Introduction

In 2008 the Delft University of Technology was commissioned by the Ministry of Economic Affairs of the Netherlands to investigate the potential impact of private equity leverage buy-out in the telecommunication sector on the public values that the government wished to safeguard. The study provided an extensive analytical framework and discussed three private equity leveraged buy-out (PE-LBO) cases: Eircom, Ireland; TDC, Denmark; and BTC, Bulgaria. The study concluded that PE-LBO funds make offers that cannot be refused by shareholders, boards and management. Hence, there is no check-and-balance in the form of corporate governance operative. As governments have relinquished control, the targeted firm is left to the ‘forces of the financial market’. The outcome is predictable: financial engineering aimed at a major redistribution of capital, totally contrary to the public interests and likely to end in bankruptcy. The research report was submitted May 2009 and the conclusions and recommendations became subject of controversy within the Ministry. As a consequence the report remained confidential for seven month.

Friday, March 30, 2012 the Irish Times reported that Eircom had filed for bankruptcy in the High Court. The PE firm involved with TDC has divested almost all international activities, which accounted for approx. 40% of the revenues, and took a first step in offloading the company through an IPO in 2010. In Bulgaria, the failure of the incumbent to supply broadband has led to approx. 670 ISPs providing fiber based broadband throughout Bulgaria, providing data rates in excess of 10 Mbit/s per customer. In this contribution the authors of the original study provide a review of the study, assessing the new realities with a focus on the developments of Eircom, using TDC as a comparative case.

This contribution is structured as follows: Section 2 provides the background to the study. In Section 3 a recap of the methodology applied in the original study is given. Section 4 provides the historical back drop for the PE-LBO development and derives the public values to be safeguarded. In Section 5 the operation of private equity leveraged buy-outs is explained. Section 6 provides the summary and conclusions of the two case studies Eircom and TDC. In Section 7 we assess the impact of PE-LBO for telecommunications policy purposes using the regulatory and developmental perspective. In Section 8 the conclusions are presented.

2 Background

Through the privatisation and liberalisation of the telecommunications sector\(^1\), in Europe initiated in the 1980s, the relationship between the financial sector and the telecommunications services firms has changed fundamentally. The euphoric period in the late 1990s has revealed the growing influence of the financial sector on the
developments in the economy in general and on the telecommunication industry in particular. The development of the telecom sector shows a changing perception of risk, first as a result of the ownership change of incumbent operators (from government to public ownership), and secondly from the increased use of financial leverage.\textsuperscript{2}

This period has also shown that not all stakeholders are necessarily in the telecom business for the long-run or for the well being of the telecom firm. This raises the issue of safeguarding the public values associated with telecommunications as an sector vital to the economy and society at large. The more recent involvement of private equity leveraged buyout funds in the telecom sector, notably the incumbent operators in Ireland and Denmark, increased this concern.\textsuperscript{3}

Typically the restructuring practice of the more aggressive private equity leveraged buyout (PE-LBO) firms have a myopic short-term focus on cash management for maximum payouts to the firms. These PE-LBO firms are not concerned with earning returns from investment in expanding the productive capacity for providing goods and services in the real economy. Their activity can best be described as financial engineering aimed at a major redistribution of capital in favour of the investors in and the managers of the firms being subject to private equity leveraged buyouts. The study concluded that bankruptcy would be a likely outcome.

3 Methodology

In the original study, to define the boundaries and interdependencies of the research question the research was positioned within the societal system at large; the interplay between the financial sector and the telecommunications sector being part of the economic system, see also Figure 1.

![Figure 1. The economic system embedded in the societal system](image)

The perspective chosen is that of a market economy with decentralized (political) decision making. The Anglo-Saxon perception of markets is taken as leading, the grounding being in the individualistic values of freedom, individual responsibility and accountability. Competition is taken as the right mechanism to allocate scarce resources and the believe that efficient private decisions will add up to the best possible public
benefits. When not corrected by the private actors themselves, governments will address and resolve any market failures.

Through the application of a longitudinal case study approach the public values to be safeguarded were identified by assessing the historical development of the telecommunications sector and the role the government assumed therein. The role of the financial sector was also assessed through a longitudinal approach, by reviewing the period since privatization and liberalization which began in the 1980s. To assess the role government could assume in relation to the PE-LBO phenomenon two main alternative approaches were analysed following the regulatory and the developmental model. In the regulatory model the government is primarily concerned with assuring the proper working of markets, the outcome of the market process being emergent. In the developmental approach the government is also interested in the market outcome and will guide the market towards the desired outcome. The two approaches provide for different recommendation as to any intervention in the case of a private equity buyout of a telecommunications services firm.

In this contribution we will reflect the main outcomes of the methodology being applied in the original study.

4 Longitudinal analysis

4.1 Telecom sector and public value developments

In the early stage of the telephone industry development entrepreneurship and competition prevailed and ‘private firms in a competitive market’ had become a good economic governance regime to allow the benefits of a new technology to be exploited. In the 1920s and 1930s the telephone network became to be perceived as a ‘natural monopoly’ and considered best centrally managed, either as a private monopoly under tight regulation as in the USA, or as state enterprises in Europe.

From the 1970s new technology applications emerging outside the field of telephony increasingly challenged the appropriateness of the monopoly. Through a process of reform a gradual erosion of the monopoly power had occurred, essentially leaving the ‘public interests’ unaffected. The ‘universal service obligation’ remained with the incumbent operators, and interconnection had become engrained in the telephone engineer’s paradigm. Through the reform of the 1980s and 1990s competition would be re-introduced as an alternative mode of economic governance to serve the ‘public interest’, with the expectation that competition would increase consumer benefits.

Technological advancements and prospects were considered to be powerful enough to enable competition, provided regulation would arrange for a ‘level playing field’. The demand for communication services were in part untapped and increasing, and hence would facilitate the introduction of competition. Moreover, it was expected that the financial sector would be interested in participating by funding investments in network and service development, the emergence of new market entrants, and the incumbents ‘going private’ in Europe.

Introduction of competition

The idea behind the introduction of competition is that competitive markets will lead to an increase in consumer choice, lower prices, and improved service quality. These aspects when realised are in the interest of the public at large. Hence, the introduction of
competition can be considered a means of serving ‘public interest’ objectives. However, there is no ex-ante guarantee that the goals are realised through the market. What can be concluded is that ‘managerial control by government’ is being replaced by the ‘competitive market ideology’ in realising ‘public interest’ objectives. In effect, while the state enterprise can be considered an instrument of the ‘developmental model’ of the state with the possibility to control outcomes, a transition to the regime of the competitive market implies a shift towards the ‘regulatory model’.

With the change in ownership, governments have relinquished direct control of the enterprise. Hence, all ‘public interest’ objectives that are not ‘naturally’ met through (1) the profit seeking behaviour of the entrepreneur, or (2) through the forces of competitive markets, or (3) through the disciplining of financial markets, need to be ‘externalized’ through legislation and or regulation.

**New Rules of the Game**

The privatisation and introduction of competition have resulted in a new reality for the incumbent operator. The new (financial) owners require stock value appreciation next to dividends, while at the same time the monopoly position was eroding. This forced the management to find new opportunities for growth, hence moving into new product/service markets and/or into new geographical markets. The former may be beneficial for the national market and hence serve the ‘public interest’, the latter implies a diversification of the business away from the national market. Although, both are aimed at continuity of the enterprise and hence serve in that respect the ‘public interest’ at large. Nonetheless, if investments abroad are perceived to yield a better return than investment in national projects, this may imply that cash flows are diverted away from national investment opportunities.

**4.2 Telecom and financial sector developments**

As the Reform proceeded, the telecommunications sector had become an interesting new market opportunity for the financial sector. Privatisation of the telecom operators implied in most cases a listing at the stock market and hence trading in shares, and sometimes an IPO. With the transition from a public entity to a private entity, financing of investments would involve a call upon financial markets, providing the banks with underwriting fees, etc. The need to demonstrate continuous growth also triggered a growing opportunity in mergers and acquisitions providing another source of income for the financial industry.

To meet the growing demands the investments needed to be financed. Lowenstein observed: “The cumulative investments marked the greatest binge in the history of private finance. In the half-decade after deregulation, telecom companies borrowed US$1,600 billion from banks and enlisted Wall Street to sell $600 billion in bonds. They raised billions more in stock sales” (Lowenstein, 2004). The telecom sector became a very important client segment, the investment banking fees for the telecom sector increased from US$1.06 bln in 1996 to $4.14 bln in 2000 (Malik, 2003). In commenting on the role of analyst cum investment bankers (e.g. Jack Grubman of Salomon Smith Barney and Henry Blodgett of Merill Lynch) Shiller quoted a market commentator, as saying: “Honesty was never a profit center on Wall Street, but the brokers used to keep up appearances. Now they have stopped pretending. More than ever, securities research, as it is called, is a branch of sales. Investors beware” (Shiller, 2001).
The impact of this support of the financial sector for the expansion of the telecommunications sector became clear in, for instance, the CLEC crisis in the USA and later in the general collapse of the industry following the stock market crash of April 2001 (Lemstra, 2006).

**The role of ‘checks and balances’ within the firm**

In the ‘normal’ mode of business operation the enthusiasm of the entrepreneur and his/her willingness to take risks is typically balanced by the ‘conservative’ nature of the parties that provide funding. The availability and cost of funding is typically based on the risks and returns perceived. The result is reflected in, e.g., the ‘cost of capital’. Within corporations the ‘cost of capital’ is translated in an internal rate of return that is used for the evaluation of projects, and in the creation and maintenance of a portfolio of investments, products or services. The recent bubble has shown that the competition between banks made their interests to become aligned with the interests of the entrepreneurs. Hence, making the process of ‘checks and balances’ inoperative.

In this respect the combination of reform in the financial sector, in particular the repeal of the Glass-Steagall Act in 1999, removing the separation between investment banking and retail banking, and the reform in the telecom sector, in particular the Telecom Act of 1996, provided in the USA for an ‘explosive combination’. It is ironic to note that the Glass-Steagall Act was adopted in 1933 in response to the 1929 crash, to avoid some of the excesses that had occurred in the preceding boom period, to be repealed at a point in time that it may have been of utmost relevance.

