

# **Public Services International Research Unit (PSIRU)**

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# Private equity: financial investors, public services, and employment

By

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## 1. Summary

#### Private equity and financial investors

- Since 2001, private equity (PE) activity has grown rapidly, especially in continental Europe and Asia, which now account for 45% and 10% of PE takeovers.
- Private equity takeovers accounted for 20% of all takeovers in Europe in 2006
- About 60% of all private equity takeovers are of companies listed on the stock exchange, or divisions of companies. On average companies are sold on after 4 years, just over 50% are floated on the stock exchange or sold to industrial companies.
- The rate of bankruptcies amongst firms bought by private equity is at least twice as high as the rate amongst stock exchange quoted firms. At least 6% of companies bought by private equity end up bankrupt.
- PE buyouts fell sharply in the last quarter of 2007, because of the financial crisis.
- Pension funds, insurance companies, and sovereign wealth funds all control far more financial
  assets than private equity, but private equity has the most direct impact on ownership and
  employment.
- Infrastructure funds may be more interested in long-term investment with lower returns, but it is too early to know how rapidly they will be sold on. They may create extra pressure for privatisations.
- The different types of investors may have complex relations, as in the consortia which bought two of the largest UK water companies in 2007, whose partners include insurance companies, pension funds, SWFs, major banks, and infrastructure funds of major global financial companies (which have in turn been recently rescued by SWFs taking a large shareholding).

#### **Sectors**

- There were few new PE buyouts in the water sector in 2007. The only major buyouts appear to be the purchase of two UK water companies, but these were by consortia of financial investors rather than a PE group.
- There were few new PE buyouts in the waste sector in 2007, and some sales. The KKR purchase of DSD in Germany has adversely affected employment. In early 2008 PE and financial investors were bidding for Biffa in the UK.
- There was a lot of activity in healthcare and social care in 2007. This included major buyouts of hospitals and care homes in the UK, and investments in central Europe and elsewhere.
- There is a lot of PE investment in renewable electricity generation.
- In the UK some PFI schemes have been sold on to PE and financial investors.

#### Issues

- Parliaments in OECD countries have been very concerned about private equity in 2007.
   These concerns have covered: labour and employment issues; financial sustainability of LBOs; tax treatment of PE; and corporate governance.
- Some PE groups are now listed on stock exchanges but still do not have to disclose financial details of the companies they own
- The proportion of debt used in PE buyouts has increased in recent years and has been recycled by banks in the same way as sub-prime mortgages.
- Some UK water companies have issued long-term index-linked bonds, which implies a great degree of confidence in government and regulatory guarantees

#### **Employment**

A new study on the employment impact of PE, commissioned by the World Economic Forum, shows that:

- workplaces of firms taken over by PE have 10% less employees 5 years after the takeover, than if they had developed like similar workplaces not bought by PE
- firms taken over by PE have about 4% less employees 2 years after the takeover, than if they had developed like similar workplaces not bought by PE (even after including the net effect of creating, buying, closing and selling new workplaces)
- firms taken over by PE have much higher rates of closure, opening, acquisition and disposal of workplaces, in the 2 years following a PE takeover, than comparable firms.

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| Tubic I.           | notogy und upor extensions   |
|--------------------|--|
| IPO                | Initial public offering: the process of listing a company on the stock exchange.       |
| LBO                | Leveraged buyout: the typical form of PE takeover, buying an existing company using a  |
|                    | lot of borrowed money  |
| PE                 | Private equity   |
| PE groups          | The private equity institutions themselves e.g. Blackstones, KKR, Apax                 |
| PE-owned companies | Companies owned by PE groups e.g. Thames Water, Capio                                  |
| PE funds           | Specific funds set up by PE groups to buy companies e.g. Maquarie Infrastructure Fund. |
|                    | Each PE group has a number of different funds.   |
| SWF                | Soveriegn wealth funds: state-owned investment funds                                   |
| Trillion           | Always used to mean 1,000,000, 000,000 (i.e. one thousand billion)                     |

Table 1. Terminology and abbreviations

## 2. Private equity and other financial investors

#### 2.1. Overview

- Since 2001, private equity (PE) activity has grown rapidly, especially in continental Europe and Asia, which now account for 45% and 10% of PE takeovers.
- Private equity takeovers accounted for 20% of all takeovers in Europe in 2006
- About 60% of all private equity takeovers are of companies listed on the stock exchange, or divisions of companies. On average companies are sold on after 4 years, just over 50% are floated on the stock exchange or sold to industrial companies.
- The rate of bankruptcies amongst firms bought by private equity is at least twice as high as the rate amongst stock exchange quoted firms. At least 6% of companies bought by private equity end up bankrupt.
- PE buyouts fell sharply in the last quarter of 2007, because of the financial crisis.
- Pension funds, insurance companies, and sovereign wealth funds all control far more financial
  assets than private equity, but private equity has the most direct impact on ownership and
  employment.
- Infrastructure funds may be more interested in long-term investment with lower returns, but it is too early to know how rapidly they will be sold on. They may create extra pressure for privatisations.
- The different types of investors may have complex relations, as can be seen in the consortia which bought two of the largest UK water companies in 2007, which were not PE groups but joint ventures stating that they see the companies as long-term stable investments, whose partners include insurance companies, pension funds, SWFs, major banks, and infrastructure funds of major global financial companies (which have in turn been recently rescued by SWFs taking a large shareholding).

#### 2.2. PE groups: buying and selling

Data from the WEF and McKinsey studies confirms that since 2001 PE activity has grown rapidly, especially in continental Europe and Asia, represents a high proportion of takeovers, covers all sectors, and is most likely to result in the company being sold to an industrial company or to another PE company. The rate of bankruptcies is at least twice as high as the rate amongst stock exchange quoted firms. PE buyouts fell sharply in the last quarter of 2007, because of the financial crisis.

- The total value of firms (both equity and debt) acquired by PE groups in leveraged buyouts (LBOs) is estimated to be \$3.6 trillion since 1970, of which \$2.7 trillion worth of transactions occurred between 2001 and 2007. Out of the 21,397 leveraged buyout transactions that took place from 1970 to 2007, more than 40% took place after 1 January 2004.
- In 2006 PE leveraged buyouts accounted for about 20% of all takeovers in Europe, and 30% in the USA. The average size of the deals was \$304m. in Europe, and \$428m. in the USA. The largest deals in 2006-7 were in the USA, including an energy company, TXU (\$45billion), and a hospital company, HCA (\$33billion). <sup>1</sup>

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- Since 2001, about 28% of deals have been buyouts of stock exchange companies (public-to-private), 31.6% buyouts of divisions of companies (divisional buyouts), and 38.2% buyouts of companies which are already private or already owned by financial investors such as other PE firms.
- Since 2001, about 45% of the companies bought in LBOs have been in USA and Canada, about 45% in Europe, and 10% in the rest of the world. <sup>a</sup> There has been a much greater proportion in continental Europe and Asia compared with the period before 2000, when 4/5ths of all buyouts were in the USA and UK.
- Target firms are spread across all sectors of the economy. According to WEF data, healthcare, infrastructure and utilities and education combined account for 5.2% of all buyouts since 1970.
- But PE buyouts fell sharply at the end of 2007 and it is unlikely they will recover in 2008. The drop was striking in the UK: "Though **private equity** has transformed the UK economy, employing over 11 per cent of private sector workers, new deals have dropped off a cliff. The volume of British buyouts tumbled 80 per cent in the fourth quarter as the squeeze on global credit led to the quietest three months in nearly five years".<sup>2</sup>

Table 2. LBOs by type and region

| Туре                      | 2001-2007     | Region               | 1970-2000      | 2001-2007     |
|---------------------------|---------------|----------------------|----------------|---------------|
|                           | % of deals    |                      | % of deals by  | % of deals    |
|                           | by value      |                      | value          | by value      |
| Public-to-private         | 28.9          | USA                  | 64.5           | 42.8          |
| Divisional buyout         | 31.6          | Canada               | 1.5            | 2.4           |
| Private-to-private        | 14.7          |                      | 0              | 0             |
| Financial vendor          | 23.5          | UK                   | 15.0           | 15.5          |
| Distressed/bankrupt firms | 1.4           | Scandinavia          | 2.3            | 4.5           |
|                           |               | Eastern Europe       | 0.2            | 1.0           |
|                           |               | Rest of Europe       | 13.2           | 26.1          |
|                           |               | Africa & middle east | 0.3            | 1.3           |
|                           |               | Asia                 | 1.8            | 4.0           |
|                           |               | Australia            | 0.3            | 1.3           |
|                           |               | Latin America        | 0.9            | 1.2           |
|                           |               |                      |                |               |
| Total value of deals      | \$2679billion |                      | \$1242 billion | \$2679billion |

Source: WEF 2008 Demography study Table 2a and 2b

- On average companies are sold after just over 4 years, but almost 40% are still held as LBOs after 10 years. The most common form of exit is sale to a company in the same sector (38%); the next most common is sale to another PE group (23%). About 14% are floated on the stock exchange.
- About 6% go bankrupt. The rate of bankruptcy of LBOs is twice as high as USA listed companies (and the true figure may be higher as other bankruptcies may be concealed in the 12% of 'unknown' exits): "6% of buyout transactions end in bankruptcy or financial restructuring. Assuming an average holding period of six years, this works out to an annual default rate of 1.2% per year. As a comparison, the annual default rates for US publicly traded firms in Compustat over the 1983 to 2002 period was half this number, 0.6%".
- Over the whole period of 1970–2002 period, the fraction of firms exiting LBO status by going public (IPO) was 11%, which is higher than the 6% of LBOs that originated from public-to-private transactions. But in 2006 McKinsey states that there were more LBOs of stock exchange firms than

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<sup>&</sup>lt;sup>a</sup> The WEF study examined a dataset of over 21,000 LBOs that took place worldwide between 1970 and 2007. About 70% of USA buyouts were included, but a lower percentage of European ones. Given the sample bias towards the USA, the true figures for Europe and the rest of the world are probably higher.

