

Financial Intermediaries in the United States:

Development and Impact on Firms and Employment Relations

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Introduction

Private equity firms (PE), hedge funds (HFs), sovereign wealth funds (SWFs), and other private pools of capital form part of the growing shadow banking system in the United States, where these new financial intermediaries provide an alternative investment mechanism to the traditional banking system. PE and HFs have their origins in the United States, while the first SWF was created by the Kuwaiti Government in 1953. While they have separate roots and distinct business models, these alternative investment vehicles have increasingly merged into overarching asset management funds which encompass all three alternative investments. These funds have wielded increasing power in financial and non-financial sectors – not only via direct investments but also indirectly, as their strategies – such as high use of debt to fund investments – have been increasingly adopted by investment arms of banks and by publicly-traded corporations. In this chapter we outline the changes in the US regulatory environment which have facilitated the rapid growth of alternative investment funds (AIFs) and then examine the specific features of these funds, including their growth, business models, and implications for firms and employees.

The institutional environment

Part of the power and dramatic growth in the activities of PE and other AIFs is related to the weak regulatory environment in the US – particularly the financial regulatory regime, and to a lesser extent, labor market laws and institutions.

Financial regulation

Four laws provide the regulatory framework for US public corporations and the financial services industry: the Securities Act of 1933, the Securities Exchange Act of 1934, the Investment Company Act of 1940 (Company Act), and the Investment Advisers Act of 1940 (Advisers Act). The Securities Act prohibits fraud, requires registration and public reporting by publicly-traded firms, and gives authority to the Federal Securities and Exchange Commission (SEC) to regulate the industry. The Company Act requires investment funds to disclose their financial policies, restricts activities such as use of leverage and short selling, and requires a board structure with a substantial percentage of disinterested members. The Advisers Act requires the registration of fund managers, enforces compliance with fiduciary responsibilities, and limits the performance fees they may charge.¹

In practice, most PE and HFs have avoided these regulations by limiting their funds' size to that which is defined as exempt under law. This has allowed them, in contrast to mutual funds for example, to engage in financial practices such as selling securities short, making use of substantial leverage, and adopting performance-based fees which increase with fund gains but do not necessarily decrease with losses. Thus the funds have operated with little transparency (even to their investors) and without board oversight.

By the 1990s, deregulation of banking and financial services led to dramatic growth of PE and other private investment pools. In the 1970s, Congress passed laws allowing pension funds and insurance

¹ Goldberg et al. (2010).

companies to invest in stock and high risk bonds for the first time (the Employment Retirement Income Security Acts, ERISA, of 1974 and 1978). In the 1980s, it allowed Savings and Loan banks to invest in risky commercial activities, including bonds rated as ‘high risk’ (‘junk bonds’), and hence more likely to default. The Reagan administration further relaxed enforcement of antitrust and securities laws, and corporate raiders grew more powerful after the Supreme Court struck down state antitakeover laws in 1982.² In turn, the emergence of large pools of liquid capital for junk bonds facilitated leveraged buyouts (LBOs), in which investors bought companies with a small down payment and borrowed the rest by using the assets of the acquired company as collateral. This high leverage model, which often led to financial distress or bankruptcy, became a central building block of the PE model of the 1990s.

Banking deregulation continued with the 1999 Gramm-Leach-Bliley Act, which repealed the Glass-Steagal Act of 1933 and allowed, for the first time since 1929, the consolidation of commercial banks, investment banks, securities firms, and insurance companies. Then in 2004, the SEC allowed investment banks to hold less capital in reserve, thereby facilitating greater use of leverage in trading activities.³ Lax regulation also aided the development of new financial instruments – commercial mortgage-backed securities (used to securitize debt which PE funds lever on the firms they acquire) as well as collateralized debt obligations, credit default swaps, and other derivatives. Congress explicitly excluded these financial instruments from regulation under the 2000 Commodity Futures Modernization Act. Taken together, these legal changes dramatically increased the pools of capital available for investment in PE and HFs and speculation, a practice which the 2011 Dodd-Frank Wall Street Reform and Consumer Protection Act is intended to curb.

PE and HFs also take advantage of US tax laws. By using high leverage in buying companies, for example, the interest on debt may be subtracted from taxable income, whereas retained earnings or dividends are taxable as profit. The profits from their portfolio investments are defined as ‘carried interest,’ and this is treated as capital gains and taxed at a 15 percent rate, rather than the top rate of 35 percent for corporate or individual taxes.⁴ In addition, most PE and HFs avoid other taxes by registering off-shore.⁵

The Dodd-Frank act now requires PE and HFs with more than \$150 million in assets to register with the SEC and report basic organizational and operational information, such as size, types of services, clients, employees, and potential conflicts of interest.⁶ Legislative attempts to tax carried interest as ordinary income had failed as of the end of 2011.⁷ These minimal requirements stand in contrast to the European Union’s (EU) Alternative Investment Funds Managers Directive. The latter instructs member states to adopt much more extensive reporting requirements as well as substantive rules to limit the use of leverage and implement risk management systems.⁸

US regulations governing SWFs are also limited in scope and have largely encouraged SWF investment in the US. SWFs are completely exempt from taxation (Article 892 of the US Internal Revenue Code), giving them a major advantage over other private investors. When the China

² Jarrell (1983).

³ Lowenstein (2004).

⁴ Fleischer (2008); Marples (2008); Government Accountability Office (GAO) (2008a), p. 72.

⁵ Jickling and Marples (2007), p. 6.

⁶ Federal Register (2011); PriceWaterhouseCoopers (2011).

⁷ MacGillis (2011); Rubin et al. (2011).

⁸ Europa (2010); European Union (2011).

Investment Corporation (CIC) invested in Morgan Stanley in response to the financial crisis, for example, it avoided the 30 percent withholding tax which other foreign investors must pay unless they are covered by a special treaty.⁹ The US government has focused more on SWFs as a threat to national security, leading Congress to pass the Exon-Florio Amendment to the Defense Production Act of 1950. These established the Committee on Foreign Investment in the US (CFIUS), which reviews foreign acquisitions and may stop private sector transactions,¹⁰ such as the 2006 attempt by state-owned Dubai Ports World (DP World) to acquire six major US ports.¹¹

Labor market regulation

The US is also well-known for its weak labor market protections compared to its European counterparts. US employment law is based on the ‘employment-at-will’ doctrine, which means that employers may hire or fire employees at will – although firms do worry about individual lawsuits and the reputational effects of relying on layoffs to adjust workforce levels. At the collective level, US labor laws have established a decentralized industrial relations system in which employees may gain union representation only by winning a majority of votes in elections at the workplace or firm level. This system works to limit union power by requiring high levels of union resources, both for administering existing contracts and organizing new members. While industrial unions were successful in the post-World War II period in organizing a large percentage of workers in manufacturing and negotiating ‘pattern’ contracts which applied across firms, those patterns have largely broken down as union power has eroded and union density has fallen – now to only 7 percent of the private sector workforce – roughly equal to the estimated workforce now employed by companies owned by private equity.

Two aspects of the US labor institutional environment are particularly relevant to the role of new financial intermediaries. First, unlike their European counterparts, US workers and unions have no information or consultation rights so they typically do not have advance notice, and cannot influence, the change of ownership of a corporation. Second, the US pension system is a decentralized employer-based system, though some unions control members’ pension funds under provisions of the Taft Hartley Law. Public employers also have pension funds covering the majority of public sector employees. Unions and public sector officials have a fiduciary responsibility to ensure that these multi-billion dollar funds have adequate returns, and many have invested in PE and HFs in an attempt to achieve high returns. Pension funds invest an average of 8.8 percent of their portfolios in PE, while public pension funds invest 6.8 percent in HFs.¹²

This system has created dilemmas for US unions. While they invest in PE to gain high returns for retired members, they also encounter PE investors who take over unionized firms and may find themselves fighting these new owners over downsizing or derogation of contract rules. The result is that the US labor movement as a whole has not developed a unified position or public approach to new financial intermediaries.

⁹ Fleischer (2009).

¹⁰ Crocker (2008).

¹¹ AP News (2006).

¹² Eder et al. (2011).

Growth and business models of funds

This weak regulatory environment governing capital and labour markets has created a space for new financial intermediaries to operate with few constraints. In the following sections, we examine the LBO model of PE, which has the most direct effect on management and employment relations, before turning to HF's and SWFs.

Private equity

PE firms draw on the legacy of the LBO model of the 1980s, exemplified by Kohlberg, Kravis, and Roberts' (KKR) purchase of the Houdaille Corporation in 1979 and RJR Nabisco for \$31.1 billion a decade later.¹³ Their actions were justified by ideas developed in 'agency theory' by finance economists to explain how firms can best maximize shareholder value.¹⁴ According to agency theory, the 'managerial' model of the firm is deficient because shareholder ownership is too dispersed effectively to control managerial decisions. Professional managers (the agents) are free to pursue their own agendas rather than maximizing value for shareholders (the principals). Traditionally, it is argued, managers used their power to control labor and extract value through the production process. They used some of the company's retained earnings to induce diverse stakeholders to contribute to enterprise productivity and to finance investments in new technologies, worker skills, or labor peace and cooperation.¹⁵ However, finance economists argue that in the short-term, managers did not maximize value for the company's current shareholders.

By contrast, LBOs and corporate takeovers in theory solve the principal-agent problem by concentrating ownership in a few hands so that shareholders have greater influence over managerial decisions. In addition, loading acquired companies with debt makes it necessary for managers to focus on cost-cutting and short-term profits to meet debt repayments and maximize returns to shareholders. For a time, this model collapsed in the scandals of the 1980s, with the indictment of leading figures such as Michael Milken¹⁶ and the publication of scathing critiques such as *Barbarians at the Gates*. Investors became wary of these deals and the junk bond market collapsed.

Size, scale, and scope of PE in the US

By the late 1990s, however, a second wave of LBOs emerged among investors with large pools of private capital. PE firms raised capital through funds in which investors (the so-called limited partners) commit a certain amount of money and pay management fees to the PE firm (the general partner). The limited partners provide most of the capital while the general partner manages the fund and makes all of the decisions. Limited partners include primarily pension funds (or 'workers' capital), as well as insurance companies, endowments, and wealthy individuals.

