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Worker ownership and collaborative production

Charles Heckscher Rutgers University May, 2013

Abstract

Purpose

To explore the challenges of worker ownership in complex and distributed collaborative production systems.

Approach

Review of emerging developments in the organization of economic production and conceptual exploration of their implications for the ownership regime, and for worker ownership.

Findings

Worker ownership research and advocacy usually take for granted <u>what</u> is to be owned: a factory or firm, exchanging on open markets. But this form of production, analyzed in the markets-hierarchy literature, is increasingly in question as more value is generated through flexible cross-boundary collaborations. As a result, the nature of ownership rights are contested from both within and without the business community.

Practical implications (if applicable)

This paper explores some implications of these developments on employee ownership as a practical ideal: what are the main possibilities for the evolution of "ownership" rights in collaborative processes?

Worker owners need to consider their relation to, and distribution of rights among, other collaborative partners, including knowledge contributors and interdependent stakeholders.

Social implications

Implies a need to move beyond markets-hierarchies frameworks, in which concern is focused on the governance of firms, to building a set of mechanisms for the organization and governance of production networks.

Originality/value of paper

Poses a set of problems for the worker ownership field emerging from the changing nature of production and organization.

Keywords: ownership, collaboration, knowledge, stakeholders

Classification: conceptual paper

The worker ownership literature generally assumes that economic production is organized in firms, with clear ownership of their products, and linked by market exchange. The question raised from that perspective is to what extent employees, rather than individuals or outside shareholders, should gain decision rights in the firm and financial returns from it. But economic developments over the last few decades have put the basic productive model in question, creating both theoretical and practical managerial problems that a shift towards worker ownership would not solve by itself.

The issue is that economic production is gradually shifting from a model centered in large, closed bureaucracies to more decentralized and fluid network forms. Production requires forms of collaboration that are organized *neither* in a classic employment relation *nor* through an arms'-length contract for the delivery of goods – relations in which people from different companies work together in ongoing task forces and initiatives. This creates enormous and so-far-unresolved difficulties in assigning the rights and accountabilities of ownership.

The worker ownership literature generally looks at only one slice of the problem: where workers enter into an employment contract to provide their labor, it makes the case that they should share rights in decision-making and economic returns (Ellerman, 1999). But there are at least four growing issues in economic production posing problems for ownership rights that would not be solved by transfer of ownership to workers.

1. Knowledge production

Many have argued center of economic value-added is moving from mass production to knowledge (Grant, 1996; Nonaka, Toyama, & Nagata, 2000). Though the speed and extent of this shift are debated, there is little doubt that physical labor counts for less, and advanced knowledge counts for more, than in the past.

In the mass production model, knowledge was an occasional addition: that is, there were Research and Development departments that would periodically create innovations that were then passed to the production side. Knowledge work was almost entirely internal to the firm: generated through internal conversations (known in the old Hewlett-Packard as "next-bench" innovation); most managers, and even the R&D people, rarely attended outside conferences. Thus knowledge could plausibly be said to be owned by the company, and could be governed by existing property rights, including employee-ownership forms (partnerships, ESOPs) as well as public shareholding and private ownership.

But firms are increasingly reaching beyond their own boundaries for knowledge. This makes perfect sense from the point of view of production: if engineers in India know something relevant to a problem, the solution will be more easily found if they are involved. In knowledge-intensive companies, these sorts of collaborative cross-boundary processes are commonplace. Thus companies in practice are forming a wide range of relations that are outside the traditional ownership frame: alliances, partnerships, employee-sharing, consortia, and so on (Bøllingtoft, Donaldson, Huber, Håkonsson, & Snow, 2011; Gulati & Singh, 1998; Hagel et al., 2010).

Such relations are growing because the two traditional choices – market transfer and corporate takeover – are often ineffective. On one hand, knowledge cannot be

transferred in the same way as goods or services: if I tell you what I know, we *both* know it – I don't stop knowing it myself. Even more important, knowledge in complex production is rarely just a definable commodity that can be bought in a market transaction: it is valuable only as part of an interactive collaborative process. What is sought is not a particular piece of information, but a general expertise that can contribute, through discussion and recombination, to the generation of new solutions.

