



Ökonomische Aspekte der Digitalen Agenda

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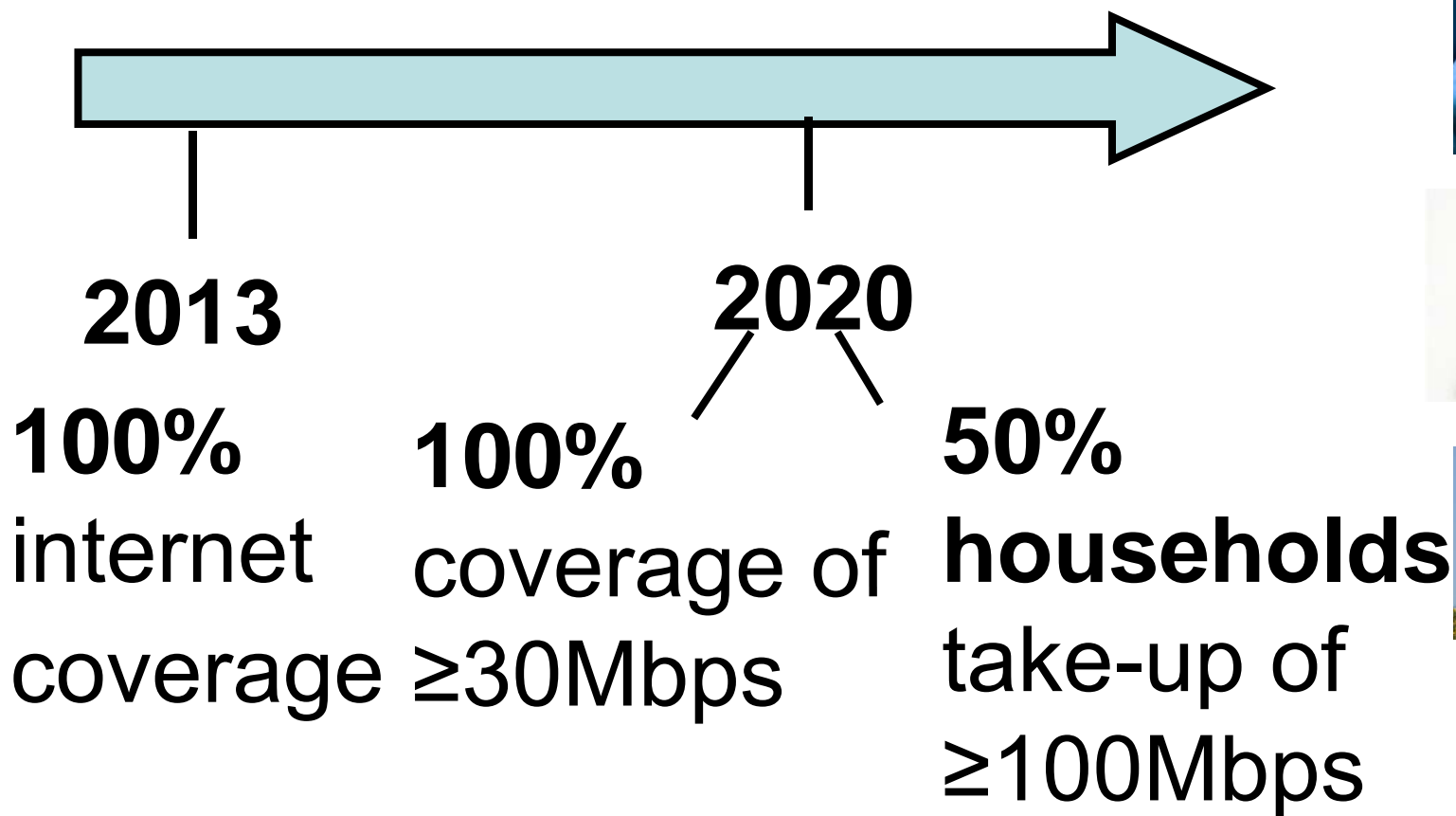
13. Salzburger Telekom-Forum:

Ultraschnelles Internet – Erreichen wir die Ziele der Digitalen Agenda?

Salzburg, 27. August 2012



Internet for all





EUROPÄISCHE KOMMISSION

MEMO

Brüssel, den 12. Juli 2012

Ein attraktiveres Umfeld für Breitband-Investitionen schaffen – Erklärung von Vizepräsidentin Kroes