Increasing access to pension funds enabled PE firms to expand the scale and scope of their operations and to become global in their investment activities in the 2000s. Data from private equity data provider Pitchbook showed that between 2003 and 2007, the number of annual PE transactions increased by 375 percent (from 665 to 2,490 deals), while the value increased by nine fold (\$66 billion to \$607 billion). Deal activity fell dramatically during the financial crisis, but by 2010 the value

¹³ Baker and Smith (1998); Anders (2002).

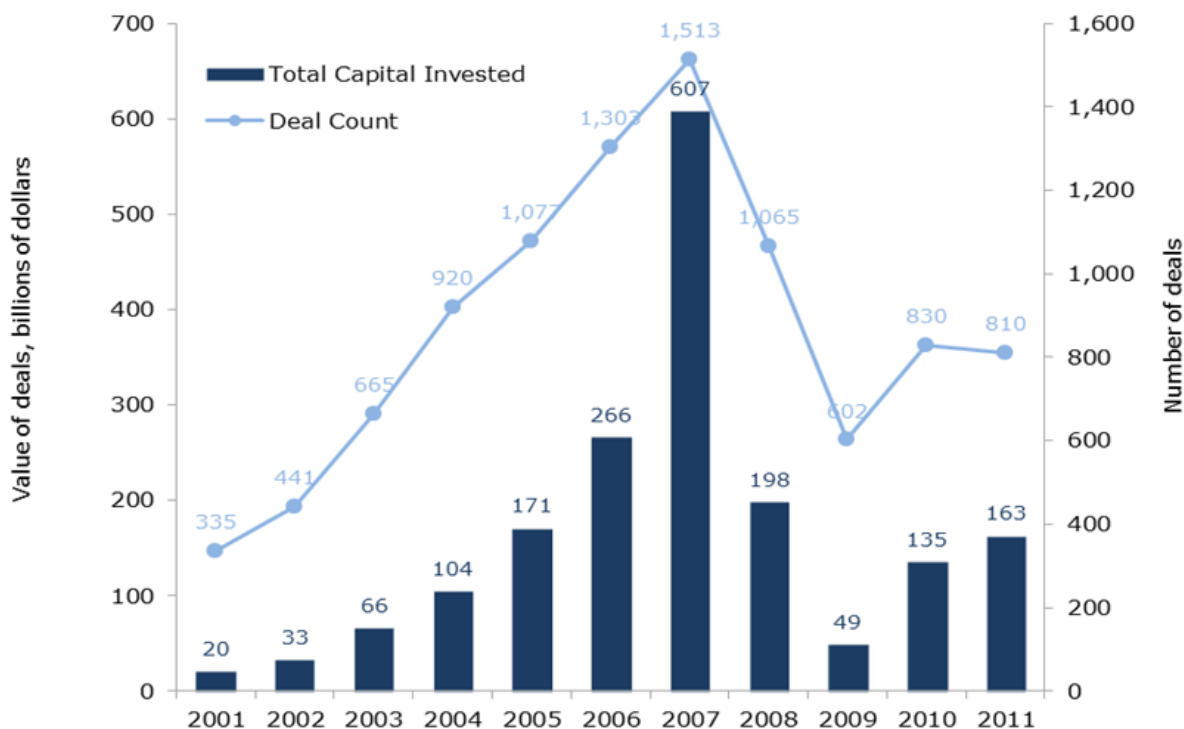
¹⁴ Jensen and Meckling (1976).

¹⁵ Chandler (1990); Lazonick (1992).

¹⁶ Akerlof and Romer (1993).

of deals approach its 2005 level (Figure 1). These data are broadly consistent with estimates using Capital IQ data, reported by Strömberg (2008) and Kaplan and Strömberg (2009: Figure 2 and Table 1).

FIGURE 1
Number and Value of Annual PE Deals in the US



Source: Pitchbook Data

The types of PE transactions also changed in the 2000s. In the 1980s, LBOs focused primarily on large public firms in mature industries such as manufacturing and retail. By the 2000s, buyout activity spread to a wide range of industries, including information technology, health care, financial services, utilities, infrastructure, business to business, and other business to consumer activities. Similarly, in the 1980s, LBOs of publicly-traded firms taken private represented almost half of the value of all transactions, but this fell to about one-third in the 2000s. By contrast, secondary transactions – in which one PE fund sells a privately-held company to another PE fund – rose from 2 percent of transaction value in the 1980s to one-third in the 2000s.¹⁷

Impact on firms, employment, and ‘workers’ capital’

The most comprehensive analysis of the employment and productivity effects of PE in the US draws on industry data on PE transactions (Capital IQ) and the US Census Bureau’s Longitudinal Business Database (LBD), which covers the entire non-farm private sector.¹⁸ In the 2011 paper on PE and employment, the data consist of 3,200 PE-owned firms (with 150,000 establishments), acquired in PE transactions from 1980 to 2006. The research examined employment at PE-acquired

¹⁷ Kaplan and Strömberg (2009), Table 1.

¹⁸ Davis *et al.* (2008), (2009), (2011).

establishments for 5 years before and after the PE transaction and compared these with control establishments, which were comparable in age, size, and multi-establishment status.

The findings are instructive. In PE-acquired establishments, gross job destruction was substantially greater than in the control establishments. The average cumulative five-year employment difference was 6.4 percent in favor of the controls, with half of this due to the greater pace of closings of PE establishments. The authors found modest declines in employment in PE establishments relative to controls in manufacturing, but employment fell by nearly 12 percent in PE-owned retail establishments relative to controls. Two years post-buyout, these negative employment effects persisted at the firm level – with PE-owned firms showing 3.62 percent lower employment – despite the fact that PE created somewhat more jobs than the controls at greenfield sites.

With respect to productivity in manufacturing, Davis *et al.* (2009) found confirmation of the agency theory view that PE ownership improves performance. Labor productivity was higher in target firms than in controls. Notably, almost three-quarters (72 percent) of this differential was due to productivity improvements in the continuing establishments of these firms, including downsizing or closing of less productive establishments and the reallocation of activity to more productive establishments. In addition, target firms were much more likely to close establishments with lower productivity than were the controls. Unfortunately, it is not possible with these data to distinguish between productivity increases due to investments in employee skills, technology, and work organization and those due to work intensification.

For the limited partners – which are overwhelmingly the pension funds of union and public sector workers – the higher than average returns proclaimed by private equity have been seriously challenged by recent evidence. A *New York Times* analysis found that pension funds with a third to over half of their money in alternative investments (private equity, hedge funds, and real estate funds) had returns that were more than a one-percentage point lower than those funds that avoided these risky investments – and they paid almost four times more in management fees.¹⁹ Scholarly evidence also raises serious questions. An econometric study by Kaplan and Schoar (2005) of PE funds between 1980 and 2001 that had reached the end of their life found that PE returns averaged 93 to 97 percent of the S&P 500. Median returns were 80 percent of the S&P 500. Using the same data, Phalippou and Gottschalg (2009) reached similar findings but identified several features of the data, including self-selection bias, that upwardly bias the results. More importantly, the standard industry practice of measuring results using the internal rate of return (IRR) has been seriously questioned because calculations make the questionable assumption that cash proceeds from the sale of an operating company can be reinvested at the same IRR over the entire life of the PE fund. Using a modified IRR, Phalippou and Gottschalg (2007) estimated returns for the top 25 percent of PE firms that were about ½ of those reported using the IRR. Moreover, the limited partners “accept extreme illiquidity and leverage (debt) risk relative to the S&P.”²⁰ In sum, the stated benefits of PE investments for workers capital and the retirement income of middle-class Americans are highly suspect.

Management and employment relations

The labor relations strategies of private equity firms take advantage of the weak U.S. labor laws and labor movement, which provide few constraints to managerial prerogative; but PE firms do not

¹⁹ Creswell (2012).

²⁰ Higson (2010), p.7; for a fuller discussion see Appelbaum and Batt (2012), pp. 24-7.

uniformly seek to eliminate or marginalize unions. Their attitudes vary from hostile to pragmatic to indifferent. As long as unions don't get in the way of making anticipated returns, PE firms can live with them; if not, they fight them. Where labor cost savings are not a major source of higher returns – as in the \$40 billion buyout of Texas Utility Corporation (TXU) – then union contracts are not a major obstacle. But in old-line manufacturing plants or distressed industries such as steel, layoffs and deep concessions in work rules, health care, and pensions have been common. Overall, however, our case evidence shows that whether or not PE is hostile or willing to negotiate, it has gained the lions' share of wealth from buyouts while workers hold on to diminished jobs and lost income and welfare security.

The steel industry, for example, is considered a positive case of PE investment because without it, most believe the industry would have collapsed. Between 1998 and 2003, in the context of the Asian crisis, cheap steel imports, and global overcapacity, 45 US steel companies declared bankruptcy, shut down 18 mills, and laid-off 55,000 steelworkers. Over 210,000 retirees and their dependents lost their retiree health care benefits.²¹ In 2001, investment banker Wilbur Ross approached the steelworkers to make a deal, and with their backing, created ISG as a parent company to buy the major steel companies out of bankruptcy at bargain prices (LTV, US Steel, Bethlehem, Georgetown, and Weirton). The bankruptcy proceedings allowed the pension plans covering over 250,000 employees, with \$10 billion in underfunded benefits, to be terminated and turned over to the US Government's Insurance program, the Pension Benefit Guarantee Corporation (PBGC).