there were IPOs, so there is now a net reduction in stock exchange firms. PE ownership has thus increased relative to stock exchange quoted companies, and McKinsey expect this trend to continue.

| Table 3. Exit route of LBOs 1970-2002 |
|---------------------------------------|
|---------------------------------------|

| Type of exit             | No of | % of all | Months   | Months  | Exited | Exited   | Exited  |
|--------------------------|-------|----------|----------|---------|--------|----------|---------|
|                          | exits | exits    | to exit  | to exit | within | within 2 | within  |
|                          |       |          | (median) | (mean)  | 1 yr   | yrs      | 5 years |
| Bankruptcy               | 488   | 7        |          |         |        |          |         |
| IPO                      | 966   | 14       |          |         |        |          |         |
| Financial buyer          | 1644  | 23       |          |         |        |          |         |
| LBO corporate buyer      | 336   | 5        |          |         |        |          |         |
| Management               | 115   | 2        |          |         |        |          |         |
| Strategic buyer          | 2728  | 38       |          |         |        |          |         |
| Other                    | 818   | 12       |          |         |        |          |         |
| Total exited LBOs        | 7095  | 100      | 49       | 42      | 2.7%   | 10.7%    | 38.7%   |
| No exit (remain as LBOs) | 3752  |          |          |         |        |          |         |

Source: WEF 2008 Demography study Table 4b p. 19, Table 5 p.20

### 2.3. PE groups size relative to other types of financial investor

McKinsey (2007) estimate that PE groups control \$0.7 trillion (=\$700billion), worldwide, in companies which they have bought through leveraged buyouts (LBOs). This excludes venture capital investments. PE assets are small in relation to other institutional investors. Mutual funds, pension funds and insurance companies each hold assets of about \$20tr., and together they control over one-third of world financial assets. McKinsey identify three 'new' types of institutional investor, sovereign wealth funds (SWFs), hedge funds and PE, which between them held \$8.4 trillion in 2006, 5% of total world financial assets, and they are growing faster than pension funds etc.

- PE is the smallest of the 'new' types, controlling only \$0.7trillion, compared with \$6.7trillion held by SWFs, and \$1.5 trillion by hedge funds. It is also the slowest growing, at 14% per annum, not much faster than insurance funds (11% p.a.). The total amount controlled by all PE groups is smaller than that controlled by some of the largest individual institutions.
- However PE makes a disproportionate impact, for two reasons.
  - Firstly, PE always invests directly in companies, whereas the other institutions invest in other assets e.g. bonds. The impact of PE on corporate ownership is therefore greater. The value of firms owned by PE is equal to 5% of the value of stock market companies in the USA, and 3% in Europe, according to McKinsey.
  - Secondly, PE funds are highly 'active' investors, usually with 100% ownership of a company, and so the PE group policy has a direct effect on the companies and employees. Other financial investors are normally content with minority shareholdings and a passive relationship with management (though a number of pension funds, especially in the USA, have become much more active e.g. Calpers).

Table 4. Value of assets managed by financial institutions, including private equity

|                                    | Value of assets managed \$ | Annual growth rate | % of global<br>financial |
|------------------------------------|----------------------------|--------------------|--------------------------|
|                                    | trillion (2006)            | 200-2006           | assets                   |
| World financial assets             | 167                        |                    | 100%                     |
|                                    |                            |                    |                          |
| I. Types of financial institutions |                            |                    |                          |

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| Pension funds                          | 21.6 | 5     | 13%  |
|--|------|-------|------|
| Mutual funds                           | 19.3 | 8     | 12%  |
| Insurance companies                    | 18.5 | 11    | 11%  |
|  |      |       |      |
| SWFs                                   | 6.7  | 19-20 | 4%   |
| Hedge funds                            | 1.5  | 20    | 0.9% |
| PE funds                               | 0.7  | 14    | 0.4% |
|  |      |       |      |
| II. Individual investment institutions |      |       |      |
|  |      |       |      |
| Barclays Global Investment             | 1.7  |       | 1.0% |
| State Street Global Advisers           | 1.6  |       | 1.0% |
| Legg Mason Capital Management          | 1.1  |       | 0.7% |
| Vanguard                               | 1.1  |       | 0.7% |
| Allianz Global Investors               | 1.1  |       | 0.7% |
| People's Bank of China                 | 1.1  |       | 0.7% |
| Abu Dhabi Investment Authority         | 0.9  |       | 0.5% |
| Bank of Japan                          | 0.9  |       | 0.5% |
| JP Morgan Fleming AM                   | 0.9  |       | 0.5% |
| Mellon Global Investments              | 0.8  |       | 0.5% |
|  |      |       |      |

Source: McKinsey 2007

Table 5. Value of companies owned by private equity 2006 (\$billions)

| USA | Europe | Asia | Total |     |
|-----|--------|------|-------|-----|
| 422 | 182    | 103  |       | 707 |

Source: McKinsey 2007

#### 2.4. Source of funds

PE is also a 'secondary' investment vehicle, whose funds are financed by other institutions. According to McKinsey, over one-third of the finance for PE purchases of existing companies through leveraged buyouts (LBOs) comes from pension funds. 23% comes from public sector pension funds alone. For example, the Irish National Pension Reserve Fund (NPRF) aims to invest a total of \$2 billion in private equity funds.<sup>3</sup>

Over a third comes from pooling of PE funds. For example, Mid Europa Partners new fund includes commitments "from over sixty leading investors, including AGF Private Equity, Alpinvest, ATP Private Equity Partners, AP2, Auda Private Equity, AXA Private Equity, Caisse des Depots et Consignations, CAM Private Equity, Citigroup, European Investment Bank (EIB), Feri, Government Investment Corporation of Singapore, Goldman Sachs Asset Management, HarbourVest, MetLife, OP Trust, Pantheon, TIAA, and Unigestion."

Table 6. Sources of funds for Private equity LBO funds (%)

|                          | % of value of |
|--------------------------|---------------|
|                          | PE LBO funds  |
| Banks                    | 4             |
| Investment companies     | 5             |
| Endowments               | 6             |
| Insurance                | 7             |
| Pension funds: corporate | 10            |
| Pension funds: public    | 23            |
| PE fund of funds         | 37            |
| Other                    | 8             |

Source: McKinsey 2007

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### 2.5. Sovereign wealth funds (SWFs)

The sovereign wealth funds are state-owned investment institutions responsible for investing the financial assets of countries. There are two main groups of countries with substantial amounts to invest in this way. One is the oil-exporting countries, such as Bahrein, Kuwait, Oman, Qatar, Saudi Arabia, UAE, and also Norway, Russia, Nigeria, Venezuela, Indonesia; the other is Asian countries who have accumulated large foreign currency reserves as a result of trade surpluses (and IMF policy conditions): China and Japan are the biggest of these, but others include Hong Kong, India, Malaysia, Singapore, South Korea and Taiwan.

These funds are very large and have become important investors: some of the banks and financial companies which experienced problems at the end of 2007 obtained the funds they needed from SWFs: for example the Singapore fund Temasek invested just under GBP£1billion in Barclays bank, equivalent to 2.1% of the share capital. The USA and large EU countries have been concerned about SWFs because they are state-owned, and so they are concerned that the funds might be used for political objectives. There is however no evidence of this. <sup>5</sup>

There is another group of state-owned funds, which are used to support pension schemes in a number of countries, for example Norway and Sweden. The trade union advisory committee (TUAC) at the OECD has identified these pension reserve funds (PRFs) as potential sources of good practice:

"PRFs such as the Norwegian *Government Pension Fund Global*, the French *Fonds de réserve des retraites*, and the Swedish *AP Funds* have all active socially responsible investment policies which cover part or the totality of their investment mandates. Scandinavian PRFs in particular have engagement policies with the management of invested companies with regards to compliance with ILO core labour standards and international human rights. Some Swedish AP funds apply negative screening: For example in 2006 AP2 excluded Wal Mart of its portfolio for discrimination against women in Guatemala and anti-union action and labour legislation violations in the United States. AP1 had "targeted ethical engagement" with that company as well as with BHP Billiton (Anti-union action in Australia), Chevron Texaco (Human rights violations in Nigeria), L-3 Com (Human rights violations in Iraq), Marathon Oil (Corruption in Equatorial Guinea), Total (Human rights violations in Burma), Thales (Corruption in South Africa), Toyota (Anti-union action in the Philippines) and Yahoo! (Actions curbing freedom of expression in China)." <sup>6</sup>

The OECD identifies 11 major SWFs, but it does not include reserve banks. As a result they do not include any of the three major funds noted by McKinseys, and the scale of the assets involved are much smaller.

Table 7. Major Sovereign Wealth Funds (SWFs) identified by OECD

|               | Assets (US\$billion ) |  |
|---------------|-----------------------|--|
|               | 2006                  |  |
|               |                       |  |
| United Arab   | 688                   |  |
| Emirates      |                       |  |
| Norway*       | 316                   |  |
| Singapore     | 215                   |  |
| Kuwait        | 174                   |  |
| Russia        | 122                   |  |
| Singapore     | 108                   |  |
| China         | 66                    |  |
| Qatar         | 50                    |  |
| Algeria       | 43                    |  |
| United States | 40                    |  |
| Kuwait        | 39                    |  |

Source: OECD 2007

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## 2.6. Infrastructure funds: potential problems

Infrastructure funds have been created by a number of financial institutions. For example, Credit Suisse and GE have set up a joint fund called Global Infrastructure Partners, which at the start of 2008 was likely to buy the UK waste management company Biffa. As discussed in the 2006 report <sup>7</sup>, these may reflect a different investment model of long-term secure returns rather than rapid capital gains. If so, then there may be less of a threat to job security. In addition, the higher level of debt finance may be closer to a public sector form of financing.

But infrastructure funds may create different and additional problems.