**Foreclosures and bankruptcies**

In the aftermath a new phenomenon came to the telecommunications industry: bankruptcy. Following the crash telecom operators and equipment makers were struggling to survive. The immediate actions included downsizing and financial restructuring. The financial ratings of the telecom operators dropped dramatically implying more difficulty in obtaining loans and higher costs. For instance in 2001, KPN, the incumbent in The Netherlands, required financial support by the state for a €5bln share issue to stay away from the danger zone.

Most of the ‘old-world’ companies survived based on existing revenues streams that were built before the bubble. Many new-starts, specially those emerging in the final days of the bubble, had to seek bankruptcy protection; in the US this means filing for protection under ‘Section 11’. the telecom operator defaults as reported by the OECD, involved a total of 142 entities and an amount of US$183 bln (OECD, 2005). The defaults on telecommunications corporate bonds represents the largest cycle of defaults on bonds since the 1930’s. Telecommunications represented 56.4% of defaults worldwide (Lennin and Paltridge, 2003).

We can summarize the major developments relevant to the emergence of ‘private equity’ in the telecommunications sector as follows:

- After privatisation and liberalisation telecommunications firms have become part and parcel of the broader economic system, and subject to the financial market regime as any other (publicly listed) corporation.
- There is no reason to believe that telecom executives and managers behave differently given opportunities for personal gain.
- Invariably humans will seek out the limits of rules and regulations and explore the ‘grey zone’ between lawful and unlawful practices.
Proper governance of the financial sector is critical to the performance of the telecommunications industry. Early detection and eradication of unlawful practices is an imperative.

Given the interconnectedness of our economy high yield financial practices will be copied, sooner or later.

The organisational purpose of the telecommunications firm or its reason for existence may not be perceived by all stakeholders as the creation of economic value by providing telecommunications services.

4.3 Summary public interests in relation to the telecom sector

From the longitudinal analysis the following conclusions can be drawn with respect to the 'public interests' to be safeguarded. The list is (in large part) derived from the study of the Netherlands but is considered to be generally applicable:

- KPN, the incumbent fixed line operator has been charged with the Universal Service Obligation (USO). The 'public interest' of available, accessible, and affordable (AAA) basic services has in effect been resolved as each customer premise is connected to the PSTN, providing telephony service. In effect the success of mobile telecommunication has improved the universal service outcome as virtually every individual is now connected to the telecommunications network. However, what is considered ‘basic’ is subject to changing perceptions and needs in society. The AAA of Internet at a reasonable data rate is considered a next evolutionary step, but no legislation has been formally enacted or proposed.

- The ‘public interest’ of interconnection of competing (sub-)networks has re-emerged through unbundling and has been addressed through regulation. The interconnection of applications, such as the Internet, implemented on top of a fully interconnected transmission infrastructure has been resolved through self organising within the Internet community (ISPs). However, competing and incompatible application-based networks have emerged on an international level (e.g. Skype). No legislation has been enacted or proposed to force interconnection at this level.

- The ‘public interests’ associated with the effective management of public resources, the radio frequency spectrum, and rights-of-way has been retained by the government.

- The ‘public interests’ in the proper performance of the telecommunication network has increased with the introduction of the Internet, which has become an integral part of today’s business models and an important element in society in general. This requires major investments to transform the legacy circuit-switched networks to packet-switched “All-IP” based networks.

- New ‘public interests’ have emerged in relation to the content of electronic communications networks, in particular the Internet. These include issues of privacy, security, spam, protection of minors, harassment, and fraud.

- The re-emergence of a ‘natural monopoly’ with respect to fibre optic networks, in particular Fibre to the Home is subject of regulatory attention.
The consequences of ‘convergence’ of communications and media into the electronic communications sector has consequences for the safeguarding of ‘public interests’ related to content, historically being resolved on the basis of infrastructure or service specificity.

The recognition of unique resources as ‘public interest’ items, e.g. identifiers (telephone numbers, internet domain names), as they are transferring from having only engineering relevance to obtaining economic and political relevance has become a new topic of ‘public interest’ associated with telecommunications.

The protection of the consumer becomes a ‘public interest’ item that requires more attention in competitive markets aimed at profit maximisation by firms.

A new ‘public interest’ is associated with ‘security of supply’. Recent cases suggest that the ‘security of supply’ is expected to be resolved through resilience build into the infrastructure and through the competitive market being responsiveness to a firm’s ‘failure to supply’. The financial strength of the telecom firms that have survived has improved since the crash, however, the risk of financial failure remains, as is the risk of a ‘black-out’. The severity of this risk is directly related to the position of the affected telecom operator in the market and the ability of competitors to assume the service within a reasonable amount of time.

The risks associated with telecommunication services firms becoming subject to new and ‘aggressive’ forms of ‘private equity’ is subject of the next Sections.

Note that many of the ‘public interest’ objectives and concerns listed above have become an integral part of the ‘Digital Agenda for Europe’ as formulated by the European Commission (EC, 2010b).

5 The role and operation of private equity

The firm is considered the organisation where capital and labour come together to create economic value. The capital required in a firm can be provided either internally, i.e. from the cash flow being generated in the business process, or provided externally.

In the start-up phase of a firm, when there is no cash flow, private equity is often the only source of capital available – at first instance provided by the founders, family and friends. A wealthy individual investing capital in entrepreneurial firms may provide for a first round of so-called ‘angel funding’ to allow the innovators to turn their ideas into reality. In a more structured form Venture Capital (VC) firms channel capital from institutional investors into privately held companies with a high-growth potential. This is called ‘seed funding’, the first level of early stage venture capital.

Venture capital (VC) is cyclical in the sense that a particular VC fund exists for a specific period of time, typically 10-13 years, involving a period of fund raising, of selecting target firms and investing, of monitoring and adding value to these firms, to be concluded by exiting and returning capital to the investors. Because venture funds make long-run illiquid investments in firms, they need to secure funds from their investors for periods of a decade or more. They are often organised in the form of a limited partnership. In return for committing their capital, the VCs demand from the firm preferred stock with numerous restrictive covenants and representation on the board of directors. VCs typically take the most successful firms in their portfolio public,
accounting for the bulk of venture returns. The partners in the VC firm typically retain 20% of the proceeds, as variable compensation, plus the base compensation through fixed management fees as a percentage of the committed capital, between 1.5 and 3% or 15-19% in NPV terms (Gompers and Lerner, 1999).

In the 1980s the limited liability partnership (LLC) became the dominant organisational form in the VC industry in the USA; with the institutional investors as the Limited Partners and the VC professionals as the General Partners. In order to retain the limited liability status the investors (e.g. pension funds) cannot become involved in the fund’s day-to-day management. This type of structure has the advantage compared to corporations that income is only taxed once, as it flows to the partners. Moreover, ‘carried interest’ is taxed as capital gains (with a maximum federal rate of 15% in 2007, rather than ordinary income with a max. rate of 35% (Cendrowski et al., 2008).

As firms mature and start to generate steady streams of revenue and income, the related cash flows can be used to attract capital in the form of debt, mostly provided for by the banks. When publicly listed, firms may attract additional capital by issuing stock.

The more traditional form of private equity, not using a defined short investment cycle, but taking strategic interest in a firm applying a long term investment perspective is for instance represented in The Netherlands by the “Participatie Maatschappijen”, such as NPM Capital, HAL, Rabo Participaties, and ABN AMRO Capital (Wester, 2008).

### 5.1 Infrastructure funds

More recently PE funds have been set up to buy stakes in companies operating in infrastructure industries, including water, electricity, gas, toll roads, ports and airports. These funds facilitate the privatisation process of utility firms. The utility industry is attractive for investment funds because of the stable returns. Until 2005 €700 bln was said to have been privatised with another €300 bln left, to which may be added wholly-owned state enterprises and public infrastructure assets. These funds expect long-term returns and are not likely to apply the same strategies as the private equity leveraged buyout funds. In 2006, PE investors assumed €7 bln of the €22 bln worth of assets offered by European governments, which included for instance 4.5% of Deutsche Telekom (2006). Figure 2 reflects the amounts of privatization in the enlarged Europe for the period 1977-1H2008 (Megginson, 2008).

![Figure 2. Privatization in the enlarged Europe, 1977-1H2008](image)

In the USA the 1935 Public Utility Holding Company Act requires public utilities for regulatory purposes to be incorporated in the state in which they operate or to be
regulated by the Securities and Exchange Commission (SEC) if they operate in more than one state. This Act prohibited non-public utility companies, such as investment banks or oil companies, to own public utilities. The 1935 Act was repealed by the Energy Policy Act in 2005 and replaced by the Public Utility Holding Company Act of 2005. This Act moved jurisdiction over public utilities from the SEC to the Federal Energy Regulatory Commission (FERC) and opened the door to investments in public utilities, and as Cendrowsky observed: “…PE firms struck quickly” (Cendrowski et al., 2008).

5.2 Private equity – leveraged buyouts

One particular type of private equity funds is concerned with leveraged buyouts (PE-LBO). In the 1980s investments in the buyout funds surpassed the investment in venture capital funds, at an annual investment level of US$5 bln. “With some equity investors earning as much as 60 to 100 percent per year on their investments, the buyout binge was borne.” Institutional investors began allocating large portions of their portfolio to private equity to both diversify and achieve higher rates of return than available in public markets (Cendrowski et al., 2008).

Buyout funds have large similarities with the venture capital funds, in terms of structure and remuneration for the Limited and General Partners. However, they target mature public or private companies that often have experienced a short term set-back in earnings, which the buyout team believes they can remedy. Potential buyout targets are firms with strong and stable cash flows, market leadership, a well-seasoned management team, and a low debt-to-equity ratio relative to the industry average. With these qualities banks will be more likely to lend large amounts of debt to the target firm, which is essential as the control of the company is assumed by buying out the current shareholders with capital derived from a combination of debt from the banks and equity from the private equity fund (2008).

According to the OECD the “…business model of private equity funds and ‘activist’ hedge funds can be summarized as seeking to increase the market value of their pooled capital through active engagement with individual public15 companies. The engagement may include demands for changes in management, the composition of the board, dividend policies, company strategy, company capital structure and acquisition/disposal plans, which are normally regarded as corporate governance issues. The investor may also take a public company private for a period of restructuring before either returning it to public ownership or selling it to another company” (OECD, 2007).

With the growth in PE investments came the growing antipathy for the structure of PE-LBO transactions. Recognizing their vulnerability companies started to take protection against hostile takeovers by raiders, such as T. Boone Pickens, “Chainsaw Al” Dunlap, and Carl Icahn. The role of leveraged buyouts became exemplified by the acquisition of RJR Nabisco by Kohlberg, Kravis Roberts & Company (KKR) in 1988. Despite the disinclination toward the methods applied by buyout firms, defenders of the buyout practice argue that many firms otherwise may have gone out of business.

