The Private Equity Phenomenon in Telecoms and Media

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Contents

• Trends in private equity investment in telecoms

• Investment models

• Social and political impacts
Private equity investment in the telecom industry is increasing but still remains volatile despite some large deals

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>• Investment levels recovered from the dot.com crash and surpassed historic levels</td>
</tr>
<tr>
<td>2</td>
<td>• Still primarily focused in North America, but the rest of the world (Europe and Asia) is growing its share of investment</td>
</tr>
<tr>
<td>3</td>
<td>• Average size of transaction is twice that of the dot.com era</td>
</tr>
<tr>
<td>4</td>
<td>• Since 2000, three clearly defined periods in the evolution of PE investment in telecommunications</td>
</tr>
<tr>
<td>5</td>
<td>• Incumbent targeting in telecommunications is changing the nature of the private equity industry</td>
</tr>
</tbody>
</table>
Private equity investment in telecommunications exhibits three clearly defined periods.

PRIVATE EQUITY INVESTMENT IN TELECOMMUNICATIONS

<table>
<thead>
<tr>
<th>Period</th>
<th>Irrational exuberance</th>
<th>Retrenchment</th>
<th>Incumbent targeting</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-2</td>
<td>$106,608</td>
<td>$33,442</td>
<td>$247,997</td>
</tr>
<tr>
<td>2003-4</td>
<td></td>
<td>$219,641 (*)</td>
<td></td>
</tr>
<tr>
<td>2005-6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007-8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Incumbents with wireless operations have been categorized as fixed telephony.
(*) 2007-8 numbers include Bell Canada deal; numbers up to May 2008.

Sources: Thomson Financial; Company and Fund reports; analysis by the author.
Large transactions were made in all three periods

<table>
<thead>
<tr>
<th>Acquired</th>
<th>PE Firm</th>
<th>Amount ($M)</th>
<th>Acquired</th>
<th>PE Firm</th>
<th>Amount ($M)</th>
<th>Acquired</th>
<th>PE Firm</th>
<th>Amount ($M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panamsat Corp</td>
<td>KKR</td>
<td>$4,281</td>
<td>TDC A/S</td>
<td>Blackstone Group, KKR, Apax Partners</td>
<td>$10,618</td>
<td>Alltel (wireless)</td>
<td>Texas Pacific Capital, Goldman Sachs capital Partners</td>
<td>$25,101</td>
</tr>
<tr>
<td>Koninklijke KPN NV</td>
<td>TPG</td>
<td>$2,307</td>
<td>Versatel Deutschland Holding GmbH</td>
<td>Apax Partners Worldwide LLP</td>
<td>$661</td>
<td>Bell Canada (incumbent telco)</td>
<td>Ontario Teachers Union, Madison Dearborn, and Providence Equity</td>
<td>$51,181</td>
</tr>
<tr>
<td>Japan Telecom Co Ltd (Japan Telecom Holdings Co Ltd)</td>
<td>Ripplewood Holdings LLC</td>
<td>$2,218</td>
<td>Deutsche Telekom</td>
<td>Blackstone Group LP</td>
<td>$3,319</td>
<td>Intelsat Ltd</td>
<td>Apax Partners, Apollo Management, Madison Dearborn Partners and Permira</td>
<td>$16,000</td>
</tr>
<tr>
<td>DDI Pocket Inc</td>
<td>Carlyle Group LLC</td>
<td>$2,024</td>
<td>Vodafone KK (Japan)</td>
<td>BB Mobile Corp</td>
<td>14,331</td>
<td>One GmbH (Austria) (wireless)</td>
<td>Mid Europa Partners, France Telecom</td>
<td>$1,880</td>
</tr>
<tr>
<td>Hawaii Telcom</td>
<td>Carlyle Group LLC</td>
<td>$1,650</td>
<td>Wind Telecomunicazioni SpA</td>
<td>Apax, TPG, and Weather Investments I</td>
<td>12,799</td>
<td>Bulgarian Telecommunications Co PLC</td>
<td>AIG Global Investment Corp</td>
<td>$1,480</td>
</tr>
</tbody>
</table>
Each period has a distinct profile, with deals getting bigger