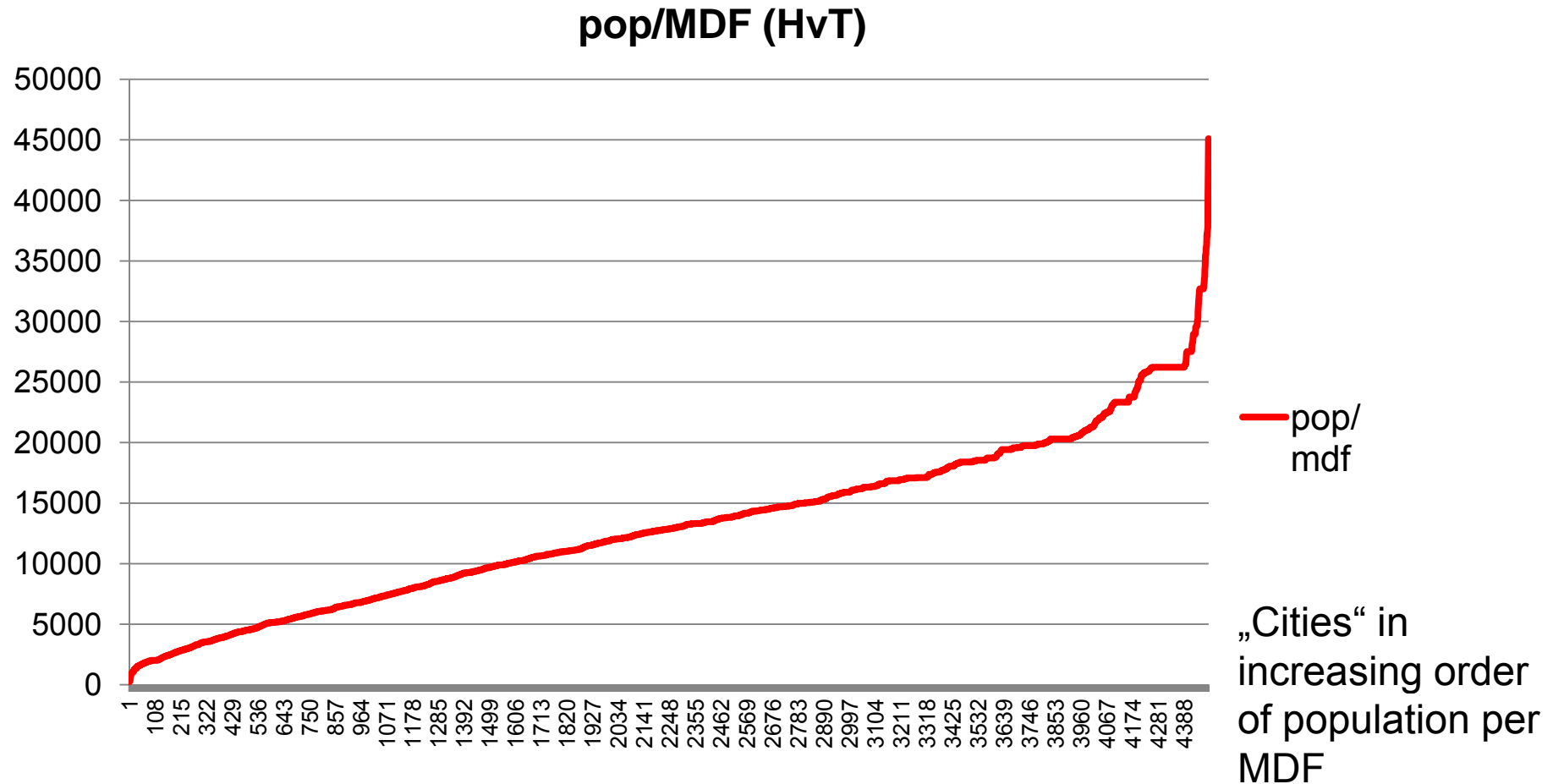
Investment risk and regulatory commitment

- EC NGA-recommendation, September 2010
- NRAs should estimate **investment risk**, inter alia, by taking into account the following factors of uncertainty: (i) **uncertainty relating to retail and wholesale demand**; (ii) uncertainty relating to the costs of deployment, civil engineering works and managerial execution; (iii) uncertainty relating to technological progress; (iv) uncertainty relating to market dynamics and the evolving competitive situation, such as the degree of infrastructure-based and/or cable competition; and (v) macroeconomic uncertainty. **These factors may change over time, in particular due to the progressive increase of retail and wholesale demand met. NRAs should therefore review the situation at regular intervals and adjust the risk premium over time, considering variations in the above factors.**

Impression

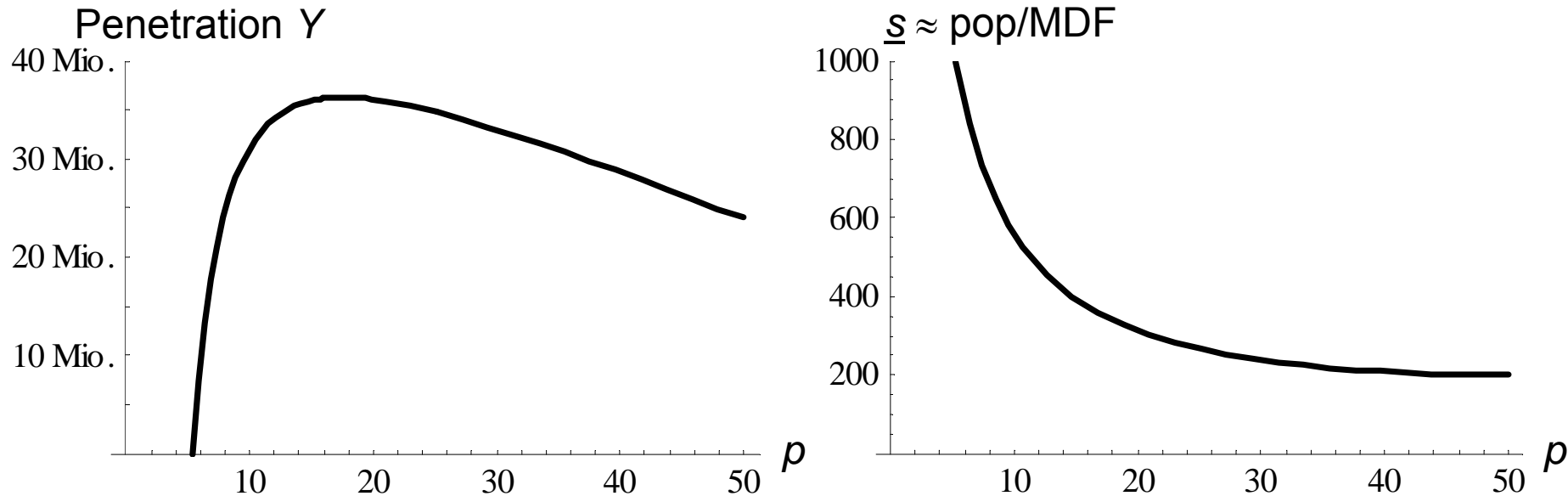
- ⇒ Regulators (Commission) more afraid of regulating too little rather than regulating too much! [Type I vs. Type II errors]
- Investment is at issue, not regulating an existing network
- ⇒ (Error) Costs of regulating too much are much higher than of regulating too little
- ⇒ (ex-post) competition policy available as safeguard
- Memo not very encouraging:
 - ⇒ non-discrimination (margin squeeze)
 - ⇒ *“When the right conditions are imposed by regulators (...), **and** where there is a significant competitive constraint (...), I propose that NRAs **need** not apply cost orientation **directly** to NGA wholesale access products.”*