In the period 1985-1989 the five year average returns for PE-LBOs had been 35 percent, which has dropped to levels of less than 13 percent for the period 1989 to 1993. With the economic recovery the investments in buyout firms increased from US$6 billion in 1995 to $56 billion in 2000, see also Figure 3 for the capital inflows by quarter to venture capital and buyout investments in relation to the S&P500 index (Cendrowski et al., 2008).
As a result of PE-LBO public companies are being de-listed of which the size increased significantly over the years: 2001 128 firms at average US$145 mln to 67 firms in 2005 at US$992 mln. The total amount surged to $120 bln in the USA in 2006, or 20% of total mergers and acquisitions and about 1.5% of GDP (Thomson Venture Economics c.a. as cited in Hall, 2006; OECD, 2007). In the period 2005 to 2007, 15 out of the 15 largest buyout funds have been raised, which include a US$20 billion fund by Goldman Sachs Capital Partners, $15.6 bln by Blackstone Capital Partners, and $15 billion by Texas Pacific Group Partners. Typical examples of large to extremely large PE firms are the Blackstone Group, with total assets under management of approx. US$888 billion; Kohlberg, Kravis Roberts & Company (KKR); and the Texas Pacific Group (Cendrowski et al., 2008).

To consummate the buyout, typically the PE firm initiates a new legal entity operating under a holding company established in a tax-friendly jurisdiction. This new entity takes out the loan from the bank, with the cash flows of the firm as the collateral. With the loan amount the shareholders are paid and the firm moves as a subsidiary company under the holding, which assumes ownership of the firm. Current (public) share holders typically accept the buyout offer made by the PE firm as the offer tends to be set well above the current market price (Wester, 2008).

As part of the PE transaction, firm managers are given large equity stakes for their participation in the buyout deal. Thereby they are highly incentivised to improve the performance of the company in order for it to achieve a successful exit event within three to seven years. In these buyouts ‘cash is king’ as cash payments are used to service the debt raised in the deal. To generate or improve cash flow, the General Partners will divest unprofitable business lines, sell non-core assets, stretch out payables, reign in receivables, and cut R&D and capital expenditures. Cash-hungry operations will be closed or sold. Without such actions the company may not survive or be able to meet its liquidity constraints imposed by the high leverage ratios. “This ‘discipline of debt’ acts in concert with management equity stakes to impose a culture of strict cash discipline.” The finite life of the Private Equity fund stimulates managers to act in a manner that is swift and deliberate (Cendrowski et al., 2008).
PE firms are considered to present a strong governance model that helps eliminate some of the principle-agent problems associated with public-company boards. The General Partners of the PE fund represent a fully independent board of directors who closely monitor the day-to-day operations of the firm. Moreover, PE funds are not bashful about instituting leadership changes. All interests are focussed on creating shareholder value, the General Partners being heavily incentivised by large equity stakes granted to them by their PE firms (2008).

With unilateral control the PE funds can optimise the financial flows towards the PE firm ahead of the ‘exit’. Typically target firms pay for the transaction costs involved. Moreover, they compensate the PE fund for advisory and management services being rendered. Sometimes the target firm takes out a loan at the PE fund to facilitate the leverage buyout or shortly following the buyout; the loan is often deferred and the interest rate being determined well above market rate. The payment of ‘super dividends’ is another mechanism being applied. To illustrate this point: According to ratings agency Fitch 50% of the €25 bln of debt raised in the first half of 2005 was used to pay dividends. The sale and lease back of real estate provides another vehicle to generate cash and allow for advance payments to the PE firm (Hall, 2006; Wester, 2008).

As the cost of debt is linked to market interest rates, it influences directly the level of private equity investment activity. The declining interest rates since the beginning of the early 1980s contributed to the feasibility of leverage buyouts (Cendrowski et al., 2008).

The PE buyout funds have a limited lifetime, typically 8 to 12 years. PE firms typically raise funds every three to four years. As time is crucially important in generating high returns PE firms try to realise their investments as soon as feasible, the ownership period is typically 3-5 years. The prevailing ‘harvest’ or ‘exit’ scenario’s for PE managed firms are initial public offerings (IPOs), mergers and acquisitions. M&A deals permit managers and investors to achieve liquidity for their investments without waiting for a ‘lock-up’ period to expire as associated with IPOs. In a reverse takeover a company becomes publicly traded without raising additional capital and hence with less stock dilution than is necessary in an IPO. M&A has become the preferred exit strategy for buyout firms: with 119 against 66 cases in 2006 (2008).

The process cycle of a Private Equity Leveraged Buyout is summarized in Figure 4 (based on: Cendrowski et al., 2008).

The cycle begins with (1) investment capital commitments are being obtained from a select group of major investors, who become the Limited Partners in the Limited Liability Company (LLC); (2) opportunities for investment are identified and screened by the fund managers, who become the General Partners (GPs) in the LLC; (3) a target firm is selected by the GPs; (4) a proposal is made to the shareholders of the target firm using a significant market premium; (5) upon acceptance the deal is closed, the investment capital is ‘called’ and new debt from the capital market (banks) is assumed to consummate the transaction, the debt is taken on the books by the acquired company; (6) the company is taken private, to become a subsidiary under a holding company managed by the General Partners; (7) returns for the General Partners are optimized as the acquired company assumes all costs involved in the transaction; (8) the business is streamlined and the cash flow optimised; (9) freed-up cash flow is used to payout (super) dividends; (10) the General Partners are compensated for management involvement through annual fees; (11) the company is divested through an IPO or direct sale, the later often to another PE-fund; (12) the General Partners take 15-25% of the
capital gains, the so-called ‘carried interest’, the Limited Partners receive 85-75% of the capital gains; (13) the LLC is resolved, this ends the cycle.

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<th>Investors</th>
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<th>Portfolio Companies</th>
<th>Capital Market</th>
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<tr>
<td>Provide capital</td>
<td>Identify and screen opportunities</td>
<td>Use LP, GP and CM capital for Buyout (privatisation)</td>
<td>Provide leverage capital</td>
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<tr>
<td>Money</td>
<td>Transact and close deals</td>
<td>Money</td>
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<td>Limited Partners</td>
<td>Monitor and add value</td>
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<td>Pension funds</td>
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<td>Return of principal plus 75-85% of capital gain</td>
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**Figure 4. Extended Private Equity Leveraged Buyout cycle**

The operating principle of private equity leveraged buyout funds as described above suggest the initiative is always in the hands of the PE firm, which selects the most attractive targets. Empirics show that private equity firms are also invited by firms to invest and take over a particular part of the business or a particular division. The 1988 RJR Nabisco case, the largest PE-LBO at the time, is a case in point. Some more recent examples of private equity leveraged buyouts are: Hertz Car Rental, Chrysler, ISS Industrial Cleaning, and the Copenhagen Airport.

### 6 Private equity leveraged buyout case studies – telecom

Considering the impact of the leveraged buyout, the streamlining and restructuring following the acquisition of targeted firms, the financial position of the acquired firms is seriously impacted, hence it is important to assess the effects on the ability to fulfil the expectations placed on these firms from a public interest perspective. Two case studies are presented, Eircom and TDC. These represent PE-LBO cases of the more aggressive kind. The case narratives were originally compiled by Melody and with permission included in this contribution, with editorial rearrangements and updates to include recent developments (2007a; 2007b).

#### 6.1 Case study “Eircom”

Eircom is the privatized and in 1999 renamed former national operator Telecom Eireann of Ireland.

Following a long period with a national focus and with major involvement of the state in industrial activities, the Irish government policy changed in 1987 towards an emphasis on competitiveness within the European Union and participation in a wider...
global economy. The wave of privatization in the United Kingdom had raised much interest in Ireland, where the privatization process started in 1990, in the areas of agriculture, insurance and shipping.

As cited by Barrett, the Dargan Report\(^{20}\) of 1979 found the state telephone company to be underperforming, being ‘overmanned’ by a factor three compared to Britain and a factor four compared to the USA. The Culleton Report of 1992 reported that telecom revenues in Ireland at 2.7% of GDP were by far the highest of any EU country in 1989, ranging from 1.3 to 1.8% of GDP. Moreover international charges were higher than in competitor countries (Barrett, 2004).

In 1995, Telecom Eireann was the principal provider of telecom services, with approximately 1.6 million fixed-lines and an estimated 100 thousand mobile subscribers and it is the designated universal service provider.

Considerations for privatization started in 1995 to be effectuated starting 1998. In the five years before privatization (1990-1995) the company already showed significant improvement in average annual rates of growth in labour productivity (8.18), but hardly any growth in profitability (PBIT at 0.41) and a modest growth in the return on capital employed (ROCE 2.61) (Palcic and Reeves, 2008).

The chronology of key events relating to the changes in ownership is shown in Table 1.

**First IPO**

When Eircom was privatised by the government in the period 1996-2001 through a combination of a trade sale and an IPO, it was relatively inefficient and in need of significant investment. Ireland assumed position 24 in the list of 30 OECD countries based on number of subscribers per 100 inhabitants.

The initial share offering was taken up by KPN and Telia who obtained 21% resp. 14% through their joint investment vehicle Comsource. As part of the privatization process the Employee Share Option Trust (ESOT) obtained 14.9%. The remaining 49% of shares were purchased by a wide cross-section of Irish citizens. The total proceeds for the Irish Government were €6.1 bln (Irish Pst. 4,824.1 mln) equivalent to 2.7x revenues in the year 1999 of US$1.9 bln and US$1,573 per access path.\(^{21}\)

**Telecom industry ownership**

Strategic participation by other telecom operators lasted only 4 years, in late 1999 KPN and Telia decided to sell their stakes in Eircom. KPN intended to reduce its debt and to focus on its majority shareholdings, while Telia having become part of the Telia/Telenor Group was forced by the European Commission to reduce its share holding, as it now owned through Eircom 14% of Eircell and 49.5% of Esat Digifone, the first respectively the second largest GSM operator in Ireland. As Telia becomes part of a privatization process it decided to hold on to the Eircom stake. In the end game KPN and Telia dispose of their stakes in Eircom as part of the next ownership change.