On the other hand, knowledge is in many cases not best managed by bringing a person or company into the organization through hiring or takeover. First, the knowledge relevant to a given problem may not be relevant to the longer-term mission of the firm; thus an employment relation is often seen as too rigid. Second, buying a firm for its knowledge means that you are buying very fragile assets: they can walk out the door the day after the purchase. Finally, pulling the people into an existing firm often undermines the qualities that enables them to generate the knowledge in the first place: they are expected to spend much more time dealing with the internal hierarchy and less interacting with their networks of outside colleagues.

In general, knowledge is a fluid and evolving resource; trying to rely on internal resources limits a process that inherently needs continual interactive sustenance. Hence the growth of relations that are neither based on neither market nor hierarchy. Perhaps the clearest instance is the interpenetration of traditional large companies, such as IBM and Apple, open-source software production. Open source products like Firefox and varieties of Linux are produced through networks of volunteers. The companies have found that even their legions of carefully-chosen engineers cannot match the knowledge and innovativeness of these extended networks; so they have entered into collaborative relations, in which they create consumer interfaces that can be sold commercially in exchange for providing resources to the open-source community (Ferraro & O'Mahony, 2012; Lerner & Schankerman, 2010).

These forms of knowledge sharing and exchange are emerging rather pragmatically rather than through clear application of consistent principles. The legal system has tried to apply traditional ownership principles but has run into great difficulties. Battles over intellectual property have spiraled out of control. Judges have not yet agreed on principles. To take one instance, Apple has consistently tried to assert property rights over knowledge, arguing that it owns the "look and feel" of its software and hardware products. The results have been inconsistent and sometimes ludicrous. One case in 2012 declared that Samsung did not have the right to use rounded corners on its tablets because Apple owned that aspect of the design (*Apple, Inc. v. Samsung Electronics Co., Ltd.*, 678 F.3d 1314 (Fed. Cir. 2012)). Beyond Apple, there have been lawsuits, some of which have dragged on for years, claiming that ideas like the hyperlink belong to someone and that we should all pay every time we click on a link. These extremes become absurd, but the reality of wide-open use of intellectual property suits to claim complex knowledge is a real and constant issue.

All this is inefficient. It strangles innovation and effective production (Benkler, 2002). The Guardian reports, for instance, that "App developers withdraw from US as patent fears reach 'tipping point'":

"App developers are withdrawing their products for sale from the US versions of Apple's App Store and Google's Android Market for fear of being sued by

companies which own software patents - just as a Mumbai-based company has made a wide-ranging claim against Microsoft, Apple, Google, Yahoo and a number of other companies over Twitter-style feeds, for which it claims it has applied for a patent. Software patent owners in the US have latched onto potential revenue streams to be earned from independent developers by suing over perceived infringements of their intellectual property." (Guardian.co.uk, 15 July 2011)

Companies are pushing their ownership claims ever further to try to control the fluid nature of knowledge. The spread of "non-compete" clauses in contracts, for example, essentially asserts rights over the ideas that people have in their heads even if they haven't said anything about them; there is strong evidence that this retards economic growth (Marx, Singh, & Fleming, 2010; Samila & Sorenson, 2011). Current efforts to assert property rights in human genes have similar negative effects (Williams, 2010).

One result is that a parallel economy is being built around open source, with an entirely different property regime. This has produced a set of property licenses essentially protecting ideas as common (the "General Public License," or GPL). These efforts, very foreign to traditional ideas of property and markets, have penetrated deep into the mainstream economy. Microsoft produced Internet Explorer with a traditional internal process; but Mozilla produced Firefox with an open-source process, with hackers from all over the world making contributions and no one claiming exclusive property rights. Google, meanwhile, has produced Chrome partly internally and partly building with open-source modules. Google and IBM have been leaders in exploring such hybrid forms, which has not yet solidified in practice or law (Lerner & Schankerman, 2010; Lessig, 2006).

The General Public License is not a form of worker ownership; indeed it is not ownership at all in any familiar sense. It has not been tested much in the legal arena, and lawyers have not developed a consistent point of view towards it. It brings back elements of ancient laws of commons, but also includes various novel twists such as limited exclusivity (Abramowicz, 2010).

