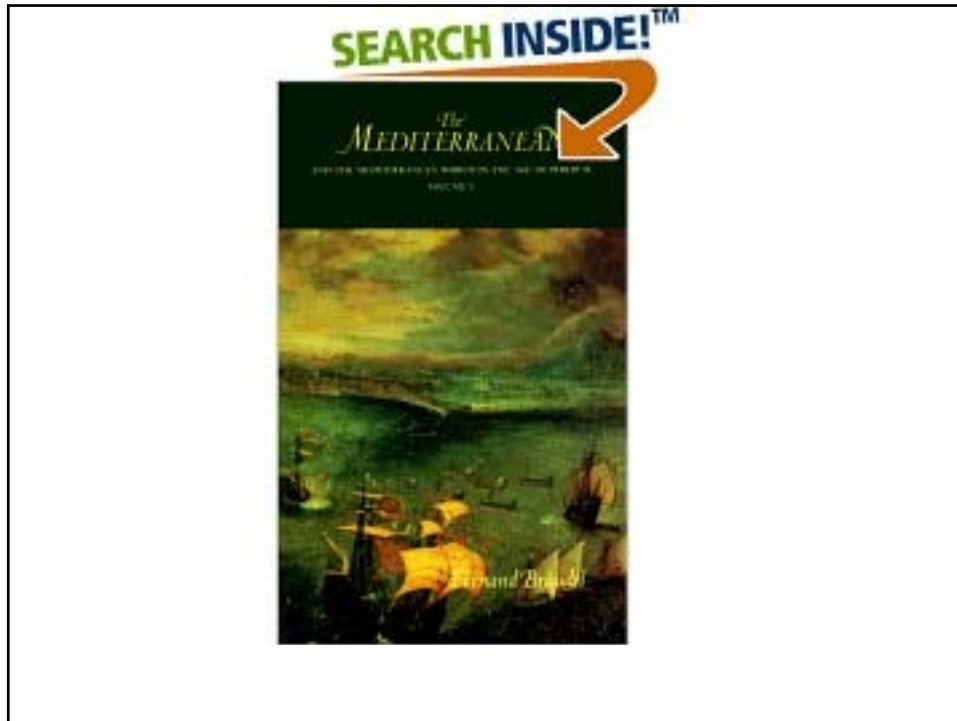


Ahead and Behind

Dave Burstein

Earn my living from equipment ads, conferences,
some consulting with mostly small companies.
Not paid by telcos.



Ahead

- Innovative apps
- Video over the top
- Lower termination wireless
- 20% of the U.S. getting a decent network
- Cable research
- Lobbying
- Italy, Spain, Germany still
- Availability 95%
- Cheapest transit. \$10-15, versus 10-15 euro competitive. Less developed peering
- Ridiculous patent barriers to entry

Penetration driven by price

If Martin had courage, for
BellSouth deal require a 3 meg
\$15-20 DSL U.S. quickly passes

Compare to the Best

- Eight and ten years ago,
U.S. was best
- Now, middle of pack of developed countries.
Ahead of Germany Italy, soon behind France
- Should Chicago have a second rate Internet
compared to Berlin, Paris, Amsterdam,
Vienna,
- And New York, when Verizon gets going.
FTTPr
- (Trying to get franchise to not serve Bronx)

5 or more for competition

- U.S. wireless prices went up when we went from 6+ to 4+
- 500 million fines for France mobile 3, but they continue
- Bell Canada and cable raising prices
- 2 carriers could fight (Verizon/Cablevision) but don't even need to meet to make a deal.

Monopoly can work

- China is the proof of concept
- Government owned telcos are leading in DSL, and about to pass U.S. in broadband.
- Officially agreed to non-compete
- Where you have "monopoly", smart regulator can do ok. Germany, Italy, most of U.S.

Best solutions

- Push full DOCSIS 3.0 in 2008-2011 with digital transition.
- Where incumbents do not deliver world class Internet (at least 10/50, \$15-35), government do something. Produce Colognes across Germany DT ADSL
- Columbia synthesis: Recognize “monopoly behavior” Do something serious. DT four years ago was widely overpriced, Kurth made unbundling work

International

- Unbundle as much as possible, per line, not per bit. Choose sharable fiber, not PON
- Support competitors heavily. Regulate hard monopolies, like BT Openreach, TI, and ...
- Subsidize services, not stockholders
- Keep price per bit insignificant. Charge per line

**Ahead: Web
Innovation**

**Small
companies**

Google, eBay,
Facebook,

DVD Quality video
over the top

Lower Termination Rates

- Because of terminating monopoly, these rates are not affected by price sensitivity

20% of U.S. getting a decent network

- Verizon is building a decent fiber network
- Leads in research for DOCSIS 3.0, darn good system. ?deploy
- Pumps up U.S. numbers temporarily

**\$M to
politicians**

\$Million Lobbyists

Very good

Honest folks
misled

Rhetoric

- Deregulate to encourage investment
- Monopolies invest more because they are more efficient?
- Japan fiber because of Softbank, German DSL dropped in half because unbundlers drove down prices, FT fiber response to Free taking almost 3M customers
- Literally, copying American rhetoric
- American disease

Ahead of Italy,
Spain

Availability 95%

**Cable not
government**

Behind

- Surveillance
- Speeds over 1 upstream, quarter speed downstream rare across 60-80% of U.S.
- Price - \$100-150 against 30-60 Euro
- Investment ratios/ AT&T 30% less
- Qwest, regionals 40-50% less
- Verizon merely replacing depreciation
- No profitable simple network example
- BT FON almost free wireless cloud, Slingbox coming, free wireless cloud and video share
- Truphone better than jajah
- Wireless interoperability

**Every customer,
every session,
all the time**

longue durée

Gap is small

2-5 good years

Converge 70%

**Republicans
failed**

**Deregulation
failed**

Sophistry/Nits

Paris 30 euro

\$15- \$25

**70% U.S.
AT&T similar**

1 meg up,
6 meg down

10/50 Berlin

100/100

Paris, Geneva,
Cologne,
Amsterdam

100/100 nation
Japan, Korea,
Taiwan, Singapore
Andorra, Holland

Verizon 20%

AT&T data

DOCSIS 3.0

Soon,
robust,
affordable

Modest
cost

**Decimate
AT&T**

Likely delayed

**U.S. CLECs died
1999-2002**

**Deregulation
discourages
investment**

Thank
you