**First PE-LBO**

In late 2001, followed the (first) private equity leveraged buy-out by the Irish Valentia consortium, backed by US-based Goldman Sachs, George Soros Equity Fund and Providence Equity Partners, in competition with another Irish and PE-backed group – the eIsland consortium.\(^{22}\) As part of the transaction ESOT increased its share holding to 29.9%.
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
<th>Transaction data</th>
<th>Related data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>Start of privatisation process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>KPN and Telia become strategic partners with initial 20% share extended to 35%</td>
<td>Total proceeds of privatization for the government €6.1 bln</td>
<td>Through Comcourse</td>
</tr>
<tr>
<td>1998</td>
<td>Government offers 49% of shares on the public stock market, retains 1.1%</td>
<td>ESOT obtains 14.9% of shares, valued at €363 mln</td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td>KPN and Telia intend to sell 35% stake</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>Eircell, the mobile division of Eircom, sold to Vodafone</td>
<td>Share swap value approx. €4.5 bln</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Private Equity based purchase by Valentia Consortium</td>
<td>€2.8 bln, with enterprise value of €3.1 bln. Through debt facility of €2.2 bln and €900 mln in equity</td>
<td>KPN/Telia sells stake as part of the PE buy out; ESOT increases share to 29.9% for €202 mln</td>
</tr>
<tr>
<td>2003</td>
<td>Refinancing of Valentia debt</td>
<td>€1.4 bln bank facility and €1.05 bln bonds issue</td>
<td>Re-organised as UK Holding, distributing €512 mln to shareholders</td>
</tr>
<tr>
<td>2004</td>
<td>Dividend pay-out to Valentia and ESOT</td>
<td>€446 mln</td>
<td>Employees benefit through 29.9% share owned by ESOT</td>
</tr>
<tr>
<td></td>
<td>Valentia exits through public share offering</td>
<td>IPO for 70% of shares Company market cap €1.15 bln, enterprise value €3.4 bln</td>
<td>Debt stands at €2.1 bln; Dividend at fiscal year end March 2005 forecasted to be 7.1%</td>
</tr>
<tr>
<td>2005</td>
<td>Acquisition of Meteor Mobile</td>
<td>€420 mln</td>
<td>Third largest mobile operator in Ireland</td>
</tr>
<tr>
<td></td>
<td>Babcock and Brown acquires 12.5% stake</td>
<td>€250 mln</td>
<td>Debt stands at €1.8 bln</td>
</tr>
<tr>
<td>2006</td>
<td>Eircom acquired by Private Equity branch of Babcock and Brown (BCM)</td>
<td>€2.4 bln. through €1.9 bln in debt and €480 mln in equity</td>
<td>ESOT increases stake to 35% stake. €3.65 bln Senior Facilities Agreement (SFA)</td>
</tr>
<tr>
<td>2009</td>
<td>BCM evaluates and Eircom rejects proposal from TaemasBridge to replace BCM as owner</td>
<td></td>
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<tr>
<td></td>
<td>Eircom reaches union agreement on headcount reduction and two year pay freeze</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>STT completes acquisition – with ESOT – of Eircom Holding, owner of Eircom</td>
<td>Controlling interest through €140 mln cash and shares deal</td>
<td>Debt stands at €3.97 bln. ESOT holds 35%</td>
</tr>
<tr>
<td></td>
<td>Start three year program to stabilize group financial performance and transform the organisation; advance warning issued, SFA financial covenants may be breached within 12-18 months</td>
<td></td>
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</tr>
<tr>
<td>2011</td>
<td>Eircom announces price increases, on average 3.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>Preliminary engagement with lenders on balance sheet remediation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>August</td>
<td>Eircom requests a three month waiver from senior lenders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sept</td>
<td>Eircom receives three month waiver from senior lenders, confirming breach of senior debt/EBITDA covenant as of June 30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec</td>
<td>Independent Directors review three proposals concerning balance sheet remediation</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Eircom requests and receives extension of covenant waiver to January 31, 2012</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>STT remediation proposal rejected, STT nominated Directors resign</td>
<td></td>
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<tr>
<td>2013</td>
<td>Directors authorize process to assess the interest of third parties in the sale of the Company. Proposal are due March 2012. Waiver extension granted to March 2012</td>
<td></td>
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</tr>
<tr>
<td>March</td>
<td>Eircom requests and is granted by the High Court examinership to protect the company from its creditors for up to 100 days and to allow it time to restructure its gross €4.1 bln debt.</td>
<td>Restructuring proposal includes reduction by €407 mln on €2.695 bln from first lien lenders, €350 mln of second lien lenders cut by 90% and €1.05 bln loan note holders being wiped out</td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>High Court approves five-year survival scheme for Eircom; debt stands at €2.35 bln</td>
<td></td>
<td></td>
</tr>
<tr>
<td>June</td>
<td>Eircom exists examinership, being owned by its lenders</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Time line of ownership change of Eircom, Ireland, 1995-2012
The acquisition was financed through €2.2 bln in debt and €900 mln in equity. After the acquisition, Eircom repaid Valenta debt by issuing bonds which increased debt from about 25% to 70% of its capital structure.

Under PE-Fund ownership Eircom capital expenditures declined from €700 mln per annum in 2001 to €300 mln in 2002 and €200 mln in 2003 and 2004. In 2001, before the takeover, Eircom invested its internally generated capital from depreciation allowances plus another €275 mln. Between 2002 and 2004, it reduced its investment dramatically. Investment was more than €450 mln less than its internally generated capital from depreciation allowances. This enabled payment of a special €446 mln cash dividend to Valenta and ESOT.\textsuperscript{23} Net assets fell from €812 mln in March 2002 to €297 mln at the end of 2003.

The company turned from a profit of €104 mln in 2000 to a loss of €104 mln related to a drop in revenues from €2.2 bln to 1.8 bln. This reflects the reduced prices through government intervention and competition (Barrett, 2004). In the first five years after privatization (1997-2002) the average annual rates of growth in labour remained relatively high (5.67), the growth in profitability improved (PBIT 2.1) albeit from an depressed level, and growth in return on capital became significantly negative (ROCE – 5.82) (Palcic and Reeves, 2008).

**Second IPO**

In 2004, three years after the acquisition, Valenta used a public stock offering as its exit strategy. The company was successfully floated at a market value of €1.15 bln, which yielded €569 mln for the exiting shareholder Valenta. The enterprise value of €3.4 bln represents 5.7x EBITDA. Debt stood at €2.1 bln. Moodys gave the group shares a junk rating.

During the 2004-2006 period of publicly held stock ownership, the 70% debt ratio remained unchanged. Capital expenditure stayed low at €200 mln in 2004 and 2005 and increased only slightly to €250 mln in 2006. In all years capital expenditure remained less than internal capital generated from depreciation allowances.

**Second PE-LBO**

In 2005 Australia-based Babcock and Brown acquired 12.5% of the shares in Eircom for €250 mln. In 2006 Babcock and Brown purchased the remaining floating shares of Eircom, taking the firm private for a second time; again through debt finance to the amount of approx. €1.9 bln and equity of approx. €480 mln. Through a complex holding company structure, ultimate ownership is traced to the Cayman Islands. After this takeover, Eircom debt has risen to €3.8 billion supported by assets of €3.1 billion, providing a debt/assets ratio of 117%. Although the new owners have announced their intention to invest in upgrading the Eircom network to European broadband standards, Eircom’s capacity to invest significant amounts seems virtually straight-jacketed. The new owners have begun exploring whether government will provide funds to support universal service investments, and have indicated that price increases for basic services will soon be needed. Early 2009 the company applies a write down of €720 mln in goodwill.

In March 2009, Babcock and Brown submitted to voluntary administration, i.e., seeking bankruptcy protection. BCM the investment vehicle, which owns 57% of Eircom, has recently broken all ties with the former parent and has been rebranded as Eircom Holdings Limited.
According to newspaper reports Eircom Holdings had become the subject of a takeover bid of €95 mln from a consortium called Taemas Bridge. The Taemas Bridge bid is being opposed by Eircom management and unions. Eircom Holdings said that it regarded the bid as hostile, and that it had received approaches from a number of other potential bidders. The Eircom Share Ownership Trust (ESOT) could increase its stake in the former state telecoms firm as the company gears up to help fight off an unsolicited offer. ESOT, which is made up of thousands of former and current employees at the telecoms firm, already owns 35% of Eircom. Eircom's acting chief executive Magee said the Eircom board is attempting to shape a solution that underpins the long-term future of the company. For example, the Taemas offer document contains no plans for Eircom's future and focuses on extracting value for BCM shareholders who have been burned by their investment in the fund. "The challenges facing the company now are significant -- we have net debt of €4 bln and a deficit in our pension scheme. We have a cost structure that is no longer sustainable and a market which is contracting. We also have a requirement to invest significantly in next generation networks that are vital to the future of the company and the economy." Mr. Magee said there were no easy solutions and tough decisions would be required. A restructuring plan is already under way at the firm which will include over 1,200 job losses (down from 7,000) and savings of up to €150 mln per annum.

After three years of Babcock & Brown involvement, Magee and others senior executives and board members at Eircom are keen that it takes control of its own destiny rather than having it decided in Australia. Eircom has already made it clear that the Babcock model has failed. Eircom doesn’t wish to repeat that ‘trick’ with Topfer’s latest Taemas plan.

**Foreign sovereign equity**

During June of 2009 it appeared that Singapore Technologies Telemedia (STT) was preparing a bid for Eircom Holdings. STT was founded in 1994 as a unit of Singapore’s sovereign fund Temasek Holdings. The bid received support from ESOT, which retained its 35% share in the company. The bid was finalized with a shareholders approval in December 2009 valued at €140 mln, a 20% premium on the closing price of June, to be effectuated through Cayman Island based Emerald Communications. STT will be facing refinancing of Eircom debt of €1.2 bln in 2014 and another €1.2 bln in 2015.

**Senior Facilities Agreement**

With the acquisition of Eircom by Babcock and Brown the company enters in a Senior Facilities Agreement (SFA) with its first lien lenders, which includes financial covenants on EBITIDA results. This SFA transcends the acquisition by STT. The company starts a three year program to stabilize the financial performance and transform the organization to meet the SFA targets.

To meet EBITIDA targets the company increases the prices, agrees with the unions a reduction of the headcount and a two year pay rate freeze. In the difficult economic climate these measures are largely able to keep the costs in line with falling revenues, but leave little room for reduction of the debt. By August 2010, the company provides advance warning that the financial covenants may be breached within the next 12-18 month. This sets in motion negotiations with the lenders on financial restructuring.