- Infrastructure funds may be a source of new pressure for privatisation., as this creates more assets that the funds can buy, such as water, roads, ports, airports, . According to the FT report of a conference on infrastructure funds in October 2007: "Speaker after speaker urged delegates to press the case for privatisation round the world." But in developing countries infrastructure is less established and more risky so the infrastructure funds are then acting more like other PE investors, as noted in the FT: "If you build an airport in a developing country, you are taking on construction risk, operating risk, political and regulatory risk and so on. That calls for correspondingly higher returns. In fact, you have joined the world of private equity." 9
- If infrastructure funds are run by PE groups then their usual high fees may create extra unsupportable demands. As noted in the FT: "If you are settling for a low return, of course, you cannot afford private equity fees. One speaker claimed some funds charged private-equity type fees for running wind farms. On what grounds, he asked? Could they make the wind blow?" 10
- Some infrastructure investments have been re-financed through long-term index-linked bonds (see below) which indicates that they expect long-term stable returns. But it is too early to know if these investors will in practice act as long-term owners with less short-term pressures on assets and workers. For example, the McKinsey 2007 report claims that infrastructure funds expect to hold their investments for 10 yrs with 14% annual return, compared with other LBOs who expect to hold assets for 4-5yrs with annual returns of 18%. They offer no evidence for this assertion and there can be none: infrastructure funds have only existed for 3 or 4 years so far.

# 2.7. The mixed new financial owners of English water companies

The complex relations between the different types of investors can be seen in the consortia which bought two of the largest UK water and sewerage companies during 2007.

- These consortia are not PE groups running funds and charging fees to investors.
- They are however private companies which have taken the companies off the stock market.
- They are joint ventures owned by a few financial institutions each with a large but minority shareholding. They state that they see the companies as long-term stable investments
- The partners include insurance companies, pension funds, SWFs, major banks, and infrastructure funds of major global financial companies (which have in turn been recently rescued by SWFs taking a large shareholding)

Southern Water was bought by a consortium called Greensands Investment. The owners of Greensand are:

- JP Morgan Infrastructure Investments Group (32%). Created in 2006 this also has investments in gas and water company in the USA and a wind-farm company in the UK.. The JP Morgan Chase group claims to hold assets worth \$1.6 trillion.
- Challenger Infrastructure Fund (27%). This fund is run by an Australian financial services company. It also has stakes in UK gas networks in Wales and the northwest of England.
- UBS (18%), a major Swiss bank with assets of about \$2.75 trillion. It made large losses in 2007 and has been rescued by an injection from Government of Singapore Investment Corp. of CHF 13bn. (US\$ 10bn).
- seven Australasian superannuation funds advised by Access Capital Advisers (18%),
- the ex-BT pension fund Hermes (4%), and
- Paceweald Limited, advised by Consensus Business Group (1%).

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• Since the takeover, Cheung Kong Infrastructure (CKI), a private Hong Kong group which also owns Cambridge Water, announced it was buying 4.88% of Greensands.

Kelda Group, which includes Yorkshire Water, was bought by a consortium called Saltaire Water. This is a joint venture between four financial institutions which involve banks, insurance companies, and sovereign wealth funds. The four institutions are:

- Citi Infrastructure Investors: Citi is one of the largest USA-based financial companies, formed from merchant banks including Citibank, Schroders, Salomon Brothers and others. At the end of 2007 the financial crisis forced Citi to raise new capital, and it sold \$7.5 billion worth of shares to a sovereign wealth fund, the Abu Dhabi Investment Authority. The takeover of Kelda group appears to be the first significant investment by Citi Infrastructure Investors.
- GIC Special Investments Pte Ltd: GIC was set up in 1981 to manage Singapore's foreign currency reserves: it is the sovereign wealth fund of Singapore, wholly owned by the government of Singapore. It now manages over \$100billion worth of investments. GIC Special Investments is the private equity and infrastructure division, which says it is Asia's largest PE investor, with over 2000 companies worldwide in a range of sectors. <sup>13</sup> It started in the 1980s providing capital to USA venture capital and private equity funds, and then became a major investor in AIG Asian Infrastructure Funds, set up by the USA insurance company American International Group. The first of these, Asia I, set up in 1994, has funds of \$1.08billion, and has 24 investments in a wide variety of sectors including fixed line and mobile telecommunications, toll roads, container terminals and electric power and water, and in countries including China, India, Korea, the Philippines, Taiwan and Thailand. The second, Asia II, set up in 1998, made 18 investments totalling US\$990 million in industries ranging from fixed and mobile telephony, petrochemicals, transportation, cement, agribusiness, paper manufacturing, and technology.
- Infracapital Partners LP: is the infrastructure fund of the Prudential Group, one of the largest UK insurance companies. It was established to make investments in infrastructure assets, including electricity, gas, water and ports.
- HSBC is the largest UK bank.

# 3. Sectoral activity

#### 3.1. Overview

- There were few new PE buyouts in the water sector in 2007. The only major buyouts appear to be the purchase of two UK water companies, but these were by consortia of financial investors rather than a PE group.
- There were few new PE buyouts in the waste sector in 2007, and some sales. The KKR purchase of DSD in Germany has adversely affected employment in the waste sector. In early 2008 PE and financial investors were bidding for Biffa in the UK.
- There was a lot of activity in healthcare and social care in 2007. This included major buyouts of hospitals and care homes in the UK, and investments in central Europe and elsewhere.
- There is a lot of PE investment in renewable electricity generation.
- In the UK some PFI schemes have been sold on to PE and financial investors.

#### 3.2. Water

Outside the UK there do not appear to have been any new private equity takeovers of European water companies. As reported previously, in 2006 there were net exits by private equity groups, with PAI selling SAUR to a consortium including the French state fund CDC, and Penta, the Czech PE group, sold its water company in Czech republic to the Spanish multinational FCC.

In the UK, there has been continued activity by PE groups. The takeovers of Kelda Group and Southern Water have removed two more UK water companies from the stock market. These are two of the large water and sewerage companies, like Thames Water, (not the smaller water-only companies which have been the

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main subject of PE takeovers in the past). In both cases the new owners are private companies, but consortia of financial institutional investors rather than funds run by PE groups.

The Bahrein SWF Arcapita sold South Staffs Water to a New York based infrastructure fund, Alinda. South-East water, also owned by financial investors, bought Mid Kent Water.

The net effect is to increase the concentration of ownership and the dominance of financial institutions owning companies. Only 5 UK water companies remain on the stock market, and financial institutions own 30% or more of three of these (Northumbrian, Pennon, and Dee Valley).

Table 8. Ownership of UK water companies February 2008

| Company                                 | Owner                         | Country      | Type of owner | Comments  |
|---|-------------------------------|--------------|---------------|---|
| Anglian Water                           | Osprey/AWG                    | UK           | PE/Infra      | Consortium of 3 funds, inc. 3i  |
| Northumbrian Water                      |                               | UK           | SEC/Fin       | 25% owned by Ontario Teachers Pensions, 15%<br>by fund managers Amvescap, 5% by Barclays<br>Bank  |
| North West Water                        | United Utilities              | UK           | SEC           |   |
| Severn Trent Water                      | Severn Trent                  | UK           | SEC           |   |
| Southern Water                          | Royal Bank of Scotland        | UK           | PE/Infra      | Bought in October 2007 by Greensands<br>Investment Ltd, comprising:6 institutions led by<br>JPMorgan  |
| South West Water                        | Pennon Group                  | UK           | SEC/Fin       | Pennon is 30% owned by 5 financial investors  |
| Thames Water                            | Macquarie                     | Australia    | PE/Infra      | ·   |
| Welsh Water                             | Glas Cymru                    | UK           | NPC           |   |
| Wessex Water                            | YTL                           | Malaysia     | M             |   |
| Yorkshire Water                         | Kelda                         | UK           | PE/Infra      | Two PE investors buy 7% stakes in April 2007  |
| Bournemouth and West<br>Hampshire Water | Biwater                       | UK           | P             | Private company, operates internationally, but not in EU outside UK.  |
| Bristol Water                           | Agbar/Suez                    | ES/FR        | M             |   |
| Cambridge Water                         | Cheung Kong<br>Infrastructure | Hong<br>Kong | M             |   |
| <b>Cholderton Water</b>                 | Cholderton Estate             | UK           | P             | Private family owned  |
| Dee Valley                              | -                             | UK           | SEC           | 35% of shares owned by Axa SA.  |
| Folkestone and Dover                    | Veolia                        | FR           | M             |   |
| Portsmouth Water                        | South Downs Capital           | UK           | PE/Infra      | South Downs Capital is 36% owned by SMIF/Land Securities (PE). SMIF=Secondary Market Infrastructure Fund. SMIF itself was bought by Star Fund (PE) in 2003, sold in 2006 to Land Securities (PE)  |
| South East Water                        | UTA and HDF                   | Australia    | PE            | Utilities Trust of Australia (UTA); Hastings<br>Diversified Utilities Fund (HDF).   |
| South Staffordshire<br>Water            | Alinda Infrastructure         | USA          | PE            | Bought by Alinda in 2007from Arcapita (Bahrein)   |
| Sutton & East Surrey<br>Water           | Aqueduct Capital              | DE           | PE            | Aqueduct Capital is part of Deutsche Bank. Bought holding company East Surrey Holdings Group (ESH) for £189m in 2006 from Kellen Acquisitions Ltd – part of Terra Firma. Kellen had bought ESH only in October 2005, and then sold off gas companies. |
| Tendring Hundred                        | Veolia                        | FR           | M             |   |
| Three Valleys                           | Veolia                        | FR           | M             |   |

#### 3.3. Waste

Following a series of disposals in 2006 and 2007 (see paper on waste management EWCs for details)<sup>14</sup> the private equity presence in major European waste management companies is now as shown in the following table. Sulo was sold to Veolia during 2007, and so no longer appears in the table.