The Steelworkers Union welcomed Ross because he was willing to save the mills and, unlike the legacy companies tainted with years of union hatred, he was straightforward and pragmatic. Negotiations were purely about money. The union accepted layoffs of 20 percent in exchange for management layoffs of 40 percent. Ross accepted the union's plan for reorganizing the plants, which streamlined job grades and led to large productivity gains. The contract maintained full time work hours, overtime pay, and seniority provisions; set lower base wages plus an incentive bonus plan and profit-sharing; provided less comprehensive health care than previously; and retained important non-monetary clauses such as the maintenance of standard contract protections, a neutrality clause, and limits on pay for top managers. The union gained an expanded role in implementing the work redesign and running the plants, an extensive training program, health and safety committees, a "lay-off minimization plan", and a union nominee to the ISG Board of Directors. Active union members were folded into the Steelworkers Pension Trust, a less generous multi-employer defined benefit pension plan than they previously had.²²

Hardest hit were laid-off workers over 55, who received \$50,000 severance pay, and retirees whose health insurance was covered by a new trust with contributions contingent on corporate profitability. In 2005, Ross sold all of the plants to Mittal Steel for \$4.5 billion, making an estimated 14 times his investment in less than 3 years.²³ The mills continue to operate competitively, with collective bargaining negotiations occurring in 2012. While the deal between Ross and the steelworkers union saved the industry, the bittersweet pill is that Ross's profits almost exactly equal the losses sustained in the pension and health care programs for retirees.

²¹ USWA (2004).

²² USWA (2002), (2003).

²³ Gross (2005).

In a more hostile union case, the anti-union company Olmet Aluminum, backed by PE firm Matlin Patterson, filed for bankruptcy and gained a court order to void a steelworker union contract; but union militancy led to a 19-month massive corporate campaign against the company and PE firm, which ended with a satisfactory contract covering 1,500 workers.²⁴

These distressed buyouts are a tiny fraction of PE activity. In other cases, private equity has acquired healthy companies, and while they have negotiated decent union contracts, they have left the companies with huge debt loads that undermine the sustainability of the enterprises. For example, in 2007 a PE consortium of KKR, the Texas Pacific Group, and the PE arm of Goldman Sachs acquired the Texas utility company TXU (now Energy Future Holdings) in the largest PE buy-out in history – worth \$48 billion. They negotiated with the union (the International Brotherhood of Electrical Workers, IBEW), and the contract ensured union recognition and no job loss for three years.²⁵ But their economic model failed, and by early 2012, the company continued to owe some \$20 billion of the \$40 billion in debt from the original buyout; and credit default swap traders were betting that the company would default in the next three years.²⁶

In another high profile case in 2006, a consortium of investors (Bain Capital Partners, KKR, LLC, Merrill Lynch Global PE, Citigroup Inc., Bank of America Corporation, and HCA CEO Dr. Thomas F. Frist) acquired Hospital Corporation of America (HCA), the largest for-profit health care organization in the US, providing roughly 4 to 5 percent of all hospital services nationwide and employing 190,000 people. The PE owners negotiated in good faith with its unions (the Service Employees International Union and the National Nurses Union) and even signed neutrality agreements allowing the unions to organize new members in typically non-union southern states. But as in the Texas utility case, the real money is not in the union contracts. Private equity owners have already extracted their initial investment through financial engineering while leaving the hospital chain with a huge debt overhang. The PE owners initially invested \$4.5 billion in the \$21 billion deal. In 2010, they repaid themselves \$4.25 billion in dividends by issuing junk bonds and loading the company with additional debt. Then in March, 2011, they issued a successful IPO worth \$3.8 billion. While the owners more than recouped their initial investment, HCA is now saddled with \$26 billion in debt – \$12 billion more than the company's assets.²⁷ More importantly, HCA is currently under investigation for Medicare fraud – billing for unnecessary and costly interventional cardiology procedures that raise profits and can endanger patient health care. Prior to PE ownership, HCA had settled the largest Medicare fraud case in history (\$1.7 billion) with the Justice Department in 2000. The current investigation raises serious questions about the failure of HCA under PE ownership to reign in these kinds of practices.²⁸

In other cases, hostile private equity owners have marginalized unions or fought union strikes and closed plants. In a Teamsters Union case, for example, PE firms KKR and CD&R purchased US FoodService from Dutch supermarket chain Royal Ahold in 2007. Management-union relations were cooperative under Ahold, but the new owners refused to consider the union's offer to work together on productivity improvements. Instead, they pursued a campaign of cost-cutting and work

²⁴ Business Wire (2005), (2006).

²⁵ Beeferman (2009); Kosman (2009), pp.10-11.

²⁶ Anderson and Creswell (2010), Childs and Johnsson (2012).

²⁷ Kosman (2011); Reuters (2011); Terry (2011).

²⁸ Abelson and Creswell (2012).

intensification; started shifting work to non-union worksites; and launched an anti-union campaign against one organizing drive that led to over 200 violations of the National Labor Relations Act.²⁹

In another case, the private equity firm Brynwood Partners bought Stella D'Oro Biscuit Company, a historic Italian-style bakery located in the Bronx, in 2006. It immediately demanded cuts in wages and benefits from the plant's 130 members of the Bakery, Confectionary, Tobacco Workers, and Grain Millers Union (BCTGM). After failed negotiations, the workers struck for 11 months, and won the strike in 2009 when the National Labor Relations Board ruled that the firm must reinstate workers with 2 months back pay. But the PE firm sold the company to Lance, Inc., a North Carolina employer with an anti-union reputation, who moved the plant to Ohio with no offer of jobs to the former workers.

In sum, the available case record shows that whether private equity firms negotiate or not with unions, the outcomes are similar, with the earnings of PE owners coming at the expense of workers rather than an increase in efficiency.

Private equity, the economic crisis, and financial distress

PE investments were very much affected by the financial crisis and the economic recession, which in turn had negative effects for the limited partners and led to a series of bankruptcies in portfolio companies. Practitioner accounts, corroborated by the available empirical evidence, suggest that PE is highly cyclical.³⁰ The number of deals fell by more than half between 2Q2007 and 2Q2009 (from 737 to 302), while deal volume declined from a high of \$168 billion in 4Q2007 to a low of \$7.5 billion in 2Q2009. The number and volume of deals both recovered somewhat after the trough, and the value of deals in 2011 was close to its 2005 levels (Figure 1).³¹

The recession made it difficult to find opportunities for investment, and PE funds continued to have large amounts of 'dry powder' – funds committed by limited partners that must be invested or returned along with the relevant management fees. Estimates of dry powder as of November, 2011 ranged from \$376 billion³² to \$436 billion.³³ PE funds also have had difficulty exiting from their mature portfolio firms.³⁴ Pitchbook estimated that 4,300 portfolio firms owned by PE in 2011 can be characterized as 'mature portfolio investments.' Related to this, PE funds have increased their use of secondary buyouts (sales to other PE firms),³⁵ in part to solve this problem. The PE firm which sells the portfolio company is able to exit and pay distributions to limited partners, while the PE firm which buys the company can use up some of its dry powder. One of the largest of these deals was the 2010 LBO of MultiPlan Inc., a health care business which creates medical networks for major health care insurers. The company was acquired by PE firms BC Partners and Silver Lake Partners from Carlyle Group and Welsh, Carson, Anderson, & Stowe in a transaction which valued the company at \$3.1 billion.³⁶

²⁹ Appelbaum and Batt (2010), Appendix 2.

³⁰ Kaplan and Strömberg (2009), pp. 137-143.

³¹ Pitchbook (2011).

³² Preqin (2011), p. 5.

³³ Pitchbook (2011), p. 1.

³⁴ Ernst and Young (2011).

³⁵ Preqin (2011), p. 3.

³⁶ Lattman (2010)

Secondary buyouts are problematic for the limited partners who often partner with more than one PE firm and may find themselves on both sides of the secondary buyout, to their disadvantage. Returns to the limited partners in most PE funds proved disappointing in 2008, 2009, and 2010, which has made raising new funds challenging. The number of funds that closed and the amount of total capital raised declined throughout 2011. Despite this tough fundraising environment, over 300 PE funds were seeking commitments in 2011, the same as in the peak year of 2007.

More important for managers and employees is the pattern of distress and bankruptcies experienced by PE-owned companies. Even before the recession, bankruptcy rates of LBOs were higher than those of comparable publicly-traded firms, according to the most exhaustive study of this issue.³⁷ Strömberg found that PE firms acquired in LBOs between 1970 and 2007 had an average net debt to enterprise value of 67 percent and average net debt to EBITDA (earnings before interest, taxes, depreciation and amortization) of 5.4, compared to 14 percent and 1.1 for comparable publicly-traded firms. For the LBOs that occurred between 1970 and 2002, the rate of bankruptcy or reorganization was twice as high as it was for publicly traded companies.

Strömberg's analysis does not cover the period of the financial crisis and its aftermath. Since then, many companies acquired in by PE have been forced to seek bankruptcy protection – including Simmons, Reader's Digest, Harry and David's, and Fortunoffs Jewelry. Several restaurant chains owned by PE firm Sun Capital – Friendly's ice cream, SSI Group (Grandy's and Souper Salad restaurants), and Real Mex (El Torito Restaurant and Chevys Fresh Mex) – all entered bankruptcy in late 2011. Other major retail chains were unable to emerge from bankruptcy and were liquidated (Linens 'n Things and Mervyns). Indeed, the largest US bankruptcy of 2011 was NewPage Corporation, owned by PE firm Cerberus Capital Management.³⁸

The risks of financial distress associated with high levels of leverage are well-known. They include the costs of reorganization, legal and trustee fees, the loss of business, and higher future borrowing costs.³⁹ Yet, PE firms tend to ignore these costs because they are largely protected from the effects of isolated instances of financial distress or bankruptcy among operating companies in the fund's portfolio. The legal structure governing PE funds limits these partners' losses to the equity invested in the distressed portfolio company. If a portfolio company defaults on its loans, the PE owners lose only the equity that was initially used to buy that company.

While the US PE industry had not fully recovered from the recession by the end of 2011, it pointed to several positive signs of improved performance, including an increase in billion dollar LBO deals. Through November, 2011, US PE firms closed 33 deals over \$1 billion.⁴⁰ PE firms also had successfully refinanced much of the huge volume of bonds scheduled to mature in coming years. While helpful, these 'amend and extend' agreements (sometimes referred to as amend and pretend) have allowed some shaky companies to escape bankruptcy or restructuring, at least temporarily, but may have required them to cut employment and reduce prices and may have left them too weak to undertake new investments or projects.⁴¹

³⁷ Strömberg (2008).