The company performance falls below the targets set in the covenants by June 2011. The company requests and receives waivers ultimately to March 2012. Meanwhile
independent directors review proposals for balance sheet remediation from the lenders and from STT. STT’s proposal is rejected and consequently the STT nominated directors resign with immediate effect. The directors also invite proposals for a sale of Eircom with a due date of March 2012.

Ultimately the directors are forced to request the High Court for protection against bankruptcy through an examinership. This examinership is granted and results in a five year survival plan, including a financial restructuring with gross debt of €4.1 bln being reduced to €2.35 bln. By June 2012 Eircom exists examinership now fully owned by its lenders.

Communications industry performance

Since the initial writing of the case study, Eircom has increased prices for basic services and petitioned the government for rural subsidies. The basket of residential telephone charges was the highest in the OECD (OECD, 2009) to improve in the 2010 rankings. By 2009 the broadband penetration in Ireland stands at 22% of households, assuming a 22th position within the OECD. In terms of broadband prices per megabits per second of advertised speeds Ireland ranks 28th (OECD, 2011). In terms of investment Ireland scores at the low end of the 34 country league table of the OECD. See also Table 2 (OECD, 2011). According to TeleGeography a report commissioned by the European Union had described Eircom’s core services as ‘expensive and unreliable’, prompting the call for re-nationalisation.

Table 2. Communications statistics Ireland, 1995-2009

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Telecom revenues (xmln)</td>
<td>1759</td>
<td>2249</td>
<td>4898</td>
<td>5357</td>
<td>6214</td>
<td>6640</td>
<td>5607</td>
<td></td>
</tr>
<tr>
<td>Access paths (x1000)</td>
<td>1577</td>
<td>3658</td>
<td>6214</td>
<td>6949</td>
<td>7480</td>
<td>7630</td>
<td>7303</td>
<td></td>
</tr>
<tr>
<td>Revenue per access path</td>
<td>1115</td>
<td>615</td>
<td>788</td>
<td>771</td>
<td>831</td>
<td>870</td>
<td>767</td>
<td></td>
</tr>
<tr>
<td>Revenue as % of GDP</td>
<td>2.08</td>
<td>2.34</td>
<td>2.51</td>
<td>2.41</td>
<td>2.38</td>
<td>2.50</td>
<td>2.52</td>
<td></td>
</tr>
<tr>
<td>Access paths per 100 pop</td>
<td>36.5</td>
<td>96.1</td>
<td>149.4</td>
<td>163.1</td>
<td>171.3</td>
<td>171.7</td>
<td>163.4</td>
<td>24</td>
</tr>
<tr>
<td>Broadband subs per 100</td>
<td>0.01</td>
<td>6.59</td>
<td>12.18</td>
<td>17.59</td>
<td>20.17</td>
<td>21.53</td>
<td>21.53</td>
<td>22</td>
</tr>
<tr>
<td>Invest/revenue</td>
<td>24.0</td>
<td>31.3</td>
<td>13.7</td>
<td>16.8</td>
<td>10.1</td>
<td>11.4</td>
<td>11.0</td>
<td>28</td>
</tr>
<tr>
<td>Investment as % GFCFii</td>
<td>2.27</td>
<td>3.17</td>
<td>1.70</td>
<td>1.67</td>
<td>1.05</td>
<td>1.12</td>
<td>1.06</td>
<td>30</td>
</tr>
</tbody>
</table>

1 Interpolated 1993-1996.

GFCF: Gross Fixed Capital Formation.

6.2 Case study “TDC”

In 1990 TeleDanmark is created to become a holding company to own the four regional telephone companies in Denmark and Telecom A/S, being responsible for international communications.

In 1994, TeleDanmark was the principal provider of telecom services, with approximately 3.2 million fixed-lines and an estimated 600 thousand mobile subscribers and it is the designated universal service provider. Moreover, TeleDanmark is the leading CA-TV provider.

The chronology of key events relating to the changes in ownership is shown in Table 3.
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
<th>Transaction data</th>
<th>Related data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>Start of privatisation process with IPO</td>
<td>US$3 bln</td>
<td>49% of shares are floated</td>
</tr>
<tr>
<td>1996</td>
<td>TeleDanmark starts international expansion, with share in Belgacom 16.5%,</td>
<td></td>
<td>Jointly with Ameritech 17.5 %</td>
</tr>
<tr>
<td>1997</td>
<td>Ameritech becomes strategic partner with 34.4% of shares purchased from the state</td>
<td>US$3.2 bln</td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td>TeleDanmark buys remaining shares from government, increasing Ameritech share holding to 42%</td>
<td>US$1.5 bln</td>
<td>State share from 17.3% to zero.</td>
</tr>
<tr>
<td>1999</td>
<td>SBC and Ameritech merge into SBC Communications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>TeleDanmark changes name to TDC, acquires Sunrise and diAx in Switzerland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>Merger talks between TeleDanmark and Telia fail</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>TDC announces intention to sell stake in Belgacom</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>SBC Communications announces intention to withdraw from Europe and to sell 32.1% stake in TDC</td>
<td>US$2.36 bln</td>
<td>Private placement and buyback of shares by TDC, in November and June 2005</td>
</tr>
<tr>
<td>2005</td>
<td>PE based purchase of TDC by consortium Nordic Telephone Company Holding, effectuated January 2006</td>
<td>US$15.3 bln. Debt facility $12 bln, equity US$3 bln. Market value US$12 bln.</td>
<td>Acquiring 88.2% of shares at 5.5% market premium. Pension fund ATP retaining 5.5% share.</td>
</tr>
<tr>
<td>2006</td>
<td>Special dividend pay-out to service debt NTCH, pushes debt to TDC</td>
<td>US$7.3 bln</td>
<td>Approx. 50% acquisition price</td>
</tr>
<tr>
<td>2007</td>
<td>International divestments: Bite (Latvia &amp; Lithuania), Talkline (Germany), One (Austria). Sunrise acquires Tele2 in Switzerland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>International divestments: Polkomtel (Poland), Invitel/HTCC (Hungary)</td>
<td>Polkomtel US$1 bln</td>
<td>Debt stands at approx US$6.4 bln</td>
</tr>
<tr>
<td>2009</td>
<td>Swiss subsidiary Sunrise merge with Orange blocked by Swiss regulator</td>
<td>US$625 mln</td>
<td>TDC to retain 25%, with exit option</td>
</tr>
<tr>
<td></td>
<td>Dividend payout</td>
<td>US$1.1 bln</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Merger between NTCH, NTCF, NTCA and NTCl with NTCA as surviving company owning TDC</td>
<td></td>
<td>Goodwill amortization</td>
</tr>
<tr>
<td></td>
<td>Capital restructuring</td>
<td>€750 mln</td>
<td>Exchanged notes due in 2012 for notes due 2015</td>
</tr>
<tr>
<td></td>
<td>PE Fund owners prepare for public offering of part of TDC in 2010</td>
<td>Market value US$8.4 bln</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>CVC acquires Sunrise</td>
<td>US$3.25 bln</td>
<td>After tax gain DKK650 mln</td>
</tr>
<tr>
<td></td>
<td>NTCA issues IPO</td>
<td>€1.9 bln, 210 mln shares issued at DKK51(€6.8); TDC market valuation of DKK64.7 bln, with DKKr23.3 net debt</td>
<td>Reduces stake from 88% to 59%</td>
</tr>
<tr>
<td></td>
<td>TDC share buyback from NTCA</td>
<td>Buyback DKKr 9 bln (€1.2 bln of which €1.16 bln from NTCA)</td>
<td>Remaining free-floating shares 40.7%</td>
</tr>
<tr>
<td>2012</td>
<td>NTCA share sale</td>
<td>US$984 mln; 128 mln shares issued at DKKr43.4; Market valuation US$6.32 bln</td>
<td>15% share sale</td>
</tr>
</tbody>
</table>

Table 3. Time line of ownership change of TDC, Denmark, 1994-2012
First IPO

In 1994 the privatization process of TeleDanmark started with an IPO involving 49% of the shares, the remainder of the shares stayed with the state. At that time TeleDanmark was a relatively efficient company in comparison to incumbent operators in Europe; TeleDanmark required 4.3 employees per US$1 mln in revenues, while Deutsche Telekom had 4.6 and BT and France Télécom 5.6. Through TeleDanmark the country had obtained the #3 position in the OECD league table in terms teledensity, after the USA and Switzerland.

Telecom industry ownership

In 1996 TeleDanmark started its international expansion strategy by assuming a 16.5% share in Belgacom, the incumbent operator in Belgium, through an investment consortium in which US-based Ameritech assumed a stake of 17.5% in Belgacom.

In 1997 Ameritech becomes a strategic partner in TeleDanmark, by buying a 34% share in TeleDanmark from the state for US$3.2 bln, In 1998, as TeleDanmark buys the remaining shares from the government for US$1.5 bln, the Ameritech share rises to 42%.

The privatization process has yielded proceeds for the government of US$7.7 bln, or 2.1x revenues in 1996 of US$3,641 mln or US$1,685 per access path.

Over the period 1992-1997 TeleDanmark shows a steady increase in revenues and profits, with an average annual growth of 10.5% in revenues and 12.0% in profits. It steadily expands its international position mainly through mobile interests. In 2000 TeleDanmark changed its name to TDC.

In 1999 SBC and Ameritech merge and as a consequence SBC Communications assumes the shareholding in TDC. In 2001 merger talks between Telia and TeleDanmark failed.

In 2004 SBC Communications announces its intention to withdraw from Europe and to sell its TDC shares, which is effectuated in 2004 and 2005 by private placement and a buyback of shares by TDC. As a result all TDC shares are on the open market again.

Second period public ownership

In contrast to Ireland, Denmark always has been a European leader in the provision of efficient telecom services over a technologically up-to-date network with universal service coverage. TDC’s corporate vision was stated in 2005 as “to be the best provider of communication solutions in Europe.” As well as continuing dominance of the Danish market, where it owns both the major telecom and cable TV transmission and distribution networks, the company has expanded its portfolio to include significant holdings in nine other European countries, as well as Oman. In 2005 TDC purchased additional operations in Hungary, Sweden and Switzerland. Switzerland is its most important foreign market, with activities in fixed, mobile and Internet. In addition, it is co-owner of several international partnerships covering services in other countries. Revenue in 2005 stood at €6,245 mln while net income was just under €1,000 mln. International operations contributed nearly half of the TDC revenues. Capital expenditures were about €800 mln. The 2005 Annual Report noted the company expects “…to be able to deliver excellent financial performance and solid cash flows in future.”
TDC stock was widely held by institutions and retail investors in Denmark, Europe and North America. It has paid a regular quarterly dividend since privatisation. In 2003, the company provided special incentives for employees to purchase shares. In recent years TDC has been able to fund its growth and new acquisitions primarily with internally generated cash, while steadily reducing its debt. Since 2001 its net interest-bearing debt has been cut in half, declining from 38% to 18% of total assets, and from 50% to 27% of debt plus equity.