More broadly, the issue of who owns knowledge is not helped by saying that workers should own it. The core problem is not who owns it but what it means for it to be owned. The answer must probably involve some rather deep transformation in our conception of the rights and privileges of property.

2. Value chains

Even outside "knowledge" industries, there is very strong evidence that vertical integration, in which firms own all the factors of production, is declining in favor of a model in which separate firms perform specialized functions that come together only at the end of the process (Gereffi, Humphrey, & Sturgeon, 2005; Greenan, Kalugina, & Walkowiak, 2007). This development can be seen as just the latest evolution of the logic of the division of labor, articulated by Adam Smith as the core of modern capitalism, which suggests that the economy does best when people – and by extension, firms – specialize, and then link their specialized activities together in some form of cooperative relation. Value chains are composed of companies that focus on one particular element of production and build their policies around it, from recruitment to organization to marketing. Just as in Smith's famous example of the pin factory, these specialized actors

or modules can do their particular modularized tasks better than more general-purpose ones.

The limiting factor in the division of labor has always been the ability to integrate or organize the modules. Large bureaucratic firms grew when product complexity and demand grew faster than the ability of markets and civil society to support them. They provided training, for example, because there were no good outside training systems that could prepare people for the difficulty of managing an automobile plant; and they financed a great deal of their own growth because of the inadequacy of traditional external financing mechanisms. But over time external mechanisms – training mechanisms, sophisticated market exchanges, wider-ranging capital institutions – have developed a great deal, making it more feasible to link formally independent businesses in integrated production processes. The benefits include those usually associated with the increased division of labor, including efficiency and innovation (Khanna & Palepu, 1997).

Value chains can be compatible with a worker ownership regime as long as there are clear market transfers of product along the way - so one company makes headlights, for example, and another wiring harnesses, and both sell their products through a market transaction to a third that puts them together into headlight assemblies. The problem is that this model is relatively inefficient, with high costs incurred in the contracting and transferring. The Japanese alliance networks, or *keiretsus*, have led the way to another approach in which employees of the different companies work together in an ongoing way to share plans and techniques, leading to higher quality and more rapid innovation (MacDuffie & Helper, 2006). Assigning of ownership rights is not a helpful tool in managing these collaborative processes. The Japanese handle them relatively well because their strong existing communal relations dampen the need to assign clear ownership rights to each stage.

3. "Non-traditional" work

The rise of knowledge value has been a major cause, , though not the only one, of the weakening of the connections between firms and employees. Worker ownership, by contrast, is generally seen as a way of attaching employees more strongly to firms. This makes sense in the context of firms that are relatively stable and bounded: the research evidence is convincing that in such circumstances, increased loyalty and security create economic as well as social value. The problem is that those circumstances are a declining part of the economy.

One key indicator is the weakening of internal labor markets in general. Large companies are engaging in much more "churn" than in the past - that is, economically healthy companies lay off sectors of their workforces every year and hire new people. Sometimes this is a "talent" strategy - getting rid of the worst performers; more often, however, it is a capability strategy, trying to keep up with adjustments in market demands and technology. Qualitative research in companies is very consistent in suggesting that at both blue-collar and - the truly novel element - white-collar levels there is much more willingness to get rid of people and also to take on new people who have not come up within the firms (Lawler, 2005; Tuna, 2009; Uchitelle, 2006). Quantitative evidence of this shift is difficult - the data are not collected consistently

across companies – but the most rigorous recent studies have confirmed the trend over the last two decades (Farber, 2007; Hollister, 2011; Osterman, 2001).

The rise of contingent, and especially temporary, work, is a trend common to most of the advanced industrial world (Belous, 1995; Greenan et al., 2007; Kalleberg, 2000). In the U.S., there is great debate about how extensive it is: most estimates are around 30% (US Government Accountability Office, 2006; Valenzuela, 2011). The temporary help industry has grown particularly rapidly in the last few decades.

One view of this shift is that it is driven by short-sighted managerial cost-cutting which undermines productivity beyond the short term. To the extent that this is the case, a worker ownership regime would benefit everyone by slowing or reversing a noxious trend. Yet there is considerable evidence for a contrary view: that some, at least of the shift is driven by the changing nature of production, which requires increased flexibility in fast-changing competitive environments. This would mean that the trend would be hard to slow and would be likely to accelerate. The likelihood is that the erosion of internal labor markets is due in part to both factors – but the importance of the second creates challenges for worker ownership models.

