An assessment of employee ownership in the United States with implications for the EU

Joseph Blasi, Douglas Kruse, James Sesil and Maya Krouiinova

Abstract The United States has developed a varied and widespread employee ownership sector. This sector has two distinct sub-sectors, the public stock market and small privately-held firms. There is a significant gap in the incidence and development of employee ownership between the European Union (EU) and the US when both sectors are examined. Socioeconmic system differences between the EU and the US suggests that EU employee ownership will be more likely to develop if the EU expands citizen participation in its public stock markets and creates legislative support for selling smaller family businesses to employees. Second, US employee ownership is deficient in direct employee participation in corporate governance. If employees are to have reasonable rights to protect their investment risk, the US will have to converge with the EU in terms of its appreciation of the co-determination rights of workers. The development of employee ownership in the US can be better understood by appreciating the subtleties of how the argument that ownership causes superior performance of employee owned firms is presented. Most employee ownership firms will use the pull model of employee ownership where the firm never makes the extreme commitments of cultural transformation that are necessary to drive better corporate performance. We expect that the push model of employee ownership will continue to be the basis of a more "utopian" image of employee ownership. The pull model of employee ownership is based on the notion that the structure of compensation has changed in modern society and corporations are increasingly looking for ways to provide modest fix wage commitments and pay AFTER performance has taken place. The collapse of the fixed wage system plays a key role in the emergence of employee ownership in the US. Research on the wealth effects of employee ownership supports the perception that employee ownership firms are more generous. It is only this evidence that creates the basis of broad public support of the idea. This last observation helps explain why employee ownership has become so popular in the United States despite the fact that it violates a common precept of investment, namely, that a diversified basket of investments are the most rational market investment. Too much US employee ownership was "bogus employee ownership" based on workers purchasing stock with their savings. To the extent the EU wants to learn about employee ownership from the US. it should not imitate these mistakes.

Keywords Employee ownership; broad-based stock options; Employee Stock Ownership Plans (ESOPs); profit sharing; corporate governance; unions; small business; family businesses; European Union.

Joseph Blasi, Douglas Kruse and James Sesil. Rutgers University, School of Management and Labor Relations. New Brunswick, New Jersey, USA 08903. (tel: +732 445 5973; fax: +732 445 2830: e-mail: jrbru@hotmail.com) Maya Kroumova. New York Institute of Technology. 1555 Broadway, New York, NY 10023-7692. USA.

The Ia rrnatioua/ .Mama/ o/ Human Resource Management
ISSN 0958-5192 print/ISSN 1466-4399 online © 2003 Taylor & Francis Ltd
http://www.tandf.co.uk/journals
DOI: 10.1080/0958519032000106137

Introduction

The primary objective of this analysis is to assess the state of employee ownership in the United States in a way that will help the human resource professional make practical decisions and the policy maker evaluate major trends. This will be accomplished by contrasting some features of employee ownership in the US and in the European Union. We shall then explore some socio-economic system differences between the US and the EU that may account for these variations. Finally, we shall discuss several critical issues that are impacting on the future of employee ownership in the US using some recent research. This paper is not a new empirical study. Recent empirical findings on employee ownership in the US have been presented on employee ownership in general (Blasi and Kruse, 2001; Sesil *et al.,* 2002; Kruse and Blasi, 2000) and on broad-based stock options (Sesil *et al.,* 2000, 2001b; Blasi *et al.,* 2000). The most up-to-date analysis is in a forthcoming book by two of the authors (Blasi *et al.,* 2003). Three decades ago when research on employee ownership began in earnest in the US, the major issues were whether it existed in a significant way, how prevalent it was and whether it could work. These and other empirical studies have moved the discussion beyond these questions at this point in time. What has been lacking is a more general analytical discussion that evaluates the broader issues behind the development of employee ownership and attempts to explore the contrast with developments in the European Union. Throughout the paper, we shall refer the reader to current resources on the Internet.

Employee ownership in the United States at the beginning of the twentieth century

Significant financial participation by workers is not a new phenomenon of the end of the twentieth century or the beginning of the twenty-first century (Blasi *et al.,* 2003: 153-84). At the beginning of the twentieth century, a number of US industrialists dreamed of bridging the divide between labour and management. They were motivated by a concern about the spread of socialism and Communism and the trade union movement. This movement came to be known as welfare capitalism (Jacoby, 1985, 1997). One important goal of this movement was to encourage employee shareholding. By the end of the 1920s, 315 non-union major corporations with a total of 2.7 million employees had 806,068 employee shareholders. The average percentage of employee ownership per corporation was 4.5 and the total value was $1.045 billion or about 1.1 per cent of the total stock market or a holding of $1300 per employee. Employee stockholders made up about 21 per cent of company stockholders. The principal formats for this financial participation were employee share purchase plans that allowed employees to buy stock and profit-sharing plans that gave workers profit shares in company stock. At the time, employee stock ownership was a modest source of capital for corporations and savings for workers. By the end of the 1920s, the number of companies offering employee stock ownership had doubled over the previous six years. This historical movement towards employee ownership was entirely based on employees buying stock with their savings. As one might expect, members of the nascent trade union movement were suspicious of employee stock ownership, despite the fact that one study found that the percentage of corporate dividends received by people with modest incomes rose from 1.8 per cent to 18.4 per cent during this period.

Assessments of this early experiment depend at which point it is examined. At the time, the companies believed that they benefited from favourable publicity about employee stock offerings with the public although the main practical impact of their plans was to increase employee thrift. In a National Industrial Conference Board study, some companies reported some increased commitment but mainly employee interest in added

equity income. Regarding corporate governance, employees had board representatives in only a few companies and they did not pool their votes in order to have any meaningful effect. What we now know about this earlier employee ownership movement comes from an in-depth study that was conducted by the National Industrial Conference Board in New York City (National Industrial Conference Board, 1928). The Conference Board - as it is now called - was and is the most influential association of businesses in the US. This study must be considered the first major comprehensive study of employee ownership in the US in large corporations. Obviously, the employee ownership in the 1920s was introduced in a period of robust business activity and rising stock prices. The stock market crash of 1929 virtually wiped employee stock ownership off the map of the US because many of these companies' securities were publicly traded on a major stock market. Employees lost the stock and the savings they used to buy it.

This failure profoundly influenced the attitudes of unions towards employee ownership for decades. The 1920s were a time - oddly - when unions' legal status in the US had still not been positively protected by the US Congress. That did not happen until after World War 11. The stock market crash, the Depression and the failure of the promise of employee ownership all led to a rapid rise in unionization from the 1930s to the 1950s. As the century progressed, unions had a bad memory of employee ownership. based on both its intent and its consequence. The intent of many companies experimenting in the 1920s was to keep unions out. As noted, the consequence of many of these plans was an almost total loss of worker savings invested in company stock after the crash. Not only did trade unions not support employee ownership after this first large corporate experiment, but it was viewed as a less interesting and effective option for workers than the fixed wages and corporate pensions that promised workers a fixed income after retirement. Perhaps, this is not such an unrealistic conclusion given the fact that important protections for stock market investors through regulation of the securities markets, the emergence of a social security pension system for all citizens and strong legislative support for private company pensions and savings plans were all instituted *after the* 1920s. It is important for this discussion to be reminded yet again how late the US implemented such ideas as Federally protected union rights, transparent public stock markets, social security and public pensions. This entire employee ownership project of the 1920s ultimately failed and unions and collective labour agreements for fixed wages rapidly supplanted this ten-year experiment as unions rapidly organized major US industries until they achieved over 30 per cent diffusion in the private sector in the 1950s.

Employee ownership at the beginning of the twenty-first century

By the year 2002. significant numbers of US workers and corporations were involved in some form of employee ownership (see Table 1). All told, 24 million workers, or about 23 per cent of the total US private-sector workforce are involved. There are six principal forms of employee ownership that are relevant in the US: KSOPs (a combination of an Employee Stock Ownership Plan (ESOP) and a 401k plan), 401k plans that hold company stock. ESOPs, deferred profit-sharing plans that hold company stock, employee stock purchase plans and broad-based stock option plans. Table I provides estimates for the number of companies involved in the initial four of these employee ownership formats. For the first time, we present the number of companies that have the dominant types of employee ownership plans rather than the number of plans in use. (Because any one company may have more than one employee ownership plan, the traditional approach of researchers, which counted the number of plans, always overestimated the incidence of employee ownership and the number of employees involved.)

Table 1 *US estimates on employee ownership in 2002*

Form	*No. of firms*	*Employees*	*Value 3/2000*	*Value 8/2002*	*Loss from 3/2000 to 8/2002*
KSOP	1,397	4.8 million	$229 billion	$174 billion	$107 billion
401ks	2,813	13.6 million	$191 billion	$147 billion	$94 billion
ESOPs	6,431	3.4 million	$96 billion	$58 billion	$49 billion
Profit sharing	174	0.9 million	$18 billion	$12 billion	$8 billion
ESPPs	746	1.4 million	$6 billion	$4 billion	$3 billion
Total	11,561	24.1 million	$540 billion	$395 billion	$261 billion
Total market value of employee ownership in the United States (including retirement plan and Employee Stock Purchase Plans)					$395 billion
Total as a percentage of all publicly traded stock in August 2002					4.8%

Source: Analysis by Douglas Kruse and Joseph Blasi *of* corporate filings to the US Department *of* Labor and US Securities and Exchange Commission filings; also, Kruse (2002).

Notes

1. Unlike previous estimates, which tend to overstate the incidence *of* employee ownership in the US because they count the number *of* plans versus the number *of* employee ownership companies, this table indicates the number *of* public and private corporations with employee ownership according to the dominant employee ownership plan. Thus, for example, the 1,397 firms where KSOPs are the dominant plan may also have other forms *of* employee ownership as secondary plans. The assets *of* these secondary plans are included in the asset values. A sophisticated statistical method was used to tabulate the value *of* overlapping employee ownership programmes in the same company.
2. The asset values are only for the market value *of* the company stock in the plans in the firms. The value *of* non-employee-owned stock in other corporations is not included.
3. A KSOP *is* a hybrid between an ESOP and a 401k plan.
4. Profit-sharing plans are deferred profit sharing trusts that accept profit-sharing payments from the employer and contributions from the employee and have these as investments in company stock.
5. ESPPs are Employee Stock Purchase Plans.