In Germany, KKR's ownership of DSD has hit employment in the recycling sector because of prices being driven down by competitive tendering. Otherwise the sector continues to be dominated by the industrial

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groups: Veolia/Onyx, Sita, Rehthmann/Remondis, and Alba. Alba for example continues to expand, and acquired a controlling stake of over 50% in Interseroh, following its acquisition of U-plus earlier in the year.<sup>15</sup>

| Date          | Company                                     | Country     | Empl  | Owner                                      | Notes  |
|---------------|---|-------------|-------|--|--|
|               |   |             | oyees |  |  |
| April 2007    | Christota AD,<br>Wolf 96 OOD<br>and Ditz AD | Bulgaria    | 800   | Equest Investment<br>Balkans PE            | Three companies hold waste concessions for Sofia. Equest specialises in investing in Balkan countries. |
| May 2007      | SAUR  | France      | 2500  | CDC/Séché/Axa                              | Bought from PAI in May 2007.   |
| 2007          | DSD   | Germany     |       | KKR  |  |
| February 2007 | AVR/Van<br>Gansewinkel                      | Netherlands | 4000  | KKR + CVC PE                               | Bought separately by KKR and merged in 2007.   |
| March 2007    | Cory<br>Environmental                       | UK          | 1000  | Financial<br>consortium led by<br>ABN AMRO | Bought from Montagu PE in<br>March 2007  |
| 2008          | Kelda                                       | UK          |       | Consortium of financial investors          |  |

Table 9. Major European waste companies owned by PE/financial investors January 2008

## 3.4. Healthcare<sup>16</sup>

Biffa

UK

2008

PE groups are extremely active in health and social care sectors. Much activity is taking place in the Nordic countries, the UK, and central Europe, but the main groups also own companies in Italy, Spain and Portugal, and an increasing proportion of the companies in the table operate in European countries outside their own home base. Cinven, for example, with major hospital holdings in the UK, also owns private hospital groups in France and Spain.<sup>17</sup> The most active groups are Cinven, 3i, Apax, EQT, Bridgepoint, and Mid Europa. but bought Diaverum, formerly Gambro healthcare.

led by JP Morgan

accepted

?Montagu/GIP bid

There are some signs of financial investors other than PE groups: Investor, for example, classifies Gambro and Mölnlycke Healthcare as 'operating investments', distinct from its private equity investments. <sup>18</sup> However the PE model of selling companies after 2-5 years for capital gains remains dominant. During 2007 Bridgepoint, for example, sold both Medica France and Attendo, which they had bought in 2005 and 2003 respectively; but also made a major new investment by buying Diaverum, formerly Gambro healthcare. A new PE group specialising in healthcare, Baigo Capital, set up by German investors, said it expected growth from higher spending on healthcare and liberalisation, and profits from selling companies after 5 years: "Mr Bracklo said that his focus would be on taking stakes and boardroom seats to support established healthcare companies with a validated business model to expand internationally, strengthen their management and make acquisitions. Exits would typically be after five years. He forecast that, within a few years, deregulation in countries including France and Germany would provide greater scope for investments in pharmacy chains and laboratory diagnostics, while overall healthcare spending would double from current levels to about 20 per cent of gross domestic product across Europe by 2035." <sup>19</sup>

The UK health and social care sector has seen considerable activity by PE groups and other financial investors.

- The largest private hospital group, General Healthcare Group (GHG), is owned by a joint venture of PE group Apax and South African healthcare company Netcare. GHG owns BMI Healthcare, and also bought hospitals from Nuffield. <sup>20</sup>
- Cinven formed Spire Healthcare from 26 hospitals acquired from the leading non-profit hospital company BUPA, and has since then bought Classic Hospitals.<sup>21</sup> BUPA has exited from the Uk hospital but is actively expanding in Australia and New Zealand.<sup>22</sup>
- In the nursing home sector, Blackstone sold the Southern Cross health care group (UK) which it had bought in 2004 by floating it on the stock exchange in 2006. It made a return over 4 times its original investment.<sup>23</sup> Four Seasons is owned by the Qatari SWF Three Delta, and grew by acquiring Care

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Principles. A smaller firm, positive Lidfestyles, was bought by PE group Sovereign Capital.<sup>24</sup> Private firms have been helped by a legal ruling that private sector firms have the right to evict residents, as the Human Rights Act only applies to publicly owned homes.<sup>25</sup>

## 3.4.1. Private care homes exempt from European Convention on Human Rights

Over 300,000 elderly people in the UK are in privately run residential care homes. Nine out of 10 care homes in England and Wales are now run by private firms. The largest private company, Southern Cross, has 29,000 care home beds in the UK, 80 per cent of which are paid for by local authorities. Southern Cross is listed on the stock market, but was owned by Blackstone, a private equity group, from 2004 to 2006.

In 2007 the highest court in the UK ruled that private care homes are not subject to the European Convention on Human Rights, because that convention only applies to public authorities. <sup>26</sup> As a result, old people in care homes cannot rely on the convention to protect them from eviction. The court ruling followed precedents of the European Court and so similar decisions may be made in other European countries.

The case was brought by an 84-year-old woman suffering from Alzheimer's. She was threatened with eviction by a care home owned and run by Southern Cross. She argued that since her place was paid for by her local authority, the private home was exercising a "public function" and was bound by the Human Rights Act.

But a corporation is only covered by the European Convention on Human Rights if it is a "public authority", defined as a body with some public functions. And the judges ruled, by a 3-2 majority, that Southern Cross was not. In the words of Lord Scott, one of the judges:

"Southern Cross is a company carrying on a socially useful business for profit. It is neither a charity nor a philanthropist. It enters into private law contracts with the residents in its care homes and with the local authorities with whom it does business. It receives no public funding, enjoys no special statutory powers, and is at liberty to accept or reject residents as it chooses ... and to charge whatever fees in its commercial judgment it thinks suitable. It is operating in a commercial market with commercial competitors.......If an outside private contractor is engaged on ordinary commercial terms to provide the cleaning services, or the catering and cooking services, or any other essential services at a local authority owned care home, it seems to me absurd to suggest that the private contractor, in earning its commercial fee for its business services, is publicly funded or is carrying on a function of a public nature. It is simply carrying on its private business with a customer who happens to be a public authority. The owner of a private care home taking local authority funded residents is in no different position. It is simply providing a service or services for which it charges a commercial fee."

This decision contradicted the assurance given by government ministers when the act was passed in 1998, that the legal definition of a public authority "took account of the fact that over the past 20 years an increasingly large number of private bodies. . . have come to exercise public functions that were previously exercised by public authorities". <sup>27</sup>

PE groups are active in healthcare in central Europe and Turkey

- In October 2007 Mid Europa acquired 100% of LUX-MED, and Medycyna Rodzinna, respectively the second and the sixth largest private healthcare providers in Poland. <sup>28</sup>
- Penta, a Czech PE group, plans to develop "health care facilities, pharmacies and betting agencies".<sup>29</sup> In Slovakia it owns Procare, a company which started developing a chain of clinics in 2007, as well as an insurance company.<sup>30</sup> However, in September 2007 Slovakia reversed its plans to corporatise hospitals as plcs. This was supported by unions and criticised by business representatives.<sup>31</sup>
- A 30% stake in a Romanian cleaning services company, Romprest Service, was acquired by 3i. 32

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• Financial investors including PE and sovereign wealth funds from the Gulf states are interested in the health sector in turkey. A finance company in Turkey claimed that the private sector could grow because of poor performance of the public sector: "The real competition should be not among private hospitals but against the public sector. Clumsiness of the public sector is a great opportunity for foreign creditors since the rival is very weak."<sup>33</sup>

Table 10. Private equity and healthcare, January 2008

| Company                                  |    | Sector                 | Owner   | Type          | Bough<br>t | Previous status                                 |  |
|--|----|------------------------|---|---------------|------------|---|--|
| Aleris                                   | NO | Social care            | EQT   | PE            | 2005       | Division of ISS                                 |  |
| Alliance Medical                         | UK | Health<br>care         | Dubai HIC   | Fin           | 2007       | PE Bridgepoint<br>(from 2000,<br>previously 3i) | Subsidiaries include<br>Interim Solutions, Alliance<br>Diagnostic            |
| Aramark                                  | US | Support<br>services    | GS Capital, CCMP<br>Capital, JP Morgan,<br>Thomas H lee partners,<br>Warburg Pincus | PE/fin        | 2007       | Listed  |  |
| Attendo                                  | SE | Social care            | Industri Kapital  | PE            | 2007       | PE (Bridgepoint, from 2005)                     |  |
| Capio                                    | SE | Health<br>care         | Apax/Nordic Capital   | PE            | 2006       | Listed (started as VC)                          | Sold UK hospitals 2007 .<br>Bought Unilabs 2007                              |
| Carema                                   | SE | Health<br>care         | 3i/GIC  | PE/fin        |            |   |  |
| Clinica Baviera                          | ES | Health<br>Care         | 3i  | PE            | 2005       |   | ophthalmology clinics  |
| Clinical<br>Assessment<br>Services (CAS) | UK | Health<br>Care         | Bridgepoint   | PE            | 2005       |   |  |
| Diaverum                                 | SE | Health<br>care         | Bridgepoint   | PE            | 2007       | PE (EQT)  | Formerly Gambro<br>Healthcare. 155 clinics in<br>15 countries                |
| Four Seasons                             | UK | Social care            | Three Delta   | PE/Fin        | 2006       |   | Bought Care Principles (from 3i)   |
| Gambro                                   | SE | Renal<br>care          | Investor  | Fin           | 2006       |   |  |
| General Healthcare<br>Group(GHG)         | UK | Health<br>Care         | Apax/Netcare  | PE/list<br>ed | 2006       |   | Joint with Netcare 50.1%<br>(South Africa). Owns BMI<br>Healthcare, Nuffield |
| ISS                                      | DK | Support services       | EQT/Goldmann Sachs  | PE/fin        | 2005       | Listed  | ,  |
| Lux-Med                                  | PL | Health<br>Care         | Mid Europa  | PE            | 2007       |   |  |
| Medica France                            | FR | Social care            | BC Partners   | PE            | 2006       | PE (Bridgepoint, from 2003)                     | Subsids include Aetas<br>(Italy)   |
| Medicover                                | SE | Health care/insu rance | Celex   | Privat<br>e   | 2006       | Listed<br>(originally 1996<br>VC (Oresa))       |  |
| Medycyna<br>Rodzinna                     | PL | Health<br>Care         | Mid Europa  | PE            | 2007       | PE (Enterprise investors, from 2000)            |  |
| Mölnlycke                                | SE | Health<br>Care         | Investor/Morgan<br>Stanley  | Fin           | 2007       | PE (Apax, since 2005)                           |  |
| Partnerships in Care                     | UK | Mental<br>health       | Cinven  | PE            | 2005       | Division of<br>GHG                              |  |
| Positive Lifestyles                      | UK | Social care            | Sovereign Capital   | PE            | 2007       | private   |  |
| Romprest Service                         | RO | Support<br>services    | 3i  | PE            | 2007       | private   | Minority 30%   |
| Spire Healthcare                         | UK | Health<br>Care         | Cinven  | PE            | 2007       | Not for profit<br>(BUPA)                        | Bought Classic Hospitals<br>(from PE group LGV<br>Capital)                   |
| Tunstall                                 | UK | Health<br>Care         | Bridgepoint   | PE            | 2005       |   | Minority stake   |
| Ultralase                                | UK | Health<br>Care         | 3i  | PE            | 2008       | Division of<br>Corporacion                      | laser eye treatment  |

