

Communications markets & regulation – all change

Brian Williamson

Competition Matters 2015, Wellington, New Zealand

23 July 2015

Outline

- Objectives
- Market developments
- Regulation
- Outcomes
- Conclusions

Objectives

They differ

Europe

- Competition & investment objectives
- Technology neutral (in principle)
- 'State aid' rules limit state funding
- European targets, by 2020
 - 30 Mbps for all
 - 50% take-up of 100 Mbps+
 - 1200 MHz for mobile

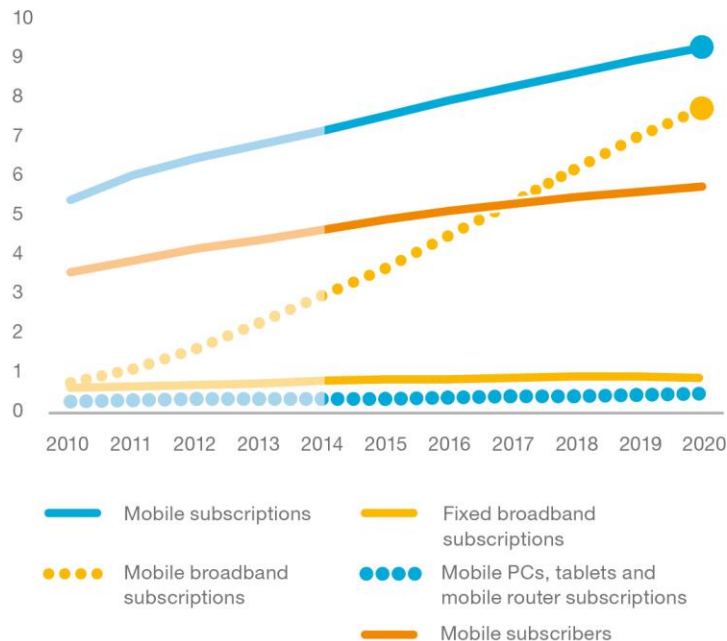
Australasia

- Desire for fibre, government directed market
 - National FTTH plans
 - Substantial funding
 - Separation
- Shift in Australia to mixed technology

Market developments

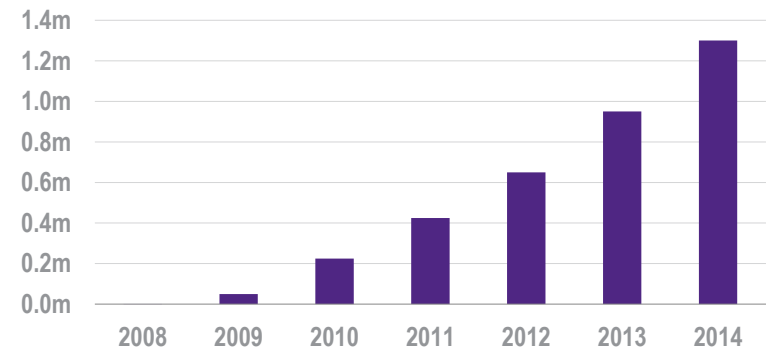
Mobile data & apps (including OTT)

Subscriptions/lines, subscribers (billion)