Population per MDF in 2000 German “cities”



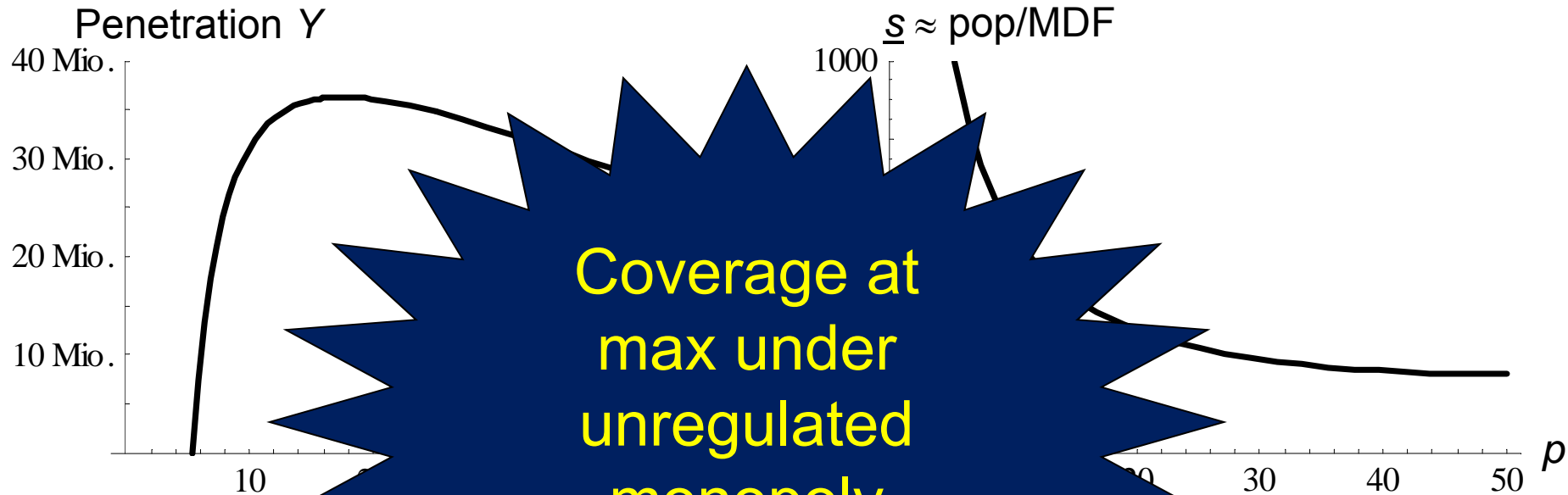
→ Population distributed rather unevenly across exchanges

Penetration and coverage as a function of price cap p



- Penetration initially increases with decreasing prices. However, as the price cap becomes very low, penetration eventually decreases.
 - ⇒ Price decrease increases demand in covered regions
 - ⇒ Monopolists invests less and coverage and number of potential consumers decreases