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|                |    |        |                |    |      | Dermoestetica   |                           |
|----------------|----|--------|----------------|----|------|-----------------|---------------------------|
| USP Hospitales | ES | Health | Cinven         | PE | 2007 | PE (Mercapital) | Has 25% of HPP (Portugal, |
| Group          |    | care   |                |    |      |                 | hospitals)                |
| Vedici         | FR | Health | Apax (minority | PE | 2006 | Private         | Six private hospitals,    |
|                |    | Care   | holding)       |    |      |                 | employing 800 people      |

#### 3.5. Other

#### 3.5.1. Energy

Private equity funds are investing in energy companies of various kinds across the EU. This is not a comprehensive survey, but examples include:

- The German company SAG has been sold to its second private equity owner in 2 years. SAG provides build and maintenance outsourcing services to utility transmission and distribution grids and employs 5,900 staff. It was sold by RWE in May 2006 to PE group Advent International, a large global PE group. Advent 'streamlined' the business and in December 2007 sold it to EQT, a Swedish PE group.
- Austrian PE firm Meinl International Power is investing in solar, wind and conventional energy across Europe. It already owns operations in Germany and Spain and is planning further investments in Serbia, Slovakia and Bosnia. It states it "will act as long-term investor to benefit from stable cash flows". 34 The firm is part of the long-established Meinl food and retail group.
- Bulgarian private equity fund Advance Equity Holding, owned by local financial firm Karoll, plans to invest €18.6 m. by the end of 2008 in wind and solar parks. It is the first Bulgarian-owned private equity fund. It has stakes in seven companies, including energy efficiency company Energy Effect and gas supplier Enesy.<sup>35</sup>
- Lithuania is planning to create a joint venture company to take over the electricity companies, including Ingalina nuclear power station. The new company will be 62% state-owned and 38% owned by a Lithuanian private equity company NDX Energija. It is planned to build a new nuclear power station to replace Ingalina: 66% of this will be owned by Poland, Latvia and Estonia, with the other 34% owned by the Lithuanian state/PE joint venture.<sup>36</sup>
- Romanian gas distributor Gaz Sud was bought by PPF Investments in Dec 2007 through it's Cyprus based SPV Ligatne.
- Czech PE group Penta owns 100% of the Slovak gas turbine cogeneration plant, Paroplynovy Cyklus Bratislava, PPC.<sup>38</sup>
- Austrian CE Energy Holding AG develops, finances, builds and operates wind parks in Slovakia, the Czech Republic, Hungary, Poland, Latvia, Lithuania, Estonia and Brazil. It has started forming a \$2 billion global equity fund in November 2007. It has a joint venture with EnerCap Power Fund, a Czech private equity fund focused on renewable energy, whose main investors include the European Investment Bank, the EBRD, Invest Credit Austria of the Volksbank Group, and Ireland's Jaguar Capital.<sup>39</sup> "EnerCap is targeting a minimum gross internal rate of return of 25% on its investments, which will typically be exited within three to five years," the company said.<sup>40</sup>
- Italy's Apri Sviluppo Private Equity plans to launch a fund with a target size of 100 million euro (\$148 million) focusing on energy projects in south-eastern Europe in the second part of 2008. It will start in Bulgaria and also focus on Albania, Romania, Kosovo, Croatia, Hungary, Macedonia, Serbia, Montenegro and Slovenia.
- Swedish PE fund East Capital has created a fund especially to take advantage of possible investments in electrical utilities and other sectors in Russia and other former soviet union countries..<sup>41</sup>

#### 3.5.2. UK: PFI, schools

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Some PFI schemes in the UK have been sold on to financial or PE investors. For example, in November 2007 the construction group McAlpine agreed to sell its interests in six PFI concessions to Infrastructure Investors Limited Partnership, which is backed by Barclays Private Equity, Societe Generale and 3i. McAlpine retains one PFI concession, for the A13 road.<sup>42</sup>

## 3.5.3. Estonia: failed railway investment

Estonia privatised its railways in 2001 to a consortium led by PE company Mid Europa. The government was so unhappy with the result that it renationalised the railways in 2007.

#### 4. Issues

### 4.1. General parliamentary concern

The trade union advisory committee (TUAC) at the OECD states that there has been "a high degree of parliamentary activism across [countries belonging to] the OECD in the past six months". These discussions have covered: labour and employment issues; financial sustainability of LBOs; tax treatment of PE; and corporate governance. <sup>43</sup>

# 4.2. PE groups listed on stock exchanges

Although PE groups are largely private firms or partnerships, McKinsey states that there are over 300 PE groups listed on stock exchanges, worldwide, with a total market value of about \$100bn. Major examples include the USA group Blackstone and the UK group 3i. KKR also planned to list but deferred it due to market conditions.

- Listed PE groups have to disclose more information about their own finances and activity, in line with other stock exchange companies.
- However, this does not require them to publish the same information about companies they own. The companies wholly owned by Blackstone, e.g. Sithe Power, do not publish any more detailed information than those owned by other PE groups.

## 4.3. Returns to investors in PE funds

It is now more widely recognised that PE funds have produced mixed returns. If the fees of the PE funds are excluded then the returns to investors such as pension funds may be no better, or even worse, than investing in the stock market. 44

Low interest rates have boosted the profitability of PE because interest payments absorb less of the operating profit. Corporate profits in general have been high and growing. The combination of these two factors means that LBOs with higher gearing have produced higher rates of return to shareholders' equity. According to a 2005 study by McKinseys, this effect explained 1/3 of the performance of PE funds.

## 4.4. Debt

The general effect of PE buyouts has been to increase the proportion of debt in relation to shareholders' equity. Whereas stock exchange companies in the USA have about four times as much equity as debt, PE-owned companies have twice as much debt as equity.

According to McKinsey's, the proportion of debt used in PE buyouts has risen sharply since 2002, and especially fast in Europe. In 2006, the average PE leveraged buyout in Europe used 6.2 times as much debt as equity.

Table 11. Use of debt in PE leveraged buyouts: debt to equity leverage ratio

|        | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|--------|------|------|------|------|------|------|------|
| USA    | 4.18 | 4.08 | 4.02 | 4.63 | 4.85 | 5.25 | 4.99 |
| Europe | 4.44 | 4.35 | 4.38 | 4.49 | 4.76 | 5.51 | 6.20 |

Source: McKinseys Exhibit 5.18

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The great majority of this debt now comes from bank loans rather than from 'junk' bonds issued by the companies. But the banks have repackaged these loans and sold on as 'collaterised' loans (in much the same way as the sub-prime mortgage loans were repackaged).<sup>45</sup>

If interest rates rise in future, this may create greater pressure on PE-owned companies and could lead to companies being unable to pay their debts, possibly leading to bankruptcies, closures and further shocks to the banking system.

This may be less of a problem with PE-owned companies in public service areas like water, healthcare and even waste, as governments and regulators are likely to guarantee to increase payments in line with inflation (including rises in interest rates) in order to maintain services.

#### 4.5. Index-linked bonds

Some English water companies, including some owned by PE funds, have issued long-term index-linked bonds to finance their business. These bonds provide a return of the rate of inflation plus a small percentage. This is remarkable for two reasons. Firstly, it has traditionally been governments which issue such bonds, because companies are not normally prepared to take the risk of the level of inflation. Secondly, these are very long-term bonds, which investors will only buy if they are convinced of the long-term security of the business and its revenues.

The most dramatic example is the case of Thames Water. In 2007 it issued £900 million in index-linked bonds with maturities between 35 and 55 years. The money will be used to refinance part of the debt used by Maquarie in buying Thames Water. It is part of a larger £10billion total refinancing of Thames Water. These bonds are "irrevocably and unconditionally guaranteed by Thames Water Utilities Limited ('TWUL'), Thames Water Utilities Holdings Limited and Thames Water Utilities Finance Limited." Other water companies that have issued such bonds include Wessex, United Utilities, Kelda, Pennon, Northumbrian, and Welsh Water.

An article by Bank of England staff at the end of 2006 discussed the role of index-linked bonds. <sup>47</sup> By 2006, the UK government had issued £120billion of index-linked bonds, and the private sector had issued £18billion. 72% of all index-linked bonds issued by the UK government are held by pension funds and insurance companies, because they match their liabilities, which also rise with inflation. Their demand for such bonds has risen in recent years, but index-linked bonds still represent less than 10% of pension fund assets. The real interest rates associated with index-linked bonds are very low. 50-year government index-linked bonds have a yield of around 1% in real terms – in January 2006 the yields fell as low as 0.5%.

The supply of government index-linked bonds has risen from under £4billion in 2000 to over £14billion in 2006, of which more than three-quarters was in bonds maturing in less than 30 years. Companies issued relatively few index-linked corporate bonds before 2006. In that year over £5billion were issued, nearly all of which were for longer than 30 years. The Bank of England article suggests a number of factors may explain this growth, including the wish to lock in the current low levels of interest rates.