First, KSOPs are a combination of 401k plans and ESOPs. A 401k plan is a retirement savings plan to which the employer and the employee (using before-tax contributions from their salary) make contributions. In a KSOP, an ESOP is used to fund several years of employer stock that is used to match employee contributions. The employer matching stock in KSOPs does not involve the use of worker savings to buy company stock. However, when an employee makes contributions from their salary and directs that it be used to buy company stock, this is precisely a repetition of the `buy employee ownership with your savings' approach popularized in the 1920s. As Table 1 indicates, KSOPs accounted for $229 billion in employee ownership before the stock market crash of March 2000. They were also the biggest source of worker losses, $107 billion, as company stock lost its value through August 2002.

Second, 401k plans are a major vehicle for employee ownership even though they do not have employee ownership in their name. They have been the fastest growing form of retirement plan in the US over the last two decades and they are now represent the largest concentration of employee ownership assets in the US if they are grouped with KSOPs. As noted, a 401k plan is a tax-sheltered retirement plan where an employee can save money on a pre-tax basis. The amount employees can contribute annually from their salary pre-income tax is $10,500, indexed for inflation from 2000. Employees then typically invest these savings in a variety of mutual funds made available by a financial advisory firm - such as Charles Schwab Inc. or Fidelity Inc. or others - that manages the plan for employers. (Detailed legal and factual data on these plans are available at the websites of the Profit Sharing/401k Council of America www.psca.org and the Employee

Benefits Research Institute www.ebri.org/facts/1200fact.htm) Companies often match each dollar of employee contributions with a 50 per cent company contribution and receive tax deductions for both the employee and the employer contribution. Many companies report that they would not match employee contributions if they could not do so in company stock. The portion employees invest from their payroll is based on their personal savings, while the portion they invest from employer matches is not. In effect, the government uses these extensive 401k plan incentives to create a private savings system in order to supplement expected future social security retirement payments and traditional company pension plans, which tend to provide workers with only modest income in the US. As noted, employees also have the choice of investing their savings in a company stock fund. Many companies provide their matching contributions only in company stock. 401k plans emerged in 1978 and did not exist in the 1920s. Because many workers invested their 401k plan assets heavily in mutual fund equities and their own company stock, in the recent market downturn 401k plan participants experienced significant losses that amounted to $94 billion (see Table 1; also Rodrick, 2001).

Three, the ESOP allows corporations to contribute stock or cash to buy stock in the company where a worker is employed to a company-controlled trust that holds stock for the workers until they retire. Typically, the employee ownership gradually accumulates over time as companies buy stock for workers. A special kind of ESOP, the leveraged ESOP, actually allows companies to borrow money from a lender to purchase large blocks of stock in single transactions. ESOPs do not use the savings of workers to acquire stock. They are based solely on company contributions for which corporations receive tax benefits, although a minority of companies report trading ESOPs for wage and benefit concessions (for evidence, see Blasi, 1988; Blasi and Kruse, 1991). Thus, while ESOPs do involve market risk for employees, they typically do not involve market risk for savings that employees took from their pocketbooks to put into company stock. (There are a few well-publicized exceptions such as the troubled United Airlines ESOP that was based on trading stock for wage concessions. However, less than 5 per cent of ESOPs are based on concessions.) In this way, most ESOPs have overcome some of the problems of 1920s employee ownership. By not making employees buy ownership with their savings. ESOPs also include many beneficial tax incentives for employees and they are viewed as retirement plans (see Foundation for Enterprise Development, 2001a, 2001c). Ironically, while ESOPs have `employee ownership' in their name, they are only the third largest form of employee ownership in the US, representing about $58 billion in August of 2002 (see Table 1). ESOP participants lost $49 billion in the crash.

Fourth, deferred profit sharing plans are retirement trusts that receive payments from the employer as a result of profit sharing with workers. Sometimes the company pays these profit sharing payments in company stock. Employees may also choose to take profit-sharing payments that they do not receive in company stock and invest it in company stock. Thus, to some extent, they involve workers buying employee ownership with their savings. Because of a series of tax law changes, these profit-sharing plans have declined since the 1980s. The companies with them represent the smallest number of employees, firms and assets. Collective profit-sharing assets in employer stock were $12 billion in August 2002, with a total loss through the 2000-2 crash of $8 billion (see Table 1).

Fifth, Employee Stock Purchase Plans (ESPPs) allow employees to use their savings to buy company stock. (For an overview of legal rules, tax issues and research, see Carberry and Rodrick, 2000.) These plans have important tax benefits for both corporations and workers. They are the successor to the employee share purchase plans

used in the 1920s. Employees do voluntarily use regular contributions from their salaries to buy these shares and the plans do involve significant market risk for employees. In August 2002, firms where these were the dominant form of employee ownership had company stock assets of $4 billion. In the recent market downturn, employees who had concentrated large amounts of savings in such plans did experience real losses of about $3 billion, although employees who had any equities - whether in mutual funds or individual stocks - also experienced significant losses. However, there are ways to structure employee stock purchase plans as short-term options that do not put employee savings at significant risk. To do this a corporation would accumulate payroll savings to buy stock from employees, provide employees a 15 per cent discount to the market price when they purchase the stock, yet - and importantly - also allow employees a long window or time period (for example, one to two years) to buy the stock at the lowest price during that period. If employees use this opportunity properly and do not hold significant portions of their retirement nest-egg in company stock going forward, significant amounts of their savings will not be at risk.

Sixth, broad-based stock option plans refer to traditional stock option plans that include more than 50 per cent of non-executive employees. Until the recent market collapse and 2000-2 recession, these have been the newest form of employee equity in the US. Employee stock options give employees the right to buy stock in the future (for example, ten years on) at a price set on the day the options are issued (typically, the then market price) and provide employees access to these rights based on the amount of time they stay with the company (referred to as vesting, with US vesting periods averaging three to four years). For example, on 1 January 2002 an employee may receive the right to buy 1000 shares of the stock of Company X for $10 a share -the trading price on 1 January 2002 -for ten years, vesting at the rate of 25 per cent per year over four years. Obviously, if the stock price goes down and never rises above $10, the ten year option must be considered worthless. There is no evidence that companies that instituted such plans have stopped issuing them as a result of market difficulties. In fact, some companies that issue broad-based stock options typically issue them more frequently than annually to employees, so that, as the price drops, employees actually continue to receive new options at lower prices. When stock options are issued in the US, they are not taken as a charge against earnings in corporate accounting statements. While this practice has been controversial, it provides a lot of flexibility for companies that use these benefits. (For a more detailed discussion, see http://www.nceo.org/library/optioncorpperf.html) Stock options also do not involve the use of worker savings. They involve an upside opportunity for future gain without a downside risk of losing existing savings. Thus, stock options have overcome some of the limitations of 1920s employee ownership. (For detailed information on stock options, see www.nceo.org; www.fed.org; Foundation for Enterprise Development, 2001b.) There have been a number of large estimates of broad-based stock options in the US as a result of counting all employees who have ever received options and are currently holding them. Such estimates are as high as 7-10 million workers in thousands of firms. These numbers have been used by proponents of stock options to exaggerate their significance. Recently, the National Center for Employee Ownership and the US Bureau of Labor Statistics have set the record straight by providing evidence that about 3 million non-executive employees receive stock options on an annual basis. The number of firms and the paper value of these options (that is, the profit on the option net of the exercise price) cannot be accurately estimated (see Leonhardt, 2002; US DOL, 2000). For these reasons, broad stock options are not included in Table 1.

Table 2 *How ouch employee ownership is in public or private corporations?*

Type of corporation	*Companies*	*Employees*	*Employee ownership assets*
Public	12%	70%	80%
Private	88%	30%	20%

Source: Kruse (2002). based on the most recent US government records and updated by Joseph Blasi and Douglas Kruse. Figures do not include Employee Share Purchase Plans and broad-based stock options.

Table I summarizes these data and shows the number of companies, the number of employees and the total assets held in employee-owned stock in all of these plans in the US at the end of 2002, and the losses engendered by employee ownership holdings from the beginning of the recent market crash in March of 2000 through August of 2002. Table 2 indicates some estimates of how these companies, employees and assets are divided among corporations traded on public stock markets versus corporations what are closely held. Table 3 provides data on the percentage of employee ownership in firms among some of these different formats of employee ownership. In light of the corporate scandals - typified by the failures of Enron and Worldcom where workers lost a lot of money in employee ownership bought with savings - it is noteworthy to point out that US workers lost an estimated $261 billion on company stock investments from March 2000 to August 2000.

An assessment of US employee ownership

What are the most interesting and compelling patterns when the US employee ownership sector is more closely examined? We think that the following are the most important from the perspective of practitioners in corporations and policy makers in both the US and the European Union.

The two worlds of employee ownership: buying ownership versus receiving ownership

In the US today, there are two worlds of employee ownership: one based on savings and one based on sharing capital with workers. One world, made up of ESOPs, broad-based stock option plans and profit-sharing payments in company stock, is a distinct departure from the 1920s model. (This also includes company stock used to match employee contributions to 401k plans that come from a special kind of ESOP called a 401 k ESOP.) Employees do not use their personal savings or direct contributions from their wages *per se* to obtain this type of employee ownership. Certainly, we can inquire whether employees who receive these employee ownership benefits are paid lower salaries in lieu of these benefits. That will be addressed below. Nevertheless, there

Table 3 *Percentage of employee ownership by type of firm*

Category	*0-10%*	*11-30%*	*31-50%*	*51-100%*
Private co. ESOPs	20%	35%	25%	20%
Public co. ESOPs	62%	34%	3%	1%
401(k) plans	85%	10%	5%	0%
Stock options	45%	53%	2%	0%
Stock purchase plans	100%	0%	0%	0%

Source: National Center for Employee Ownership. Oakland. California.

is no question that the formal structure of employee ownership has evolved and changed since the 1920s.