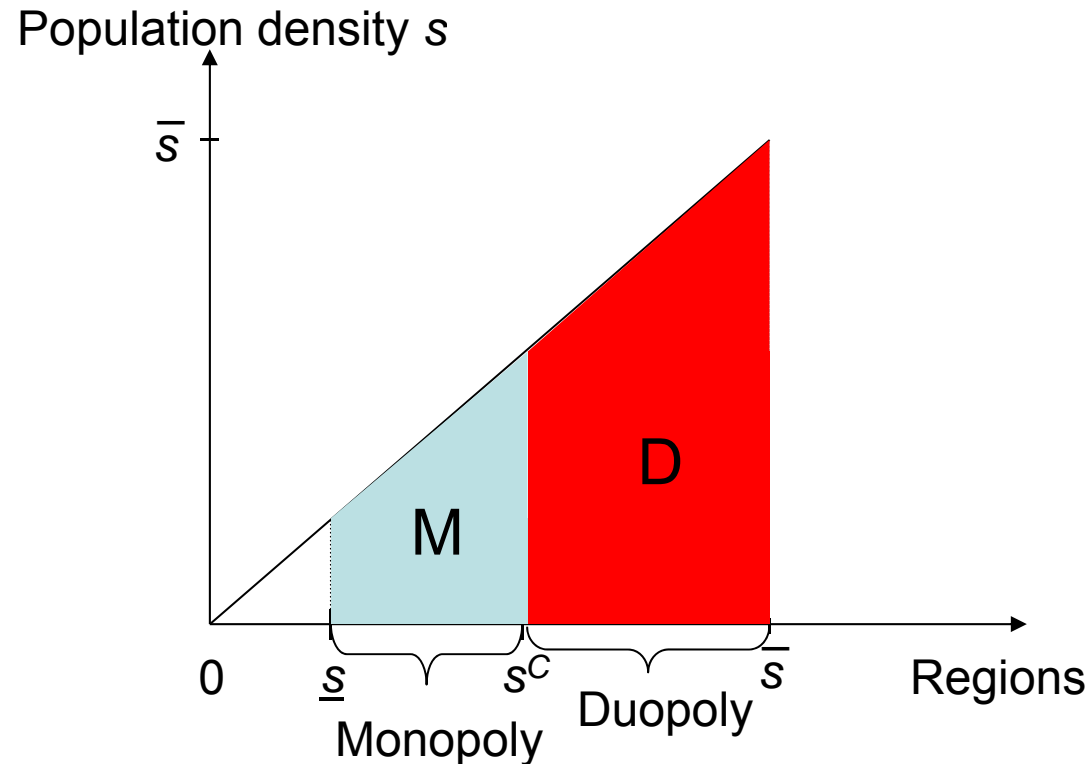
Penetration and coverage as a function of price cap p



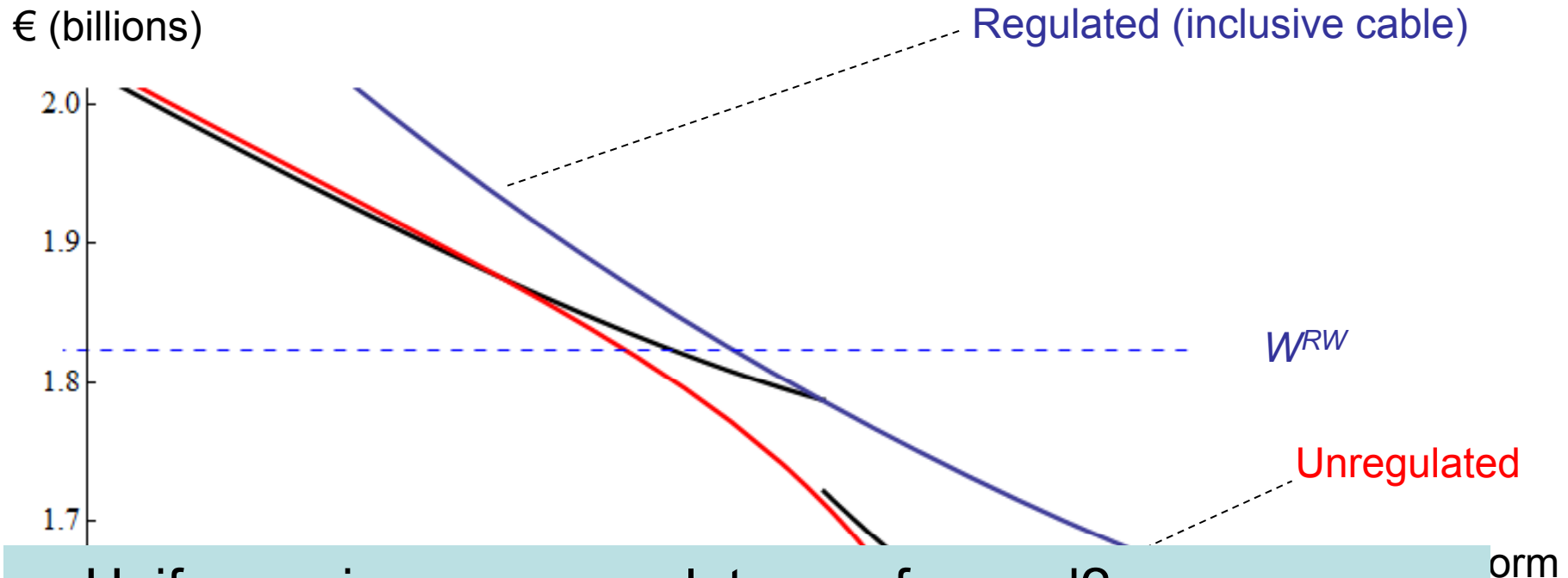
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Facilities-based competition with uneven population distribution

- Differentiated Bertrand model
- unregulated or uniform-pricing rule for incumbent