Over 90% of these corporate bonds come from two sources: utilities, and PFI schemes.

"Regulated utilities — these are companies with cash flows that are partly subject to government regulation, including privatised utilities such as water, electricity and gas firms. Typically their pricing structure will be set by the regulator, with some prices allowed to rise each year by inflation (plus or minus a certain percentage). That gives rise to a flow of revenues linked to some degree to inflation.

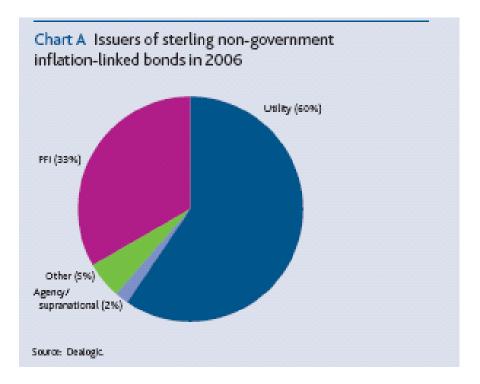
Private Finance Initiatives (PFIs) — under these public finance schemes, a private company pays for and runs a public infrastructure project (for example, building and maintaining a school or hospital) for a number of years. In return, the government pays the company an income stream, often inflation-linked." <sup>48</sup>

Both of these share the characteristics of a privatised public service with an income stream which is linked to inflation and supported by some form of government guarantee. (The other, minor, issuers of corporate

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index-linked bonds are the European Investment Bank, itself a public sector body; and some retail stores, whose revenues can also be seen as partly linked to inflation).

Chart A. Utilities and PFI schemes issuing corporate index-linked bonds



Source: Bank of England 2006

As a company strategy, it can be seen as a way of further increasing the return to equity shareholders. It takes advantage of implicit government guarantees to reduce the cost of debt still further; it increases the proportion of debt, at a time when interest rates remain low; and it refinances the company at rates well below the rate of return on capital allowed to the water companies, so that the remaining profit can support a higher dividend to shareholders. Although the bonds are long-term, they can nevertheless be seen as helping a strategy of short-term returns, because the effective interest rates are much lower. So it remains uncertain whether such moves support the idea that infrastructure funds are more long-term, stable owners accepting a lower rate of return.

Index-linked debt is also being used to finance or refinance other infrastructure run by concessions or PPPs. In France, for example, the Millau viaduct, a major motorway bridge, has been refinanced with an index-linked €573 million loan by Eiffage, the concessionaire that has a 78-year deal to operate and maintain the viaduct.<sup>49</sup>

The use of index-linked bonds supports the view that the financing structure of the English water companies is returning to a model closer to that of public ownership. A higher percentage is being financed by debt; a higher percentage of this is long-term debt; and it is based on a secure regulatory/government guarantee that revenue will always maintain a link to inflation. And the remaining equity shares are also attractive to investors because they are similar to index-linked bonds, as noted in the FT: "The enormous growth of infrastructure funds is based on demand from long-term institutional investors, pension funds in particular. At best, infrastructure assets ought to be a proxy for index-linked government bonds - long-dated, low-risk and inflation-proofed." <sup>50</sup>

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## 5. Private equity and employment - the WEF/Harvard study

#### 5.1. Introduction

The World Economic Forum meeting at Davis has published a large new study on private equity (PE):

- The Globalization of Alternative Investments Working Papers Volume 1: The Global Economic Impact of Private Equity Report 2008. <a href="http://www.weforum.org/pdf/cgi/pe/Full\_Report.pdf">http://www.weforum.org/pdf/cgi/pe/Full\_Report.pdf</a>.
- The executive summary is available at http://www.weforum.org/pdf/cgi/pe/Executive Summary.pdf
- The WEF issued a press release on 25 January 2008, available at <a href="http://www.weforum.org/en/media/Latest%20Press%20Releases/PrivateEquity\_PressRelease">http://www.weforum.org/en/media/Latest%20Press%20Releases/PrivateEquity\_PressRelease</a>

The study was led by Josh Lerner, Jacob H. Schiff Professor of Investment Banking at Harvard Business School. It included four separate studies, covering the 'demography' of PE, investment in innovation, impact on employment, and corporate governance. It also includes 6 case studies, two each from Europe, China, and India. This note is concerned only with the section "Private Equity and Employment". <sup>51</sup>

## 5.2. Results: workplaces lose 10% of jobs in 5 years following PE takeover

The Harvard/WEF study shows that:

- workplaces of firms taken over by PE have 10% less employees 5 years after the takeover, than if they had developed like similar workplaces not bought by PE: "the net impact on existing establishments is negative and substantial" (p.54)
- firms taken over by PE have 3.6%-4.5% less employees 2 years after the takeover, than if they had developed like similar workplaces not bought by PE (even after including the net effect of creating, buying, closing and selling new workplaces): "for a sample of surviving firms, we observe .....a negative net impact on employment that is substantial but smaller than that from the establishment-level results that ignore greenfield entry." (p.54)
- firms taken over by PE have much higher rates of closure, opening, acquisition and disposal of workplaces, in the 2 years following a PE takeover, than comparable firms: "we observe more greenfield entry, more acquisitions, divestitures and establishment shut-downs" (p.54)

The reporting of these results has been confused by misleading 'spin' about the impact of 'greenfield' employment changes and the comparative bankruptcy rate.

## 5.3. Background: study designed in response to union critiques

The design of the employment study was influenced by the critiques published by trade unions. The introduction to the employment section refers to the limitations of studies by the various private equity associations, listed as:

- Reliance on surveys with incomplete response
- Inability to control for employment changes in comparable firms
- Failure to distinguish cleanly between employment changes at firms backed by venture capital and firms backed by other forms of private equity
- Difficulties in disentangling organic job growth from acquisitions, divestitures and reorganizations
- Inability to determine where jobs are being created and destroyed

A footnote references only the two reports published by the SEIU and Unite/TGWU are the sources for these points: "See Service Employees International Union (2007) and Hall (2007) for detailed critiques." <sup>52</sup>

The report then states that "In this study, we construct and analyse a dataset that overcomes these limitations and, at the same time, encompasses a much larger set of employers and private equity transactions." <sup>53</sup>

## 5.4. Methodology

The study is based on used the Longitudinal Business Database (LBD) at the US Bureau of the Census, which covers all non-farm private companies, to follow employment at PE-backed companies in the US between 1980 and 2005, before and after PE takeover. The study looked at employment changes in actual

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workplaces owned by these firms – factories, offices etc – as well as employment changes resulting from new establishments, the closure of existing establishments, and further takeovers or disposals by the firms. It identified about 5,000 PE-backed firms, covering 300,000 US establishments, and also a control group of 1.4 million other establishments and firms, selected for being of comparable industry, age, and size to the PE-backed establishments and firms at the time of their takeover. The study looked at employment changes for 5 years before and after the PE takeover.

This approach does not suffer from the methodological problems of the private equity association surveys. It provides data on changes in employment in actual workplaces, and, separately, employment changes in the firm as a whole, including the effects of acquisitions and disposals. It excludes venture capital companies and management buyouts where private equity was not involved. It covers all private equity buyouts in the USA since 1980, not a selected sample. It provides a set of 'control' firms with similar characteristics for meaningful comparisons. The main limitation is that it covers only the USA.

# 5.5. Overall results: cumulative job losses of 10%

The main results are based on studies of employment changes at establishment (workplace level). This data reflects what happens to employees in existing workplaces taken over by a PE fund. It does not include changes due to new workplaces being created, or bought. The data shows that employment shrinks more rapidly in establishments after a PE takeover, than in control establishments. The study found that the actual change in employment in the establishments subject to PE takeovers was about 7% worse after 3 years, and 10.3% worse after 5 years, than it would have been without the takeovers.

Table 12. Cumulative difference in employment in workplaces after private equity takeovers (percentage of total employment at year of takeover, compared with similar firms not subject to PE)

|               | After 2 years | After 5 years |
|---------------|---------------|---------------|
| % change      | -7%           | -10.3%        |
| Total ('000s) |               | -340,000      |

The report states:

"Figure 6C compares the actual employment level of private equity transactions pre- and post-transaction with the implied employment of these targets had they grown at the same rate as the controls. This exercise permits evaluating the cumulative impact of the differences in net growth rates between targets and controls. To conduct this counterfactual exercise, the employment level of the controls is normalized to be exactly equal to that of the targets in the transaction year. The pattern for the controls shows the counterfactual level of employment that would have emerged for targets if the targets had exhibited the same pre- and post-transaction employment growth rates as the controls. Figure 6C shows that, five years after the transaction, the targets have a level of employment that is 10.3% lower than it would be if targets had exhibited the same growth rates as controls." (p.50)

# 5.6. Net job losses at firm level 2 years after PE takeover

A separate analysis of the firms takes account of the opening of new workplaces ('greenfield'), the closure of existing workplaces, and the buying and selling of subsidiaries, as well as the effect on existing workplaces. The report finds that the net result of all this is negative: -3.6% of total employment after 2 years compared with control group. The table shows the details of this data. All elements of the effects were negative: the creation and exit of workplaces is negative; the net result of acquisitions and disposal is negative; and these add to a negative effect on employment in surviving workplaces. <sup>54</sup>

Table 13. Employment changes in firms 2 years after private equity takeovers

(percentage of total employment at year of takeover, compared with similar firms not subject to PE)

| PE firms | Control group | Difference  |
|----------|---------------|-------------|
|          |               | (PE effect) |

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| Greenfield entry rate                    | +14.9 | +9.0 | +5.9 |
|--|-------|------|------|
| Establishment exit rate                  | -16.7 | -8.1 | -8.6 |
| Net effect of workplace creation and     | -1.8  | +0.9 | -2.7 |
| closures                                 |       |      |      |
|  |       |      |      |
| Establishment acquisition rate           | 7.4   | +4.7 | +2.7 |
| Establishment divestiture rate           | -5.8  | -2.9 | -2.9 |
| Net effect of acquisitions and disposals | +1.6  | +1.8 | -0.2 |
|  |       |      |      |
| Continuing establishment net growth rate | -1.7  | -0.1 | -1.6 |
|  |       |      |      |
| Overall two-year growth rate             | -1.9  | 2.6  | -4.5 |

# 5.7. Other points

## 5.7.1. Insecurity

As the report points out, the rate of acquisitions, sales, new plants and closures are all about twice as high in PE firms as in others. The report describes this process as 'creative destruction', but the other side of this is much greater insecurity for workers. In 2 years following a PE takeover, 24% of employees will have experienced their workplace being closed, sold, or reduced – double the uncertainty compared with a firm which has not been the subject of a PE takeover.