Without trying to build the whole argument here, I would note a set of solidly-constructed arguments that the increased emphasis on flexibility is rooted in deep changes of late capitalism, especially the maturation of markets, increased sophistication of consumers, and increased education of workers. These factors lead both to more unstable demand and also to greater capability in responding to it. The stable, closed firm is unable to rise to this level of responsiveness, and the more open networked firm is better at it (Amable & Lung, 2008; Benkler, 2007; Boltanski & Chiapello, 2006; Deloitte Center for the Edge, 2011).

To the extent that this is true – and we don't need to make any extreme claims about the transformation of capitalism in this context – employee ownership may fail to deal with this important emerging trend. And for workers who expect the payoff to come many years in the future will be taking a major gamble that the forces of change will not overwhelm their investment.

The goal of creating a mutual bond of responsibility in the workplace is a worthy one, but one has to ask whether employee ownership creates problems by limiting that bond to the boundaries of a single firm; many mutual relations now cut across those boundaries.

4. External stakeholder claims

In recent decades there has been a substantial rise in demands on business by stakeholders other than workers. These most frequently include local communities and environmental groups, but may also include many others. The original "New Deal" compromise channeled these other societal needs through government, but as that deal has unraveled the groups are taking up their own causes. (Beloe, Elkington, Hester, & Newell, 2003; Friedman, n.d.). Some companies have established processes for dialogue with such stakeholder groups, usually within the framework of Corporate Social Responsibility (European Multistakeholder Forum On CSR, 2004; Spar, 2002; Wei-Skillern, 2004). A large academic literature has grown up around stakeholder management (Freeman, Wicks, & Parmar, 2004; Friedman, n.d.), including some

attempts at redefining the legal responsibilities of corporations to extend beyond shareholders (Leung, 1997). About half the states have passed laws enabling consideration of a broader range of stakeholders, and seven have (as of this date) permitted a form of incorporation that *requires* stakeholder responsiveness.

From the stakeholder point of view, employees are just one of a range of groups that are affected by corporate actions and that should have rights of some sort – and not necessarily the most important one. The consequences of corporate decisions range far beyond employees. There are many cases in which employees and managers have united to pursue goals that are contrary to the interests of other key stakeholders, and arguably against the public interest: auto workers who fought regulations on pollution and fuel economy, communications workers who sought to preserve monopolies. In general, workers and managers share interests in maximizing profits and minimizing competition, so a shift of ownership to the former would not reduce the tendency to externalize costs as much as possible.

Thus there is an emergent point of view rejecting the core idea that corporations are, or should be, merely market actors pursuing profits within market constraints. The alternative is to see them as part of a network of institutions contributing to a healthy society, with mutual obligations. The maximization of profits is beneficial to society some of the time under some circumstances, but not all the time in all circumstances. This, unlike the earlier points, is primarily a *moral* argument - that the good of society requires balancing productive requirements with other values.

Government regulation, the classic way of bringing "other" considerations to bear, is increasingly perceived as ineffective and clumsy; again, this is not just a US phenomenon but common throughout the advanced industrial world (Pharr, Putnam, & Dalton, 2000; WorldPublicOpinion.org, 2008). It appears once again that neither markets nor states are capable of organizing conflicting moral claims. Many have therefore argued the need for collaborative relations of one kind or another – stakeholder engagement through forums, or diverse representation on boards and other decision-making bodies (Freeman et al., 2004; Leviten-Reid & Fairbairn, 2011; Varughese & Ostrom, 2001).

These solutions may or may not be viable: so far there is little evidence of effective alternate models of stakeholder engagement on a wide scale. The point here, however, is that worker ownership does not help solve the problem. Existing conceptions of ownership in effect replace shareholders with employees as the primary stakeholder; they offer neither rights nor engagement to a broader range of stakeholder concerns. There is no reason that a worker-owned firm should be more environmentally sensitive, or more attuned to product quality, than a conventional firm; owners in both cases seek maximization of profit.²

² There have been some experiments with multistakeholder cooperatives, which do address the problem I describe (and have had some success) (Leviten-Reid & Fairbairn, 2011); but they necessarily dilute the ownership rights of workers.