Another world of employee ownership does involve the use of worker savings. The use of 401k plans has evolved and deepened in the US as government, corporations and workers realize that fixed corporate pensions and government-sponsored social security are unlikely to provide adequate income for retirement. Many workers have chosen actually to take their savings in these plans and purchase company stock. Moreover, workers also use Employee Stock Purchase Plans to buy company stock with their savings. Others use their profit-sharing payments to buy additional company stock in profit-sharing retirement plans. Later, we shall explore why both workers and companies have been willing to invest these assets in undiversified company stock rather than diversified mutual funds.

Mainly a public stock market phenomenon

Today, employee ownership in retirement plans in the US is mainly a phenomenon of larger publicly traded stock market companies in terms of the number of employees and assets involved. This estimate is based on an examination of recent US government records for all these plans (Kruse, 2002). Public companies account for about 70 per cent of employees, 80 per cent of assets, but only 12 per cent of the companies. This domination of public companies in US employee ownership is similar to the pattern in 1929. Moreover, almost all the employee ownership in Employee Stock Purchase Plans is in public companies. The fact that employee equity is mainly a public stock market phenomenon in the US is further underlined by the predominance of broad-based stock option plans among public companies. Estimates of the paper value of these stock options are not included in the employee ownership figures. Also, 401k plans that are invested substantially in employer stock tend to be mainly in larger public corporations according to our analysis.

Majority employee ownership is mainly in private companies

The major difference between 1929 and 2002 is that significant (20-49 per cent employee ownership) and majority employee ownership (more than 51 per cent) is now mainly a phenomenon of small and medium-sized family and independent businesses in terms of the number of companies involved. As Table 3 indicates, public stock market company employee ownership is mainly concentrated in the category below 10 per cent, with a modest number of firms having significant employee ownership, whereas private company employee ownership is heavily concentrated in significant and majority employee ownership. This pattern is further underlined by the fact that stock purchase plan employee ownership is mainly concentrated in public stock market companies and almost always under 10 per cent. In most companies, it is 1-2 per cent. Moreover, the percentage of outstanding stock represented by most broad-based stock option plans is mainly under 10 per cent except in high-technology companies, as the NCEO data in Table 3 indicate. As noted, both stock purchase plans and stock option plans are mainly concentrated in public corporations. Another NCEO study looked at ESOPs in privately held corporations in order to evaluate how much employee ownership they expected to have in the next few years. This question is relevant because existing business owners typically transfer ownership in segments over a five-to-ten-year period in these smaller privately held companies. The conclusion was that employees own or will own a majority of the stock in an increasing number of these companies in the coming years.

Thus, for the foreseeable future, majority employee ownership will remain the province of mainly smaller privately held corporations in the US (NCEO, 1996).

The employee ownership sector is a large and growing sector

One of the problems that researchers have encountered in assessing the size of the employee ownership sector is the fact that many corporations have multiple plans. This complicates the assessment of the state of US employee ownership at the beginning of the twenty-first century compared to the beginning of the twentieth century. For example, it is not uncommon for a public corporation to have a small ESOP, 1-2 per cent of its equity in a stock purchase plans, some percentage of its equity in a 401k plan and 1-5 per cent of its equity in a stock option plan. No one US government source exists that aggregates all this employee ownership into one number for each firm. Thus, in previous estimates of employee ownership in the US, many of the millions of employees represented in each different format of employee ownership in Table 1 can be found in the same company, and, as a result, these previous figures involved some double counting. We have now eliminated this problem and, for the first time, provide conservative estimates of the actual number of companies rather than plans. Thus, there are about 12,000 employee ownership retirement plans that cover about 24 million employees and hold $395 billion in company stock. This represents about 23 per cent of private-sector employment. In the past, the best estimate of the overall percentage of employees participating in such plans came from public opinion polls. A variety of polls conducted over the last decade indicated that 20-5 per cent of US workers participate in some employee ownership plan in their company (Kruse and Blasi, 1999). These figures did not take into account the extent of broad-based employee stock option plans. Based on the new data presented in Table 1, it is now clear that public opinion polls were correctly measuring the incidence of employee ownership. This clearly represents an increase of many times over the number of employees that the National Industrial Conference Board estimated were involved in the employee ownership sector in the 1920s. Moreover, shared capitalism has grown five times from an estimated I per cent of corporate equity in the 1920s to almost 5 per cent of corporate equity. This figure does not include the paper value of stock options that have been granted to rank-and-file employees. (This does not include the heavy concentration of ownership in the stock market through public and private pension plans or pension plans that own stocks in companies where workers do not work. The New York Stock Exchange (2000) estimates these plans own 40 per cent of the stock market in 1998.) An indication of the interest of US workers in employee ownership is the way they have concentrated employee stock ownership in their 401k plans. Recent estimates from the Profit Sharing/401k Council of America reports companies over 5000 employees (these are mostly public stock market companies) have 47.5 per cent of their savings plan assets in employee stock ownership. The figure is 9.1 per cent for companies under 5000 employees (PSCA, 2001). It is important to note that employees expressed these preferences during one of the great bull markets in history. Employee and company preferences for employee ownership now need to be studied in bear markets. Nevertheless, as Table I indicates, over 80 per cent of employee ownership in August of 2002 was concentrated in 401k plans or 401k/ESOP plans (i.e. $321 of $395 billion). Most of this was purchased by workers with their savings. Thus, while the employee ownership sector is large and growing, in light of the extended bear market, one must responsibly raise the question whether this large concentration of company stock in retirement plans is prudent. We shall address this question below.

The EU compared to the US

There is a large employee ownership gap between the US and the EU

What lessons do we learn when recent European and US research on financial participation is taken together and we compare both geographical units? Uvalic (1995) provides the first assessment of employee ownership in the European Union. While more current data may be available,' for the purposes of our general comparison we use the EPOC survey as the basis for EU data. This survey had data on 4600 establishments from ten European countries (European Foundation, 1997). In general, these comparisons are imperfect because data in both systems were collectedd for different purposes and used different measurement criteria. However, there is no escaping the fact that there appears to be a pronounced and large financial participation gap between the EU and the US regarding the overall trend in both labour markets-This comparison focuses only on employee ownership and not profit sharing.

For employee ownership, it is more difficult to define the gap because the EU figures measure, percentage of work sites and the US figures measure percentage of adult employees.' However, with only 5 per cent of work sites in the EU having employee ownership compared to 23 per cent of private-sector working adults in the US, it would appear that a very sizeable gap does exist. When one considers that there is no evidence of extensive use in the EU of broad-based stock option plans - which have spread rapidly throughout US industry and especially in high-technology and Internet companies the gap is probably very wide indeed.

Some of this uncertainty about defining the financial participation gap can be allayed when individual EU> member states are compared with the US and the EU leaders. This exercise indicates that seven out of ten EU countries have very significant financial participation gaps compared with the US as well as with EU leaders. For employee' ownership, the very low percentages of work sites with employee ownership in France (I per cent), Sweden (1 per cent), Italy (2 per cent), Portugal (2 per cent), Germany (3 per cent), Ireland (3 per cent), the Netherlands (3 per cent) and Denmark (5 per cent) suggest quite significant lags. The UK, with employee ownership.- in 11 per cent of work sites, and Spain, with 8 per cent, lag-behind ¯the US much less. It makes sense to go beyond this discussion of mere incidence of, employee ownership, i.e. counting plans, to a consideration of the quality of both phenomena. This is where, more clear-cut contrasts become obvious.

Employee ownership involves a wider group of industrial sectors in the US than the EU

A further difference between the EU and the US is the sectors in which employee ownershipp is concentrated. Poutsma (2001: ch. 4) used descriptive statistics; and multiple regressions to demonstrate that employee share ownership inthe EU is concentrated in firms in the trade or commercial sector. Some scholars have tried to build theories around the observation that employee share; ownership is concentrated in special sectors where there is a high degree of customer contact or service orientation or professional knowledge involvement (see Hansmann, 1996). In 1990, virtually the entire population of publicly held corporations with a minimum of 4 per cent broad-based employee stock ownership was examined (Blasi and Kruse, 1991). These; 1000 corporations were broadly concentrated in financial, transportation, utilities and consumer products and thinly concentrated in the services sector, especially retail trade. The measures of concentration were total market valuee of

shares owned by employees, number of employees and total market value of the companies with employee ownership. However, a breakdown of the lirnt, according to those with Fortune 500 industrial and service ranking demonstrated clearly that there was a wide distribution across sectors in both manufacturing and service,. including retail trade (Blasi and Kruse, 1991: 10).

Since this early work, a number of other studies have suggested that rntl,It,vee ownership is distributed across a wider variety of sectors than the trade sector. A 199 study of virtually the entire population of employee ownership plans in 4011, (that i,. employee saving pension plans) found that employee ownership is concentrated (Kroumova, 1999) in transportation, communications, utilities, financial services anti manufacturing followed by mining and retail trade. There is low concentration ill agriculture, construction, wholesale trade and other services. Another study of this issue examined public employee ownership firms that had 20 per cent share ownership in 1983 and retained that amount of employee ownership in 1993. Again it is not a study of a sample, but virtually the entire population that could be identified from public disclosure documents. It found wide sectoral distribution and variety (Blair *et al.,* 2000). Finally, the most recent, 1998, study of employee ownership structured as broad-based stock option plans (Weeden *et al.,* 1998) has further established that plans are implemented in a wide variety of industrial sectors. (For specific data on industrial sectors and broad-based stock option plans, see also Blasi *et al.,* 2000.) These studies on sectoral distribution strongly suggest that the EPOC finding for the EU is more likely an artefact of the low incidence of employee share ownership in the EU rather than a finding suggesting that employee ownership in the EU is not relevant to a wide variety of business sectors.