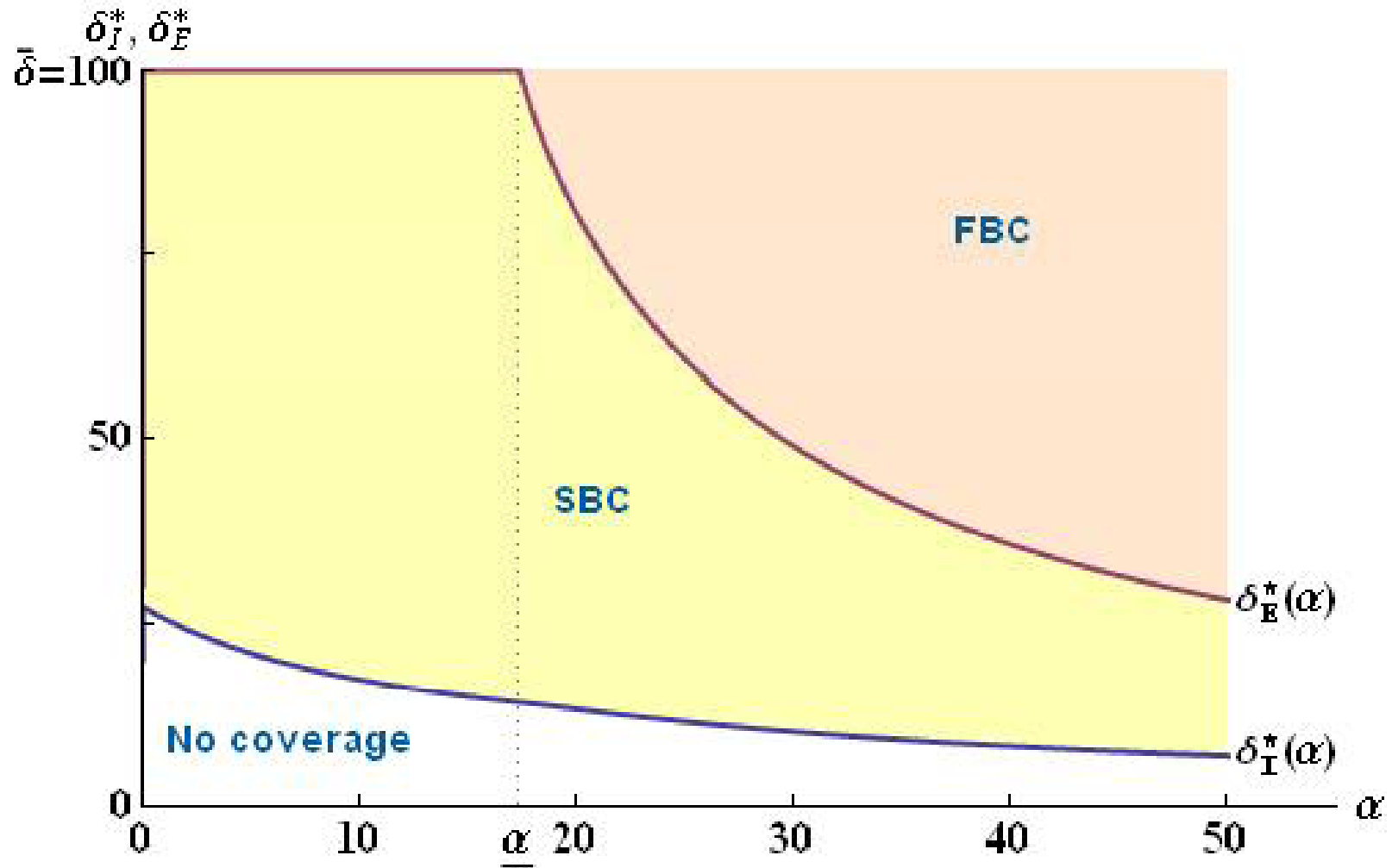


Welfare under facilities-based competition

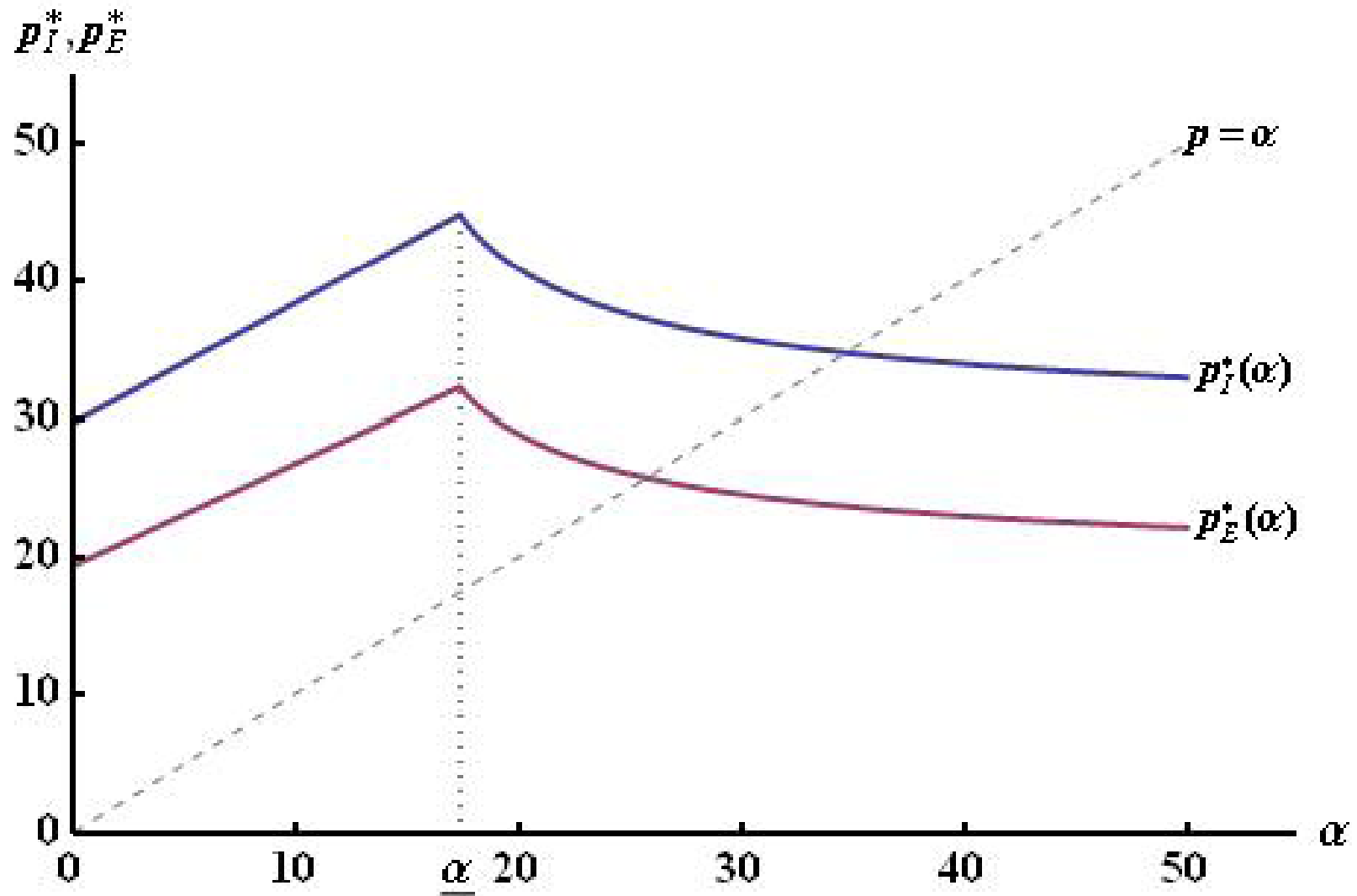


- ⇒ Uniform prices as a regulatory safeguard?
- ⇒ Differences in welfare are small.
- ⇒ Even regulation by an omniscient and benevolent regulator