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¹ There have been some partial successes, such as the decisions over Shell's North Sea oil drilling after the Brent Spar disaster (Livesey, 2002; Wei-Skillern, 2004), but we are very far from a regularized institutional framework.

Thinking about solutions

The common thread through these problem areas – knowledge production, value chains, non-traditional work patterns, and stakeholder engagement – is that the familiar markets-hierarchies analysis is insufficient, *both* for narrow considerations of economic production *and* for social justice. Instead, or rather in addition, there is a need for collaborative networks in which multiple actors work together across boundaries. Knowledge is best developed through such networks; coordination of production often requires close cooperation along a distributed value chain; and the achievement of social welfare often requires direct engagement of stakeholders.

This presents profound problems for ownership as currently conceived. The existing legal concept of ownership is heavily grounded in master-servant law and assumes that there are clear lines of management responsibility; it has trouble dealing with situations of distributed responsibility and specialized contribution in team-like settings. In Marilyn Strathern's (1996) phrase, the existing framework requires "cutting the network" in ways that do not reflect the actual contributions of its various members.

The challenge is to develop a form of ownership that recognizes and encourages processes of flexible collaboration that often cross boundaries defined in the current legal and organizational regime, and that respond to multiple stakeholder concerns. Worker ownership certainly has a role in this evolution, but it faces the same challenges as traditional firms in dealing with collaborative networks.

Ownership is not an immutable natural principle; it is a more elastic and historically contingent concept than is often recognized. It has changed fundamentally in the past, so there is no reason to think it cannot change in the future. An equivalent moment is the problem caused by the rise of large corporations in the late 19th century. Property law at that time was conceived as applying to individuals: persons controlled the things they owned. This was true of businesses as well as land. The owner of a factory controlled the resources and people within it and could decide how to use them, within a few limitations. But when corporations started growing in size, helped by the mastery of bureaucratic techniques of organization, there were two new consequences: they gained power well beyond their markets, and they required financing beyond the holdings of an individual or small group.

These developments led to the development of the law of public corporations. One key was the separation of ownership from managerial control (Berle & Means, 1932). Another, less widely-noted, was the abstraction of the *purpose* of corporations. Since they were now owned by a widely-dispersed mass of people, corporations could no longer set their purposes from the personal desires of the owners; there had to be some more abstract and stable goal that would ground a contract with the large number of stock owners. This came to be defined over time essentially as the pursuit of profit.

This shift in the notion of ownership was highly contentious, leading to titanic battles both in the courts and in electoral campaigns. The courts led the way in giving expansive rights to corporations; the Greenback, Granger, and Populist movements arose to combat the perceived imbalance of power; Theodore Roosevelt raised the centrality of government regulation as a way to maintain the balance. It was not until at least the 1930s that a reasonably stable view of corporate property was established.

In simple terms, we can describe what happened over that period as a redefinition of property to encompass new productive forces. Prior to the mid-19th century production occurred primarily in small workshops which could easily be linked to property rights; this is certainly what Adam Smith had in mind. When it became clear that organization in large bureaucratic structures greatly increased productive capacity, a redefinition of property was needed to encompass that form.

If, as I have argued, we are currently in a phase in which collaborative networks frequently demonstrate greater productive capacity than large bureaucracies, then we need once more to redefine ownership in order to encompass them. How this is to be done is still to be worked out, and we may have new versions of Populist and Granger movements before we are finished. The legal profession is increasingly aware that the existing master-servant framework is inadequate, and there is lively debate about new doctrines such as "entrepreneurial responsibility" and "participation as theory of employment" (Bodie, 2013).

One particularly interesting current development is the "Benefit Corporation," a new incorporation statute recently written into statutes in fifteen states. Corporations incorporated under this form are required to respond to multiple stakeholders – specifically employees, customers, local communities, and the environment, in addition to shareholders – and must be assessed annually on these dimensions by independent parties. In principle shareholders can bring action against these companies for failure to "adequately consider" those stakeholder interests. (Clark & Vranka, 2012) That procedure has not yet been tested in court, and it is likely to cause some earthquakes when it begins to happen.