Apps available

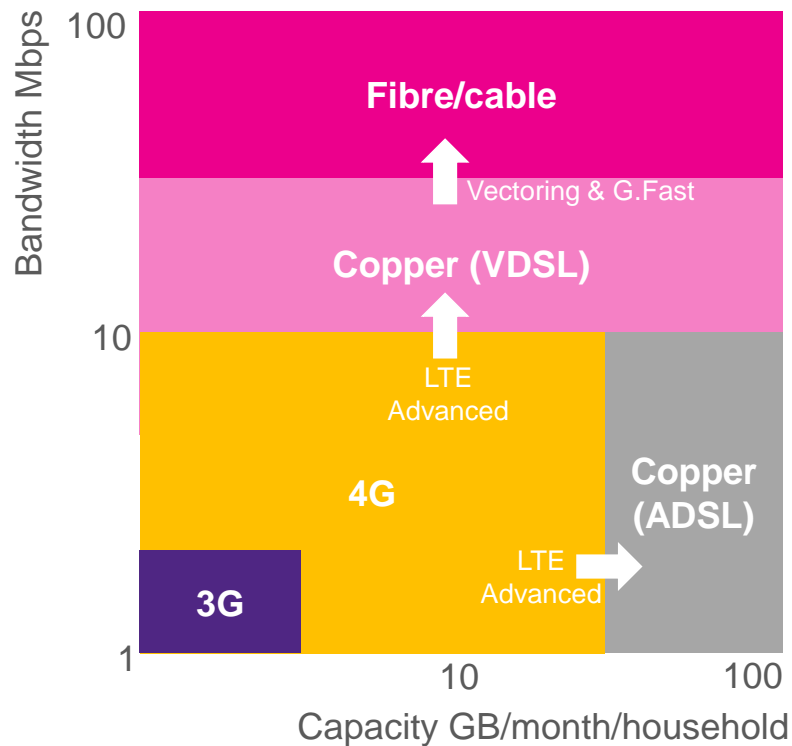
Midyear estimates



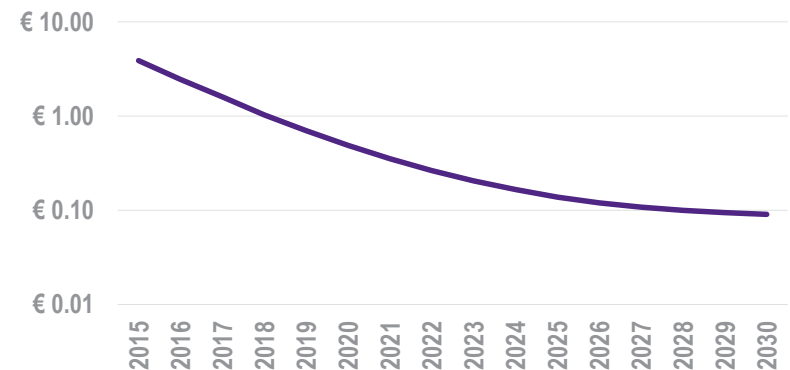
Source: Plum Consulting

- Including OTT communications apps
- Driving search for bandwidth efficiency

More access competition, but bottlenecks remain



Mobile data cost/GB



Source: Plum Consulting Bootstrap Model

If mobile unit costs fall faster than fixed traffic growth, then increased substitution is likely

Implications

- Separation of applications & networks via the market (OTT)
 - Applications competitive independent of access regulation
 - Applications global rather than national
 - Counter to bundling e.g. WhatsApp & Netflix unbundle communications & video
- Rise of mobile devices, data & apps
 - Spurring development of efficient apps – may dampen demand for FTTH
 - Will substitute for fixed for those who find speed & data limits adequate

Regulation – a product of
objectives, beliefs & evidence

UK – 2005 & 2009

- 2005 Ofcom Strategic Review – focus on sustaining competition
 - BT undertakings - equivalence of inputs supported by functional separation to address discrimination
 - Price of copper local loops lowered
 - Review did not address next generation access
- 2007 Anchor product concept floated
<http://www.broadbanduk.org/wp-content/uploads/2012/08/williamson - bsg from pipe dreams to reality.pdf>
- 2009 Ofcom propose anchor product approach - pricing flexibility for fibre
 - BT CEO Ian Livingston responded *“Today’s announcement gives us the green light to push ahead with our £1.5bn superfast investment plans to reach at least 40% of UK households by 2012”*
 - FTTC extended beyond 50% (cable), Virgin now extending cable footprint
- 2014 Ofcom review *“We will not regulate the level of VULA prices during the next market review period, allowing BT to retain pricing flexibility on NGA pricing”*

Transition & anchor product concept

- Motivated by desire to
 - Encourage efficient investment (Maximise $\Delta\text{value} - \Delta\text{cost}$)
 - Protect consumers during transition where there is market power
- Investment is not yes/no decision, but choice across set of options
 - Timing, now or later?
 - Technology ADSL vs. VDSL vs. FTTH vs. wireless only?
- Cost orientation (including risk adjusted WACC)
 - Does not place weight on value & cannot motivate efficient investment
 - May also preclude efficient price differentiation & experimentation
- Regulate at most one - not both - services during transition
 - For fibre - pricing freedom with copper anchor (or virtual fibre anchor product)
 - For “All-IP” transition reverse concept & price regulate only new services?

