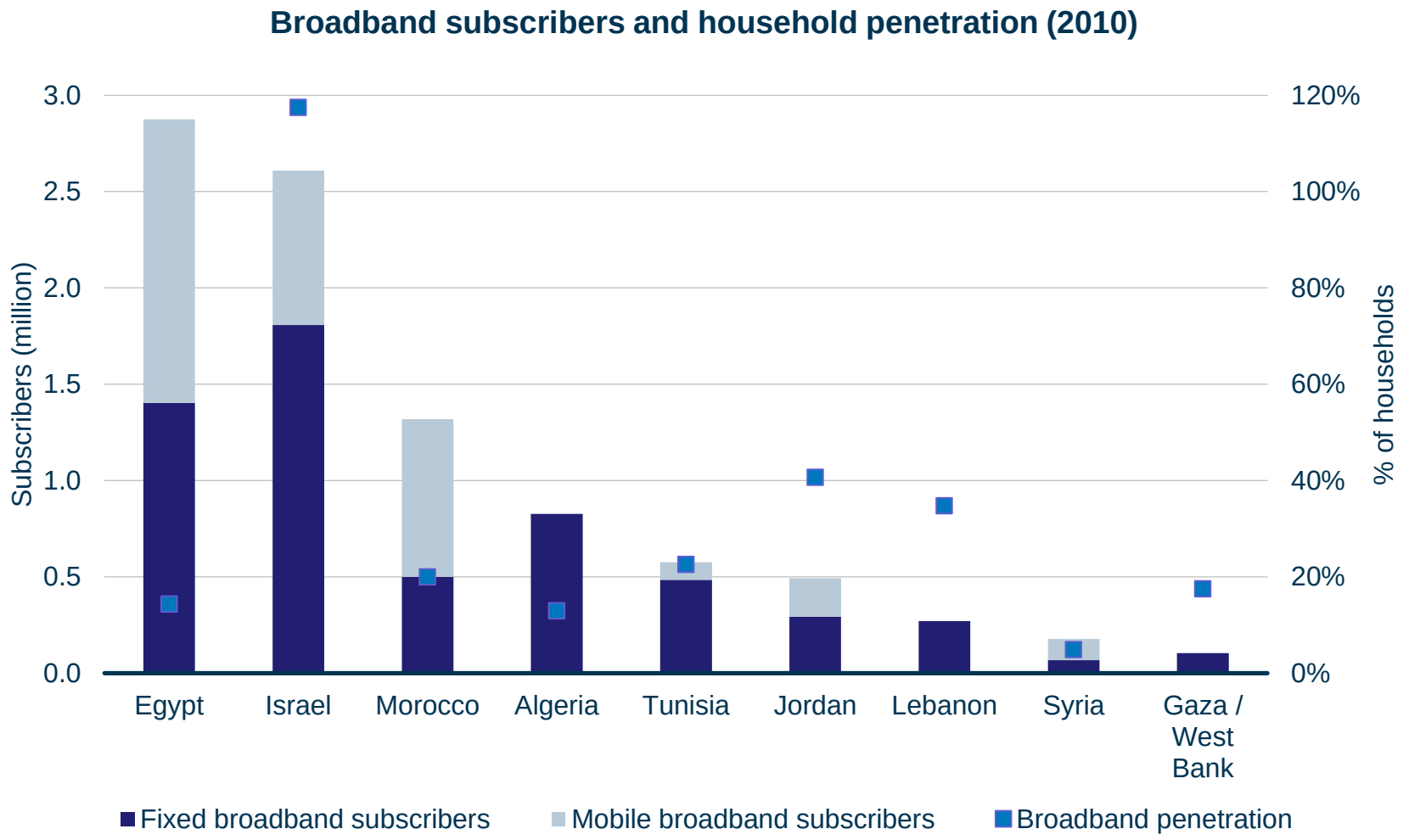
Total broadband penetration is still too low