**STAGES OF PRIVATE EQUITY INVESTMENT IN TELECOMMUNICATIONS**

<table>
<thead>
<tr>
<th></th>
<th>PHASE 1</th>
<th>PHASE 2</th>
<th>PHASE 3</th>
<th>CONTINUATION OF PHASE 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TIMING</strong></td>
<td>2000-2</td>
<td>2003-4</td>
<td>2005-6</td>
<td>2007-8</td>
</tr>
<tr>
<td><strong>AMOUNT INVESTED</strong></td>
<td>$106.6 billion</td>
<td>$33.4 billion</td>
<td>$247.9 billion</td>
<td>$219.6 billion</td>
</tr>
<tr>
<td><strong>AVERAGE SIZE OF INVESTMENT</strong></td>
<td>$0.710 Billion</td>
<td>$0.64 Billion</td>
<td>$2.58 Billion</td>
<td>$3.9 Billion</td>
</tr>
<tr>
<td><strong>PRIMARY TARGETS</strong></td>
<td>New entrants (CLECs, 2nd and 3rd wireless licences)</td>
<td>Surviving CLECs</td>
<td>Incumbents</td>
<td>Incumbents</td>
</tr>
<tr>
<td><strong>GEOGRAPHY</strong></td>
<td>10% NA</td>
<td>25% NA</td>
<td>29% NA</td>
<td>91% NA</td>
</tr>
<tr>
<td></td>
<td>45% Europe</td>
<td>50% Europe</td>
<td>53 % Europe</td>
<td>8% Europe</td>
</tr>
<tr>
<td></td>
<td>31% Asia</td>
<td>16% Asia</td>
<td>11 % Asia</td>
<td>1% Asia</td>
</tr>
<tr>
<td></td>
<td>14% ROW</td>
<td>2 % SA</td>
<td>6 % ROW</td>
<td>1% ROW</td>
</tr>
</tbody>
</table>

*Source: Thompson Financial; analysis by the author*
Going forward, we might be moving into a new cycle emerging from the credit crunch

Source: Thomson Financial; analysis by the author
Contents

• Assessing size and trends in private equity investment in telecoms and media

• Investment models

• Social and political impacts
Private Equity investment models appear to be of four types

- Model 1: leveraged buyout/financial engineering
- Model 2: private equity/telco partnerships
- Model 3: rationalization of industry structure
- Model 4: price flipping
Model 1: Leveraged buyout/financial engineering

- Buyout of incumbent carrier made in total or partial cooperation with existing management
- Acquisition funds borrowed against the target firm’s assets to leverage the buyout
- Value proposition:
  - Efficient long term investment with more extensive time horizons rather than quarterly concerns of publicly-traded companies
  - Operational management
  - Maximization of short-term returns to investors
- Concerns: asset stripping, unsustainable debt structures, postponement of strategic investment, higher risk to investors (e.g. Pension funds), public utility implications
- Performance metrics:
  - Short-term allocation of capital generated from operations
  - Debt as a percent of total capital (debt plus equity)
  - Net debt/EBITDA
Model 2: private equity/telco partnerships

- Recently emerged in Europe to fit the need for complementary assets/intangible capabilities between private equity groups and debt-laden telcos seeking to achieve a regional footprint

- Example 1: Acquisition of One GmbH, third wireless carrier in Austria
  - Property: One GmbH, 20% market share
  - Seller: E.ON AG (50%), TDC (15%), Telenor (14.5%), France Telecom (14.45%)
  - Buyer: France Telecom (no cash outlay, Orange brand, 35%), Mid Europa Partners (65%)
  - Deal value: US $ 1.88 billion
  - Potential scenario: France Telecom might take control in the future or take a profit if business is sold (less likely)
  - “The partnership constitutes a new approach of co-operation between and operator and a private equity fund which allows to combine the operational expertise of a leading telecom operator and the recognized know-how of a private equity fund strongly active in this sector and this region” (FT statement)
Model 3: private equity as a rationalizer of industry structure

- Private equity group identifies a sector where intrinsic industry economics favor a consolidation with high returns to scale
- Group partners up with management team with experience in successful acquisitions and integration
- Target identification is conducted in areas with low competitive pressure
- Consolidation is combined with growing the core business driven by capital investments in adjacent businesses (broadband)
- Integration is aimed at generating operational efficiencies and improvements through common systems and processes
- Once the new integrated company is packaged, sell to an operator that benefits from further consolidation
Madison River is an example of this model