Socio-economic system differences

Key system differences between the socio-economic systems of the EU and the US appear to affect the diffusion of share ownership and these also manifest themselves in the structure of share ownership in the EU and the US. The principal difference is that the most employee shareholders are concentrated among publicly traded stock market companies in the US while most potential employee shareholders are concentrated among privately held corporations in the EU. This difference reflects several factors. One is that European stock markets (with the exception of the UK) tend to represent a smaller percentage of the total number of corporations and total corporate employment than the US. Another is that these markets also tend to have less widespread citizen participation than the US. The most recent figures, as of 1998, indicate that 43.6 per cent of its adult citizens invest in the public stock market. Public participation in the stock market went up 21 per cent since 1995 and 61 per cent since 1969 (NYSE, 2000). US polling data on financial participation over the last century demonstrate that the incidence of general stock ownership in the US has risen continuously since 1947. It also demonstrates that the incidence of employee stock ownership in the US has also risen steadily from 1984-99 (Blasi and Kruse, 1999c).

Certainly, the sharp rises in public stock market participation in the US since 1990 may be related to the bull market that ended in March of 2000. However, there is no question that the public stock market - aside from bull market phenomena - is more central to US society and the US economy. The centrality of the public market in US employee ownership even in the 1920s further serves to underline this appetite for risk and equity investments. One of our colleagues has criticized this analysis because they

claim that employee ownership is driven by the bull market. We do not agree with this criticism because the basis for broad citizen participation in the US stock market is not and has not beenoccasional bull markets. Rather the basis is the historical fact that the average annual rates of return of a basket of common stocks in public companies has been 8.8 per cent per year adjusted for inflation from 1926 to 1985 compared to a corporate bond return of 2.2 per cent (Brealey and Myers, 1988: 128). American citizens have been taught that equity risk has higher returns over the long run and they have voted in favour of this precept with their feet decade after decade. The central government and corporations and private stock market institutions and financial services firms banded together to sell this message and build a business out of it. US private and governmental institutions encouraged the development of large public capital markets. However, this observation begs the question of whether it makes sense to invest in equities in the company where an employee works because that ostensibly- violates the principle that the best investment is a diversified basket of stocks of the entire market. We shall discuss this issue later. -

While both economic systems have a large representation of institutional investors in the stock market (banks, mutual; finds, insurance companies), the US system is distinguished by broad' individual citizen' participation. Further evidence from the New York Stock Exchange and other surveys indicates that a very large proportion of this broad citizen participation in the public stock market is a result of employee share ownership. In 1990, a New York Stock Exchange survey of adult shareholders found that 36.4 per cent of all current adult share owners firstacquired their shares through a company employee share ownership plan, 32.1 per cent from an employee stock purchase plan at their company and 4.3 per cent from a company bonus plan. Only 33.6 per cent of all adult shareholders acquired shares from the entire broker/dealers system in the US, while 12.8 per cent got their shares from a mutual fund or investment company. Also, new adult shareholders who recently entered the stock market were just as likely to have entered the stock market through an employee stock ownership plan at their company (34.7 per cent) than through the broker/dealer system (34.7 per cent). An ABC News poll in 1987 tracked the same pattern, with 30 per cent of stockholders reporting that they owned stock solely through a company stock plan in which they participated or had previously participated. And an NBC News/Wall *Street Journal* poll in 1986 reported that 34 per cent of stockholders said that they got most of their stock as part of an employee benefit plan. It thus appears that-the-availability of a large established public market for corporate shares creates an infrastructure for corporations strongly to promote employee share ownership. This was true from 1919 to 1928'and it is true from 1984 to 1999 (Kruse and Blasi, 1999). Finally, virtually all the 3 million workers who get broad-based stock options every year (US DOL, 2000; Leonhardt, 2002) are in public companies.

The share ownership gap between the EU and the US will never be closed until EU Member States' stock markets encompass more corporations, more corporate employment and more citizen and worker participation. The greater size of the UK public stock market is probably one important factor explaining the UK's pre-eminent leadership in share ownership in the EU. We documented the size, the development and the reasons for growth of employee ownership in the US stock markets in our 1991 book, *The New Owners,* which used corporate disclosure documents to produce a list of the employee ownership of 1000 out of the 7000 publicly traded corporations in the US (Blasi and Kruse, 1991). The infrastructure of the stock market provided hundreds of corporations with an easy avenue through which to implement employee stock ownership.

The small business sector is the dominant adopter of signi/iecuu cmplovce ou *ner.chip in the US*

Another key difference between the EU and US is that larger companies in ilie I :I adhol)I share ownership more whereas small family businesses avoid share ownership (IN)III 'Ili 1A, 2001). In the US, smaller companies are the major adopters of share 0wncrshil, :unuur:' privately held companies and small family businesses are a major source 01 L'14) \\ 111 14)1 share ownership (NCEO, 1999). Ironically, the conservative small business st-cim is III(' major creator of majority employee-owned businesses in the US. What factors acccmut for this difference? Data on the prevalence of small businesses (businesses with |c~~cr than 100 employees) in both the EU and the US suggest that about 60 per cent (d workforces and 50-60 per cent of gross domestic product are accounted for by Ihc.c businesses in both geographic units. So it would not appear that differences in time ¡mportance of small and medium-sized businesses between the EU and the US accu uill for this difference.

The predominance of small to medium-sized independent privately held businesses in the US as the platform for employee ownership is a new phenomenon. The 1928 Conference Board study found that only 6.2 per cent of such plans were in companies with fewer than 100 employees, while 7.99 per cent were in companies with 101-250 employees (National Industrial Conference Board, 1928: 3, Table 2). The transformation happened in 1984 when the US Congress exempted family and other small business owners of privately held businesses from capital gains taxes if they sold more than 30 per cent of their businesses to the employees and invested the proceeds of the sale in the securities of another US company by adding Section 1042 to the law of the US Internal Revenue Code of the US. This is without question the most important piece of share ownership legislation in the US since the ESOP was created. Since that time small and medium-sized family businesses have become the principal engine of expanding the number of employee ownership companies in the US.

Traditionally, trade unions and left-leaning academics in the US were the groups that talked most about worker control and worker participation. If anything, small and family business owners were neutral to antagonistic to such ideas. However, in the early 1980s, a number of Congressmen and women discovered that small and family business owners who were their constituents had a major problem: the World War II generation of founders of these businesses was getting close to retirement age and they often had no son or daughter who wanted to continue to operate the business. They often needed to sell the business for its entire economic value in order to pay for their retirement and share the benefits of a life's work with other family members. Their problem is that it was not always easy to sell a family or small business. Often, no one wanted the business or could not afford the financing in order to pay a fair price. Often, competitors would buy the business and close it or radically change its commitment to its core identity, the local community and the employees who had been loyal for decades. After discovering that some family and small business owners were spontaneously using worker buy-outs to solve this problem, Congress decided to marry two large needs: the Congress' desire to expand the growth and scope of employee ownership was married with the small and family business owner's desire to cash out his or her business and ensure its stable continuity. In the end, what was probably one of the most conservative political groups in the US was converted into a strong proponent of employee ownership. But the impact of this law went far beyond what its framers expected. In fact, some small and family business owners had been searching for some time for a more equitable structure and more high-involvement structure for their businesses. They often used these employee

buy-outs - which were conducted by non-union and union employee groups - in the form of gradually increasing employee buy-outs that would culminate in a change of control at the time of their retirement. Some even passed on large chunks of the business to their sons or daughters, who inherited the initial executive positions, and then also sold more than 30 per cent to the employees. This created hybrid family/employee-owned businesses. More importantly, however, the small and family business owner and retiree has now become the main creator of majority and 100 per cent worker-owned businesses in the US. Many of the majority worker-owned firms in the US were created by family founders and their employees. In many cases, the owner would negotiate the sale with an employee group or a trade union with which he or she had a relationship for many decades. Thus, the government created a law where conservative family and small business owners personally benefit when they create worker-owned businesses.

It is unlikely that the employee share ownership gap between the EU and the US will ever be closed until this same intentional political act is attempted by European Parliament and adopted widely in EU member countries. As one might expect, the positive experience with employee ownership in families throughout all fifty states of the US has created a source of non-partisan political support for other share ownership endeavours by government and private business and unions. Thus, this suggests that Poutsma's findings (2001) that a business with fewer than 200 employees and an independent (i.e. often family) business predict the absence of share ownership in the EU should not be viewed as a general research finding about the nature of share ownership, but an artefact of the lack of state support for marrying the interests of small and family business owners and employee share ownership in the FLJ.

Critical issues that impact on the development of employee ownership

The incidence and socio-economic system structures are the outcomes of engines driving employee ownership. They are the result of changes in management and worker ideologies and practices. What are some of the critical concepts underlying these changes?

The preoccupation with superior performance

Modern management ideologies have become increasingly and justifiably preoccupied with how to increase the economic performance of firms. This preoccupation has shaped the perception of corporate leaders toward the development of employee ownership. But it has also introduced certain other limiting factors. Academic researchers and policy makers and the media have been very preoccupied with the simplistic question of whether companies with employee ownership have better financial performance than companies without employee ownership. Surely, there is extensive systematic empirical evidence that superior performance does exist under certain conditions. We refer the reader to the empirical studies cited at the beginning of this article.

However, we question this preoccupation on several fronts. First, the simplistic question is highly imprecise as it is framed and used in the public domain. How is employee ownership to be defined? How is performance to be measured so that the effects of other relevant variables can be excluded? Typically, clear definitions of the terms are never attempted. Second, this perspective tends to put employee ownership on the defensive. In fact, as long as the research tradition on employee ownership and firm performance proves at the minimum that there is no statistically significant difference between the behaviour of firms with employee ownership and firms without employee ownership, employee ownership should be considered as a legitimate candidate for

enterprise organization. As we have observed, substantial evidence exists that their i% superior performance under many conditions. (For a new review, see Blasi *el (Il..* 2003: ch. 7.) However, our point is that, even if the scientific findings concluded that employee ownership firms performed only as well as non-employee ownership firms, one could make a credible case for employee ownership as long as it did not significantly disadvantage other shareholders.