³⁸ Hals *et al.* (2011).

³⁹ Platt (2009), p. 13.

⁴⁰ Pitchbook (2011), 28 and 29 November.

⁴¹ Hals *et al.* (2011).

Hedge funds

The value of assets held by the HF industry worldwide grew massively in the last two decades –from \$20 billion in 1995 to \$1.92 trillion in 2007. While the financial and economic crisis led to a fall in value to \$1.33 trillion by the first quarter of 2009, HFs rebounded by 2010; total assets under management in 2012 were estimated at \$1.76 trillion.⁴² While the industry is known for mega-funds which wield enormous power in financial markets, it is striking that the structure of the industry is relatively unconcentrated, with 25 percent of the assets held by 19 firms in a population of 5,000.⁴³

The rise of US hedge funds and their business models

The classic model of a HF, as developed in the US by Alfred Winslow Jones in 1949, included three characteristics: ‘hedging’ market investments by holding both long and short positions, using leverage (debt) to improve returns, and paying managers based on incentives tied to performance.⁴⁴ Over the last twenty years, however, HFs have taken on very different forms, using dozens of portfolio strategies and asset classes. The potential for large performance-based pay for managers has favoured the adoption of high risk and high leverage models of investment;⁴⁵ and many HFs today, take either short or long positions in any type of security or market and use leverage and performance-based pay for managers. In addition, they typically are domiciled in an offshore tax haven, have a limited number of wealthy investors, and operate in relative secrecy.

For purposes of this study, most HFs are unlikely to have a direct effect on corporate governance or employment relations. A useful typology of funds, developed by Goldman Sachs in a 1998 guide, identified four types of funds: a) Equity funds – following the Winslow Jones model; b) Arbitrage funds, which exploit inefficiency in financial markets; c) Directional funds, which operate in a wide variety of markets, such as global macro markets; and d) Event driven funds, which target extreme corporate events, such as mergers or bankruptcies.⁴⁶ Event driven funds also include ‘activist funds’, which seek to influence corporate board decisions when they believe that a firm is undervalued.⁴⁷ These funds make up a relatively small portion of the HF industry, but are the most likely to influence management decision-making because they make their returns by closing the gap between a company’s stock that is undervalued and what it would be worth if the company changed its strategy, which may also involve changing its corporate governance.⁴⁸

Implications for firms and workers

Recent research on HF shareholder activists suggests that they seek to influence the governance or operations of a target firm via one of two approaches: indirectly, by helping to bring about the takeover of a target firm or directly by insisting on changes in governance or operational policies in the existing firm. Schor and Greenwood (2009), for example, analyzed the demands of large shareholders of public corporations as indicated in their filings of Schedule 13D with the SEC for the period 1993-2006. (Investors who buy 5 percent of the shares of a corporation are required to file this report and typically become activist shareholders soon thereafter). Schor and Greenwood found that HF activism using 13D filings was four times the level of non-HF investors, and it

⁴² BarclayHedge (2012).

⁴³ Fruhan (2010), p. 3-4.

⁴⁴ Temple (2001), p. 46.

⁴⁵ Temple (2001), pp. 46-7.

⁴⁶ Temple (2001), p. 51.

⁴⁷ Coggan (2011), p. 31.

⁴⁸ Fruhan (2010), p. 15.

increased dramatically from the late 1990s onwards. The SEC filings contained nine categories of planned initiatives, which focused on capital structures, governance issues, business strategies, sales of assets, influence over merger and acquisition activity, and proxy contests.⁴⁹

Compared to non-HF activists, HF activists were more likely to seek ownership changes as a means of securing higher than average returns.⁵⁰ Activists increased the likelihood of a takeover by 11 percent; and the firms they took over earned 26 percent higher monthly returns compared to their counterparts that were not acquired. In sum, HFs were more likely to become activists in order to secure the takeover of a target firm and aimed to achieve their abnormal returns in this way. This approach changes the operating conditions of the target firm by inserting a new owner with a new set of governance practices and employment policies; or if ownership remains unchanged, the threat of takeover may induce changes in operating or employment policies. Another study, using the same SEC Schedule 13D data for the period 2003-05, examined changes in corporate governance and operations demanded by HFs. The authors identified a similar list of initiatives which HFs sought to implement, and 60 percent of the 151 initiatives by HF activists were successful in achieving changes.⁵¹

Recent examples of successful HF activism include the industrial company Ameron International Corporation and the Barington Capital Group. James Mitarotonda, head of Barington, had attempted to get Ameron to make several strategic and operational changes, including focusing on its core business, cutting expenses and executive compensation, and buying back its own stock. When Ameron was slow to respond, Barrington ran a year-long proxy contest which resulted in his election to Ameron's Board of Directors.⁵² In another case, activist HF Elliott Management, which acquired a 5 percent ownership in Iron Mountain, attacked the company for its expansion strategies, which were losing money. Elliott Management demanded four new directors on Iron Mountain's board and insisted that the company maximize shareholder value by focusing on its mature real estate business and becoming an operator of a real estate investment trust (REIT), which would lower costs and US tax obligations.⁵³ Iron Mountain subsequently agreed to give Elliott one board seat, commit \$2.2 billion to share repurchases and dividends, explore becoming a REIT, and sell the company's digital archiving business.⁵⁴

HFs may also affect the governance and operations of companies by investing in distressed debt – firms that are close to, or already in, bankruptcy. HFs may provide loans to companies in trouble on the assumption that they will get the company at a bargain from investors who panic and want to sell cheaply. These HFs typically have specialized knowledge in bankruptcy laws and the ability to negotiate with other classes of creditors, which allows them to position themselves with equity rights in the restructured company. HFs that purchase distressed debt play a mixed role in these companies – allowing them to return to operation and save jobs while making large profits by preying on the most disadvantaged or powerless economic actors.

⁴⁹ Schor and Greenwood (2009), p. 8.

⁵⁰ Schor and Greenwood (2009).

⁵¹ Klein and Zur (2006).

⁵² Barr (2011).

⁵³ Mellor (2011).

⁵⁴ de la Merced (2011).

Hedge funds since the advent of the financial and economic crisis

Since the financial crisis, investor satisfaction with returns has been low, and reached its lowest levels in 2012.⁵⁵ HF investment in distressed debt has yielded the highest returns compared to other strategies – with average overall returns of 3.9 percent in 2011.⁵⁶ In this way, HFs may fill a void in the supply of capital where traditional sources such as commercial banks are unwilling to take risks. Small and mid-sized companies, unable to compete in bond markets for credit, have turned to HFs to borrow billions for needs ranging from on-going operations to new strategies and innovations. While filling a needed role in the post-crisis period, HFs charge high interest rates – of 12.5 percent or more. Moreover, they are known for their short time horizons, raising questions about whether they will quickly foreclose on loans which fall in arrears – a strategy referred to as ‘loan to own’.⁵⁷

An important example of a distressed investment is Yellow Roadway Worldwide, one of the key remaining companies in the long-haul trucking industry. The case is illustrative of the role of PE and HF investment in avoiding bankruptcy and the difficult situation that the Teamsters union faced in negotiating agreements to keep the company alive over five years. Ironically, the company faced bankruptcy to begin with because its owner copied the high leverage strategies of PE firms before the financial crisis to buy two other companies; and then the recession hit. The company’s share price fell from \$60 to \$0.37.

The Teamsters Union represented 25,000 of the company’s workforce in 2011, down from 45,000 in 2008. The union saved the company by agreeing to three rounds of contract concessions. In 2009, the union took a 10 percent wage cut and suspension of cost-of-living increases in exchange for options for a 15 percent stake in the company. The resulting savings of \$250 million annually were not enough to convince the company’s lenders (a group of traditional institutions led by J.P. Morgan Stanley) to refinance. The union then agreed to the suspension of pension payments for 18 months and an extra 5 percent wage cut, which saved Yellow Roadway an estimated \$50 million a month through 2010. These concessions were contingent upon the company gaining a better deal with its banks and a conversion of \$450 million debt to equity.⁵⁸

HFs entered the picture in early 2010 when they purchased the company’s distressed debt and demanded a third concession package if the company was to undergo a comprehensive restructuring which included a resolution of the union pension liability issue, a new injection of capital, and a debt reduction. Because the union could not obtain the identity of any of the investors, it had little leverage in negotiating, and it was only through third party actors that a negotiated agreement was finally reached.

After a third union concession was accepted by Yellow Roadway Board in September, 2010, the company finally turned a corner. In exchange for the concessions, the union insisted on a new management team and board of directors, which the HF investors supported. Subsequently, the union played a key role in the recruitment, interviewing, and hiring of a new CEO; and it chose two members of the nine-person board of directors. By 2011, the company was out of immediate danger of collapse and able to focus on operations. The union was cautiously optimistic about the future. This represents another example of a bittersweet experience of unions and alternative investors –

⁵⁵ Preqin (2012).

⁵⁶ Or and Barr (2011).

⁵⁷ Ahmed (2011).

⁵⁸ Interview with Teamsters’ Strategic Research & Campaigns Department

while PE and HF funds saved the company, workers ended up with substantial losses in wages and pensions.