1996
- Madison River Capital is formed

1998
- Acquisition of MebTel
  - Madison Dearborn, Goldman Sachs, Providence

1998
- Acquisition of Gallatin River

1999
- Acquisition of Gulftel
  - Madison River Communications
    - 176,000 rural access lines
    - 45,000 broadband subscribers
    - Residential broadband penetration 38%
    - 3,600 route miles of local and long haul network
    - $16 million in capex (8.5% of sales)
    - Total debt: $549 million
  - 2006 Results:
    - Revenues: $189 million
    - Ebitda: $99 million (52%)
    - FCF: $35 million

2000
- Acquisition of Coastal Comm.

2005
- Acquisition of N. Carolina acc. lines

Sold to CenturyTel
- $830 million in a combination of cash and the assumption of debt
- Complementary to acquirer

Value added
- From family owned to corporate culture
- Cost controls
- Platform integration
- Economies of scale
- New services to rural consumers
Model 4: private equity as a “price flipper”

- Private equity group identifies or is approached by a company whose shareholders are searching for an exit strategy but cannot find yet a strategic buyer.
- Group partners up with existing management team to continue taking care of the company.
- After transaction is conducted, ongoing management team continues leading the company, although some search might occur for margin improvement.
- After 3-5 years, with industry consolidation having progressed, private equity group sells to strategic buyer.
The Alltel wireless transaction is a classic example of this model

- Original investors put the wireless business up for sale right after spinning off the wireline business
- Strategic buyers were reluctant to close on the company due to regulatory concerns
- Company finally bought by Texas Pacific and the private equity arm of Goldman Sachs for $27.5 billion (at 8.9 x 2008 EBITDA estimates, versus 7.1 (Sprint) and 8.3 (Dobson))
- LBO debt increase to $22.2 billion
- A year later, company sold to Verizon for $28.1 billion in cash (at 8.1x2008 EBITDA), which amounts to a $0.6 billion gain on an approximately $5 billion equity investment
- Trend in Alltel net debt/EBITDA
  - 2006 (Pre-acquisition by PE): 1.1 (wireline/wireless)
  - 2008 (at time of Verizon purchase): 6.5 (total debt $22.2B, of which $5B to finance LBO)
Each model comprises opportunities and risks for investors as well as consumers

<table>
<thead>
<tr>
<th>Investors</th>
<th>Consumers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Opportunities</strong></td>
<td><strong>Risks</strong></td>
</tr>
<tr>
<td>Model 1: Leveraged buyout/financial engineering</td>
<td>• More efficient long-term investment and operational management of carrier</td>
</tr>
<tr>
<td></td>
<td>• Maximization of short-term returns (payouts, asset divestiture, opex reduction, tax avoidance)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 2: private equity/telco partnerships</td>
<td>• Good combination of acquirer capabilities</td>
</tr>
<tr>
<td></td>
<td>• Huge upside for telco under sale or keep scenarios</td>
</tr>
<tr>
<td>Model 3: private equity as rationalizer of industry structure</td>
<td>• Abundance of low-priced assets</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 4: private equity as “price-flipper”</td>
<td>• Find opportunities for margin improvement</td>
</tr>
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</tbody>
</table>

**Legend:**
- High
- Moderate
- Low
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We have attempted to gather evidence which could give us directional answers to some of the issues raised

- Can a reduction in capex be linked to negative innovation impact of PE buyouts?
- Can the volatility of ownership result in inordinate frictional costs?
- What is the ultimate impact on long term infrastructure investment?
- Are there countervailing forces to undue political influence?
As expected, the buyouts have increased debt beyond the conventional range in telecom companies

- **TDC:** Since the buyout was financed by approximately 80% debt, TDC’s debt jumped from 27% (2005) to 82% (2007) of total capital (debt plus equity) and the net debt/EBITDA from 1.3 to **5.1**; part of it is funded through high yield bonds, maturing in 2014.

- **Eircom:** The buyout transaction has resulted in an increase in net debt/EBITDA from 3.0 (2001) to **6.9** (2006); average cost of debt is 8%.