The reasoning behind our objection to how employee ownership is discussed is straightforward. One does not observe academics and policy makers and the media asking if large public companies or family businesses or small businesses or foreign-owned businesses or multinationals are more efficient or have superior financial performance than each other or some other format as a way to justify *their* existence or any government support which *they* get. The expectation of better and superior performance places too unfair and disparate a set of expectations on the backs of supporters of broadened employee ownership. For example, why can one not simply argue that it is a good idea because it is potentially a more fair way to run capitalism and broadens wealth, and may help involve employees in the business?

This does not mean that researchers should not care about whether employee ownership improves corporate performance. Good scientific evidence is an important lever in motivating managers to consider it. But researchers must distinguish between the function of scientific studies as tools to help managers make companies more successful and the function of studies as bases for government policy. Governments can and should be encouraged to implement widespread employee ownership as long as there is no systematic evidence of inferior performance.

Seven large studies in the US provide firm evidence that, at the minimum, employee ownership has no systematic negative consequences for firms. These studies also show under which conditions employee ownership has positive consequences. They are: first, a US Government General Accounting Office study of smaller and medium-sized privately held companies with different levels of employee ownership (US GAO, 1986); second, a study of larger publicly traded corporations on the stock market with more than 4 per cent employee ownership, which compared them to non-employee ownership firms in their industry group (Blasi *et al.,* 1996); third, a review and meta-analysis of published studies on US employee ownership using empirical databases and systematic analysis. (Kruse and Blasi, 1997); fourth, a ten-year project to document the stock price performance of public companies with more than 10 per cent employee ownership compared to most common stock market averages (American Capital Strategies, 1999; Hollod, 1999); fifth, a recent study of public companies that were more than 20 per cent employee-owned from 1983 to 1993 compared to the next largest and smallest firm in their industry during the same period (Blair *et al., 2000);* sixth, a study comparing almost 400 publicly traded corporations with broad-based stock option plans with companies without such plans (Sesil *et al., 2000);* and, seventh, an as-yet unpublished study of the population of privately held corporations that adopted ESOPs between 1988 and 1994 (for a summary, see http://www.nceo.org/library/corpperf.html). Each provides some evidence of better performance by various types of employee ownership companies under certain conditions. Since not all the studies are longitudinal studies, one cannot establish strict scientific causality on that score. So one cannot be certain in each of the studies that the employee ownership itself is causing this observed improved performance or whether it is caused by other factors. However, study six (on broad-based stock options) and study seven (on ESOPs in privately held companies) are before and after studies and they do suggest that employee ownership plays an important role in the improved performance.

Nevertheless, the policy realm of employee ownership should be larger than a search for superior performance. By surrendering this preoccupation with superior performance, researchers and policy makers can allow employee ownership to take its place in modern society as a respectable business format. Indeed, we believe that the preoccupation with superior performance has been a tool for opponents of a more broad-based capitalism to cut short any discussion of its expansion to a more inclusive format. These opponents argue that we have to wait until all the evidence is in or they claim that we must prove that most or all employee ownership firms are model workplaces. These arguments constitute a biased and unnecessary threshold for employee ownership policy to attain. In an economic environment where real wages have been essentially flat in the US and many industrialized countries, employee ownership needs to be viewed as a way to promote greater capital ownership among citizens to supplement their income.

Push and pull employee ownership

The concept of push and pull employee ownership can help researchers deal with these dilemmas. Namely, while large statistical studies may confirm that employee ownership in the US is not a negative phenomenon and there is evidence of many positive effects, how can one establish where the levers of these effects are? In other words, we observe at least neutral and generally positive effects of employee ownership on firm performance in many large statistical studies, but how do we look inside the black box of these firms to account for what drives better performance? The concepts of push and pull employee ownership help resolve this difficulty. Push employee ownership is employee ownership where the employee ownership itself pushes or creates the superior performance. It is a prime cause of improved productivity, accounting profits and increases in stock price by virtue of aspects of the employee ownership itself and how it is combined with company culture when other variables which could account for the superior performance are held constant. The fact that this firm has x per cent of employee ownership and y per cent of the average employees' annual compensation in company stock is central to its entire culture of performance. Only very special companies with special commitment will practise the transformative cultural change that amounts to push employee ownership. In push employee ownership companies, the firm is managed tightly so that difficult goals are set by employee shareholders and they are completely aware that the achievement of these goals results in better firm performance and specific increased rewards to them in the forms of stock or stock options. In these companies, employee ownership is clearly and explicitly the reward for making more money than you would have made without employee ownership. Workers share in this added value. Push employee ownership is consistent with the school of thought in the US called strategic human resource management. These researchers have shown that employee ownership is one of many ways successful firms mobilize people to high-performance workplaces (see Becker *et al., 2001).* Nevertheless, one study of a random sample of work establishments across the entire US provides clear evidence that only about one in a hundred workplaces can be called high-performance workplaces (Blasi and Kruse, 1999a). Having said this, we believe that the superior economic evidence for employee ownership is explained by the combination of various social arrangements between workers that spur productivity with the incentive of employee ownership (see Blasi *et al., 2003).*

The concept of pull employee ownership is very different. Here employee ownership is pulled along with the company's performance but does not create it. It is an after-the-fact way to share in company performance. It is where the employee ownership is not

the prime cause of superior or acceptable performance. Acceptable or improved productivity, accounting profits and increases in stock price can be explained by a variety of other factors when the firm is compared to its competitors. One would be hard pressed to look inside this black box and argue that the firm has a high-performance work system. The fact that this firm has x per cent of employee ownership and y per cent of the average employees' annual compensation in company stock *is not* central to its entire culture of performance. The presence of employee ownership might be associated, or suggestive that it is a cause, but there will he no clear-cut evidence that this is so. This firm either has not undergone a far-reaching cultural chance to connect employee ownership to a performance-based culture or that culture cham_,e li;is not been successful in creating push employee ownership. A firm with pull employee ownership uses stock ownership to reward workers for performance after it has been achie\ed but is under no illusion that the ownership caused the performance. These firms do not try to niana.!e performance goals and stock ownership incentives tightly in concert. Shnre M\ ncrslnp nnav he used as a form of variable wage, as a method to attract and retain cIupluyees. as a payment for employee sacrifices or as an employee benefit, but it is not viewed as the core eleiuent in :lit a performance-management culture nor do the day-to-day details of cluphwce management behaviour support such a claim.

As we can see, the concepts of push and pull employee ownership help us think about future policy issues. For the foreseeable future, many firms will have pull employee ownership. There will be no high-performance workplaces inside the black box of these firms, but studies of large numbers of these firms might not find any statistical evidence that they perform worse than firms without employee ownership. While push employee ownership may be more desirable, our point is that pull employee ownership can also be a credible reason to have employee ownership. This has implications for the future consideration of employee ownership in both the US and the European Union. Policy makers will be asked to support employee ownership legislation in spite of the fact that it is not creating `utopian' companies, but because there is evidence that employee ownership can be a workable acceptable alternative to the existing way of organizing businesses. Understanding the answer to this question requires an analysis of the collapse of the fixed wage system. In brief, the answer is that if fixed wage returns to workers continue to be generally flat relative to inflation, then employee ownership may emerge as a way to compensate workers for better firm performance, even if employee ownership (in a high-performance work system) was not the cause of that performance.

The collapse of the fixed wage system

The collapse of the fixed wage system is really why employee ownership is growing in the US. We wish to distinguish between our personal support for this collapse (which is not the case) and our observation that this collapse is a definite event. The key fact over the last two decades of the US wage market is average real wage increases of 0-2 per cent a year (Mishel *et al., 1999)* versus average real stock price increases of 8.8 per cent a year (Brealey and Myers, 1988) (and often 20-30 per cent a year). The Economic Policy Institute has proven that capital investments appreciated more than investments merely in wage labour. Families whose incomes went up relative to inflation saw the bases of these increases not from labour income but from capital income, largely based in equities (Mishel *et al., 1999).* In general, in the US one can observe an annual trend of flat or nearly flat inflation-adjusted wages and a long-term trend of flat inflation-adjusted wages since 1980. This has been supplemented by an annual trend of flat inflation-adjusted traditional pension plan payments to individuals. This means fewer government real

increases in the value of social security payments, fewer company attempts to provide real increases in private company pension and less trade union success in negotiating real increases in pensions and social security payments. Historical' data strongly support this analysis (for a complete review, see Mishel *et al.,* 1999). This is matched by the widening inequality of wealth distribution and the worsening fate of the working class and the middle class in terms of standard of living<(Mishel *et al.,* 1999). At the same time, one can observe the promotion of pay for performance plans in industry' and strong support for profit sharing and employee ownership among both union and non-union employees in opinion polls (Blasi and Kruse, 1999b).

At a recent conference on financial participation in the EU, a senior official of the EC remarked that the picture presented above for the US is precisely the trend in Europe. In the US at least, we believe that the collapse of the fixed wage system is the major contextual factor influencing the spread of employee stock ownership. Again, this requires- a paradigm change in the minds of both academic researchers and policy makers. For three decades, research on employee ownership and policy promotion of employee ownership has been based on the notion that it should be expanded because it improves the economic performance of firms. Our point is that, while the evidence indicates the overall effect of employee ownership is positive, the actual reason why executives, and firms, and governments, and workers should *also* be interested in the concept is because it can play a majorrole in the ongoing restructuring of the wage system in modern societies. Whether we like it or not, fixed wage and"benefit payments are being moderated by corporations and an ethic of 'pay for performance' is being promoted instead. In the US, employee ownership in terms of ESOPs and broad-based stock options has represented a pay alternative that i ' being offered to increasing numbers of workers. (Note that it is hard to say the same about employee share purchase plans and 401k plans without reservation because they use worker savings. In a profitable stock market and -a firm with stock market opportunities, some worker savings in stock purchase plans and 401k plans may offer -a way to increase the economic benefit that a worker receives from the firm

Industry is making the transition to a system where major increases in pay will be given in concert with corporate performance whether these financial participation schemes cause the performance or not. Industry is not necessary sold on the idea that the pay causes the performance, but fewerr in industry in the US are committed to the 1950s image of what can be called `working for the Post' Office'. 'Working, for the Post Office' in the 1950s meant annual increases in both wages and pension benefits substantially over the rate of inflation over a large number of years. While the reasons for leaving this image of the labour economy behind can be debated, the fact of this transition in the US is now beyond argument. The implications for research and policy on employee ownership in the-EU are far-reaching. When the fixed wage and benefit system collapses and when the main increases > in income come from capital incomes and profit sharing or employee ownership, then only the standard of living adjusted for inflation of those members of the population in the private-sector economy who participate in company-performance based pay have any hope of expanding. In the US this solid fact explains why public support for employee ownership is so strong.