Some Benefit Corporations, though not all, are owned by their workers. But whether or not have they ownership rights, workers have rights in the statute of incorporation: treatment of employees is among the criteria that companies are measured on and that they can be held legally responsible for. In cases where workers are also owners, they bear responsibility to the same range of stakeholder criteria. In other words, their ownership rights are *different* from those of worker-owners incorporated under classic statutes.

This is far from a complete solution, even in theory, to the problems raised by the rise of collaborative production: it addresses only one piece, specifically the problem of balancing multiple stakeholders in interdependent relations. It does not solve the problem of "cutting the network" in assigning property rights to knowledge. The GNU General Public License (GPL) is one radical solution used for free software projects such as Linux: it requires mainly that anyone using or modifying the product *not* assert any restrictions on further use or sharing. This has caused a fierce reaction from such protectors of capitalist markets as Steve Ballmer of Microsoft, who has referred to it as a "cancer that attaches itself in an intellectual property sense to everything it touches." ("Microsoft CEO takes launch break with the Sun-Times," 2001). Yet the GPL has in fact merged in many and complex ways with commercial activity: companies like IBM and Google make extensive use of open-source software and contribute to GPL-licensed code.

There are also other suggestions for new conceptions of property rights, such as the "Platform for Privacy Preferences" proposed by Lawrence Lessig (2006, p. 226 ff);

limited exclusivity (Abramowicz, 2010); public stakeholder funds (Oswald, 1998); and others. Some of these try to address the issue of how to assign rights in knowledge products developed in collaborative networks

I am aware of very few efforts to define a new property regime as a whole. Turnbull's carefully worked-through model of stakeholder governance (2002) is one of the more complete, though it remains (perhaps necessarily) utopian, disconnected from the main economy, drawing examples from currently marginal cases.

In short, the problem of ownership in collaborative and interdependent networks is already giving rise to a host of new definitions of property rights. Most are still experimental, in the sense that they have not been fully tested in court and have not been integrated into a coherent property regime. But the rapid proliferation of forms of licensing and incorporation is an indication of the forces pressing against the constraints of firm-based, exclusive notions of property. Worker ownership from this perspective addresses a subset of the problem, focusing *one* key relationship under which people cooperate for production, and *one* stakeholder that has both moral and practical claims to involvement in managerial decisions. A full exploration of the rights of ownership, and their attribution to workers or others, requires a more complete understanding of the changing nature of economic activity.

- Abramowicz, M. (2010). Orphan Business Models: Toward a New Form of Intellectual Property. *Harvard Law Review*, 124, 1362–1421.
- Amable, B., & Lung, Y. (2008). *The European Socio-Economic Models of a Knowledge-based society*. Groupe de Recherche en Economie Théorique et Appliquée. Retrieved from http://ideas.repec.org/p/grt/wpegrt/2008-26.html
- Beloe, S., Elkington, J., Hester, K. F., & Newell, S. (2003). *The 21st Century NGO: In the Market for Change*. London: SustainAbility.
- Belous, R. S. (1995). Rise of the Contingent Work Force: The Key Challenges and Opportunities, The. *Washington and Lee Law Review*, 52, 863.
- Benkler, Y. (2002). Coase's Penguin, or, Linux and The Nature of the Firm. *Yale Law Journal*, 112(3), 369–446.
- Benkler, Y. (2007). *The Wealth of Networks: How Social Production Transforms Markets and Freedom.* New Haven, Ct: Yale University Press.
- Berle, A. A., & Means, G. C. (1932). *The modern corporation and private property*. New York: Macmillan.
- Bodie, M. (2013). *Participation as a Theory of Employment* (SSRN Scholarly Paper No. ID 2252725). Rochester, NY: Social Science Research Network. Retrieved from http://papers.ssrn.com/abstract=2252725
- Bøllingtoft, A., Donaldson, L., Huber, G. P., Håkonsson, D. D., & Snow, C. C. (Eds.). (2011). *Collaborative Communities of Firms: Purpose, Process, and Design* (2012th ed.). Berlin, Heidelberg: Springer.
- Boltanski, L., & Chiapello, E. (2006). The New Spirit of Capitalism. *International Journal of Politics, Culture, and Society, 18*(3-4), 161–188. doi:10.1007/s10767-006-9006-9
- Clark, W. H., & Vranka, L. (2012). The Need and Rationale for the Benefit Corporation: Why It Is the Legal Form That Best Addresses the Needs of Social Entrepreneurs, Investors, and, Ultimately, the Public. Benefit Corp Information Center. Retrieved from http://www.benefitcorp.net/for-attorneys/benefit-corp-white-paper
- Deloitte Center for the Edge. (2011). *The 2011 Shift Index: Measuring the forces of long-term change*. Deloitte Center for the Edge. Retrieved from http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/us_tmt_2011shiftindex_111011.pdf
- Ellerman, D. (1999). The Democratic Firm: An Argument Based on Ordinary Jurisprudence. *Journal of Business Ethics*, 21(2-3), 11–124.
- European Multistakeholder Forum On CSR. (2004). European Multistakeholder Forum On CSR Final Results and Recommendations. Retrieved from http://circa.europa.eu/irc/empl/csr_eu_multi_stakeholder_forum/info/data/e n/csr%20ems%20forum.htm
- Farber, H. S. (2007). Is the Company Man an Anachronism? Trends in Long-Term Employment in the US, 1973-2006. In S. Danziger & C. E. Rouse (Eds.), *The price of*

