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GOVERNMENTS IN THE TELCO BUSINESS: PRUDENTIAL INVESTORS OR BUREAUCRATIC INTRUDERS?

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“If it moves, tax it.
If it still moves, regulate it.
If it stops moving, subsidise it.”

Attributed to former United States President Ronald Reagan





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GOVERNMENT BROADBAND INVESTMENT

Thirty years of telecommunications privatisation and market liberalisation

- pursuing the competition ‘holy grail’

But more regulatory intervention than ever before

Unprecedented advances in technological innovation

- falling costs – infrastructure and software
- multiple platforms: fibre-optic cable, wireless, mobile, satellite
- content convergence to a single common digital format

Yet governments back investing in the telco (FTTH) business

- Australia and NZ
- Korea and the Netherlands



WHY TURN BACK THE INVESTMENT CLOCK THIRTY YEARS?

No substantive justification in policy documents

Three plausible explanations:

1. The 'conventional wisdom' of 'natural monopoly'
 - there will only be one FTTH network
 - inherent 'market failure': government must build and regulate
2. 'Regulatory failure'
 - increasingly intrusive access regulation and separation directives have chilled private investment incentives
 - only governments prepared to undertake financial risks of building a truly open access network
3. Non-economic reasons
 - differentiated populist political positioning
 - 'aspirational' objectives



**ARE ANY OF THESE JUSTIFICATIONS
PLAUSIBLE?**



1. 'CONVENTIONAL WISDOM'

The (im)plausibility of 'only one network' (Hellwig, 2008; Levin, 2010)

Technological innovation in mobile, wireless

- growth engine is mobile data usage, despite widespread availability of fast copper-based networks

The end of application/network specificity

- application access, not network typology, will be paramount
- FTTH a complement, not substitute
- except for very high-definition digital entertainment apps
 - cost-effective close substitutes already available???

Flawed geographic thinking given decreasing real costs

- Australia and NZ amongst most urbanised OECD countries
- why is there no widespread fixed access duplication (i.e. cable tv) already in urban areas?



2. 'REGULATORY FAILURE'

Theoretically and empirically substantiated (Roller & Grajek, 2009)

Why not change the regulatory regime to encourage private investment?

- 'regulatory holiday' – proposed for Germany (Gans & King, 2004)
- no broadband access regulation - USA
- regulatory technological neutrality – Finland
- precisely how most telephony networks were developed circa 1880
 - Government-owned networks lagged privately owned ones in deployment (both rural and urban) and pricing (Wallsten, 2001)

Few impediments to inter-platform competition from unregulated (e.g. cable, mobile, wireless) networks

Politically problematic

- 'skew' in existing investment patterns
- given long legacy of access regulation



3. NON-ECONOMIC CONSIDERATIONS

No credible empirical evidence yet that investment in faster broadband will generate positive returns

- BB and above average economic growth correlated in areas that were already growing above national averages (USA - Greenstein, 2009)
- firms using BB more productive than paired comparators without broadband, but no higher productivity levels observed in firms accessing faster (cable) BB (NZ - Grimes, Ren & Stevens, 2009)
- marginal vs average benefit given wide current BB use
- where will the benefits accrue? (Grimes & Howell, 2010)

Optimal risk management strategy is to wait for more information

But other countries' governments are investing

- “we can't afford to be left behind if it does ultimately prove to be an important differentiator”



THE (INEVITABLE) CHALLENGES

1. Competition implications

- the new networks will not operate in a competitive vacuum
- relationship to existing network provision
- what form of competition will be supported?

2. Other policy implications

- ubiquitous vs targeted deployment
- open vs closed access regimes
- vertically separate or integrated firms
- what other regulation/intervention will be required?



COMPETITION IMPLICATIONS

Position of existing network providers

- will NGBN network compete with them or supersede them?

Compete

- hardly a ‘level playing field’
 - stranded assets (incumbent and unbundling entrants)
 - compensation?
- distorted network investment incentives
 - mobile, wireless face significant disadvantages against subsidised fixed network

Supersede

- again a compensation issue
- strategic challenges – who (amongst existing providers) will lead the deployment?
- ongoing regulatory involvement



UBIQUITY VS TARGETING

Where to deploy first?

- crowding out of private investment in urban areas
- overinvestment/technology skew in some rural areas?

Universal service obligations

- what is the objective
 - maximum deployment and uptake as soon as possible?
 - equalised prices, regardless of differentiated demand?
 - consumer or corporate universality?
 - geographic or market segment differentiation?
- how to fund?

Access to a technology or an access typology?

- application development crowded out by technology investment?



OPEN VS CLOSED ACCESS REGIMES

‘Open access’ ‘unnatural’ when private investor seeks to recover a return on investment

Limits ability to use bundling of applications and technology to

- induce uptake
- recover high fixed and sunk costs

Counterindicative to wide deployment and uptake objectives

Begs question of real target for universal pricing

- consumers or competitors?



VERTICAL INTEGRATION VS STRUCTURAL SEPARATION

Structural separation (network/retail) inimical to alignment of incentives to invest in cohesive infrastructure

- risk-free retail entry
 - ⇒ short term investment horizon
 - ⇒ few incentives for long-term contracts
 - ⇒ real risk that NGBN will become stranded by retailers if new technology comes along

High regulatory costs

- as long as partial private investment exists
- few incentives for accurate forecasts

Risks overinvestment in retail innovation

- at expense of network, application innovation



REGULATORY INTERVENTION

Cost-based? Or other forms?

What primary objective?

- welfare maximisation or promotion of competition
'on the network?

What types of tariffs?

- connection or usage-based?

Will price discrimination be permitted?

- on what bases?



AN ARTICLE OF FAITH?

<http://www.trinitywallstreet.org/webcasts/videos/browse/worship>



**APPLICATIONS, RATHER THAN
INFRASTRUCTURES, HOLD THE KEY**

THANK YOU



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