The mistake of employee ownership based on worker savings

There is no question that the Achilles' heel of the US employee ownership system is the extent to which it is based on employees buying ownership with their savings. In 1990,

Harry Markowitz received the Nobel Prize in economics for explaining how investors can better satisfy their investment objectives by assembling a portfolio of different securities (McCarty, 2001: 254-5). There is no question that the extensive concentration of worker savings in the stock on one company would be a complete violation of this principle. After the 2000 market drop, there were play reports in the US press about workers who concentrated too much of their retirement savings in employee stock purchase plans and 401k plans. While this may not he a problem in a hull market, in a bear market an extreme concentration in employee ownership can mean the loss of a loh and the loss of retirement income. The US system of employee ownership does not require that workers concentrate all or most of their rctircnlent savings in company stock. One lesson from the unfortunate experiences *of* workers in the It)2us and the recent market fall is that companies with employee ownership progiannnes lutist educate workers to place reasonable limits on the percentage of their total investments contained in company stock. If this is done, then employee ownership can he part of a diversilied portfolio for each individual worker.

The terrible losses suffered by workers in the well-publicized 1 neon and Will Iticool cases-mostly in 401k plans-were, as Table I now demonstrates, generafiied throughout the US economy, with an estimated $261 billion in losses From March 2000 to August 2002. In the future the US needs to base its system of employee ownership more on ESOPs, company stock matches in 401k plans and broad-based stock option plans that do not force workers to buy employee ownership with their savings. Less employee ownership should be based on employee retirement savings. Broad-based stock options should be emphasized, where feasible, as the centerpiece of employee ownership because they protect workers against all downside risk. Some employee ownership based on worker savings is acceptable as long as it represents a small portion of the entire wealth portfolio of the average worker. The horror stories of Enron and Worldcom workers having 50-100 per cent of their wealth invested in company stock indicate that the system in some companies went to an unacceptable extreme.

The key empirical question this analysis raises is whether the standard of living of workers is better in general when they combine flat fixed wage systems with employee share ownership or whether share ownership is merely a way to shift risk to them and pay them less. If there is evidence that workers get paid lower wages under employee ownership and expose themselves to too much undiversified risk, then serious policy questions must be raised about its continued relevance.

The wealth effects of ernplovee ownership

So, do workers in corporations with employee equity end up with more money than those in firms without employee equity? Several recent studies provide systematic information on this question. Kardas *et al. (1998)* looked at forty-seven ESOPs in the State of Washington in 1995 and compared them to a control of similar companies without employee ownership. Many of these companies involved sales of stock to employees by retiring family and small business owners. Fifteen of these companies were majority employee-owned and the average employee ownership was 42 percent (median 35 per cent). The companies were matched with sixty-eight control companies that were similar to them but did not have employee ownership. Detailed wage and pension data were collected. The results were that the average retirement assets per employee were significantly higher in the ESOP companies ($32,213) than in the control group ($12,735), and the ESOP represents 75 per cent of the value of the employee's retirement

for the average employee shareholder. It must be recognized that, since this asset is so concentrated in company stock, it carries more risk than the lower diversified retirement asset of the non-employee shareholders. The researchers asked whether employee shareholders had significantly lower wages to make the purchases of company stock possible. The results show that the ESOP companies pay higher average and median wages than the comparison firms. The average ESOP company wage of *$19.09* per hour was 12 per cent higher than the control company wage of $17 an hour and the median ESOP company wage of $14.72 was 8 per cent higher than the median control company wage of $13.58. Regarding other compensation and wages, the ESOP companies paid out more for stock options, cash bonuses and so forth than the control company, $1688 on average per year per employee compared to $323. This study lends support to the notion that companies are not using employee ownership as a ruse to pay lower wages. In fact, the opposite appears to be true. Obviously, the study needs to be repeated with a large national sample in the US. This effort is currently under way.

Another study deals with 401k employee savings schemes using employee ownership. Recently, the most comprehensive study ever done on all such plans in the US that involve employee ownership has been completed (Kroumova, 1999). This study used publicly available records from the US Internal Revenue Service and is based on the entire population for the US, not a statistical sample. In 1993, 1777 401k plans were invested in company stock. They included a third of all employees involved at any time in pension plans and 43 per cent of all the assets of such plans in the US. They held about $90 billion in company stock. While the average 401k plan invested only 2.2 per cent of employee savings in company stock, this percentage increased with employer size. This study found that there is no evidence that the companies using employee ownership saving schemes terminated their traditional pension plans, which offered guaranteed fully company funded pensions, and replaced them with these plans. In 1993, 51 per cent of the companies that had 401k plans using employee stock ownership also had traditional pension plans, whereas only 24 per cent of the companies having 401k plans without employee stock ownership had traditional pension plans. Companies with 401k plans using employee stock ownership also had a higher total amount of assets per participant and were no less generous than plans offered by companies without employee stock ownership. It was found that 401k plans using employee ownership have 20-30 per cent higher assets per employees compared to 401k plans without employee ownership. Given that a higher proportion of participants in 401k plans with employee ownership were also covered by a traditional pension plan, it appears that the total pension package (traditional pension plan + 401k plan with employee ownership) was higher for the employee shareholder than for the non-shareholding employee. Therefore, it appears that the transition to employee ownership in company savings-type (401k) pension plans has not been a manipulation of workers to accept fewer benefits.

A study that deals with broad-based employee stock options (Sesil *et al,* 2000) compared the compensation of companies that provided broad-based stock options to those that do not. The study found that the companies that decided to use broad-based stock options in the early 1990s were already higher-paying companies in the mid-1980s. Note that, in the US, government measures of `compensation' by the Department of Labor currently do not include stock option payments, so stock option payments are in addition to these figures. In this study, the difference between fixed compensation between the 1985-7 and the 1995-7 period is statistically significant with a 7.8 per cent premium for all the stock option companies. Looking at the difference between the levels and growth of companies where there are complete data for the two time periods, we see that the stock option companies had 7.8 per cent higher compensation levels

in 1985-7 and maintained this significantly higher level of 7.7 per cent in 1195 7. But there is again no significant difference compared to the non-stock option control companies. The annual growth in compensation between the two periods was not different when both groups of companies are compared.

These results suggest that the broad-based stock option companies paid their employees more before they instituted stock options and they maintained their compensation edge after instituting stock options, although they did not significantly increase their levels of growth after the introduction of stock options relative to non-stock option companies. They were not little high-tech start-ups that paid employees poor wages and gave them stock options instead. Anyway, there is no evidence that the stock option companies cut fixed wages and substituted stock options for them. In short, the stock option companies had the same fixed wage increases as other non-stock option companies during this period, but continued to maintain their relative advantage of higher compensation. And they paid stock options on top of this. These results are consistent with the view that these companies were not trying to rip off employees but intended to maintain their leadership while having future increases come in the form of performance pay rather than fixed pay.

Another study explores whether the compensation of companies with bundles of high-performance work practices is higher than companies without these practices and sheds indirect light on this issue (Blasi and Kruse, 1999b). Following Huselid (1995), the researchers used the definition of the high-performance workplace to create a score for a representative national sample of US workplaces in 1994 and 1997 on a High Performance Workplace Index which included practices such as problem-solving groups, self-directed work teams, flatter organization and so forth. In 1994, median regressions indicated that a one standard deviation increase in the High Performance Work Systems Index resulted in an average annual increase in the pay of non-managerial employees of only 1.45 per cent. However, some workplaces actually have more than one standard deviation increases from the mean in the country in High Performance Work Practices. The top I per cent of establishments have scores ranging from 10-26 in 1994 and 8-19 standard deviations from the mean in this Index. That means that pay increases could be roughly in the 10-30 per cent range. A surprising finding was that non-union establishments paid workers these premiums for increases in high-performance work practices while union sites did not. This suggests that the non-union sites may have had union avoidance in mind. But it also suggests that the union sites - which in the US generally have higher wages - are not succeeding in bargaining compensation for participation in such practices comparable to non-union work sites. Share ownership and profit sharing may be options in these situations where companies may believe that fixed pay systems are at maximum levels.

A final unpublished study looked at all ESOPs in privately held companies between 1988 and 1994. The companies were compared to non-ESOP companies in terms of the types of pension and benefit plans that they offered employees. The results show that the ESOP companies were more generous employers, that is, they provided ESOP plans in addition to providing greater access to traditional pension and other savings retirement plans (Kruse and Blasi, 2001).

In conclusion, it appears that employee share ownership can play a positive role in enhancing the wealth of employees when a fixed wage system is in decline. This does not address the problem of buying employee ownership with worker savings. Future policy should be guided by two principles: one, funding employee ownership with ESOP and broad stock option plans that are not dependent on worker savings or `bogus employer ownership' that workers are forced to buy themselves; and, two, making sure that

employee ownership comes on top of a fair pay package and is not substituting for other pay and benefits. It is the combination of these two policies that makes employee ownership a progressive practice for employees. If the evolution of the fixed wage system in the EU follows the US pattern, these issues will become increasingly relevant to the development of employee ownership in the EU. However, it will be very important to document, as research has done in the US, that employee ownership companies are more rather than less generous employers. In other words, no employee, no citizenry, no trade union and no large group of non-union workers would be likely to provide public support for employee ownership if they really believed that it promised more pay for better firm performance but did not actually deliver on that promise.