Sovereign Wealth Funds

SWFs are viewed as passive, long-term, stable investors; and since the 2007 recession many US firms – especially distressed ones – have sought out SWF funds.⁵⁹ SWFs have appeared to save several large troubled American banks, including Citigroup, Merrill Lynch, and Morgan Stanley, which received more than \$32 billion in investment from SWFs from China, Korea, Singapore, and United Arab Emirates.⁶⁰ In 2011, the US government and AIG allegedly were seeking SWFs to take over a large portion of the US Treasury's 92 percent stake in AIG;⁶¹ and SWFs from Kuwait and Singapore expressed interest in the deal.⁶²

The size of SWF global market rose sharply before the financial crisis in 2007, and then fell precipitously in 2008-2009.⁶³ AUM of all SWFs increased by 11 percent in 2010 to a record \$4.2 trillion, with an additional \$6.8 trillion held in other sovereign investment vehicles, such as pension reserve funds and development funds. While the number of transactions increased by 50 percent from 2010, the average value of transactions decreased by 23 percent, which suggests that SWFs are now making more, but smaller, deals. Investments in the US are largely concentrated in financial institutions (81 percent) and real estate companies and properties (10 percent).⁶⁴ Overall, however, the data available on the size and investments of SWFs is very limited and uneven.⁶⁵

Estimates of the size and influence of SWFs expand greatly when these estimates include government-sponsored corporations or entities. For instance, the government of the United Arab Emirates manages the Abu Dhabi Investment Authority (ADIA) as a sovereign saving fund. ADIA holds minority stakes in Citigroup Inc. (4.9 percent), Apollo Management (9 percent), and Hyatt Hotels Corporation (10.9 percent). Similarly, Istithmar World, the PE arm of the Dubai World, controls a 100 percent stake in Barneys New York, a 100 percent stake in Loehmann's, a 10 percent stake in Perella Weinberg Partners (a financial services boutique), and a 33.3 percent stake in Education Media and Publishing Group International.⁶⁶

Evolving nature of SWF strategies and post-crisis activity

Similar to other types of funds, SWFs engage in diverse investment strategies and tactics.⁶⁷ Kunzel *et al.* (2011) identify three types of SWFs with distinct objectives and investment horizons: savings (designed for long term objectives), stabilization (to insulate the national budget), and pension reserve funds (for unspecified pension liabilities). Dyck and Morse (2011) distinguished two objectives of SWF investment: financial portfolio versus domestic developmental agendas, with the

⁵⁹ McCormick (2008); Rose (2008).

⁶⁰ Deloitte (2008).

⁶¹ Guerrero and Braithwaite (2011),

⁶² Kansas (.2011).

⁶³ TheCityUK (2011).

⁶⁴ Monitor-FEEM SWF transaction database (2008); Bortolotti *et al.* (2009).

⁶⁵ GAO (2008b).

⁶⁶ Butt *et al.* (2007).

⁶⁷ For detailed asset allocations of each SWF, see Monitor Group's SWF database

<http://www.monitor.com/tabid/202/L/en-US/Default.aspx>, which covers investment activities of 33 SWFs from 1981 to the present.

latter particularly important for Middle Eastern and Asian SWFs. Political objectives and cultural differences also influence SWF investment behavior.⁶⁸

In recent years, SWFs have shifted from low-risk to higher-risk/higher-return strategies.⁶⁹ In addition, dissatisfied with fund performance during the financial crisis, they have begun to take more direct and proactive roles as investors. The investments of Qatar Investment Authority, for example, earned it a seat on the board of Veolia Environment and director-level representation at Harrods in the UK.⁷⁰ SWFs also have expanded their involvement in PE firms, from investors in funds to minority owners in the firms themselves. The Abu Dhabi Investment Authority bought a 9 percent stake in Apollo Management and a 7.5 percent stake in the Carlyle Group. The Kuwait Investment Authority and the Government of Singapore Investment Corporation have gained a 5 percent stake in the Texas Pacific Group,⁷¹ and China Development Bank was seeking a minority stake in the same PE fund.⁷²

SWFs also invest in private companies through innovative arrangements such as Exchange Traded Funds (ETF). BlackRock is the largest money manager in the world, with \$3.35 trillion in AUM. As of 2011, BlackRock owned 5 percent or more of over 42 percent of all traded companies. Also, it is the largest shareholder of one in five US corporations, including AT&T, Chevron, ExxonMobil, GE, IBM, and JP Morgan Chase.⁷³ Several SWFs hold a significant minority stake in BlackRock, including China Investment Corporation (CIC), Kuwait Investment Authority, the Government Pension Fund of Norway, and the Singapore Government Investment Corporation and Temasek.⁷⁴

While SWFs appear to be expanding their influence over their investment targets in the US, they are constrained by the Exon-Florio Amendments and CFIUS described earlier.⁷⁵ To shun political attention, SWFs have avoided acquiring more than ten percent of a company or have willingly forgone voting rights as the CIC did when it bought shares of the Blackstone Group.⁷⁶ A recent Government Accountability Office report (2009) concluded that, although no laws exist that only target SWFs, certain sectors are tightly regulated and monitored for foreign ownership – banking, communications, transportation, natural resources and energy, agriculture, and defense. Nonetheless, SWFs have invested in sensitive industries via their investments in PE. One example is the investment of the Mubadala Development Company (Abu Dhabi) in the Carlyle Group, which has extensive holdings in defense-related firms and firms with government contracts. In 2007, Carlyle sold a 7.5 percent stake in its general partnership to Mubadala, and in 2010 Mubadala made an additional \$500 million investment.⁷⁷ Around the time of Mubadala's initial investment, the Carlyle Group bought Kinder Morgan (one of the largest pipeline transportation and energy storage companies in North America), ARINC (a leading provider of communications and integration systems to government agencies and transportation networks), and Allison Transmission (provider

⁶⁸ Johan *et al.* (2011).

⁶⁹ Weiss (2008).

⁷⁰ Monitor (2011), p. 23.

⁷¹ Zuckerman (2011).

⁷² Sender (2011).

⁷³ Davis (2012).

⁷⁴ Bloomberg (2010), Martin (2010), Sender (2010).

⁷⁵ Rose (2008).

⁷⁶ Swann (2010).

⁷⁷ Carlyle Group (2011).

of all vehicle suppliers to the Pentagon). None of these transactions had been reviewed under CFIUS, suggesting the inadequacy of US laws to regulate SWF activity.⁷⁸

The China Investment Corporation (CIC)

The CIC provides a case in point of increased SWF activity in the US economy, and in particular, investment in PE and HF intermediaries. With a total of \$374.3 billion AUM, CIC is one of the most active and powerful SWFs worldwide. Around 21 percent of its portfolio was invested in alternative funds in 2010, and of that, 42 percent was invested in North America.⁷⁹ CIC's investment in US PE and HF includes \$3 billion in Blackstone Group with non-voting rights in 2007 and \$5 billion in Morgan Stanley in the same year.⁸⁰ In early 2008, CIC contributed \$3.2 billion to a \$4 billion PE fund with JC Flowers & Co. primarily focused on the US financial sector.

CIC investment in PE and HFs has accelerated in the post-crisis period, including a \$1 billion investment in Oaktree Capital Management LP, which was one of the firms involved in the Public-Private Investment Partnership or PPIP – the government program designed to rid banks of toxic assets.⁸¹ This investment aims at distressed debt and other fixed-income assets. With this investment and an additional \$2 billion in funding, CIC is expected to increase its HF portfolio.⁸² In addition to alternative investments, CIC is investing directly, although as a minority shareholder, in corporate shares. In February, 2011, CIC filed its full list of investments in publicly traded US stocks with the SEC for the first time.⁸³ According to the filing, CIC owns \$9.6 billion worth of shares in a variety of companies ranging from Bank of America and Citigroup to Apple, Coca-Cola, and Johnson & Johnson.

Although CIC seems to be interested in non-voting stakes or straightforward investment opportunities, how much influence it may have on the investment strategies or investment targets is an open question due to the complexity of deal structures and limited data disclosure. CIC uses its PE firms to act on its behalf as when it used Blackstone to buy Morgan Stanley's troubled property loan portfolio in Japan in 2011.⁸⁴ PE firms, such as JC Flowers & Co. and Oaktree Capital Management LP, have no obligation or motivation to reveal their investment targets. Hence, as Jeffrey Garten, Yale professor and former Commerce Department official, said, 'It's going to be harder to trace, and harder to decide whether the (SWFs') investments are worth worrying about'.⁸⁵

Impact on firms and workers

At a global level, a few studies have investigated the impact of SWFs on firm performance, as measured by the effect on the target firm's share price. The general conclusion is that the involvement of SWFs had a positive influence on the target firm's performance over a short-term

⁷⁸ SEIU (2008).

⁷⁹ Annual Report (2010).

⁸⁰ Singh (2008).

⁸¹ Strasburg and Carew (2009).

⁸² Strasburg and Carew (2009).

⁸³ A full list of CIC investment is available at:

<http://www.sec.gov/Archives/edgar/data/1468702/000095012310009135/c95690e13fvhr.txt>

⁸⁴ Sender and Anderlini (2011).

⁸⁵ Rugaber (2008).

horizon, but a negative, or neutral at best, effect on longer-term share price performance.⁸⁶ None of these studies provide breakdowns by country.

We were unable to identify studies of the impact of SWFs on labor and employment relations. However, two studies of global SWF examined governance changes at target firms and came to two different, almost opposite, conclusions. Kotter and Lel (2008) found that the target firm's governance, including CEO turnover, do not change significantly in the three-year period following a SWF investment, thus concluding that SWFs are passive investors. By contrast, Dewenter *et al.* (2009) found that target firms experience one or more events indicative of SWF monitoring or influence. They concluded that SWFs are often active investors monitoring firm management, influencing firm decisions, engaging in network transactions and influencing government decisions related to the target firm.

Conclusions

In this chapter, we examined the features of the US regulatory framework which have shaped the behavior of financial intermediaries. PE, HFs, and SWFs have been exempt from registration and reporting requirements, have not been required – as banks are – to hold reserves, and have faced no limits on their use of leverage. US financial market regulations have allowed these intermediaries to operate with virtually no public oversight or transparency to investors. Deregulation of financial services from the 1970s onwards made possible the growth of large pools of private capital. The preferential tax treatment of debt relative to equity and of carried interest further encouraged the expansion of PE, HFs, and SWFs. While the Dodd-Frank financial reforms of 2010 instituted registration and reporting requirements for PE and HFs (but not SWF), the law did not change the tax code or limit business practices such as the use of high leverage on which the industry has relied. The lax financial regulatory environment is coupled with a weak union movement and labor laws that provide few mechanisms for labor to challenge or negotiate over new forms of management introduced by PE and activist HFs.