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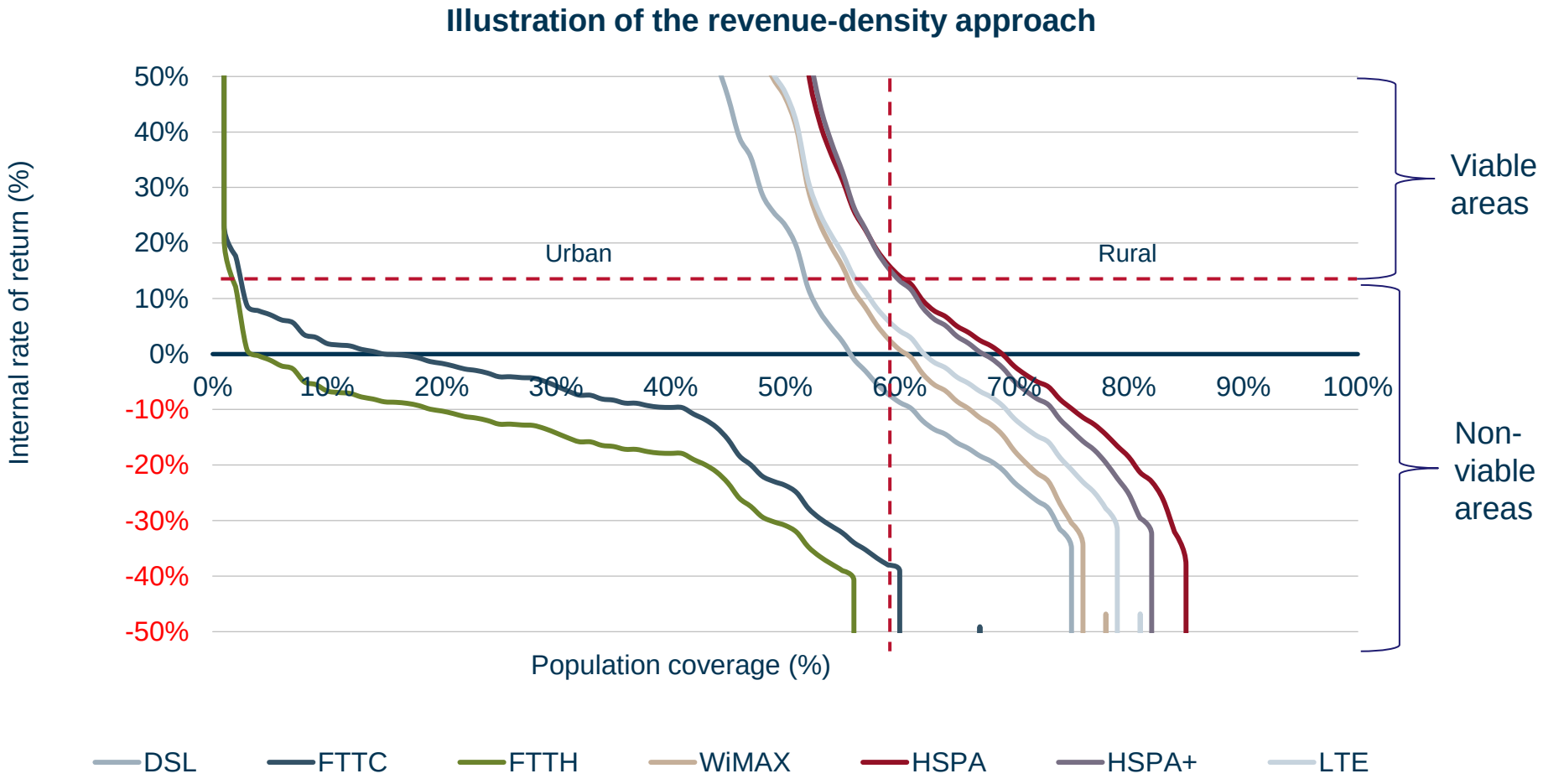
Public and private players can leverage different ICT technologies to offer broadband

Technology	Features
Fibre-optic cable	Highest capacity available, and highest cost of deployment; main choice for backhaul and core networks
Copper-based DSL	Much lower bandwidth than fibre; most practical where copper networks exist
Fixed wireless	Cost-effective widespread population coverage; HSPA+, LTE and WiMAX can offer peak speeds similar to DSL
Mobile broadband	Same economics as fixed wireless networks, but lower capacity, aimed at smaller devices; most practical where mobile networks already exist
Satellite broadband	Offers ubiquitous services; very substantial investment, but wide geographical coverage (sharing)

