

Dynamics of Shared Capitalism Policies

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Abstract

Shared capitalism is a set of compensation practices (e.g., employee ownership, stock options, and profit sharing) through which worker pay, or wealth, depends on the performance of the firm or work group. Empirical studies on whether employee ownership improves firm performance, while predominately positive, offer mixed results. This paper addresses the question: under what conditions do shared capitalism policies improve firm performance? A system dynamics model of high performance work systems estimated using the NBER Shared Capitalism dataset and calibrated to a clean technology startup company is presented. The model posits explicit causal mechanisms to explain how various shared capitalism policies and human resource practices influence employee behaviors that drive business processes, and how those business processes interact with market conditions to generate firm performance. Simulation analyses demonstrate that employee ownership and profit sharing create and mediate the strength of multiple reinforcing feedbacks linking firm performance and employee behavior. The more wealth is shared through broad-based employee ownership, the more wealth is created, given the appropriate conditions. Policy analysis suggests how mutual gains for owners and employees can be attained through a balance of salary, stock grants and other shared capitalism policies.

1. INTRODUCTION

“Shared Capitalism” is a pervasive phenomenon in the American economy. Kruse, Freeman and Blasi (2010) define “Shared Capitalism” as “a diverse set of compensation practices through which worker pay or wealth depends on the performance of the firm or work group.” They found that almost half of US employees participate in some form of shared capitalism, such as employee ownership, individual employee stock ownership, stock options, profit sharing or gain sharing. On the question “does employee ownership improve firm performance?”, results from empirical studies are mixed. Kaarsemaker (2006), in a 30-year review of the literature, found that “two-thirds of 129 studies on employee ownership and its consequences found favorable effects relating to employee ownership, while one-tenth found negative effects. However, favorable effects do not appear to come about automatically, and the specific conditions under which they do are largely unknown.” Why is that? Kaarsemaker and Poutsma (2006) argue that “one of the reasons for the relative weakness of the results from empirical research on the consequences of employee ownership is that, as yet, the theory behind many of the studies on the effects of employee ownership has been underdeveloped. In particular, no research has been

done on comprehensive models of employee ownership and the broader human resource management system.”

This paper aims to address the literature gap by building a dynamic causal model of high performance work systems (HPWS). Instead of asking “do shared capitalism policies improve firm performance?” we ask “*under what conditions do shared capitalism policies improve firm performance?*” – avoiding any presumption that employee ownership is a panacea, and instead inquiring into the conditions under which it produces better or worse effects. To do so we need to untangle the underlying causal mechanisms that determine how various shared capitalism policies influence employee behavior and firm performance.

Most of the empirical studies focus on estimating the relationship between some forms of shared capitalism and firm performance through survey data and regression analysis. To go beyond estimating a specific linkage in the HR system and develop a theory of the causal mechanism from HR practices to performance, we develop a dynamic behavioral model built on and complementary to the literature.

Our approach involves three main steps, using survey data, a case study and simulation.

1. Model Building: We build a system dynamics model of HPWS estimated using the NBER Shared Capitalism dataset and calibrated to a clean technology startup company. The model provides an explicit causal mechanism to show how various shared capitalism policies and HR practices influence employee behaviors that drive business processes, and how those business processes interact with market conditions to generate firm performance in a dynamic feedback system. The model is built on Miller’s (2007) model of clean technology startup companies. Our contribution is to add a detailed HPWS with various shared capitalism policies such as salary, stock grants, stock options, profit sharing and employee participation. To build the HPWS structure, we performed a thorough literature review on the existing theoretical and empirical findings of employee ownership and Strategic Human Resource Management (SHRM), and formally modeled them in a system dynamics framework.

2. Model Estimation and Calibration: Since employee ownership effects are the main focus of this study, we have estimated the non-linear functional forms of important employee ownership effects using the NBER Shared Capitalism dataset (Kruse, Freeman and Blasi 2010). To calibrate this model, the first author conducted interviews at and collected archival data for an early-stage clean technology startup company. Given the inherent limitation of an early-stage startup when there are no later-stage time-series data, company data was used to parameterize the initial conditions of the model. We interviewed the executives to identify their decision-making rules for pricing, financing, human resource and compensation policies and their projections for business performance. The base run of the model represents closely the executives’ expectations and confirms the general patterns of typical startup companies.

There are three reasons why we focus on a startup company. First, shared capitalism policies such as stock options, stock grants and profit sharing are important motivational tools in addition to salary in cash-constrained startup companies (Blasi, Kruse and Bernstein 2003). Second, we are interested in studying the long-term dynamic effects of shared capitalism policies across the

firm life cycle, starting from the founding stage. Third, research has shown that founders have long-term imprinting effects on organizational design and policies (Burton 2001, Burton and Beckman 2007, Beckman and Burton 2008). Understanding the impact of various shared capitalism policies since the founding phase is highly relevant to the practice of entrepreneurship.