These intermediaries have had differential effects on the management and employment practices of the firms in which they have invested. SWFs generally have had long time-horizons, have taken a passive approach to investment, and have stayed out of the limelight to avoid political attention. By contrast, HFs have had a much shorter time horizon, typically turning over investments in 18 months or less. Most HFs do not appear to have a direct effect on the internal operations of their target firms, with the exception of activist HFs, which have grown in the 2000s but still represent a small share of all HF investments. PE is still not able to take over the largest US firms – a Microsoft or Johnson and Johnson, for example – but HFs can take positions in such companies that enable them to exert influence on business strategy. Activist HFs have primarily affected the corporate governance structures and strategic direction of the companies they target; and they significantly increase the probability that those companies will be taken over by another corporation, yielding substantially higher returns for HF investors. These takeovers clearly lead to changes in management strategies and operations, but exactly how these changes affect employment levels and labor conditions is unknown. Notably, where unions exist, HF investors undermine existing norms of

⁸⁶ Fernades (2009); Bortolotti *et al.* (2009).

collective bargaining because they hold considerable power but their identities are not revealed to the union.

Compared to HFs and SWFs, PE intermediaries clearly have the most direct impact on management decision-making, operations, and employment relations in portfolio firms. They restructure the operations of acquired companies without oversight from outside investors, regulators, or the public. While much of PE activity continues to focus on financial engineering, some PE managers have used consultants with specific industry expertise who are then deployed to work in portfolio companies in those industries. More importantly, as HFs and SWFs are increasingly incorporated into large multi-purpose asset management firms, often headed by PE firms, the funds available for activist intervention in portfolio firms has increased.

The outcomes for managers and employees in PE-owned portfolio companies are highly diverse and depend on a range of contingent factors, including industry conditions, the size and strategy of the PE firm, the assets of the portfolio company itself, the direction of the stock market, and general economic conditions that influence interest rates at which funds for LBOs can be borrowed and the market success of portfolio firms. At one extreme, a handful of PE firms specialize in turning around companies and have a reasonable record of negotiating with unions. The more powerful players in the industry have undertaken large LBOs, which have saddled healthy companies with high levels of debt and have resulted in bankruptcies, and losses to creditors, suppliers, and workers. Still pending are a series of LBOs from the 2005-07 period, which have huge debt loads, much of which PE has been able to refinance. But slow economic growth persists, and the future of investments made at the height of the real estate boom is uncertain. Some analysts anticipate high rates of financial distress and bankruptcy for portfolio companies although the effects on the large PE firms are likely to be muted. The most reliable econometric analyses show net employment losses are much higher in PE-owned establishments and firms compared to similar enterprises not owned by PE, and they are concentrated in services, finance, insurance, and real estate. Related research shows that higher productivity found in PE-owned firms is due primarily to the closing of less productive units and reallocation of workers to more productive sites. It is unclear whether productivity improvements are achieved via investments in skills and technology or compliance of employees, afraid for their jobs, with work intensification. The evidence on PE's track record with unions is mixed, with some negotiating with them and others marginalizing them. In both cases, however, workers have usually lost wages and health and pension benefits, while PE owners have gained via financial engineering and the use of leverage that often threaten the overall viability of an enterprise.

One of the key lessons from the US experience is that the regulatory environment does not constrain the kind of financial engineering and risky behavior of PE firms which results in bankruptcy or the extraction of high levels of value even as the organization struggles to exist. Indeed, PE owners may resort to dividend recapitalizations, in which more debt is piled onto the portfolio company in order to pay the PE owners a large dividend and help them recoup their original investment, despite the increased risk of distress for the firm. Not only do such actions undermine the argument that PE returns are due to improvements in firm performance, but in several instances PE firms have been accused by creditors of 'bleeding-out' the company and causing it to become insolvent. Among others, Sun Capital faces such an accusation in relation to

the bankruptcy of the Mervyn's department store chain, and Apax Partners and TPG Capital face a similar complaint in the case of TIM Hellas.⁸⁷

The evidence we have reviewed suggests that several regulatory changes are needed to curb the destructive outcomes associated with some types of financial intermediary activity. Beyond the recently-enacted reporting requirements, two substantive reforms are particularly warranted: elimination of preferential tax treatment for debt relative to equity which would reduce incentives for excessive use of leverage and treatment of the carried interest earned by principals in some financial intermediaries as ordinary income.

In the cases we reviewed, the excessive use of debt is a primary cause of PE's short-term focus on cost-cutting and work intensification, and in some cases of financial distress and even bankruptcy. The threat of bankruptcy did not appear particularly worrisome in the bubble economy of the 2000s, when credit was readily available, stock prices were generally rising, and the higher risks faced by highly leveraged firms were more than offset by the very high payoffs from successful portfolio companies. In the period since the advent of the financial and economic crisis – and the instability and uncertainty of markets in at least the intermediate term – analysts expect many firms, highly leveraged in the pre-crisis years, to face distress, restructuring of their debts, and bankruptcy when that is not possible.

One approach to reducing the excessive use of debt is to reduce the preferential treatment which debt receives in the US tax code. Another solution, adopted by the EU in its reforms for AIFs, is to limit the amount of leverage which can be used, although there is on-going discussion over what that limit will be. Proposed legislation to limit the preferential tax treatment given to financial intermediaries has repeatedly failed to pass one or both houses of Congress. The Obama administration's proposal would redefine the carried interest that PE and HF managers receive as ordinary income subject to higher tax rates. While this is unlikely to modify the risky behavior adopted by financial intermediaries, it would begin to redress the serious problem of inequity in compensation between the highly paid executives employed by financial intermediaries and ordinary Americans. These tax proposals are modest reforms in the context of an economy in which median family income has been stagnant since 1995 while financial sector incomes have massively increased.

⁸⁷ Appelbaum, Batt, and Clark (2011); Primack (2011).

References

- Abelson, R., and Creswell, J. 2012. "Hospital Chain Inquiry Cited Unnecessary Cardiac Work." *New York Times*, August 6. http://www.nytimes.com/2012/08/07/business/hospital-chain-internal-reports-found-dubious-cardiac-work.html?pagewanted=4&wpisrc=nl_wonk&_r=1 [Accessed August 6, 2012].
- Ablum, T. and Burgis, M.B. 2000-2001. "Leveraged Buyouts: The Ever Changing Landscape." *DePaul Business Law Journal*, Vol. 13, pp. 109-125.
- Akerlof, G. A., Romer, P. M., Hall, R. E. and Mankiw N. G. 1993. "Looting: The Economic Underworld of Bankruptcy for Profit." *Brookings Papers on Economic Activity*, Vol. 2, pp. 1-73.
- Ahmed, A. 2011. "Bank Said No? Hedge Funds Fill a Void in Lending." *New York Times*, June 8. <http://dealbook.nytimes.com/2011/06/08/bank-said-no-hedge-funds-fill-a-void-in-lending/>.
- Anders, G. 2002. *Merchants of Debt: KKR and the Mortgaging of American Business*, Washington, DC: Beard Books.
- Anderson, J. and Creswell J. 2010. "For Buyout Kingpins, the TXU Utility Deal Gets Tricky." *Wall Street Journal*, February 28.
- AP News. 2006. "House Panel Votes to Block Ports Deal." *FOX News*, March 09. <http://www.foxnews.com/story/0,2933,187147,00.html> [Accessed July 30, 2011].
- Appelbaum, E., Batt, R. and Clark I. 2011. "Financial Capitalism, Breach of Trust and Collateral Damage." Presented at the BJIR 50th Anniversary Conference on *Across Boundaries: An Interdisciplinary Conference on the Global Challenges Facing Workers and Employment Research*, December.
- Baker, G. P. and Smith G. D. 1998. *The New Financial Capitalists: Kohlberg Kravis Roberts and the Creation of Corporate Value*. New York: Cambridge University Press.
- Bagli, C.V. 2010a. "Buying Landmarks? Easy. Keeping Them? Maybe Not." *New York Times*, January 16. <http://www.nytimes.com/2010/01/17/business/17tish.html?pagewanted=1&ref=business>.
- _____. 2010b. "Stuyvesant Town's Lenders Take over Property." *New York Times*, October 26. <http://www.nytimes.com/2010/10/27/nyregion/27stuytown.html>.
- BarclayHedge. 2012. "BarclayHedge Alternative Investment Databases." http://www.barclayhedge.com/research/indices/ghs/mum/HF_Money_Under_Management.html [Accessed August 11, 2012].

- Barr, A. 2011. "Activist hedge fund wins Ameron board seat." *Market Watch*, March 30.
<http://www.marketwatch.com/story/activist-hedge-fund-wins-ameron-board-seat-2011-03-30>.
- Beeferman, L. 2009. "PE and American Labor: Multiple, Pragmatic Responses Mirroring Labor's Strengths and Weaknesses." *Journal of Industrial Relations*, Vol. 51, No. 4.
- Ben-Ameur, H., Hind, B., Roustan, P., Théoret, R., and Trablesi S. 2005. "Assessing bankrupt probability on American firms: A logistic approach." University of Montreal, Working Paper, Cited in Strömberg (2008).
- Bernstein, S., Lerner, J. and Schoar A. 2009. "The Investment Strategies of Sovereign Wealth Funds." Harvard University, Working Paper.
- Bernstein, S., Lerner, J., Sørensen, M., and Strömberg P. 2009. "PE and Industry Performance," in A. Gurung and J. Lerner. (eds.), *Globalization of Alternative Investments Working Papers Volume 3: The Global Economic Impact of PE Report 2010*. New York: World Economic Forum USA, 2010, pp. 3-22.
- Blair, M. M. 2010. "Financial Innovation, Leverage, Bubbles and the Distribution of Income." Vanderbilt University Law School, Law & Economics Working Paper 10-31. An electronic version is available at http://ssrn.com/abstract_id=1693913.
- Bloomberg. 2010. "Kuwait Fund Made 40% Return on Blackrock, Chief Says." Bloomberg, February 1.
- Bortolotti, B., Fotak, V., Megginson, W., and Miracky W. 2009. "Sovereign Wealth Fund Investment Patterns and Performance." FondazioneEni Enrico Mattei(FEEM),University of Oklahoma, Monitor Group, Working Paper.
- Business Wire. 2005. "Steelworkers embark on weeklong New York protest tour; Union spotlights unfair treatment by Ormet, MatlinPatterson." July 11.
http://findarticles.com/p/articles/mi_m0EIN/is_2005_July_11/ai_n14732262/ [Accessed June 13, 2012].
- _____. 2006. "USW reaches tentative contract agreements with Ormet for Ohio and Louisiana facilities." June 30. <http://www.businesswire.com/news/home/20060630005455/en/News-USW-USW-Reaches-Tentative-Contract-Agreements> [Accessed June 13, 2012].
- Butt, S., Shivdasani, A., Stendevad, C., and Wyman, A. 2007. "Sovereign Wealth Funds: A Growing Global Force in Corporate Finance." *Journal of Applied Corporate Finance*, Vol. 19, No. 1, pp. 73-83.
- Carlyle Group. 2011. www.carlyle.com.
- Carmiel, O. 2010. "Ackman's Group Exits Stuyvesant Town Investment With \$45 Million Intact." *Bloomberg*, October 27. <http://www.bloomberg.com/news/2010-10-27/ackman-s-group-exits-stuyvesant-town-investment-with-45-million-intact.html>.