## 5.7.2. Total jobs lost as a result of private equity takeovers in the USA

Since the study was effectively looking at all the PE takeovers in the USA since 1980, and the employment effects are probably largely complete after 5 years, the difference represents an assessment of the overall actual effect of private equity on jobs in the USA. This implies that the loss is around 340,000 jobs. 55

#### 5.7.3. Sectoral differences

The study found significant differences in the impact between sectors. The cumulative effect after 5 years was lowest in manufacturing (-2.4%), around 10% in retail and services, and highest of all in finance, where the report only states that the effect is 'very large'.

Table 14. Employment falls linked to private equity takeovers, by sector

(percentage of total employment at year of takeover, compared with similar firms not subject to PE)

| SECTOR                             | Impact on employment 5 years after PE takeover (%) |
|------------------------------------|--|
| Manufacturing                      | -2.4%  |
| Retail                             | -9.6%  |
| Services                           | -9.7%  |
| Finance, Insurance and Real Estate | "very large"                                       |
| ALL SECTORS                        | -10.3%   |

Source: Harvard/WEF 2008, pp. 50-51, footnotes 17 and 19

## 5.7.4. Greenfield gains do not offset other job losses

It is very clear from the figures in table 2 that the greater increase in PE firms of 'greenfield' employment does **not** offset the other sources of job loss at existing establishments. It does not even offset the greater job loss from workplace closures.

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#### 5.7.5. Bankruptcy: more likely for PE firms

Some media coverage suggests that the report finds that job losses are offset by the fact that PE-backed companies have a lower bankruptcy rate, and so fewer jobs are lost through bankruptcies: e.g. the BBC report claims that "private equity-controlled firms are less likely to go bankrupt."

This is untrue. It is not only untrue, it is the opposite of what the report found. The employment study itself has no specific observations on bankruptcies, but the first section of the report ("The new demography of private equity") did produce evidence on this issue. It found that **PE firms are twice as likely to go bankrupt as the average publicly owned company**:

"For our total sample, 6% of deals have ended in bankruptcy or reorganization and the frequency of financial distress seems to have gone down over time. Excluding the LBOs occurring after 2002, which may not have had enough time to enter financial distress, the average rate is 7%. Assuming an average holding period of six years, this works out to an annual default rate of 1.2% per year. The annual default rate for US publicly traded firms in Compustat over the 1983 to 2002 period was half this number, 0.6%..." (p.8)

The study even notes that the real figure of PE bankruptcies may well be significantly higher than this: ".....One caveat is that not all distress cases may be recorded in publicly available data sources and some of these cases may be "hidden" in the relatively large fraction of "unknown" exits (11%)." (p.9)

The report even found that PE-backed buyouts were more likely to go bankrupt than other kinds of leveraged buyouts (LBOs):

"..... Although LBOs sponsored by private equity funds are more likely to experience a successful exit, they are also somewhat more likely to have their investments end up in financial distress, controlling for other factors." (p.5)

And that the rate of bankruptcy of LBOs was highest of all in the UK and USA:

"Finally, possibly because Capital IQ coverage of corporate failures may be more accurate in the US and the UK, LBOs undertaken in these regions are more likely to end up in bankruptcy and the magnitudes are very large (five and seven percentage points, respectively)." (p.10)

The report does note that the annual bankruptcy rate of 1.2% is lower than that of corporate bonds:

"Even though the LBO default rates are indeed higher than that of Compustat firms, they are lower than the average default rates of corporate bond issuers 1980–2002, which was 1.6% according to Moody's." (p.9)

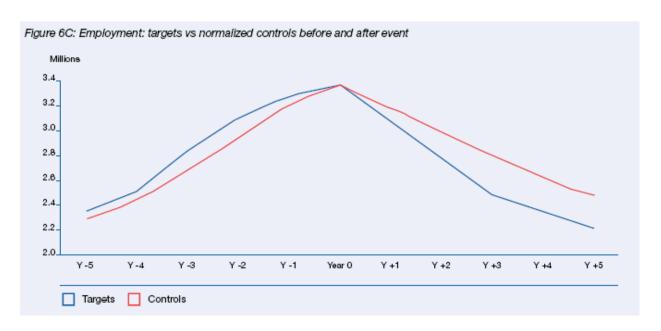
This may be relevant for investors considering PE or corporate bonds as alternative investments, but it has no implications for employment: as the designers of the employment study would point out, the group of companies which issue corporate bonds is not in any way matched or comparable to the companies bought by PE-firms. The employment study itself has no conclusion about relative bankruptcy rates.

## 5.7.6. Common pattern of rise and fall, not just PE

The patterns of employment growth and decline are similar for both the PE workplaces and the comparators, as shown in the graph. The report correctly points out that this shows the importance of having a matched sample, to avoid the false conclusion that the pattern is special to PE. It also points out that the broad pattern is typical of all employment data ("if one randomly observes establishments at some fixed point in their lifecycle, they will, on average, exhibit growth up to the point and will, on average, exhibit decline from that point on" – footnote 15). So the decline by itself shows nothing about the effect of PE. It is the gap between the two lines at the end, after 5 years, which shows the impact of PE.

## Chart B. Employment patterns in PE and comparable workplaces before and after takeover

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## 5.8. Misleading spin, inadequate press reports

The press release of the WEF is extremely, presumably deliberately, confusing about these results.

- It states that "Employment has a "J-curve" pattern in the years pre-and-post buyout", although the study at no point refers to a J-curve, nor do any of its results resemble a J-curve
- It fails to mention that the study shows that employment is 10% lower 5 years after a PE-takeover
- It mentions that "Firms backed by private equity have 6% more greenfield job creation than the control group two years after the buyout.", but fails to mention that PE firms have 8.6% greater job destruction from closing sites, so the net effect is in fact the same as the general trend.

The WEF summary of the panel discussion at Davos also credits Josh Lerner with an untrue account of the results of his own paper: "a review of 5,000 acquired companies found the number of jobs created at new factories or offices quickly offset job losses at old facilities" <sup>56</sup> – whereas the study in fact shows that after taking into account all the acquisitions and greenfields etc, firms bought by PE have 3.6% - 4.5% less employment after just 2 years, compared with other similar firms.

The Private Equity Council (PEC) encouraged the confusion by issuing a press release containing two untrue statements: "The studies demonstrate that PE firms are job savers and job growers. Firms acquired by PE on average are losing jobs at a faster clip than their peers when purchased - but over time, as the business is stabilized and refocused by PE investors, the employment trend rises to match the industry average at old facilities and exceeds average industry-wide job creation at new facilities." <sup>57</sup>

This disinformation was very successful. The main media reports have suggested that the report has mixed results on the employment impact, or even that it shows job loss to be a myth. The BBC's report for example is captioned "Companies bought by private equity firms do not destroy jobs on a large scale, a study suggests", and includes the incorrect statement that "private equity-controlled firms are less likely to go bankrupt." <sup>58</sup> A report by Andrew Sorkin in the Herald Tribune managed to assert that "Companies owned by private equity shed, on average, about one percentage point more jobs than their peers." <sup>59</sup>. Three days later, the same journalist wrote a different report for the New York Times, but this time dismissed the report as "so muddied that it was difficult to make sense of it", and instead preferred to quote another unsubstantiated claim by the PEC that PE funds created 8.4% more jobs than others <sup>60</sup>.

The FT report by Martin Arnold came closest to accuracy, headlined 'Fewer jobs created at private equity acquisitions', and, correctly reporting that 'Buy-out deals failed more often than other companies, the report found, with 6 per cent ending in bankruptcy or financial restructuring'. 61

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#### 5.9. Conclusion

The report is the soundest and most comprehensive study of the employment effects of PE

It shows beyond doubt that the employment impact of PE takeovers is negative.

It supports both the assertions and the critiques published by the unions.

It contains further interesting data on PE effects, e.g. the doubling of uncertainty of employment.

## 6. References and notes

McKinsey. 2007 The New Power Brokers: How Oil, Asia, Hedge Funds, and Private Equity Are Shaping Global Capital Markets <a href="http://www.mckinsey.com/mgi/publications/The\_New\_Power\_Brokers/index.asp">http://www.mckinsey.com/mgi/publications/The\_New\_Power\_Brokers/index.asp</a>

World Economic Forum (WEF) The Globalization of Alternative Investments Working Papers Volume 1: The Global Economic Impact of Private Equity Report 2008. http://www.weforum.org/pdf/cgi/pe/Full Report.pdf.