3. Policy Analysis: we conduct simulation analyses to study how various combinations of salary, stock options, stock grants, profit sharing schemes and employee participation efforts influence employee behavior and firm performance over time. The simulation results offer insights into the dynamic effects of shared capitalism policies. Propositions on the conditions under which shared capitalism policies improve firm performance are presented. Sensitivity analysis is conducted to ensure the robustness of the analyses and guide future research.

The main contributions of this work are, first, while the majority of the SHRM and HPWS literature tends to focus on testing a specific linkage in isolation, we provide a dynamic causal feedback model of an integrated HPWS linking HR policies, employee behaviors, business processes and firm performance. Second, several model insights on the dynamic effects of shared capitalism policies are presented. These insights can serve as a guide for future empirical studies.

Section 2 reviews the theoretical and empirical literature in employee ownership and identifies the gaps in the literature. Section 3 presents an overview of the research methods, such as the system dynamics methods for model building, model estimation and calibration and model analysis. Section 4 describes the system dynamics model of HPWS. Section 4 presents the NBER Shared Capitalism dataset used to estimate the non-linear functional forms of various employee ownership effects. Section 5 presents policy analysis of various combinations of salary and stock grants levels, and their impact on market capitalization and founder's net worth. Section 6 concludes with sensitivity analysis and discussion.

2. Shared Capitalism and High Performance Work Systems

2.1 Theories of Employee Ownership

Employee ownership takes many different forms, ranging from simple bonuses paid in employee shares (which can hardly be called “ownership”); to more structured and indirect schemes with recurrent payments to employees' investment accounts; to periodic trade administered by a trust (which is a bit more like real “ownership”); and to worker/producer cooperatives (which come closest to real “ownership”).

Toscano (1983) developed a typology of employee ownership with three general types: direct ownership, employee stock ownership plans (ESOPs), and producer cooperatives. Within these types, employee ownership forms vary according to at least eight different factors: the function of the shares, how the shares are allocated and administered, the principles of control, and the provisions for dealing with the following: sale and transfer, share concentration, new employees, and outside investors (Toscano, 1983).

Blasi, Kruse and Bernstein (2003) described the “culture of egalitarianism” pioneered by high-tech startups, or what they called “partnership capitalism.” Partnership capitalism in high-tech startups has two basic strands: empowerment (teamwork, participation in decision-making, employee board representatives, and information sharing) and share options (ownership) for everyone.

Rosen, Case and Staubus (2005) derived a model – the “equity model” – of how the business has to be structured and run in order to succeed in reframing mindsets and changing behaviors. This equity model contains three key elements: first, stock ownership is significant enough that “I” matter to all the employees’ financial future. The second is an ownership culture in which people think and feel like owners. The third element is a shared understanding of key business disciplines and a common commitment to pursuing them.

Rosen and Rodgers (2007) proposed six essential rules for creating an ownership culture. First, provide a financially meaningful ownership stake, enough to serve an important part of each employee’s financial security. Second, provide ownership education teaching people how the ownership plan works. Third, train people in business literacy so they have the tools to think like entrepreneurs about company performance. Fourth, share performance data about how the company is doing overall and how each work group contributes to that. Fifth, share profits through bonuses, profit sharing, or other tools. Six, build employee involvement not just by allowing employees to contribute ideas and information but by making that part of their everyday work through teams, feedback opportunities, devolution of authority, and other structures.

Kaarsemaker and Poutsma (2006) developed a model expressing an “ownership high-performance work system.” They proposed a set of organizational practices that translate the ownership rights (Table 1) and argued that in order to be effective, an HRM system with employee ownership should include the following HRM practices: participation in decision-making, profit sharing, information sharing, training for business literacy and mediation. The relationships between these core HRM practices are partially conditional, and partially multiplicative. An employee cannot be a real owner if he or she has no say, if he or she does not share in the returns, if he or she has no information about the business or does not understand the information that is being shared – i.e., the employee owner must be “business literate” (Rousseau and Shperling, 2003). The presence or absence of these core HRM practices determines whether or not the HRM system consistently sends the message that employees deserve to be owners and that they are taken seriously as such.