- Chandler, Alfred D. 1990. *Scale and Scope: The Dynamics of Industrial Capitalism*. Cambridge: Harvard University Press.
- Childs, M. and Johnsson, J. 2010. “KKR’s TXU Buyout Facing 91% Odds of Default: Corporate Finance.” *Bloomberg Business Week*, January 30. <http://www.businessweek.com/news/2011-09-07/newpage-cerberus-owned-papermaker-files-for-bankruptcy.html> [Accessed January 30, 2012].
- China Daily. 2010. *CIC US equity holdings revealed*. February 8. http://www.china.org.cn/business/2010-02/08/content_19383378.htm.
- Citi Prime Finance. 2011. *Global Pension and Sovereign Wealth Fund Investment in Hedge Funds: The Growth and Impact of Direct Investing*. http://www.citi.com/icg/sa/flip_book/GrowthImpactDirectInvesting/ [Accessed July 26, 2011].
- Coggan, P. 2011. *Hedge Funds, What they are, what they do, their risks, their advantages*. Hoboken, NJ: Wiley and Sons.
- Creswell, Julie. 2012. “Pensions Find Riskier Funds Fail to Pay Off.” *New York Times*, April 1.
- Crocker, T. E. 2008. “What Banks Need To Know About The Coming Debate Over CFIUS, Foreign Direct Investment, And Sovereign Wealth Funds.” *The Banking Law Journal*, May, pp. 457- 467.
- Croft, T. 2009. *Up From Wall Street: The Responsible Investment Alternative*. New York: Cosimo.
- Davidoff, S. 2011. “Wall St.’s Odd Couple and Their Quest to Unlock Riches.” December 13. <http://dealbook.nytimes.com/2011/12/13/wall-st-s-odd-couple-and-their-quest-to-unlock-riches/> [Accessed February 15, 2011].
- Davis, G. 2012. “Finance Capitalism 2.0: How BlackRock became the new JP Morgan.” Presented at 64th Labor and Employment Relations Association Annual Meeting. Chicago, January 7.
- Davis, S. J., Haltiwanger, J. C., Jarmin, R. S., Lerner, J., and Miranda, J. 2008. “PE and Employment,” in A. Gurung and J. Lerner. (eds.), *Globalization of Alternative Investments Working Papers Volume 1: Global Economic Impact of PE 2008*. New York: World Economic Forum USA, 2008, pp. 43-64.
- _____. 2009. “PE, Jobs and Productivity,” in A. Gurung and J. Lerner (eds.) *Globalization of Alternative Investments Working Papers Volume 2: Global Economic Impact of PE 2009*. New York: World Economic Forum USA, 2009, pp. 27-43. http://www.weforum.org/pdf/cgi/pe/Full_Report.pdf [Accessed 7-20-11].
- _____. 2011. “PE and Employment.” NBER Working Paper 17399. Cambridge, MA: National Bureau of Economic Research. Available at <http://www.nber.org/papers/w17399> [Accessed 12-22-11]

- de la Merced, M. 2011. "Iron Mountain Reaches Truce With Elliott." *Dealbook*, April 19.
<http://dealbook.nytimes.com/2011/04/19/iron-mountain-reaches-truce-with-elliott/>
[Accessed November 26, 2011].
- Deloitte Touche Tohmatsu. 2009. *Sovereign Wealth Funds: Real Estate Partners in Growth?*
http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/us_re_sovereignrealestatepartners_040809.pdf
[Accessed July 26, 2011].
- Dewenter, K. L., Han, X., and Malatesta, P. H. 2009. "Firm value and sovereign wealth fund investments." *Journal of Financial Economics*, Vol. 98, No. 2, pp. 256-278.
- Dick, T. S., Granwell, A. W., and Rokoff, G. 2011. "Proposed regulations would ease sovereign wealth funds' investment in US private funds." *International Tax Alert*, November 15.
<http://www.dlapiper.com/proposed-regulations-would-ease-sovereign-wealth-funds-investment-in-us-private-funds>.
- Dyck, A. and Morse, A. 2011. "Sovereign Wealth Fund Portfolios." Presented at 2012 AEA Annual Meeting, Chicago, January 7.
- Eder, S., Zuckerman, G., and Corkery, M. 2011. "Pensions leap back to hedge funds." *Wall Street Journal*, May 27.
- Ernst and Young. 2011. *Return to Warmer Waters: A Study of 2010 North American Exits*.
- European Union. 2011. "Directive 2011/61/EU of the European Parliament and of the Council of 8 June 2011 on Alternative Investment Fund Managers and amending Directives 2003/41/EC and 2009/65/EC." *Official Journal of the European Union*.
l_17420110701en00010073.pdf available from <http://eur-lex.europa.eu> [Accessed 1-1-12].
- Fama, E. F. and Jensen, M. C. 1983. "Separation of Ownership and Control." *Journal of Law and Economics*, Vol. 26, June, pp. 301-24.
- Federal Deposit Insurance Corporation. 2005. *Trust Examination Manual*. Section 3, Part 1 C and Appendix E, Statute 404. <http://www.fdic.gov/regulations/examinations/trustmanual/>
[Accessed 11-3-2011].
- Fernandes, N. 2009. "Sovereign Wealth Funds: Investment Choices and Implications around the World." IMD International, Working Paper.
- Fleischer, V. 2008. "Two and Twenty: Taxing Partnership Profits in PE Funds." *New York University Law Review*, Vol. 83, pp. 1-58.
- _____. 2009. "A Theory of Taxing Sovereign Wealth." *New York University Law Review*, Vol.84, pp. 440-513.

- Fruhan, W. 2010. "The Hedge Fund Industry." Cambridge, MA: Harvard Business School. 9-208-126. April 7.
- GAO (Government Accountability Office). 2008a. *Recent Growth in Leveraged Buyouts Exposed Risks That Warrant Continued Attention*. Report No. 08-885. Washington, DC: GAO.
- _____. 2008b. *Sovereign Wealth Funds: Publicly Available Data on Sizes and Investments for Some Funds Are Limited*. Report 08-946. Washington, DC: GAO.
- _____. 2009. *Laws Limiting Foreign Investment Affect Certain U.S. Assets and Agencies Have Various Enforcement Processes*. Report 09-608. Washington, DC: GAO.
- Goldberg, L., Pozen, R., and Hammerle, M. 2010. "Note: Disclosure, Regulation, and Taxation of Hedge Funds versus Mutual Funds in the U.S." Cambridge, MA: Harvard Business School, 9-310-131. August 28.
- Gross, Daniel. 2005. "The Bottom-Feeder King: Never mind hedge funds. Wilbur Ross gets rich the unfashionable way—in steel plants, textile mills, and other stuff nobody wants." *New York Magazine*, May 21.
<http://nymag.com/nymetro/news/bizfinance/columns/moneyandmind/10279/> [Accessed May 31, 2012.]
- Guerrera, F. and Braithwaite, T. 2011. "US woos sovereign funds in AIG sale." *Financial Times*, February 13. <http://www.ft.com/cms/s/0/890244ac-3792-11e0-b91a-00144feabdc0.html#axzz1Ti3CxXCm> [Accessed July 30, 2011].
- Hals, T., Zeidler, S., and Humer, C. 2011. "Insight: New Bankruptcy Ripples May Emerge." *Reuters*, October 11. <http://www.reuters.com/article/2011/10/11/us-bankruptcy-idUSTRE7995RH20111011> [Accessed December 1, 2011]
- Higson, C. 2010. "Does PE Outperform or Underperform? The PE Performance Puzzle." Coller Institute of Private Equity, London Business School.
- Jarrell, G. A. 1983. "State Anti-Takeover Laws and the Efficient Allocation of Corporate Control: An Economic Analysis of Edgar v. Mite Corp." *Supreme Court Economic Review* Vol. 2, pp. 111-129.
- Jensen, M. C. and Meckling, W. H. 1976. "The Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure." *Journal of Financial Economics*, Vol. 3, No. 4, pp. 305-360.
- Jickling, M. and Marples, D. 2007. *Taxation of Hedge Fund and PE Managers*. Congressional Research Service, Report Code RS22689. July 5.
- Johan, S., Knill, A., and Mauck, N. 2011. Determinants of Sovereign Wealth Fund Investment in PE, Presented at 2012 AEA Annual Conference, Chicago.