- **Madison River:** In 7/05, Madison refinanced its debt, reaching **5.5** in the net debt/EBITDA ratio; weighted average interest rate is 8.1%.

- **Alltel:** The increase in debt to finance the LBO resulted in a jump in net debt/EBITDA from 1.1 to **6.5**.

- **These ratios are not out of the ranges found in the US industry, although TDC and Eircom are out of the range in Europe.**

<table>
<thead>
<tr>
<th>Company</th>
<th>Ratio</th>
</tr>
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<tbody>
<tr>
<td>Verizon</td>
<td>1.20</td>
</tr>
<tr>
<td>ATT</td>
<td>1.24</td>
</tr>
<tr>
<td>Embarq</td>
<td>2.40</td>
</tr>
<tr>
<td>CenturyTel</td>
<td>2.53</td>
</tr>
<tr>
<td>Qwest</td>
<td>2.63</td>
</tr>
<tr>
<td>Windstream</td>
<td>3.03</td>
</tr>
<tr>
<td>Citizens</td>
<td>3.48</td>
</tr>
<tr>
<td>Cincinnatti Bell</td>
<td>3.83</td>
</tr>
<tr>
<td>Level 3</td>
<td>5.02</td>
</tr>
<tr>
<td>Madison</td>
<td>5.5</td>
</tr>
<tr>
<td>Alltel</td>
<td>6.5</td>
</tr>
<tr>
<td>Telenor</td>
<td>1.32</td>
</tr>
<tr>
<td>BT</td>
<td>1.63</td>
</tr>
<tr>
<td>DT</td>
<td>1.96</td>
</tr>
<tr>
<td>Telefonica</td>
<td>1.97</td>
</tr>
<tr>
<td>FT</td>
<td>2.07</td>
</tr>
<tr>
<td>PT</td>
<td>2.43</td>
</tr>
<tr>
<td>TI</td>
<td>2.90</td>
</tr>
<tr>
<td>TDC</td>
<td>5.1</td>
</tr>
<tr>
<td>Eircom</td>
<td>6.9</td>
</tr>
</tbody>
</table>

Sources: Bear Sterns (2007); analysis by the author
When a PE firm buys a carrier, Capex tends in most cases to be reduced – difficult to assess whether this represents a decline in innovation.
Broadband deployment is not slowing down under PE acquired incumbents
Fiber builds are highly sensitive to capex.
And even publicly traded companies with higher capex availability are having return on the investment problems

- The CAPEX problem: fiber builds tend to reduce FCF by 20-30%
- Demand for new services remains speculative so far
- Consumers balk at seeing prices for enhancing throughput rise
- In response to these issues, the “strategic imperative” is being raised as an investment rationale
  - The transformational argument: reduce network O&M by virtue of massive fiber deployment (FTTH is less opex intensive since most active equipment is managed at CO, and a fiber sub-loop costs less to maintain than copper)
  - The defensive retaliation argument: we will not make money but we have to respond to the cable threat
  - The arms race argument: let us raise the stakes and see whether they can follow us
  - We buy market share
- The regulatory and industrial policy variable is the only one that can provide some flexibility
  - Uphaul the ULL regime and have ULL players to become resellers, which would allow incumbents to raise wholesale access prices
  - Consider ultrabroadband a new highway system and therefore subject to government investment
- From a revenue standpoint, need to think at two-sided market business models
In sum, while some negative evidence emerges from recent PE acquisition deals, the overall impact might not warrant regulatory action beyond the conventional oversight.

- Out of the four types of investment models, two exert a positive contribution to the industry health: industry rationalization and telco/pe partnerships.
- On the other hand, LBO and price flipping deals may have some negative effects:
  - Debt leverage increases across the board well beyond telco industry levels.
  - CAPEX tends to decline across the board (how much of this is just a result of rationalizing capital planning, and how much is a decline in innovation is difficult to ascertain in the aggregate).
  - Broadband deployment does not appear to slow down, but next generation network investment (fiber, IP networking) is absent.
- Nevertheless, regulatory intervention needs to be carefully considered: continue with conventional quality service oversight.
- Cyclicality of ownership (eg. After a year Alltel is back in the hands of a carrier) and PE divestment horizon remain adequate market-based remedies.