- *independence: the economics of early adulthood* (pp. 56–83). New York: Russell Sage Foundation Publications.
- Ferraro, F., & O'Mahony, S. (2012). Managing the Boundary of an "Open" Project. In J. Padgett & W. W. Powell (Eds.), *The Emergence of Organizations and Markets*,. Princeton: Princeton University Press.
- Freeman, R. E., Wicks, A. C., & Parmar, B. (2004). Stakeholder Theory and "The Corporate Objective Revisited." *Organization Science*, 15(3), 364–369.
- Friedman, A. L. (n.d.). *Stakeholders: Theory and Practice*. Oxford; New York: Oxford University Press, 2006.
- Gereffi, G., Humphrey, J., & Sturgeon, T. (2005). The governance of global value chains. *Review of International Political Economy*, 12(1), 78–104.
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17(10), 109–22.
- Greenan, N., Kalugina, E., & Walkowiak, E. (2007). *The transformation of work?* D9.2.2 *Trends in work organisation* (No. CIT3-CT-2005-006193). France: CEE.
- Gulati, R., & Singh, H. (1998). The Architecture of Cooperation: Managing Coordination Costs and Appropriation Concerns in Strategic Alliances. *Administrative Science Quarterly*, 43(4), 781–784.
- Hagel, J. I., Brown, J. S., Jelinek, M., Sitkin, S., Cardinal, L., & Bijlsma-Frankema, K. (2010). Relational Networks, Strategic Advantage: New Challenges For Collaborative Control. In Control in organizations: New directions in theory and research. Cambridge, UK: Cambridge University Press.
- Hollister, M. (2011). Employment Stability in the US Labor Market: Rhetoric versus Reality. *Annual Review of Sociology*, 37, 305–324.
- Kalleberg, A. L. (2000). Nonstandard Employment Relations: Part-Time, Temporary and Contract Work. *Annual Review of Sociology*, 26, 341–365.
- Khanna, T., & Palepu, K. (1997). Why focused strategies may be wrong for emerging markets. *Harvard Business Review*, 75(4), 41–48.
- Lawler, E. E. (2005). Creating high performance organizations. *Asia Pacific Journal of Human Resources*, 43(1), 10–17. doi:10.1177/1038411105050304
- Lerner, J., & Schankerman, M. (2010). *The comingled code: open source and economic development.*
- Lessig, L. (2006). Code: Version 2.0. New York: Basic Books.
- Leung, W. S. (1997). The Inadequacy of Shareholder Primacy: A Proposed Regime that Recognizes Non-Shareholder Interests. *Columbia Journal of Law and Social Problems*, 30, 589.
- Leviten-Reid, C., & Fairbairn, B. (2011). Multi-stakeholder Governance in Cooperative Organizations: Toward a New Framework for Research? *Canadian journal of nonprofit and social economy research*, 2(2). Retrieved from http://anserj.ca/index.php/cjnser/article/view/78