- Kansas, D. 2011. "AIG Share Sale: Kuwait, Singapore Funds Express Interest." *Wall Street Journal*, May 18. <http://blogs.wsj.com/marketbeat/2011/05/18/aig-share-sale-kuwait-singapore-funds-express-interest>.
- Kansas City Business Journal. 2009. "Timeline of YRC: 2003-2010." August 18.
- Kaplan, S. N. and Per Strömberg 2009. "Leveraged Buyouts and PE." *Journal of Economic Perspectives*, Vol. 23, No. 1, pp. 121-146.
- Klein, A. and Zur, E. 2006. "Entrepreneurial shareholder activism: Hedge funds and other private investors." *NYU Law and Economics Research Paper*, No. 06-41, October.
- Kosman, J. 2009. *The Buyout of America: How PE Will Cause the Next Great Credit Crisis*. New York: Penguin Group.
- _____. 2011. "Bain's huge HCA IPO gain." *New York Post*, March 11. http://www.nypost.com/p/news/business/bain_huge_hca_ipo_gain_QQsVgFa3EOtBy4GohMc5dI.
- Kotter, J. and Lel, U. 2008. "Friends or foes? The stock price impact of sovereign wealth fund investments and the price of keeping secrets." Federal Reserve Board, Working Paper.
- Lattman, P. 2010. "Buyout-Shop Swap Multiplan in \$3.1 Billion LBO." *Wall Street Journal*, Deals & Deal Makers, July 9. <http://online.wsj.com/article/SB10001424052748703609004575355392787558722.html#>.
- Lazonick, W. 1992. "Controlling the Market for Corporate Control: The Historical Significance of Managerial Capitalism." *Industrial and Corporate Change*, Vol. 1, No. 3, pp. 445-488.
- Lex Column. 2011. "PE Lessons." *Financial Times*, October 6.
- Lowenstein, R. 2004. *Origins of the Crash: The Great Bubble and its Undoing*. London: Penguin.
- Marples, D. 2008. *Taxation of PE and Hedge Fund Partnerships: Characterization of Carried Interest*. Congressional Research Service, Report RS22717. July 8.
- Martin, M. F. 2010. *China's Sovereign Wealth Fund: Developments and Policy Implications*. Congressional Research Service, Report R41441. September 23. <http://www.fas.org/sgp/crs/row/R41441.pdf>.
- McCormick, D. H. 2008. "Under Secretary for International Affairs David H. McCormick Testimony before the Joint Economic Committee." US Treasury Department Office of Public Affairs, February 13.
- Mellor, C. 2011. "Iron Mountain Hit by Hedge Fund Attack." *The Register*, March 11. http://www.theregister.co.uk/2011/03/11/iron_mountain_attacked_by_hedge_fund/.

- Milazzo, L. 2010. "CA nurses strike against billion dollar felon HCA." *Alternet*, December 25.
<http://blogs.alternet.org/speakeasy/2010/12/25/ca-nurses-strike-against-billion-dollar-felon-hca>.
- Miller, H., Kosch, T. and MacKenzie, D.S. 2011. "Harvey Miller, Tiffany Kosch and Donald S. MacKenzie Analyze the Companies Currently on Life Support." *The Deal LLC*, November 3.
- Ministry of Finance of Norway. 2010. *Government Pension Fund Global Annual Report*.
http://www.regjeringen.no/Upload/FIN/Statens%20pensjonsfond/2011/NBIM_2010_eng.pdf.
- Mollenkamp, C. 2010. "HCA Pays Big Dividend to Its Owners." *Wall Street Journal*, November 10.
<http://online.wsj.com/article/SB10001424052748703585004575604920844241284.html>.
- Monitor Group 2011. *Braving the New World: Sovereign Wealth Fund Investment in the Uncertain Times of 2010*.
<http://www.monitor.com/tabid/69/ctl/ArticleDetail/mid/705/CID/20110606072349951/CTID/1/L/en-US/Default.aspx> [Accessed July 27, 2011].
- Or, A. and Barr, A. 2011. "Hedge-Fund Assets Reclaim Pre-Crisis Level, Aim Higher." *Wall Street Journal*, March 10.
<http://online.wsj.com/article/SB10001424052748704132204576190392446337456.html>.
- Phalippou, L. and Gottschalg, O. 2009. "Performance of Private Equity Funds." *Review of Financial Studies*, Vol. 22, No. 4.
- Pitchbook. 2011. The PE Breakdown 4Q2011.
- Platt, H. D. 2009. "The PE Myth." *Journal of Business Valuation and Economic Loss Analysis*, Vol.4, pp. 1-17. Published by Berkeley Electronic Press.
- Preqin. 2011. "Secondary Buyouts." *PE Spotlight*, Vol. 7, No, 11, November.
- _____. 2012. "Hedge Fund Spotlight." August.
- PriceWaterhouseCoopers, LLC. 2011. *A Closer Look: the Dodd-Frank Wall Street Reform and Consumer Protection Act*.
- Primack, D. 2011. "Killing the 500-shareholder rule." *Fortune/Term Sheet*, December 8.
<http://finance.fortune.cnn.com/2011/11/08/ending-the-500-shareholder-rule/>.
- Reuters. 2011. "Popular IPO values HCA at \$30-\$31 a share." *Reuters*, March 9.
<http://archive.chicagobreakingbusiness.com/2011/03/popular-ipo-values-hca-at-30-31-a-share.html>.
- Rose, P. 2008. "Sovereign Wealth Funds: Active or Passive Investors?" 118 *Yale L. J. Pocket*, Part 104. <http://yalelawjournal.org/the-yale-law-journal-pocket-part/scholarship/sovereign-wealth-funds:-active-or-passive-investors?/> [Accessed July 19, 2011].

- Rothstein Kass Business Advisory Services, LLC. 2011. *2011 Hedge Fund Outlook: Brighter Days Ahead? 5th Annual Survey*. New York: Rothstein Kass. www.rkco.com.
- Rubin, R., Sloan, S. and Talev, M. 2011. "Obama Proposes Tax on Bonds, Carried Interest for Wealthy." *Bloomberg/Business Week*, September 13. <http://www.businessweek.com/news/2011-09-13/obama-proposes-tax-on-bonds-carried-interest-for-wealthy.html>.
- Rugaber, C. S. 2008. "Funds transparency woes could worsen." *AP Business*, March 3. http://www.boston.com/news/education/higher/articles/2008/03/03/funds_transparency_woes_could_worsen/?page=2.
- Schor, M. and Greenwood, R. M. 2009. "Investor Activism and Takeovers." Harvard Business School – Finance Unit. NBER. Available at SSRN: <http://ssrn.com/abstract=1003792>
- Sender, H. 2010. "BlackRock stakes for Slim and Norges Bank." *Financial Times*, November 21. <http://www.ft.com/intl/cms/s/0/64e5e48a-f58d-11df-99d6-00144feab49a.html#axzz1jxinGCR4>
- _____. 2011. "CDB seeks to join TPG stake purchase." *Financial Times*, May 22. <http://www.ft.com/intl/cms/s/0/8e4d7f2a-849b-11e0-afcb-00144feabdc0.html#axzz1f2ObvWGX>.
- Sender, H. and Anderlini, J. 2011. "CIC set for up to \$200bn in fresh funds." *Financial Times*, April 25. <http://www.ft.com/intl/cms/s/0/51d8e878-6f2d-11e0-952c-00144feabdc0.html#axzz1f2ObvWGX>.
- Service Employees International Union. 2008. *Sovereign Wealth Funds and PE: Increased Access, Decreased Transparency*. <http://www.behindthebuyouts.org/storage/Sovereign%20Wealth%20Funds%20and%20Private%20Equity%20Final%20Report%20April%202008.pdf> [Accessed July 29, 2011].
- Singh, K. 2008. "Frequently Asked Questions About Sovereign Wealth Funds." Public Interest Research Centre. <http://www.thecornerhouse.org.uk/resource/sovereign-wealth-funds>.
- Strasburg, J. and Carew, R. 2009. "Oaktree to Receive \$1 Billion from CIC." *Wall Street Journal*, September 28. <http://compliancesearch.com/wallstreetjobreport/current-affairs/oaktree-to-receive-1-billion-from-cic/>
- Strömberg, P. 2008. "The New Demography of PE." *Globalization of Alternative Investments Working Papers Volume 1: The Global Economic Impact of PE Report 2008*. World Economic Forum, January, pp. 3 - 26.
- Sullivan, T. 2010. "Nicely Trimmed Smaller, Stronger Hedge-fund Industry Emerged from Financial Crisis." *Barrons*, May 24. http://online.barrons.com/article/SB127438820517194427.html#articleTabs_panel_article%3D1.

- Swann, JC de. 2010. "China Goes to Wall Street: Beijing's Evolving U.S. Investment Strategy." *Foreign Affairs*, April 29. <http://www.foreignaffairs.com/articles/66398/jc-de-swaan/china-goes-to-wall-street>. [Accessed July 30, 2011].
- Temple, P. 2001. *Hedge Funds: The Courtesans of Capitalism*. Chichester, U.K.: Wiley and Sons.
- Terry, K. 2011. "Big IPO for HCA Hospital Chain, But Buyers' Remorse Remains a Distinct Possibility." *Money Watch*, March 14. <http://www.bnet.com/blog/healthcare-business/big-ipo-for-hca-hospital-chain-but-buyers-8217-remorse-remains-a-distinct-possibility/2687><http://www.bnet.com/blog/healthcare-business/big-ipo-for-hca-hospital-chain-but-buyers-8217-remorse-remains-a-distinct-possibility/2687>.
- TheCityUK. 2011. *Financial Market Series, Sovereign Wealth Fund*. <http://www.thecityuk.com/assets/Uploads/Sovereign-Wealth-Funds-2011.pdf>.
- USWA (United Steelworkers of America). 2004. "Steel industry restructuring: Steel crisis, bankruptcies, pension plan terminations, and consolidation." USWA – IG Metall seminar, Sprockhovel, Germany, October 11-15.
- Weiss, M. A. 2008. "Sovereign Wealth Funds: Background and Policy Issues for Congress." CRS Report for Congress. Congressional Research Service, RL34336. September 3.
- Zuckerman, G. 2011. "Kuwait and Singapore Acquire Slice of TPG." *Wall Street Journal*, April 2. <http://online.wsj.com/article/SB10001424052748703806304576236424131916608.html>.