cannot improve much on the unregulated situation

Facilities-based vs. service-based competition as a function of the access charge

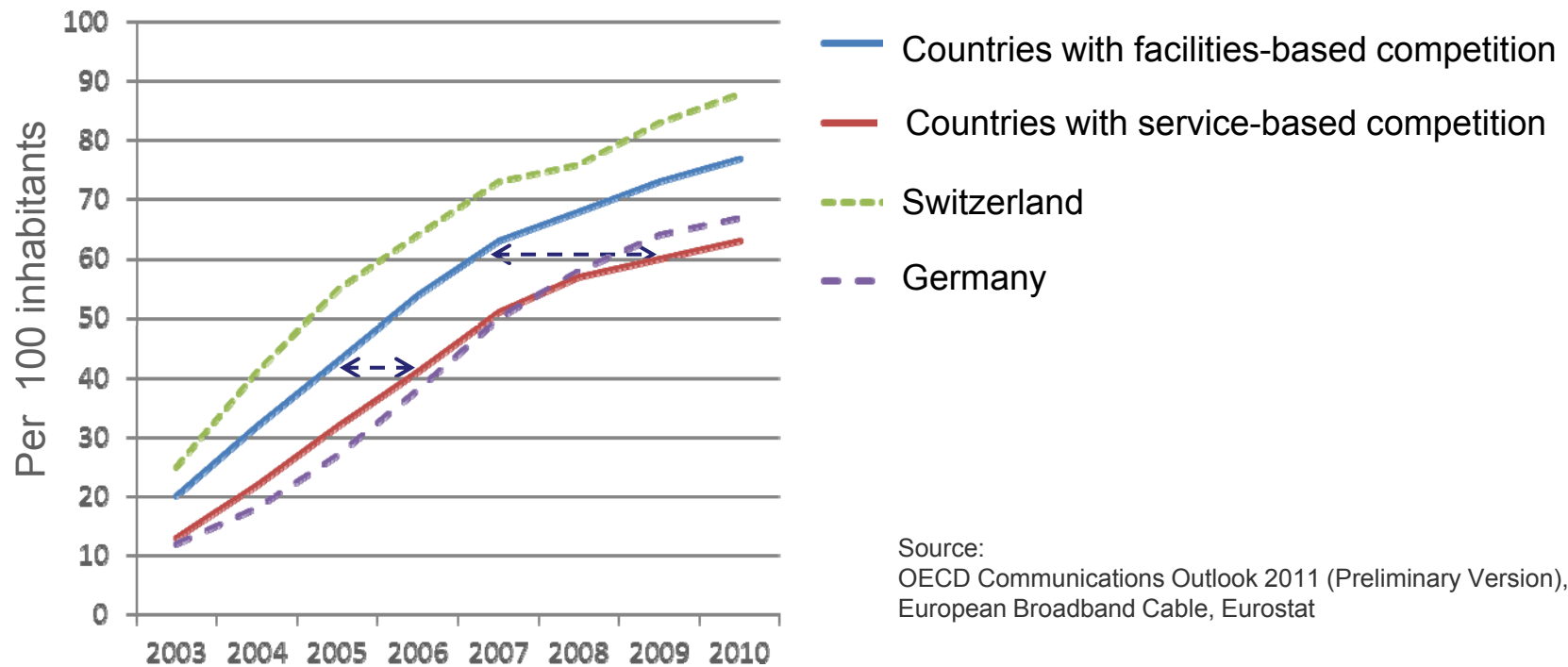


High access charges lead to low retail prices: Static and dynamic efficiency reconciled!