- Livesey, S. M. (2002). The Discourse of the Middle Ground: Citizen Shell Commits to Sustainable Development. *Management Communication Quarterly*, 15(3), 313.
- MacDuffie, J. P., & Helper, S. (2006). Collaboration in Supply Chains. In C. Heckscher & P. S. Adler (Eds.), *The Firm as a Collaborative Community: Reconstructing Trust in the Knowledge Economy*. Oxford (UK): Oxford University Press.
- Marx, M., Singh, J., & Fleming, L. (2010). *Regional Disadvantage? Non-compete agreements and brain drain* (Unpublished working paper).
- Microsoft CEO takes launch break with the Sun-Times. (2001, June 1). *June 1*, 2001. Retrieved from http://web.archive.org/web/20010615205548/http://suntimes.com/output/tech/cst-fin-micro01.html\
- Nonaka, I., Toyama, R., & Nagata, A. (2000). A firm as a knowledge-creating entity: a new perspective on the theory of the firm. *Industrial and Corporate Change*, 9(1), 1–20.
- Osterman, P. (2001). Flexibility and commitment in the United States labour market. International Labour Organization. Retrieved from http://staging2.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_142344.pdf
- Oswald, L. (1998). Shareholders v. Stakeholders: Evaluating Corporate Constituency Statutes under the Takings Clause. *The Journal of Corporation Law*, 24, 1.
- Pharr, S. J., Putnam, R. D., & Dalton, R. J. (2000). A quarter-century of declining confidence. *Journal of Democracy*, 11(2), 5–25.
- Samila, S., & Sorenson, O. (2011). Noncompete Covenants: Incentives to Innovate or Impediments to Growth. *MANAGEMENT SCIENCE*, 57(3), 425–438. doi:10.1287/mnsc.1100.1280
- Spar, D. L. (2002). *Hitting the Wall: Nike and International Labor Practices* (Case study). Harvard Business School. Retrieved from http://harvardbusinessonline.hbsp.harvard.edu/b02/en/common/item_detail.j html?id=700047&referral=1076
- Strathern, M. (1996). Cutting the network. *Journal of the Royal Anthropological Institute*, 2(3), 517–535.
- Tuna, C. (2009, May 11). Many Companies Hire as They Fire WSJ.com. *Wall Street Journal Interactive Edition*. Retrieved from http://online.wsj.com/article/SB124198904713604533.html
- Turnbull, S. (2002). Stakeholder Governance: A Cybernetic and Property Rights Analysis. *Corporate Governance: An International Review*, *5*(1), 11–23. doi:10.1111/1467-8683.00035
- Uchitelle, L. (2006). *The Disposable American: Layoffs and Their Consequences*. New York: Knopf.

- US Government Accountability Office. (2006). *Employment Arrangements: Improved Outreach Could Help Ensure Proper Worker Classification* (No. GAO-06-656). Retrieved from www.gao.gov/new.items/d06656.pdf
- Valenzuela, A. (2011). Non-Regular Employment in the United States: a Profile. In *Non-regular Employment Issues and Challenges Common to the Major Developed Countries*. The Japan Institute for Labour Policy and Training. Retrieved from http://eforum.jil.go.jp/english/reports/documents/jilpt-reports/no.10.pdf#page=95
- Varughese, G., & Ostrom, E. (2001). The contested role of heterogeneity in collective action: some evidence from community forestry in Nepal. *World Development*, 29(5), 747–765.
- Wei-Skillern, J. (2004). Sustainable Development at Shell. *Harvard Business School Case*, 9-303-005, 1–21.
- Williams, H. L. (2010). Intellectual Property Rights and Innovation: Evidence from the Human Genome. *National Bureau of Economic Research Working Paper Series, No.* 16213. Retrieved from http://www.nber.org/papers/w16213
- WorldPublicOpinion.org. (2008). *World Public Opinion on Governance and Democracy*. Program On International Policy Attitudes at the University Of Maryland. Retrieved from http://worldpublicopinion.org/pipa/articles/governance_bt/482.php?lb=btgov&pnt=482&nid=&id