Europe pre 2013

- Thinking conditioned by legacy – regulating what is already there
- Cost orientation & unbundling of copper loop
- Ladder of investment concept – regulation of multiple rungs of ladder
- September 2010 EC recommendation on next generation access
 - Cost orientation for fibre
 - Discussion of explicit risk adjustment to WACC

The great European copper pricing debate 2011-12

- Some entrants argued that lowering the copper price would encourage fibre investment
 - If copper is less profitable then investors will invest in fibre...
- However
 - Investors, rather than management, have options in other sectors & regions
 - Lower copper price discourages customer migration
 - If you lower the price of copper can you be trusted once fibre is sunk?
- Why did entrants argue for lower copper price?

http://www.plumconsulting.co.uk/pdfs/Plum_Mar2012_If_you_want_fibre_should_you_lower_the_price_of_copper.pdf

Europe post 2013

Copper

- Copper price 'stability' - convergence on €8-10 per month in real terms across Europe

Fibre

- Fibre pricing flexibility (anchor concept); or co-investment
- Greater emphasis on virtual access versus unbundled access
 - Pragmatic given fibre network
 - Speed-price differentiation incompatible with unbundling

Further narrowing of regulation

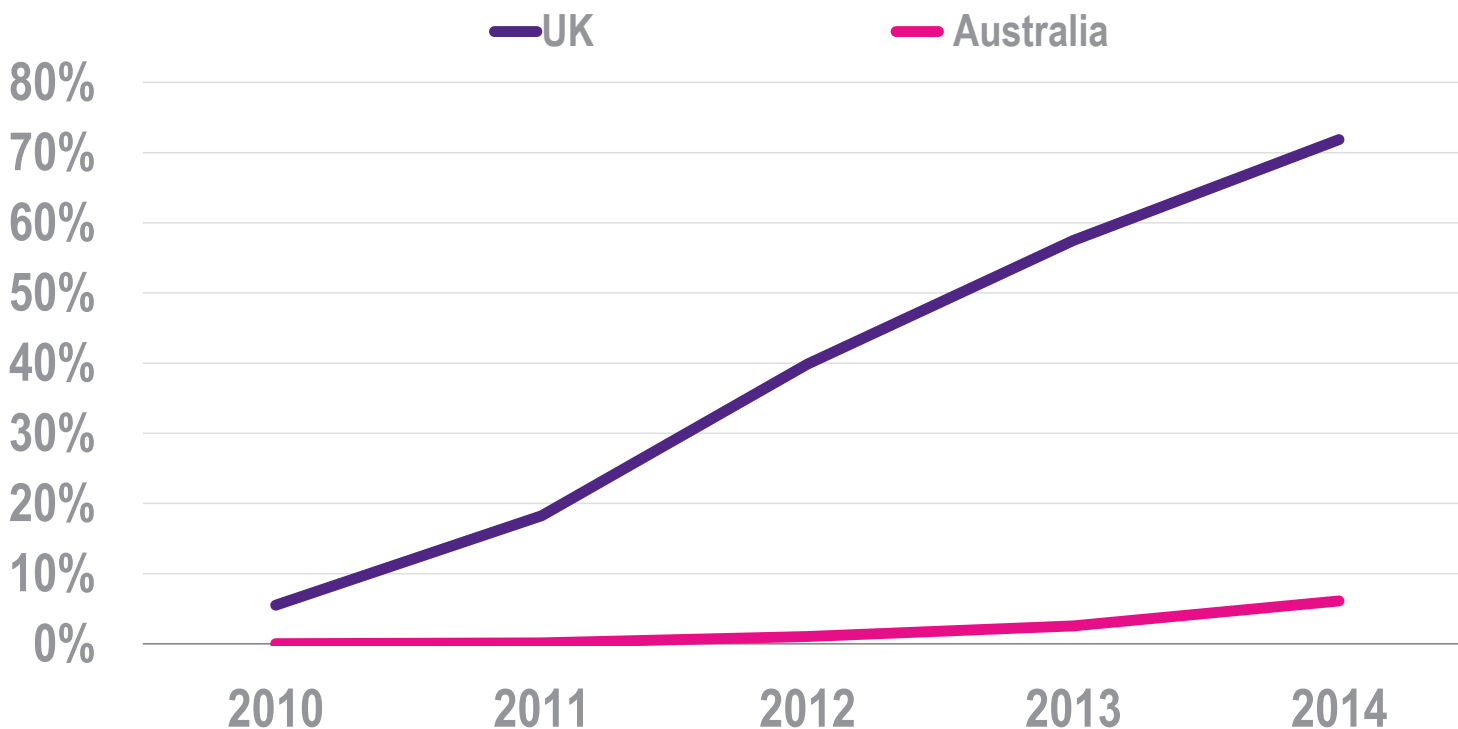
- October 2014 List of 'relevant markets' susceptible to regulation
 - Voice origination removed
 - Reduced to access & termination