The special role of trade unions

The EPOC study of financial participation considered the role of trade unions in the EU. This analysis will focus only on the findings relevant to the union-related characteristics of establishments that had employee ownership. The findings were that neither the presence of a collective labour agreement nor the percentage of trade union members in four classes of workers in the establishment predicted the incidence of share ownership in establishments either positively or negatively at the 0.01 level of significance (Poutsma, 2001). It would thus appear that employee ownership is as common in unionized as in non-union settings in the EU.

No current comparable national data on the relationship between unionization and the incidence of share ownership is available for the US. Since approximately 90 per cent of the labour market is non-union in the US_ we would expect employee ownership to be nine times more prevalent in the US if it were randomly distributed among union and non-union workers. Scattered data do indicate that unions appear to be a relevant factor in employee share ownership schemes in the US where their incidence has been measured. For example, a recent study found significant incidence of broad-based stock options among union firms (Kroumova *et al.,* 2001). Among publicly traded companies, unions have played a leading role in the incidence of employee ownership in airlines (Blasi and Kruse, 1991). Moreover, the authors' review of. nationwide US news clippings from 1990 to 1999 suggests that unions play a modest but active role in the establishment of ESOPs in the US with regard both to worker buy-outs of successful enterprises from small business owners or family members and to worker buy-outs of weak enterprises. (For a review of some cases, see NCEO, 1989.) While evidence is sketchy, it cannot be established with certainty that unions have a greater presence in all the different types of employee ownership schemes in the US beyond their proportion in the general population (of workers, of establishments, and of companies). There is no systematic evidence that they have a lesser presence. (The best contemporary source on unionized employee ownership in the US is the Ohio Employee Ownership Center, based at Kent State University in Kent, Ohio. Their newsletter, *Owners At Work,* and recent book (Logue *et al.,* 1998) have detailed information on all aspects of union involvement. Their web site is at: http://dept.kent.edu/oeoc/)

Nevertheless, there are aspects of unions and employee ownership in the US that might be relevant to considering their role in the EU. Unions have been able to have a greater impact on employee ownership because they are so well organized, so vocal and so active in the public domain. First, US trade unions have been leaders in establishing minimum standards for fairness in ESOPs. The United Steelworkers Union of America has written standards (NCEO, 1989: 18-20) as does the AFL-CIO Industrial Union

Department. And trade unions have been active and aggressive in prosecuting lawsuits where workers' legal rights have been violated in worker ownership schemes. Second, unions have pioneered large complicated employee ownership transactions such as the union-led deal to trade wage and benefit investments for 55 per cent of United Airlines. Through these transactions, unions have had the important national influence on shaping government and public perception of employee ownership in the last decade. Third. a study of corporate governance among publicly traded corporations with significant employee ownership has found that, in all cases but one, the worker groups with seats oil the board of directors are represented by trade unions. The union campaign to secure four board seats at United Airlines typified this influence (Blasi and Kruse. 1991). I Inions have pushed for and legitimated the notion that corporate governance rights go along with employee ownership. Moreover, many privately held ESOPs (which were the result of sales from family members or small business owners to workers) have union representatives on the boards of directors. Fourth, unions have been active in working with investment bankers to develop union-led employee ownership transactions and investment funds and mutual funds that invest in union transactions. Fifth, unions in the US have become very involved with institutional investors in successful lobbying for changes to securities laws that make it easier for individual employee shareholders to put issues on the agenda of shareholder meetings. This has led to very active union involvement in shareholder activism. (For a detailed overview of this, see O'('onnor. 1997; Wall Street Journal, 1993; Journal of Commerce, 1993.) Sixth, unions are increasingly realizing that the mounting collapse of the fixed wage and benefit system requires them not only to push for protection of fixed wages and benefits for their members. It also requires unions to become adept at negotiating profit sharing and stock ownership compensation. While some unions refused in the past to do this because they felt it might reduce total worker compensation by creating variable wages, others now recognize that it is sometimes possible to increase total compensation by supplementing the best possible negotiated fixed wage and pension payment with additional variable profit sharing and employee ownership compensation arrangements. (For an example, see Dow Jones & Co. (1995) on the Phillip Morris Cos. example.) Thus, the union attitude on employee ownership has shifted from what it was during and after the 1920s.

While the role of unions might be viewed as a system difference because of the stark contrast in both the incidence and the power of trade unions in the US and many EU countries, the US experience suggests that there is a varied and important role for EU trade unions in the employee ownership arena if the EU decides to develop more in this direction. Both a minimum and a maximum role for unions are possible in the EU. A minimum role for EU unions would involve establishing minimum standards and prosecuting lawsuits to protect workers' rights in important cases, pioneering large complicated transactions, negotiating and developing corporate governance rights with employee ownership and shaping governmental action through lobbying. This would require union participation in and experience with various types of employee ownership schemes in various member states. Without having employee ownership dominate unionization, at this level of involvement, unions in the f l) could play a constructive and positive role in how employee ownership develops. A maximum role for EU unions would involve working with investment bankers to develop union-led employee ownership transactions and investment funds and mutual funds, making it easier for individual employee shareholders to put issues on the agenda of shareholder meetings, and negotiating profit sharing and stock ownership compensation.

Conclusion

The US has developed a varied and widespread employee ownership sector. This sector has two distinct sub-sectors, the public stock market and small privately held firms. There is a significant gap in the incidence and development of employee ownership between the EU and the US when both sectors are examined. Socio-economic system differences between the EU and the US suggest two broad conclusions. First, EU employee ownership will be more likely to develop if the EU expands citizen participation in its public stock markets and creates legislative support for selling smaller family businesses to employees. Second, the development of employee ownership in the US can be better understood by appreciating the subtleties of how the argument that ownership causes superior performance of employee-owned firms is presented. Most employee ownership firms will use the pull model of employee ownership where the firm never makes the extreme commitments of cultural transformation that are necessary to drive better corporate performance. We expect that the push model of employee ownership will continue to be the basis of a more `utopian' image of employee ownership. The pull model of employee ownership is based on the notion that the structure of compensation has changed in modern society and corporations are increasingly looking for ways to provide modest fixed wage commitments and pay after performance has taken place. Thus, the collapse of the fixed wage system - not a phenomenon that the authors of this article support - plays a key role in the emergence of employee ownership in the US. Research on the wealth effects of employee ownership supports the perception that employee ownership firms are more generous. It is only this evidence that creates the basis of broad public support of the idea. This last observation helps explain why employee ownership has become so popular in the US despite the fact that it violates a common precept of investment, namely, that a diversified basket of investments is the most rational market investment. A final issue is that unions can play a special role in shaping the standards of employee ownership.

There is a rather significant gap between the EU and the US employee share ownership. In parliaments and business schools throughout the EU, there is evidence that some citizens believe this gap is stunting EU economic growth, business growth and high-technology development, because the new technologies of emerging firms and the increasing knowledge basis of traditional firms precisely requires offering high-performance-related gains to workers. Moving the EU in the direction of a more equity-centered workplace will involve appreciating the experience of the US. We believe that both systems will continue to converge in terms of the collapse of the fixed wage and benefit systems, the rising importance of knowledge firms, the importance of creating equity formats to reward workers, and the need to design rational methods to protect workers from undue risk, either as a result of concentrating too many of their savings in employee ownership or as a result of not having corporate governance rights to protect their investments in their own firms. Recently, an international website has been developed to encourage debate and dialogue throughout the world on expanded capital ownership. It is called the Capital Ownership Group at http://cog.kent.edu/

The terrible weakness of the US system has been demonstrated by the recent market crash. Too much US employee ownership was `bogus employee ownership' based on workers purchasing stock with their savings. The US system needs to convert itself more to a system based on ESOPs, company stock marches in 401k plans and broad-based stock options, none of which uses employee savings. To the extent the EU wants to learn about employee ownership from the US, it should not imitate these mistakes.

References

American Capital Strategies (ACS) (1999) *The ACS Employee Ownership hulcx.* (Available :u http://esops.com/acsempow.htm; the general site has much material on employer ownership at http://american-capital.com/index.htm and americancapitalonline.com)

Becker, B. and Huselid, M.A. (1998) `High Performance Work Systems and Diem I'crform:mrc: A Synthesis of Research and Managerial Implications'. In Ferris, G.R. (ed.) *R,,rar,lr ire Personnel and Human Resources Management, Vol.* 16. Greenwich. CT: JAI Press, pp. s.t 1])_1. (Available at http://www.rci.rutgers.edu:80/-huselid[bibliogr.htm)

Becker, B., Huselid, M. and Ulrich, D. (2001) *The HR Scorecard: Linking People, Sirate,mr. aad Performance.* Cambridge, MA: Harvard Business School Press.

Blair, M., Kruse, D. and Blasi, J. (2000) `Is Employee Ownership an Unstable Form? Or a Stabilizing Force?'. In Kochan, T. and Blair, M. (eds) *The New Relationship: Human Capital in the American Corporation.* Washington, DC: The Brookings Institution.

Blasi, J. (1988) *Employee Ownership: Revolution or Ripoff?* New York: HarperCollins. (Available at http://american-capital.com/bookstore/eoror title-page)

Blasi, J. and Kruse, D. (1991) *The New Owners: The Mass Emergence of Employee Ownership in Public Companies and What It Means to American Business.* New York: HarperCollins. (The full text is available at http://www.rci.rutgers.edu/ - blasi/)

Blasi, J. and Kruse, D. (1999a) *Strategic Hunan Resource Management and the Incidence of High Performance Work Innovations: The Role of Industry Group Differences and Environmental Uncertainty.* New Brunswick, NJ: School of Management and Labor Relations.

Blasi, J. and Kruse, D. (1999b) *Pay Patterns in High Performance Work Systems.* New Brunswick, NJ: School of Management and Labor Relations. (Copies are available from the authors.)

Blasi, J. and Kruse, D. (1999c) *US Polling Data on Employee Ownership over the Last Century.* New Brunswick, NJ: School of Management and Labor Relations. (Copies are available from the authors.)