First PE-LBO
The private equity fund offer was announced on December 2, 2005, being supported by the TDC Board, and completed on February 1, 2006 with the purchase of 88.2% of outstanding shares. TDC was taken over by a group of five foreign private equity firm specialists – Apax Partners; Blackstone Group; Kohlberg Kravis Roberts; Permira; and Providence Equity – in the largest takeover in Europe to that date for just under €12 bln. It was financed by slightly more than 80% in debt, a senior credit and bridge facility. The holding company owning TDC became Nordic Telephone Company ApS (NTCH), of which the balance sheet reflected intangible assets of DKr68.2 bln including DKr28.1 bln in goodwill.

The 2005 Annual Report notes significant downgrading of the TDC credit rating by Standard and Poor and Moody Investor Services as a result of the leverage buyout. The acquisition increased TDC’s net debt to total assets ratio from 18% to more than 90%, at interest rates substantially higher than those for the previously established debt. The new owners have been deliberately vague about why they have taken over TDC and what their plans are, stating only that they expect to own TDC for about five years.

On April 5, 2006, two months after the takeover, TDC declared a special dividend of DK 219.50 per share. The total payout was DK43,481 mln (€5.9 bln), about half of the share price paid by the new owners, about 47% of TDC total assets, and about twice the equity investment of the takeover partners. It was funded by TDC sales of some of its investments in other countries, additional debt, and the cash reserve TDC had built up in prior years, presumably in anticipation of making long-term investments. It served to push down debt from NTCH to TDC and allowed NTCH to repay the senior credit facility. At the same time the bridge facility was replaced by high yield bonds.

The new owners changed the mission of TDC from ‘Best in Europe” to “Focus on Denmark and the Nordic Market”. The current ambition is to: “Become the best-performing incumbent telco in Europe by 2012 measured on value creation, customer satisfaction and employee pride, while remaining the backbone of the Danish world-class communications infrastructure” (TDC, 2012). TDC has been divesting its participation in companies in other countries, leading to a 23% drop in revenues, from DKr46.6 bln in 2005 to DKr35.9 bln in 2009. The company improved performance, e.g. increasing the EBITDA margin from 28.8% in 2006 to 41.6% in 2011. It released so called ‘trapped capital’ as hundreds of buildings were sold and leased back for 30 years. Moreover, it has outsourced its international voice business to iBasis, a subsidiary of KPN, and outsourced the management of its mobile network to Ericsson. IT services were outsourced to CSC. Staff reductions continued at 7% per annum. The company reported improving customer satisfaction (CSAT Index up from 67 in 2009 to 72 in 2011 and unacceptable customer experience from index=100 at 2009Q1 to 64 in 2011). Improving employee satisfaction is reflected in the ESAT index improving from 73 in
2008 to 80 in 2011 and the percentage of low performing managers falling from 13% to 2% over the period (TDC, 2012).

**Second IPO**

In 2009 the international divestment process appears to be completed with the sale of Sunrise to FT/Orange and opens the road to an IPO. However, this deal is blocked by the Swiss regulator. The announced sale of Sunrise to PE-firm CVC in September 2010 allows the IPO to be launched with 210 mln shares being offered in December. The IPO becomes fully subscribed and generates proceeds of €1.9 bln. With the IPO, TDC also effectuates a share buyback of €1.2 bln, providing NTCA with proceeds of €1.16 bln.

In 2012 NTCA places another 128 mln shares on the market generating close to US$1 bln. By that time TDC has a stock market value of US$6.32 bln.

**Communications industry performance**

On the short term Denmark’s position in the OECD league tables has not deteriorated significantly, see Table 4 (OECD, 2011). Denmark moved from position #3 to #6 in terms of teledensity and it assumes position #6 in terms of the ratio of investments to revenues. In 2009 the country had the leading position in broadband subscribers density. TDC retained its share in fixed broadband from 60% at year-end 2004 to 61% at mid-year 2012 (TDC, 2012). TDC’s cable infrastructure expanded from 38% homes passed in 2005 to 55%, in 2009, with 77% of the homes passed able to receive data rates of 50 Mbit/s. TDC increased its share in cable networks from 40% in mid-2005 to 64% at year-end 2009. By mid-2012 it had acquired 52% of the pay-tv market. Through the acquisition of DONG Energy’s fiber network TDC now operates the largest fiber network in Denmark, with 37,586 km of fiber and 390,000 homes passed. In 2009 TDC’s market share in mobile broadband stood at 32% to increase to 35% by mid-2012.

<table>
<thead>
<tr>
<th>Denmark (US$)</th>
<th>1995</th>
<th>2000</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telecom revenues (xmln)</td>
<td>3730</td>
<td>4173</td>
<td>6574</td>
<td>6786</td>
<td>8162</td>
<td>8125</td>
<td>7674</td>
<td></td>
</tr>
<tr>
<td>Access paths (x1000)</td>
<td>4235°F</td>
<td>6640</td>
<td>9597</td>
<td>10171</td>
<td>10613</td>
<td>10947</td>
<td>11149</td>
<td></td>
</tr>
<tr>
<td>Revenue per access path</td>
<td>881</td>
<td>628</td>
<td>685</td>
<td>667</td>
<td>769</td>
<td>742</td>
<td>688</td>
<td></td>
</tr>
<tr>
<td>Revenue as % of GDP</td>
<td>2.07</td>
<td>2.61</td>
<td>2.55</td>
<td>2.47</td>
<td>2.63</td>
<td>2.38</td>
<td>2.47</td>
<td></td>
</tr>
<tr>
<td>Access paths per 100 pop</td>
<td>62.0</td>
<td>124.4</td>
<td>177.1</td>
<td>187.1</td>
<td>194.4</td>
<td>199.3</td>
<td>201.9</td>
<td>6</td>
</tr>
<tr>
<td>Broadband subs per 100</td>
<td>1.26</td>
<td>24.92</td>
<td>31.79</td>
<td>35.64</td>
<td>36.81</td>
<td>37.43</td>
<td>37.43</td>
<td>1</td>
</tr>
<tr>
<td>Invest/revenue</td>
<td>21.6</td>
<td>26.7</td>
<td>17.3</td>
<td>18.2</td>
<td>20.6</td>
<td>23.3</td>
<td>20.6</td>
<td>6</td>
</tr>
<tr>
<td>Investment as % GFCF°F</td>
<td>1.96</td>
<td>3.24</td>
<td>2.41</td>
<td>2.46</td>
<td>2.83</td>
<td>2.73</td>
<td>2.22</td>
<td>11</td>
</tr>
</tbody>
</table>

°FInterpolated 1993-1996.
°FGFCF: Gross Fixed Capital Formation.

Table 4. Communication statistics Denmark, 1995-2009

**6.3 Conclusions from the Case Studies**

In terms of market size and structure Ireland and Denmark are roughly the same facilitating a comparison: the same order of magnitude regarding inhabitants (4.4/5.5 mln); the same number of licensed communications providers (PSTN: 25/19, cellular: 4/4; MVNOs: 2/1; cable operators: 8/17) and having almost the same fixed market
concentration ratio (Herfindahl-Hirshman Index of 5.108/5.325) (EC, 2010a; OECD, 2011).

In the case of Ireland we observe the state initiated IPO to be followed by a PE-LBO, a second IPO, a second PE-LBO and a subsequent ownership change. In the case of Denmark we observe the state initiated IPO being followed by a single PE-LBO. In the case of Eircom the first PE-LBO firm is Irish-led and backed by major US-based PE firms, the second PE-LBO involves an Australian-based firm. In the case of TDC there is a single PE-LBO being led by major US-based PE firms.

While the objectives of the PE firms appear to be the same, providing an above average return to the limited and general partners, the opportunities Eircom and TDC provided to realize these objectives were significantly different and hence the significant difference in the outcomes: Eircom entering bankruptcy proceedings and TDC having strengthened its domestic market position. Hence, also a significant difference for the societies involved: Ireland remains a laggard in the OECD communications league tables, while Denmark remains a leader, see Table 2 and 4.

The difference can be explained from the starting position of the two targeted firms at the time of the PE-LBO and the strategic options this provided for the PE-firms. TDC had built up a strong international position accounting for close to 50% of its total revenues. The PE-firm’s strategy involved a re-focus of TDC on the Nordic countries and the divestment of the international holdings. This allowed major amounts of cash to be generated and transferred to the PE-firm to service the debt and provide returns for the PE firm, while the domestic position of TDC was largely unaffected; CAPEX remained at approx. 13% of revenues, allowing for some strategic acquisitions to strengthen the market position of TDC in Denmark (e.g. DONG fibre; 2x20MHz spectrum in the 800MHz band). This strategy resulted in a successful public offerings of parts of TDC in 2010 and 2012.

In contrast, Eircom did not have an international portfolio that could be divested and hence cash transfers to the PE-firms to service debts and provide a return to the PE-firms had to come from improving existing cash flows. This is a major challenge in a business climate of increasing competition and decreasing revenues. This led to financial haemorrhage and ultimately to the 2012 bankruptcy proceedings.

As a going concern Eircom is subject to a five-year survival plan and needs to service €2.35 bln remaining debt on a revenue stream of approx. €1.6 bln and EBITDA of €0.6 bln. TDC needs to service €3 bln of debt on a revenue stream of approx. €3.5 bln and EBITDA of €1.3 bln.