Outcomes

Availability

Fibre deployment in Australia and the UK

Premises serviceable, % of total premises. Midyear estimates

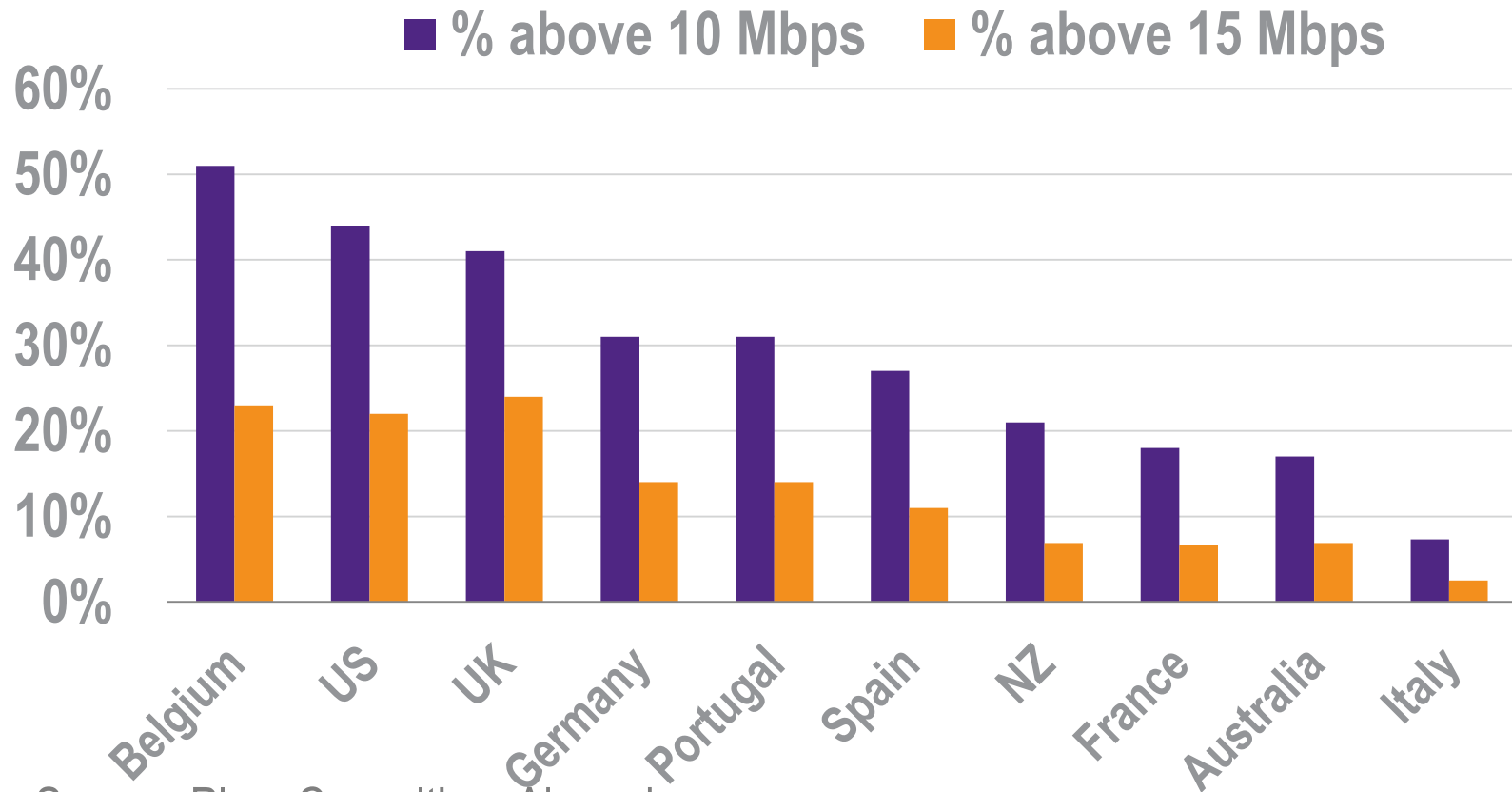


Source: Plum Consulting, BT, NBN Co

Speed

% of connections above 10 and 15 Mbps

Q1 2015

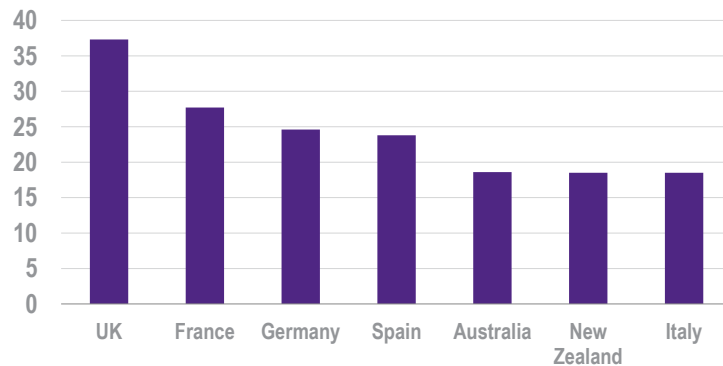


Source: Plum Consulting, Akamai

Internet activity

Average hours spent online per month

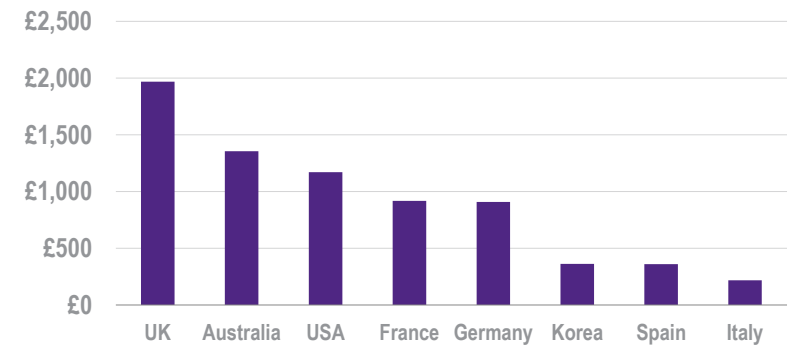
2012