Blasi, J. and Kruse, D. (2001) `Employee Equity: Employee versus Owner Issues in Organizational Behavior'. In Cooper, C.L. and Rousseau, D.M. (eds) *Trends in Organizational Behavior: Employee versus Owner Issues in Organizations, Vol.* 8. Chichester and New York: Wiley.

Blasi, J., Conte, M. and Kruse, D. (1996) `Employee Stock Ownership and Corporate Performance among Public Companies', *Industrial and Labor Relations Review, 50(1):* 60-79.

Blasi, J., Kruse, D., Sesil, J., Kroumova, M. and Carberry, E. (2000) *Stock Options, Corporate Perfornance, and Organizational Change.* Oakland, CA: National Center for Employee Ownership. (The full research report with data tables is available on line at http://www.nceo.org/library/optionreport.html)

Blasi, J.R., Kruse, D. and Bernstein, A. (2003) *In the Company of Owners.* New York: Basic Books.

Brealey, A. and Myers, S.C. (1988) *Principles of Corporate Finance.* New York: McGraw-Hill.

Carberry, E. and Rodrick, S. (2000) *Employee Stock Purchase Plans.* Oakland, CA: National Center for Employee Ownership.

Dow Jones & Company (1995) 'Blue Collar Workers Become Blue-Chip Investors', 10 March. Dow Jones News Service. (Available from Dow Jones News Retrieval at dowjones.com)

European Foundation for the Improvement of Living and Working Conditions (1997) *New Forul.c of Work Organization: Can Europe Realize Its Potential? Results of a Survey of Oirert Employee Participation in Europe.* Luxembourg: Office for Official Publications of llw European Communities.

Foundation for Enterprise Development (2001a) *Introduction to Equity Conrpeusotion. I .aiolla.* ('A: Foundation for Enterprise Development. (Available from www.fcd.org or 'A'" \A.alllazoll.coln)

Foundation for Enterprise Development (2001b) *7'he Enrrelm' nenm 's Guide to Eyui(y Compensation.* LaJolla, CA: Foundation for Enterprise Development. (Available from www.fed.org or www.amazon.com)

Foundation for Enterprise Development (2001 c) *Transitioning O11710-ship in a l'rir'are Company: The ESOP Solution.* LaJolla, CA: Foundation for Enterprise Development. (Available from www.fed.org or www.amazon.com)

Hansmann, H. (1996) *The Ownership of Corporations.* Cambridge, MA: Harvard University Press.

Hollod, L. (1999) `The ACS (American Capital Strategies) Employee Ownership Index Update', *Journal of Employee Ownership Law and Finance, 1(3):* 115-20. (The journal is available on order from www.nceo.org)

Huselid, M.A. (1995) `The Impact of Human Resource Management Practices on Turnover, Productivity, and Corporate Financial Performance', *Academy of Management Journal,* 38(3): 635-72. (Available at http://www.rci.rutgers.edu:80/ -- huselid/bibliogr.htm)

Jacoby, S.M. (1985) *Employing Bureaucracy: Managers, Unions, and the Transformation of Work in American Industry, 1900-1945.* New York: Columbia University Press.

Jacoby, S.M. (1997) *Modern Manors: Welfare Capitalism Since the New Deal.* Princeton, NJ: Princeton University Press.

Journal of Commerce (1993) `Securities and Exchange Commission Backs Employee Shareholder in Consolidated Freightways Case: Workers Get Nod to Introduce Resolutions', *Journal of Commerce,* 15 March. (Available on Lexis/Nexis and Dow Jones News Retrieval.)

Kardas, P.A., Scharf, A.L. and Keogh, J. (1998) *Wealth and Income Consequences of Employee Ownership: A Comparative Study from Washington State.* Seattle, WA: State of Washington, Department of Community Trade and Economic Development, Business Retention and Expansion Program. (Available from the authors or on order from www.nceo.org)

Kroumova, M. (1999) *Employee Ownership in Employee Savings Plans 1989 and 1993.* New Brunswick, NJ: Rutgers University School of Management and Labor Relations. (Available from Dissertation Abstracts in the Internet.)

Kroumova, M.K., Sesil, J.C., Kruse, D.L. and Blasi, J.R. (2002) 'Broad-based Stock Options. A Union-Non-union Comparison'. In Lewin, D. and Kaufman, B.E. (eds) *Advances in Industrial and Labor Relations, Vol. 11.* New York: JAI Press, pp. 69-94.

Kruse, D. (2002) Research Evidence on Prevalence and Effects of Employee Ownership: Testimony before the Subcommittee on Employer-Employee Relations, Committee on Education and the Workforce, US House of Representatives, 13 February.

Kruse, D. and Blasi, J. (1997) `Employee Ownership, Employee Attitudes, and Firm Performance: A Review of the Evidence'. In Lewin, D., Mitchell, D.J.B. and Zaidi, M. (eds) *The Human Resource Management Handbook, Part I.* Greenwich, CT: JAI Press, pp. 113-52.

Kruse, D. and Blasi, J. (1999) `Public Opinion Polls on Employee Ownership and Profit Sharing', *Journal of Employee Ownership Law and Finance,* 11(3): 3-26. (The journal is available on order form www.nceo.org)

Kruse, D. and Blasi, J. (2000) `The New Employer-Employee Relationship'. In Ellwood, D.T., Blank, R.M., Blasi, J., Kruse, D., Niskanen, W. and Lynn-Dyson, K.A. (eds) *A Working Nation: Workers, Work, and Government in the New Economy*. New York: Russell Sage Foundation.

Kruse, D. and Blasi, J. (2001) *Press Release: Study on the Population of Privately-held US Firms with ESOPs.* New Brunswick, NJ: Rutgers University School of Management and Labor Relations. (For a summary of the study, see http://www.nceo.org/library/esop_perf.html and for the data tables see http://www.nceo.org/library/esop_perf_tables.html)

Leonhardt, D. (2002) `Stock Options Said Not To Be As Widespread As Backers Say', *The New York Times,* 18 July.

Logue, J., Glass, R., Patton, W., Teodosio, A., Thomas, K. (1998) *Participatory Employee Ownership: Best Practices in Employee Ownership.* Kent, OH: Ohio Employee Ownership Center, Kent State University. (Available at tel: + 330 672 3028 or at their website at www.kent.edu .oeoc or Amazon.com)

McCarty, M.H. (2001) *The Nobel Laureates.* New York: McGraw-Hill.

Mishel, L., Bernstein, J. and Schmitt, J. (1999) *The State of Working America, 1998-1999.* Ithaca, NY: Cornell University Press. (Available from Amazon.com)

National Center for Employee Ownership (NCEO) (1989) *The Employee Ownership Union Handbook*. Oakland, CA: NCEO.

National Center for Employee Ownership (NCEO) (1996) *Corporate Governance in Employee Ownership Companies.* Oakland, CA: NCEO. (Available on order from www.nceo.org)

National Center for Employee Ownership (NCEO) (1999) A *Sioi,. iiral Portrait of Employee Ownership.* (Available at www.nceo.org under the heading Columns.)

National Industrial Conference Board (1928) *Employee Stock Purchase Plun.e in the US.* New York: National Industrial Conference Board. (Copies are available only at major 1IS University Libraries such as Princeton University.)

New York Stock Exchange (2000) *Share Ownership 2000.* New York: New York Stock Ixchange. (Available at: http://www.nyse.com/pdfs/05 INVESTINGPUBLIC.p(Il)

O'Connor, M.A. (1997) `Organized Labor as Shareholder Activist: Building ('oalitiom to Promote Worker Capitalism'. *University of Richmond Law Review,* December.

Poutsma, E. (2001) *Recent Trends in Employee Financial Participation in the l:uropran Union.* Luxembourg: Office for the Official Publications of the European Union.

Profit Sharing/401k Council of America (2001) *44th Annual Surer, of Pro/it .S'harin,r and 401(k) Plans.* Chicago, IL: Profit Sharing/401k Council of America. (Availahlc at http://www.psca.org)

Rodrick, S. (2001) *Section 401(k) Plans and Employee Ownership.* Oakland, CA: National tamer for Employee Ownership.

Sesil, J., Kroumova, M., Kruse, D. and Blasi, J. (2000) 'Broad-Based Employee Stock [)) anon. in The US: Company Performance and Characteristics', *Academy of Managemew Be.w l'aprr' Proceedings.*

Sesil, J., Kruse, D. and Blasi, J. (2001a) *Sharing Ownership via Employee Stork (hmrruhip.* Helsinki, Finland: Property Rights Regimes, Microeconomic Incentives and Devclolmrcnt. Conference, World Institute for Development Economics Research and The United Natiom University.

Sesil, J., Kroumova, M., Blasi, J. and Kruse, D. (2002) 'Broad-based Stock Options in New Economy Firms', *British Journal of Industrial Relations, 40(2):* 273-94.

Weeden, R., Carberry, E. and Rodrick, S. (1998) *Current Practices in Stock Option Plun Uesign.* Oakland, CA: National Center for Employee Ownership. (Available from www.nceo.org)

US Department of Labor, Bureau of Labor Statistics (US DOL) (2000) Pilot Survey on the Incidence of Stock Options in Private Industry in 1999.

US Government General Accounting Office (US GAO) (1986) *Employee Stock Ownership 1'/uni: Benefits and Costs of ESOP Tax Incentives for Broadening Stock Ownership.* Washington. DC: US General Accounting Office. (Available from the agency.)

Uvalic, M. (1995) *Advances in Economic Analysis of Participatory and Labor-Managed k irrn,,* Vol. 5. *The Pepper Report: Profit-Sharing and Employee Share Ownership in the Luroprun Community.* Greenwich, CT, and London: JAI Press, pp. 77-104.

Wall Street Journal (1993) `Consolidated Freightways Is Set Back on Dispute over I'rox\ Resolutions', *The Wall Street Journal,* 15 March: B6a. (Available from Dow Jones News Retrieval and Lexis/Nexis.)