Facilities-based vs. service-based competition

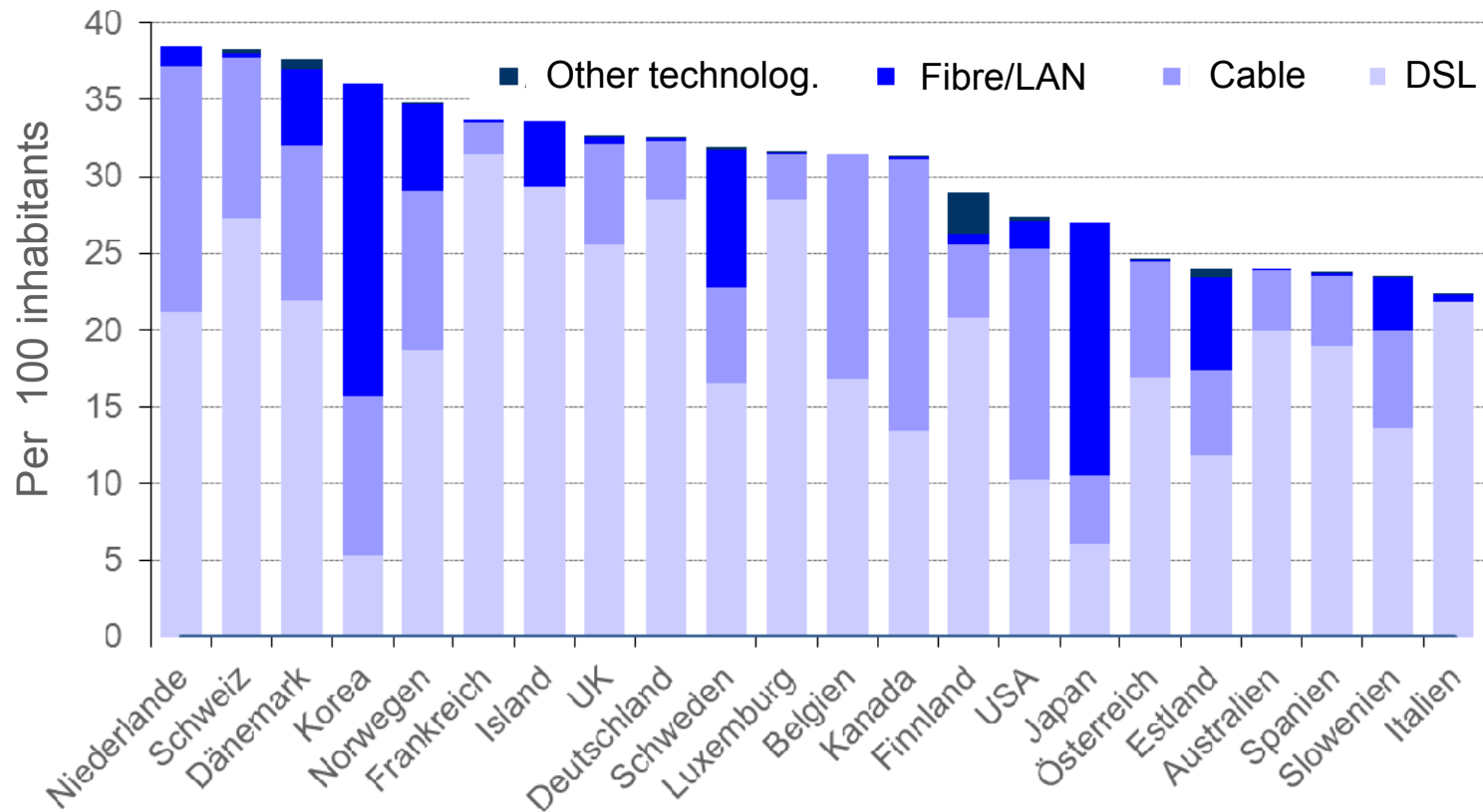
Evolution of broadband penetration in western European countries



→ Countries with facilities-based competition (cable homes-passed > 75%) exhibit more dynamic markets