PSIRU Private equity and employment – the Davos/WEF/Harvard study *February 2008* <a href="http://www.psiru.org/reports/2008-02-PE-WEF.doc">http://www.psiru.org/reports/2008-02-PE-WEF.doc</a>

PSIRU Unhappy returns to investors in private equity *June 2007* <a href="http://www.psiru.org/reports/2007-06-PE-returns.doc">http://www.psiru.org/reports/2007-06-PE-returns.doc</a>

PSIRU Methodological issues in estimating the impact of private equity buyouts on employment *May* 2007 <a href="http://www.psiru.org/reports/2007-05-PE-emp.doc">http://www.psiru.org/reports/2007-05-PE-emp.doc</a>

PSIRU Private equity and infrastructure funds in public services and utilities November 2006 http://www.psiru.org/reports/2006-11-PE.doc

09/07/2010 Page 24 of 26

<sup>&</sup>lt;sup>1</sup> McKinsey 2007

<sup>&</sup>lt;sup>2</sup> The Observer (England) January 13, 2008 Business & Media: Business: Resources: A few deals too far for BC Partners?: Problems loom for the private equity firm after a buyout spree last year, says Nick Mathiason <sup>3</sup> Irish Independent February 9, 2008 Fund to pump e2bn into private equity

<sup>&</sup>lt;sup>4</sup> Czech Republic and Slovakia Business Weekly October 26, 2007 Mid Europa closes EUR 1.5 bln fund targeting buyouts in Central

<sup>&</sup>lt;sup>5</sup> OECD: International Investment Of Sovereign Wealth Funds. 16 November 2007. DAF/INV/RD(2007)21

<sup>&</sup>lt;sup>6</sup> OECD Investment Committee Consultation on Sovereign Wealth Funds 13 December 2007 Comments by the TUAC

<sup>&</sup>lt;sup>7</sup> PSIRU Private equity and infrastructure funds in public services and utilities November 2006 http://www.psiru.org/reports/2006-11-PE.doc

<sup>8</sup> Tony Jackson Infrastructure investors run out of road in search for assets. Financial Times October 22, 2007

<sup>&</sup>lt;sup>9</sup> Tony Jackson Infrastructure investors run out of road in search for assets. Financial Times October 22, 2007

<sup>&</sup>lt;sup>10</sup> Tony Jackson Infrastructure investors run out of road in search for assets. Financial Times October 22, 2007

<sup>11</sup> http://www.citigroup.com/citigroup/press/2008/080122a.htm

https://www.citigroupai.com/investment.htm

<sup>13</sup> http://www.gic.com.sg/aboutus.htm

<sup>14</sup> http://www.psiru.org/reports/2007-06-G-EWCs.doc

<sup>&</sup>lt;sup>15</sup> Die Welt November 8, 2007 Alba Plans Expansion Across Germany (Entsorger Alba Will Mehr Mullfirmen Schlucken)

<sup>&</sup>lt;sup>16</sup> This section is partly based on PSIRU reports by Jane Lethbridge. See:

<sup>&</sup>lt;sup>17</sup> Birmingham Post **February** 5, 2008, Tuesday 1ST Edition Birmingham Nuffield is bought by BMI **Healthcare** 

<sup>18</sup> http://www.investorab.com/en/OurInvestments/Operating+investments.htm

<sup>&</sup>lt;sup>19</sup> FT 19 November 2007 Buy-out group to specialise in healthcare deals

<sup>&</sup>lt;sup>20</sup> Financial Times (London, England) December 15, 2007 Saturday London Edition 1 GHG buys Nuffield hospitals for Pounds 140m

<sup>&</sup>lt;sup>21</sup> Birmingham Post **February** 5, 2008, Tuesday 1ST Edition Birmingham Nuffield is bought by BMI **Healthcare** 

<sup>&</sup>lt;sup>22</sup> Sunday Times (London) **December** 23, 2007, Sunday Bouncing Bupa goes global

<sup>&</sup>lt;sup>23</sup> www.princess-privateequity.net

http://www.publications.parliament.uk/pa/ld200607/ldjudgmt/jd070620/birm.pdf

<sup>27</sup> Good for business a surprise verdict on EU human rights law; legal analysis

The Evening Standard (London), October 2, 2007 JOSHUA ROZENBERG; Cash: Welfare; Law Lords leave elderly out in cold: A ruling leaves elderly and vulnerable people in private care homes with no protection from eviction or illtreatment The Observer (England), June 24, 2007 Jon Robins; Care home ruling disaster for 300,000

The Daily Telegraph (LONDON), June 21, 2007 Caroline Davies

http://www.mideuropa.com/investments/index.php?id=78
 The Slovak Spectator December 16, 2007 Getting Used To Private Equity

- <sup>30</sup> The Slovak Spectator September 30, 2007 Sunday STATE WANTS TO KEEP HOSPITAL CONTROL
- <sup>31</sup> The Slovak Spectator September 30, 2007 Sunday STATE WANTS TO KEEP HOSPITAL CONTROL
- <sup>32</sup> Deloitte's Central European Private Equity Confidence Survey Jan 2008 http://www.deloitte.com/dtt/research/0,1015,cid%253D187408,00.html
- Turkish Daily News November 27, 2007 Tuesday FOREIGN INTEREST IN TURKISH HEALTH SECTOR
- 34 http://www.meinlpower.com/downloads/presse-080207-en.pdf
- <sup>35</sup> Seenews 16 Jan 2008
- <sup>36</sup> Baltic News Service January 17, 2008
- <sup>37</sup> Deloitte's Central European Private Equity Confidence Survey Jan 2008 http://www.deloitte.com/dtt/research/0,1015,cid%253D187408,00.html
- <sup>38</sup> Energy in East Europe December 7, 2007 Penta buys out SE from PPC
- <sup>39</sup> Energy in East Europe November 23, 2007 New funds for CE Energy
- <sup>40</sup> Central Europe Energy Weekly November 10, 2007 Prague-based EnerCap Power Fund's first EUR 75 mln close targets renewables in CEE, Balkans
- <sup>41</sup> Banking and Stock Exchange, Finance, Economics (Russia) October 23, 2007 A Swedish investment group East Capital has launched a special purpose vehicle for investing in nonpublic companies in Russia, in the CIS, and in the Eastern Europe
- <sup>42</sup> Financial Times (London, England) November 6, 2007 Tuesday London Edition 1 Alfred McAlpine sells PFI
- <sup>43</sup> OECD Investment Committee Consultation on Sovereign Wealth Funds 13 December 2007 Comments by the TUAC <sup>44</sup> For further details see Unhappy returns to investors in private equity <a href="http://www.psiru.org/reports/2007-06-PE-">http://www.psiru.org/reports/2007-06-PE-</a>

- returns.doc

  45 McKinseys 2007 Exhibit 5.20
- <sup>46</sup> Thomson Financial News CNF Regulatory News **August** 24, 2007 Thames Water Cayman Issue of Debt
- <sup>47</sup> Grellan McGrath and Robin Windle. 2006 Recent developments in sterling inflation-linked markets Bank of England Quarterly Bulletin 2006 Q4 <a href="http://www.bankofengland.co.uk/publications/quarterlybulletin/qb060402.pdf">http://www.bankofengland.co.uk/publications/quarterlybulletin/qb060402.pdf</a>
  48 Grellan McGrath and Robin Windle. 2006 Recent developments in sterling inflation-linked markets Bank of England
- Quarterly Bulletin 2006 Q4 p.391 http://www.bankofengland.co.uk/publications/quarterlybulletin/qb060402.pdf

<sup>49</sup> International Financial Law Review October 1, 2007

- <sup>50</sup> Tony Jackson Infrastructure investors run out of road in search for assets. Financial Times October 22, 2007
- <sup>51</sup> The authors are Josh Lerner, Harvard Business School; Steven J Davis, University of Chicago Graduate School of Business; John Haltiwanger, University of Maryland, Ron Jarmin and Javier Miranda, both US Bureau of the Census. This study is on pages 43-64 of the full report http://www.weforum.org/pdf/cgi/pe/Full Report.pdf
- <sup>52</sup> Service Employees International Union (SEIU) (2007), Behind the Buyouts: Inside the World of Private Equity, Washington, SEIU; and Hall, D. (2007), "Methodological Issues in Estimating the Impact of Private Equity Buyouts on Employment", unpublished Working Paper, Public Services International Research Unit, Business School, University of Greenwich (commissioned by Unite/TGWU)

<sup>53</sup> Introduction p.43

- <sup>54</sup> The difference between the total in the table of -4.5% and the overall figure of -3.6% is explained by the report in terms of technical issues.
- <sup>55</sup> Footnote 17 states that the difference is 34,000, which must be an error, as the base figure of the total employment is given in footnote 16 as 3.3m., and the gap is calculated as 10.3% of 3.3 million.

http://www.weforum.org/en/knowledge/Themes/BusinessandManagement/KN\_SESS\_SUMM\_22701?url=/en/knowled ge/Themes/BusinessandManagement/KN SESS SUMM 22701

09/07/2010 Page 25 of 26

<sup>&</sup>lt;sup>24</sup> The Western Mail **December** 29, 2007, Saturday First Edition Nurse's care-home venture finds private buyer only

<sup>&</sup>lt;sup>25</sup> The Observer (England) November 4, 2007 Business & Media: Business: Private equity: Why granny is a profit centre: But booming investment in private retirement homes is raising fears of evictions and deteriorating care, says Nick Mathiason

 $<sup>^{26}</sup>$  YL (by her litigation friend the Official Solicitor) (FC) (Appellant) v. Birmingham City Council and others (Respondents) [2007] UKHL 27 20 June 2007

http://www.weforum.org/en/knowledge/Themes/BusinessandManagement/KN\_SESS\_SUMM\_22701?url=/en/knowledge/Themes/BusinessandManagement/KN\_SESS\_SUMM\_22701

57 Business Wire January 25, 2008 Eriday 0:00 AM CMT. Private Family Committee Commit

<sup>57</sup> Business Wire January 25, 2008 Friday 9:00 AM GMT Private Equity Council Issues Statement on New PE Research Conducted by Prof. Josh Lerner for the World Economic Forum

<sup>58</sup> Companies bought by private equity firms do not destroy jobs on a large scale, a study suggests. <a href="http://news.bbc.co.uk/go/pr/fr/-/1/hi/business/7210548.stm">http://news.bbc.co.uk/go/pr/fr/-/1/hi/business/7210548.stm</a>

- <sup>59</sup> The International Herald Tribune January 26, 2008 Private equity buyouts get split review on job losses by Andrew Ross Sorkin.
- <sup>60</sup> The New York Times January 29, 2008 Perception And Angst At Davos by Andrew Ross Sorkin.
- <sup>61</sup> Financial Times January 25, 2008 Fewer jobs created at private equity acquisitions By MARTIN ARNOLD

09/07/2010 Page 26 of 26