Source: Plum Consulting, comScore MMX

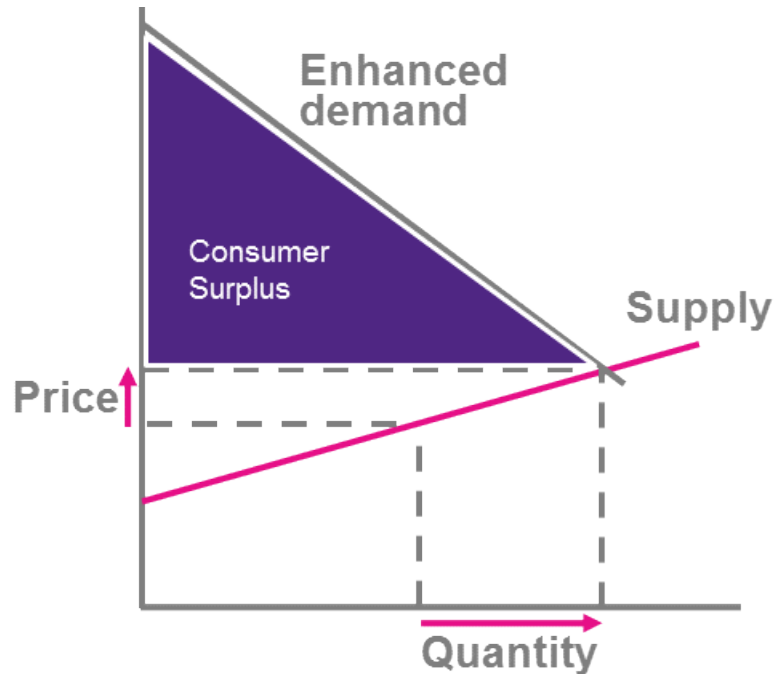
Consumer ecommerce

£ per capita, 2013



Source: Plum Consulting, Ofcom ICMR

Pricing may not be a good metric



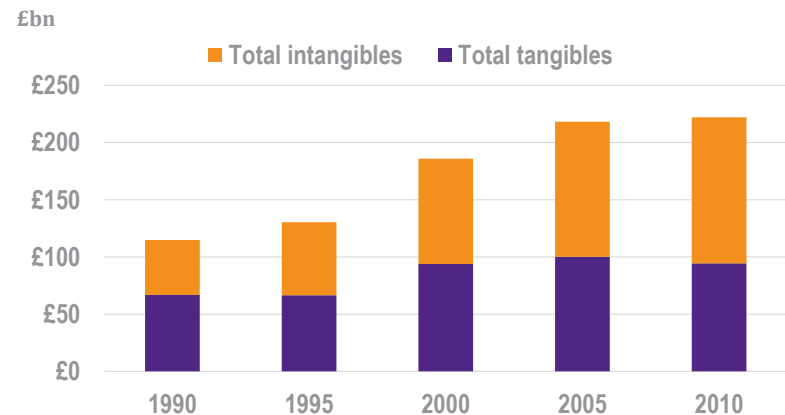
- An outward shift in the demand curve may involve higher prices & higher welfare
- Examples include
 - Fast versus basic broadband
 - Smart versus basic phone
- Narrow focus on price outcomes not necessarily aligned with consumer interest