These technologies have different economics



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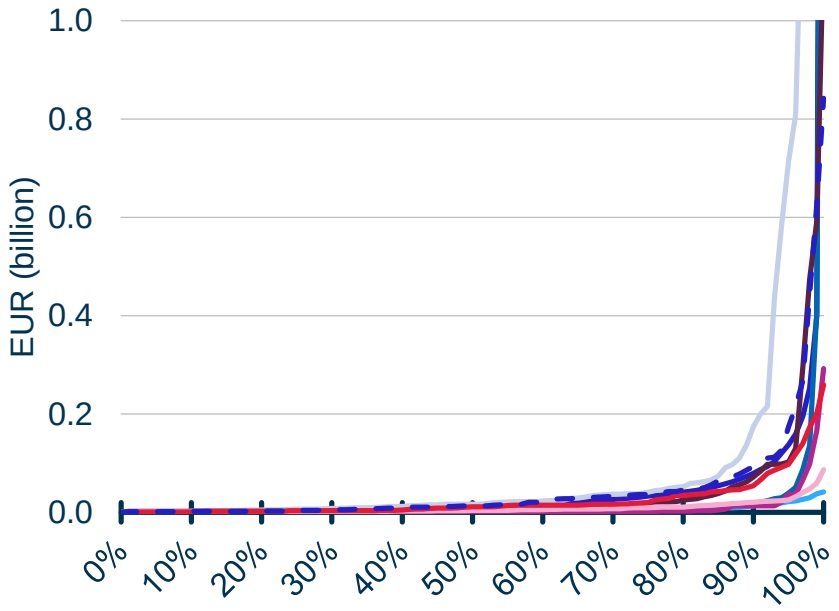
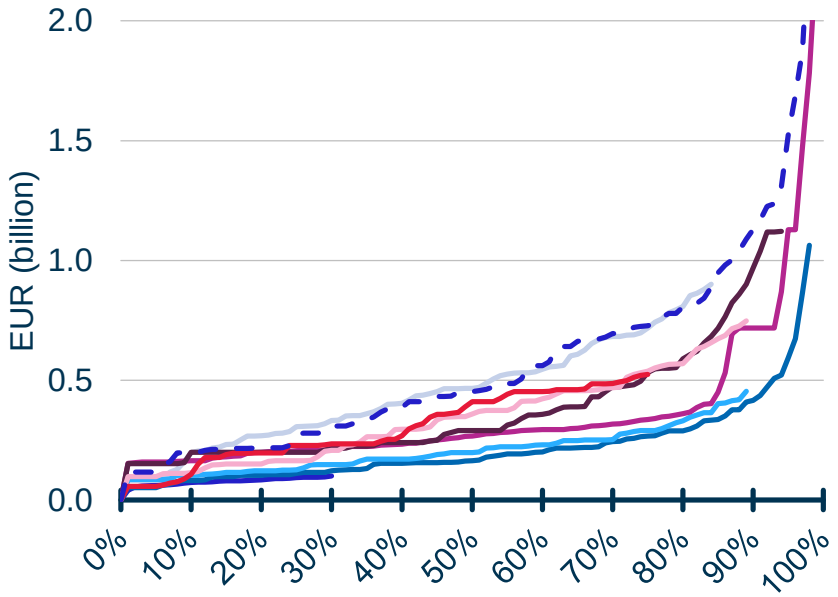
Fixed and mobile broadband costs vary (different outcomes and services)

Evolution of total coverage costs for LTE



Evolution of total coverage costs for FTTC



ICT indicators should include supply-side metrics, such as the total cost of ownership of specific technologies

Source: Analysys Mason

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Not one technology, but a combination

- The best overall solution will usually combine several technologies, involving a trade-off of cost, performance and reach that is considered appropriate for each context
- The most suitable mix depends on
  - the economics of the technologies being considered
  - the geography and population of the country concerned
  - the services to be provided to different users and prices
  - the objectives of the country and the budget available
- Governments and investors need ICT indicators to make these decisions

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Conclusions from Part I

- A sound national broadband strategy will
  - be based on the local context (i.e. some key ICT indicators)
  - leverage specific strengths of ICT technologies
  - not be the same as strategies in other countries, but unique
  - have clear objectives, ambitions and budget

... and still to come in Part II (this afternoon)

- How to build a successful national broadband strategy
  - roadmap and approach
  - outline of the national broadband strategy document

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