The telecom sector case studies of PE-LBO investments in incumbent infrastructure providers in Europe, of which two were discussed in the previous Sections, suggest the following insights as input for telecommunications policy formation:

1) Fund investments can be attracted to incumbent telecom operators that are efficient (Denmark) and inefficient (Ireland);

2) The levels of debt forced upon the operators after the leveraged buyouts force the freeing of cash to service and repay these debts, severely constrained the strategic options for applying cash to long-term investment capabilities;

3) Fund ownership has been an exercise in disinvestment and the removal of capital, not attracting capital for new investments in growth and development;
4) The case of Ireland, and to a lesser degree Denmark, shows that employees can benefit through employee share ownership (ESOT resp. APT). If and when they side with the PE fund managers they can ride the bandwagon and enjoy the dividend pay-outs being made;

5) The impact of the PE-LBO fund ownership is significant. Eircom was once a firm valued at €6 bln when privatized by the government, it recently emerged from bankruptcy protection with a five-year survival plan and €2.35 bln in debt. The market valuation of TDC is now €5.1 bln, net interest bearing debt stands at €3 bln, while approx €4 bln of international assets have been liquidated and removed.

The empirics suggest furthermore that a private equity leveraged buyout is ‘an offer one cannot refuse’, neither the shareholders, the board of directors, nor the managers; the terms offered are simply made too attractive.

In a leveraged buyout the target company resumes full ownership of the firm by borrowing money from banks to pay-off current share holders. In the process the ownership and thereby the control of the firm is transferred to the private equity fund. At ‘exit’ the capital gains, i.e., the full proceeds flow to the PE fund, the valuation of the firm being subject to the debt outstanding.

Assuming debt to assume full ownership of the firm runs counter to the ‘normal operation’ of a firm, whereby equity stakes are issued to private or public investors to obtain external capital intended to grow the business.

The operational measures employed by PE funds to improve cash flow, such as stretching out payables, reign in receivables, as well as excess spending are beneficial to the firm also under ‘normal’ operating conditions, at least to a certain degree. The measures to divest unprofitable business lines, and sell non-core assets are also have been beneficial if they are in line with the strategic long-term development of the firm.32 The ‘PE pressure’ will have accelerated the related decision making process.

However, the need to use cash for the purpose of servicing debts related to the leveraged buy-out is an expense alien to the normal operations of a firm, as are the fees that have to be paid to the banks and advisors for services rendered in taking the firm private and the remuneration of the PE firm. These expenses forfeit the firm the alternative use of the related capital, thereby curtailing its ability to invest in the renewal of its product portfolio, develop new markets and improving operations. In general, the reduction in capital expenditure will affect its competitiveness due to delayed plant renewal and restricting its growth opportunities.

7 Private Equity LBO and the safeguarding of public values

The question that remains to be answered is how the PE-LBO cycle affects the safeguarding of public values. With reference to the values identified in Section 4.3 and the effects of PE-LBO, the main concern is related to the ‘security of supply’. A second political concern is the ability to realize the Digital Agenda objectives.

In this context Melody observed that “[p]ublic utilities provide the important infrastructure foundations for all economies and societies. The efficiency of the entire economy and its social relations is heavily influenced by the efficiency, quality and universality of these utility services. They are priority factors in the decisions regarding the location for investment by firms in many industries. They are standard economic
indicators of the differences between developed and developing countries. The effects of the efficiency and universality of a country’s infrastructure services ripple throughout the economy and society in a manner that multiplies their impact many times. Because of their centrality to all economic and social life, utility services always have been treated differently from industry in general. Public policy has been directed to ensuring to the greatest extent possible the universal availability of utility services at a reasonable quality and price” (Melody, 2007a).

The transition of utility firms from the public sector to private sector makes these firms attractive to private equity funds, in particular because these firms typically provide (adapted from: Hall, 2006; Melody, 2007a):

- Large, stable cash flows from a customer base that considers the service a necessity and has few, and sometimes no alternatives;
- A significant degree of monopoly power in the primary market(s);
- Financial structures and policies are geared to risk optimization for long-term investments in capital intensive fixed assets; the large cash flows provide internally generated capital necessary to meet significant ongoing long-term investment requirements in infrastructure facilities;
- Public utilities own significant public resources and special rights (e.g., land, rights-of-way, eminent domain, radio spectrum, etc.) that are undervalued, or even unvalued assets;
- Industry specific governance/regulation is limited typically to certain service performance objectives in basic services and does not extend to ownership, financial policies, pricing for most services, or profit control.

These distinctive characteristics and circumstances of public utilities in Europe suggest that the sector is attractive for private equity funds and there is a risk of PE-LBOs to negatively affect both infrastructure development and the longstanding public policy objectives for public utilities. The case of Eircom shows what the impact of PE-LBO can be on the survival of the firm – and – the future of Eircom remains uncertain. Failure to meet the objectives of the survival plan leaves the owners (banks) with little else than a full bankruptcy, which will without any doubt invoke the government as ‘lender of last resort’. The question is whether such outcome of the market economy is politically acceptable and whether such outcome should be prevented. The answers depends on the role perception of the government.

In the following Sections we will assess the outcome using the two policy perspectives ‘regulatory’ and ‘developmental’. Using these two perspectives provides a contrast that deepens out insights. It should be noted that in practice these two pure forms do not exist.

### 7.1 Assessment in the perspective of a ‘regulatory state’

Within the regulatory state the government operates at a distance and plays the role of the ‘night watch’. Such a government is small and first of all a facilitator of what ‘society wants’. In terms of information production and diffusion it is the ‘lender of last resort’. After all other options have been tried the state plays the role that remains. It monitors and in case it discovers inconsistencies it does not intervene, but feeds information back into the system. The regulatory state is strong with respect to the
maintenance of the rules of the game: supervising the process is central and in that respect the state intervenes strongly based on strict rules of competition.

Against this background private equity leveraged buyouts is ‘just another’ asset class, a result of innovation in a quest to pursue private gains. The way private gains are achieved is left to the market as long as it is lawful. Massive capital re-allocation is one of the mechanism that can be applied to achieve that goal. Capital that is ‘freed’ can be reinvested elsewhere.

Considering that the ultimate test for the ‘shareholder value’ perspective is the degree of protection against hostile takeovers, under the ‘regulatory regime’ any remaining protection should be removed in the interest of the proper functioning of the market for corporate control. Corporate governance rules having been enacted to protect the shareholder as owner of the firm in the principle-agent relationship with the board and the management, and disclosure rules having been enacted to facilitate the proper functioning of the stock market, these become redundant once the firm is taken private.

In a market economy, if a firm having been impacted by a leverage buyout fails, other firms are expected to take benefit of the opportunity being provided.

As in this perspective the public interests are perceived to be best served by the pursuit of private interest, perceived impacts of ‘public interest’ will not lead to intervention. The outcome is one of many and a result of the operation of competitive markets.

Interestingly the country that is most often cited as a prime example of the ‘regulatory state’ – the USA, has a very strong involvement of government in the infrastructure sectors. Regulatory agencies in the US have strong regulatory powers over the financial practices of public utilities because they are “businesses affected with a public interest”.

A private equity fund leveraged buyout of an incumbent utility operator that was the dominant provider in its industry with universal service and other public interest obligations could not take place in the USA, today, without advance approval from one or more utility regulatory authorities, and ongoing regulation that encompassed both operational and financial matters (Melody, 2008).

The development of this regulatory practice in the telecom sector may be a result of the fact that in the USA the incumbent telecommunications firm has always been a private entity with shares listed at the public stock market. Hence, the principle-agent issue in safeguarding the ‘public interest’ through a ‘private firm’ has always been a matter of government involvement.

Note that as the financial system fails governments with a ‘regulatory’ perspective, or strong proponents of ‘free market fundamentalism’ do intervene as ‘lender of last resort’, as the (extreme) outcome of non-intervention is deemed unacceptable to the public at large, viz. the recent interventions in the financial markets in the USA and the UK.

### 7.2 Assessment in the perspective of a ‘developmental state’

In the ‘developmental state’ government develops, typically in consultation with the private actors, a vision about the desired future. The state defines the objectives and the instruments to be used to realise the vision. Such a state is well informed, is an authority in society, and well respected because of its power to guide and direct structural developments.
Not necessarily all private equity leveraged buyout activity needs to become subject of government intervention. Although a ‘developmental state’ could be inclined to discourage or ban all ‘investments’ that are aimed at capital redistribution and not at the addition of economic value in the production of goods or services, as from a socio-political perspective the redistribution of capital may be considered primarily a role for the state, to realise objectives related to equity and a minimum economic and social living standard for all citizens.

In the ‘developmental’ perspective the emergence of private equity leveraged buyouts is a major concern as the outcome may impact the ‘vision’, whether articulated in more general terms of ‘public interests’ or through more specific ‘public values’ being safeguarded through enactment by law. A ‘developmental state’ will be inclined to act ex-ante to avoid outcomes that are deemed not to be acceptable.

If ‘public interest’ are not safeguarded (anymore) through the normal operation of the market, intervention will be required. Given the operational process of private equity leveraged buyouts any safeguarding will have to be assured upfront and through enactment of laws and regulation.

In assessing the options to intervene the ‘developmental state’ will assess whether the market may provide the mitigation required or whether intervention is warranted, taking into account the cost of intervention and the risk of ‘market failure’ being replaced by ‘government failure’.

7.3 Assessing the impact of telecommunication firm failure

Whether the government should intervene and whether this intervention should be general or specific can be made dependent on the impact of a private equity leveraged buyout on the telecommunications sector, and following the systems approach for that matter on the economy at large. For such an assessment we need to assume a particular firm to be targeted.

If we assume the impact is most severe if the firm fails, the impact depends on the size of the firm and the ability and willingness of other firms to take over the interests after bankruptcy. The structure of the industry will be important to consider. The ability will be positively influenced by the customer base that can be taken over. The willingness will depend on the valuation of the assets. An legacy network in need of replacement will command a lower price than an All-IP network.

Whether a market solution can be acceptable depends on the impact on the ‘public interest’ at stake. Again the size of the firm matters, as well as its role in the telecommunications infrastructure. In general, the failure of an incumbent firm – the former national monopolist – will be most severe.

7.4 Instruments in the perspective of a ‘developmental state’

An impact assessment of the type described in the previous Section is expected to be possible on the basis of the powers granted to most telecom regulators in Europe in the context of regular SMP reviews. However, this assessment will have to be very regular if not ‘continuous’ as a consequence of the dynamics of the financial sector.

The approach presented above assumes a preference for failures to be corrected by the market, i.e. a ‘regulatory’ perspective applies. The major issue associated with this approach is the uncertainty as a result of the many unknown, market driven factors. Moreover, the approach suggested is not preventive but corrective and hence the
‘damage may have been done’ and the government may have to step in as ‘lender of last resort’. It should be noted that the incumbent operators own the physical infrastructure for most of the country, so the entire industry, user base and economy depends on its functioning at a reasonable level. It is typically considered too big to fail and in that case the state will have to step in as ‘lender of last resort’.