Investment may not be a good metric

- Investment associated with better outcomes, but linkage is not simple
 - VDSL vs. G.Fast vs. FTTH
- Investment is an input (a cost)
- Intangible investment (software etc.) becoming more important
 - See chart for economy overall
 - Particularly in telecoms: *“The most intangible-intensive industry is information & communication (intangible investment as a proportion of value added = 19%)”.*

http://www.nesta.org.uk/sites/default/files/1407_innovation_index_2014.pdf

Tangible and intangible investment, UK

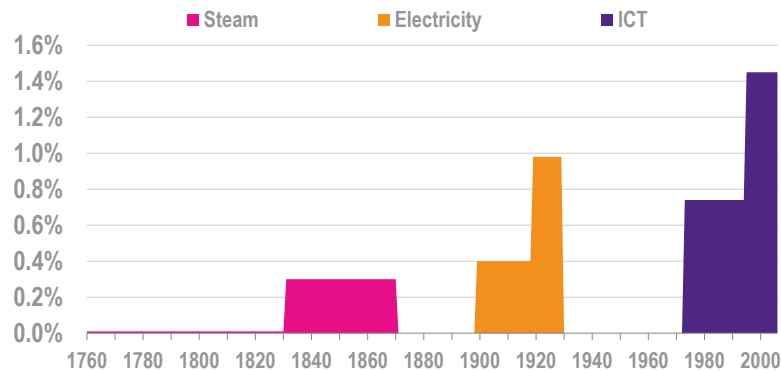


Source: Plum Consulting, Goodridge et al, 2014. "UK Innovation Index 2014"

At a higher level – productivity & growth

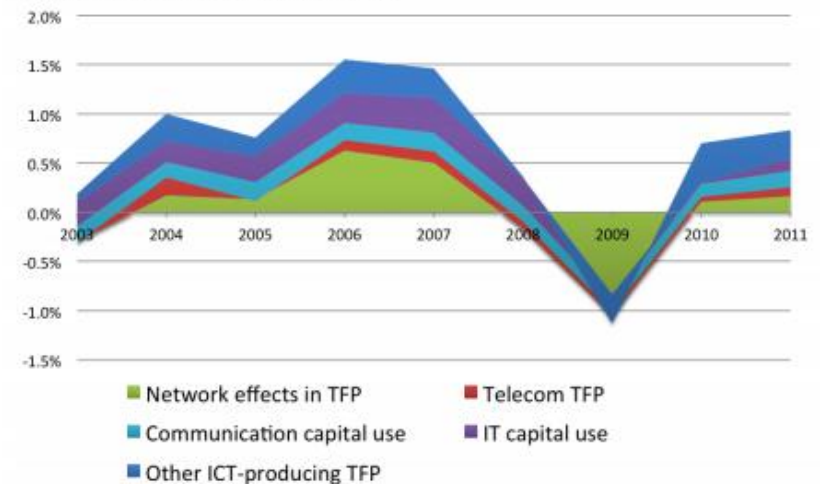
GPT contribution to labour productivity growth

% per year



Source: Plum Consulting, Crafts (2011)

Percentage point contribution to market sector real GVA growth, 8 EU countries



Corrado & Jäger. December 2014. “Communication Networks, ICT and Productivity Growth in Europe”

Conclusions

Conclusions

- Objectives – they differ markedly
 - Need to take this into account when comparing outcomes & regulation
 - Deserve more attention – tendency to lose sight of objectives
- Market - pivot to mobile & OTT post 2008
 - Cautionary tale regarding extrapolation of past trends
 - Narrow focus of *ex ante* regulation to access bottlenecks
- Regulation - in a state of flux; wasn't 'designed' for transition
 - Have regard to stability & commitment
 - Don't over-regulate transitions to fibre & "All-IP"
 - Allow legacy retirement & price flexibility (consider anchor approach)
- Outcomes – much more care should be taken over metrics
- Bigger picture – revise 'non-digital' rules throughout economy to allow transformation using communications & software