High-speed internet connections in OECD-countries

OECD-broadband internet penetration, June 2011

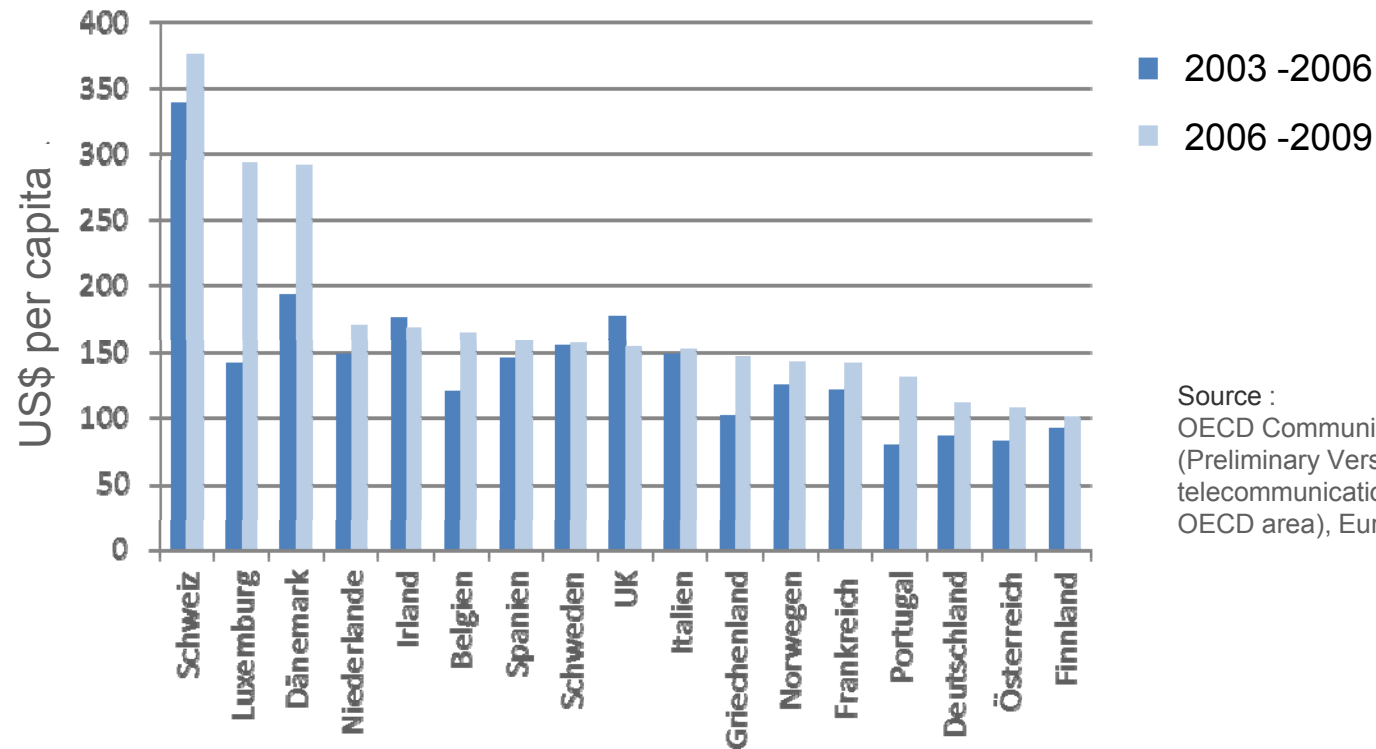


Source:
OECD Broadband
Portal (Dezember
2011)

→ Switzerland among the leaders

Telecommunication investment in recent years

Average yearly telecommunications investment western European countries



Source :
OECD Communications Outlook 2011
(Preliminary Version), Table 3.6 (Public
telecommunication investment in the
OECD area), Eurostat

→ Investments are “higher” in countries with facilities-based competition

Conclusions

- “*The industry is obviously no longer a natural monopoly and **wherever there is effective competition**—typically and most powerfully, between competing platforms—land-line telephony, cable and wireless— **regulation** of the historical variety **is both unnecessary and likely to be anticompetitive**” (Kahn 2007, p. 1).*

⇒ Potential/reality of intermodal competition:

⇒ E.g. mobile broadband in Austria

⇒ Competitive potential of cable (KabelBW: 75% of Baden-Württemberg HH at 100 Mbps)

Conclusions

- Benefit of doubt and trust in the competitive process:
 - Safeguards (ex-post competition policy) are sufficient
 - Investments and innovations will come
- Will we meet the goals of the digital agenda?
 - F.A. Hayek
- Do we make the most of our opportunities? For regulators:
Good broadband investment environment?
⇒ **“Investment holidays”** rather than **regulatory holidays!?!**

Literature

- [Coexistence of service- and facility-based competition: The relevance of access prices for "make-or-buy"-decisions](#), Christian Bender and Georg Götz, [MAGKS](#) Discussion Paper No. 07-2011, February 2011.
- [How to provide access to next generation networks? The effect of risk allocation on investment and cooperation incentives](#), Christian Bender, [MAGKS](#) Discussion Paper No. 49-2011, Dezember 2011.
- [Competition, Regulation, and Broadband Access to the Internet](#), Götz, G. (2011), ITS-conference Budapest.
- [Effective Competition: Its Importance and Relevance for Network Industries](#), Christian Bender, Georg Götz & Benjamin Pakula in: Intereconomics, Vol.46 (1), Januar 2011.
- [Investition und Regulierung bei schnellen Internetzugängen. Ein Vergleich von Deutschland und der Schweiz](#). Georg Götz und Patrick Zenhäusern ([Polynomics](#)). Vergleichsanalyse im Auftrag von [Glasfasernetz Schweiz](#). Dezember 2011.
- [Schnelles Internet und weiße Flecken? Die Rolle von Staat und Regulatoren](#), Christian Bender und Georg Götz in: Wirtschaftsdienst, Vol. 91 (1), Januar 2011, S. 42-48.
- Die neuen Rahmenbedingungen für Investitionen in die Kommunikationsinfrastruktur. Nikolaus Forgó, Georg Götz und Gerald Otto (5/2010) in "medien und recht- Zeitschrift für Medien- und Kommunikationsrecht"