If an initial assessment as described above is performed and the conclusion drawn suggests that (1) a solution through the market is not likely; or (2) the potential impact may be unacceptable; and (3) as private equity leveraged buyouts can not or will not be outlawed; and (4) as the takeover proposal will be an offer that can not be refused, the remaining solution implies that telecom regulators will need to have their regulatory powers extended and strengthened to enable effective governance over telecommunication firms that are or may become subject to financing practices of leveraged buyout funds.

One measure that could be applied nationally is to set a ceiling regarding the debt/equity ratio that is allowed for firms representing a significant public interest. While, this may discourage highly leveraged buyouts, it will not necessarily prevent a subsequent redistribution of capital. In that case, firstly, telecommunication regulators will need to obtain complete transparency with respect to all transactions affecting the implementation of existing (and new) public service responsibilities, including financing, investment and expenditure activity, as well as the periodic reporting of indicators of public service performance. This calls for a monitoring function.

In that case, secondly, regulators will need to be empowered to prevent financial practices and transactions that are contrary to the public interest in infrastructure and services development. The simple fact that regulators have these powers may provide the incentive to avoid these practices.

Specifically, telecom regulators will need to be empowered to require the telecom firm to put forward the following items for advance approval against the public interest standard (to be) established in the law (Melody, 2008):

1. All proposed payments to owners and their affiliated companies and partners, fees for financial services, non-arm’s-length transactions, management fees and bonuses;
2. A sustainable long-term investment program that will continue infrastructure and services development to meet the public interest obligations under the law;
3. A sustainable long-term financing plan based on generally accepted norms for utility sector financing;
4. A sustainable long-term human resources development plan to make full and effective use of staff resources;
5. A research and development program appropriate to ensuring the firm maintains efficiency in the light of technological and market changes.

In that case, in the light of the potential negative effects of private equity fund ownership on telecommunication infrastructure development, governments may wish to consider applying the principles applied in the early days of privatisation, i.e. upper limits on the percentage share ownership of a single party to protect against the takeover by special interests with a narrow agenda, and/or retaining a single “Golden Share” of equity ownership, to ensure the government is informed of the firm’s plans, and to reserve the power to veto major decisions if the government believes they are
contrary to the public interest. Enacting the new legislation to provide regulators with these powers may already discourage the more aggressive private equity funds in targeting telecommunication firms.

8 Conclusions and recommendations

The concerns being raised on the role of the financial sector in general and private equity buyout funds in particular in the development of the telecommunication sector and the safeguarding of public values is justified. The operating principles of private equity buyout funds and the experience from recent cases in particular Ireland (Eircom) and Denmark (TDC) provide the evidence.

The purpose of the funds is massive capital reallocation in favour of the investors and the fund managers. The operational model is not aimed at the creation of economic value through the production of goods or services.

The targeting of telecommunication firms by private equity leverage buyout funds is to be expected given the characteristics of the business model of telecommunication firms. It is a natural step in the development of the sector since privatisation, when the financial industry became involved in the telecoms sector.

While the impact of private equity leveraged buyouts may in general be absorbed by the market, the importance of the telecommunication sector for the development of the economy and society at large requires special attention to the performance of these firms in serving the ‘public interest’ in general and certain ‘public values’ in particular.

As the offers made by private equity buyout funds are too good to be declined by shareholders, boards and the management, the role these funds may assume in the firm can not be mitigated through existing corporate governance structures. In fact, these structures become redundant once the firm is taken private.

Depending on which telecommunication firm(s) is being targeted the market may mitigate the effects. However, if a large firm and/or a firm that represents the ‘public interest’ at large is being targeted the outcome may be deemed economically and/or politically unacceptable. In that case, new policy measures will need to be designed and enacted to prevent the undesirable outcomes.

In that case, public utility regulators and more specifically telecom regulators will need complete transparency with respect to all transactions affecting the implementation of existing public service responsibilities, including financing, investment and expenditure activity, as well as the periodic reporting of indicators of public service performance. Moreover, in that case regulators will need to be empowered to prevent financial practices and transactions that are contrary to the public interest in long-term infrastructure and services development.

This recommendation implies the need for continuing ex-ante involvement of governments in the development of the telecommunication sector, not because telecom services markets are not functioning properly, but because financial markets are not operating in line with public interests. As a consequence and to safeguard public values the government may wish to shift its role from a predominantly ex-post regulatory role perception to a more ex-ante involvement in the sector. In that case, ex-ante monitoring and potentially intervention will require a pro-active stance of government and are expected to have implications for the resources and capabilities of the organisations involved.
Private equity and public values: The bankruptcy of Eircom, Ireland

References


Private equity and public values: The bankruptcy of Eircom, Ireland


Notes

1 The term telecommunication sector is used to denote the service operator segment of the telecommunication industry. The industry is understood to include the manufacturers of telecommunications equipment and the users of telecommunication services.
2 For an assessment of the impact of the euphoric period on the development path of the telecommunications sector see Lemstra (2006).
3 Although private equity and hedge funds are often mentioned together in relation to ‘activist’ or ‘aggressive’ financial practices the focus of this contribution is on private equity leveraged buyouts, whereby firms are taken private to be ‘restructured’ and ‘streamlined’ for subsequent sale at a profit. Both asset classes have similarities, they are based on private pools of capital and they are not quoted on the stock market. The investments are not liquid, they are lightly regulated and lightly taxed. They borrow money for leverage to enhance their returns. However, hedge funds are involved with publicly listed companies only, while private equity leveraged buyout is based on taking publicly listed firms private (Coggan, 2008).
4 In effect the control of the state enterprise is relinquished gradually: multiple steps in the sale of stocks, and by retaining and ultimately relinquishing a ‘golden share’.
5 A typical range would be between 12 and 18 percent for the internal rate of return for a firm in the telecom equipment industry. The rate of return for the much more risky Iridium project was above 40%.
6 A process exacerbated by conflicts of interest at the level of the individuals involved.
7 Another example is the changes in the investment portfolio policy of pension funds, these were relaxed with respect to the percentage of stocks that could be held in the portfolio, at the time these long-term oriented protective measures were most needed.
8 In this contribution we address only sector specific public values. Other concerns related to private equity activity such as employment levels and tax contribution are considered to be outside the scope.
9 Other sources used in the compilation of this overview: (Lemstra, 2006; Mueller, 2002; Van Eeten et al., 2007)
10 See also (Bauer et al., 2007) on the issue of malware and economic incentives.
11 When the market is not favourable for IPOs, VC rely on private financing to exit.
12 This data reflect a study of 419 venture capital partnerships in the USA in the period 1970-1990.
13 In 1979, through the Stieger Amendment the US Congress had reduced the maximum capital gains tax rate from 49.5% to 28%. Through the Tax Act of 1981 this level was lowered to 20%.
14 While pension funds are traditionally being considered as the providers of long term capital, it appears that institutional investors in pursuing higher returns have been the main engines behind the increased role of private equity funds pursuing high yields through relatively short term investment cycles. Moreover, the association of pension funds with ‘patient capital’ is inappropriate as turnover rates of pension funds appear to be around 70% per year.
15 These are publicly listed private companies.
16 This includes payment-in-kind loans with deferred interest payments (Wester, 2008).
The practice has been called ‘leveraged recapitalisations’ and described as ‘the cocaine of private equity’. Standard and Poor reported that the quality of debt has become very weak, 75% of the loans being rated as single “B” range of junk debt. Default rates of firms with leveraged recaps were as high as 6% (Hall, 2006).

The fall of RJR Nabisco is documented by Burrough and Helyar in “Barbarians at the gate” (1990)

The updates are based for Ireland on (Barrett, 2004; Palcic and Reeves, 2008) and largely on newspaper reports in the Irish Times, Irish Examiner, the Independent, FinFacts Ireland, The Post as well as other electronic sources business&finance, ESOP, finance-magazine, telenor, totaltele.com, allbusines.com, rtebusiness, telegraph.co.uk, CIT publications and telecomseurope.net, as well as Eircom company reports and press releases. For Denmark on (Falch and Henten, 1997) respectively allbusiness, Bloomberg, fundinguniverse, redorbit, reuters, totaltele.com and TDC annual reports.


It is assumed that the OECD reported data for the country represents the incumbent data at privatization.

The Valentia Consortium is headed by the Chairman of the ‘Independent News and Media’, a media organisation based in Dublin, Ireland with interests in 22 countries on 4 continents. The company owns over 200 print titles, more than 130 radio stations, over 100 commercial websites and many billboard locations, and is a leading press player in five countries. The INM group of companies has been dominated by Tony O’Reilly, CEO, and his family. After the take over O’Reilly became executive chairman of Eircom.

ESOT has been able to generate an average of €42,000 worth of cash for each of its 14,000 members and its stake in Eircom would be worth €47,000, based on a replacement value of €2.2 bln given by Valentia (www.independent.ie/business/irish/staff-trust-nets-228m-in-deal-212960.html).

The consortium is led by former BCM director Rob Topfer, and involves former eircom chief executive Rex Comb.

STT is involved in Star Hub, the second telecoms group in Singapore, and has interest in fixed and mobile communications companies in Asia and owns Global Crossing.

ESOT is expected to roll over its 35% stake into this new entity.

A more extensive discussion of the TDC case can be found in “The private equity takeover of telecom infrastructure in Denmark: Implications for network development and public policy” (Melody, 2007b)

Ameritech is one of the US Regional Holding Companies being created in the break-up of AT&T in 1984, as is SBC.

It is assumed that the OECD reported data for the country represents the incumbent data at privatization.

Moody’s for instance downgraded TDC’s bonds to ‘non investment grade’ status Ba1.

Interest payments were assessed at about the level of annual earnings (nb!ict, 2006)

The strategy to focus on the more profitable domestic business is not unique to TDC, as the interviews executed in relation to the EC project on the removal of the remaining barriers to the full-fledged internal market have revealed (Van Gorp et al., 2011).

The EC-driven intervention in mobile termination rates and international roaming rates can be considered an exception, although an important one.

It is conceivable that financial regulation is enacted that limits the degree of leverage applied in PE-LBO transactions. However, this is not very likely as it would require international agreement, whereby public interest objectives applicable to one type of firm would affect another.