Table 1: Translation of Ownership Rights into Organizational Practices

Ownership Rights	Corporate Governance Practices	HRM Practices
Use	<ul style="list-style-type: none"> • Voting rights • Shareholders’ meetings • Board membership 	<ul style="list-style-type: none"> • Participation in decision-making • Information sharing • Training for business literacy • Mediation
Returns	<ul style="list-style-type: none"> • Dividends • Share price 	<ul style="list-style-type: none"> • Profit sharing

Sale	<ul style="list-style-type: none"> • Simply decide to sell shares 	<ul style="list-style-type: none"> • Participation in decision-making about employee ownership • Sharing of information with regard to employee ownership • Training for business literacy to understand and be capable of the above
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Source: Kaarsemaker and Poutsma (2006)

2.2 Empirical Studies of Employee Ownership

Kaarsemaker (2006) conducted a thorough literature review of employee ownership over the past thirty years. He found a prototypical quantitative study on the effects of employee ownership:

- Focuses on company-level issues from either a financial perspective or a people perspective;
- Uses cross-sectional data (i.e., data from a single point in time);
- Is limited to a single country (the U.S.);
- Analyzes data from many companies if it applies a financial perspective, but from a small number of companies if it applies a people perspective;
- Concentrates on a single type of employee ownership, mostly ESOPs;
- Finds favorable effects relating to employee ownership;
- Compares shareholders with non-shareholders, or employee ownership companies with non-employee ownership companies; and
- Ignores interaction effects.

Out of the 129 studies reviewed, 59 employed a *people* perspective and almost without exception focused solely on the effects of employee ownership on employee behavior and attitudes. Turnover (intentions), commitment, job satisfaction, motivation, and absenteeism are the most commonly researched employee behaviors and attitudes. The remaining 70 studies employed a *financial* perspective and focused on the effects of employee ownership on the financial performance and productivity of companies. Examples of commonly used financial performance measures are: profit margins, return on assets, and Tobin's Q. Value added per employee and sales per employee are examples of commonly used productivity measures.

By far the majority (87, or 67.4 percent) of studies found clear favorable results relating to employee ownership: 39 out of 59 studies with a people perspective, 48 out of 70 studies with a financial perspective. The findings of 14 studies (10.9 percent; 8 with a people perspective, 6 with a financial perspective) could straightforwardly be called negative. This leaves 28 studies (21.7 percent) that found no significant associations with employee ownership, or with results that were simply inconclusive (12 with a people perspective, 16 with a financial perspective).

In sum, two-thirds of employee ownership studies found favorable effects relating to employee ownership, while one-third did not. One-tenth of all studies found negative effects. However, positive effects do not appear to come about automatically (Conte and Svejnar, 1990; Kruse,

2002; Kruse and Blasi, 1995; Sesil et al., 2001). Kaarsemaker (2006) concluded that “the state of affairs is such that scholars and practitioners are still largely in the dark with regard to the specific conditions under which employee ownership yields favorable effects.”

Kaarsemaker and Poutsma (2006) in their review of employee ownership and SHRM literature stated:

One of the reasons for the relative weakness of the results from empirical research on the consequences of employee ownership is that, as yet, the theory behind many of the studies on the effects of employee ownership has been underdeveloped. In particular, no research has been done on comprehensive models of employee ownership and the broader HRM system.

Despite a lack of comprehensive models, several researchers have focused on combinations of employee ownership with specific HRM practices, predominantly participation in decision-making, and a number of notable findings were documented. The importance of the workforce philosophy, or management’s commitment to employee ownership, for example, is demonstrated by a number of studies (e.g. Culpepper et al., 2004; Gamble et al., 2002; Klein, 1987; Klein and Hall, 1988; Long, 1982; Rosen et al., 1986). Also, several HRM practices have been included in the research with differing results. This mostly relates to forms of participation in decision-making, but also to, for example, information-sharing (e.g. Freeman et al., 2004; French and Rosenstein, 1984; Kalmi, 2002), and profit-sharing (e.g. Brown et al., 1999; Freeman et al., 2004; Wilson and Peel, 1990). One study (Freeman et al., 2004) included a bundle of HRM practices as one variable, an ‘HRM index’.

Overall, however, the theory behind most of these studies lacks a sophisticated explanation of why specific practices would be important in relation to employee ownership, and what would be the added value of employee ownership, or what would be the added value of combining these other HRM practices with employee ownership. This lack of theoretical sophistication is reflected in the relatively weak empirical findings. (Kaarsemaker and Poutsma, 2006)

2.3 Gaps in Employee Ownership Literature

There are four main gaps and potential contributions in the employee ownership and HPWS literature: 1) Contingency: The specific conditions under which employee ownership yields favorable effects are largely unknown. A contingency theory, as opposed to a universal approach, is needed to understand the conditions under which employee ownership improves firm performance. 2) Causal Mechanisms: Theory elucidating the causal mechanisms underlying employee ownership effects is underdeveloped. One needs to build a model that captures the causal links between HRM practices and firm performance. 3) Systems Approach: The relationships of employee ownership with other HRM practices and several contingencies are too “complex and intertwined” (Poole and Jenkins 1990) to assume the benefits arise from any isolated practice such as employee participation in decision-making or other factors. One needs an integrated systems approach that connects the isolated linkages as a whole. 4) Dynamic Analysis: Most of the empirical studies on employee ownership effects are static in the sense that they do not take timing into consideration. The field of employee ownership would benefit from

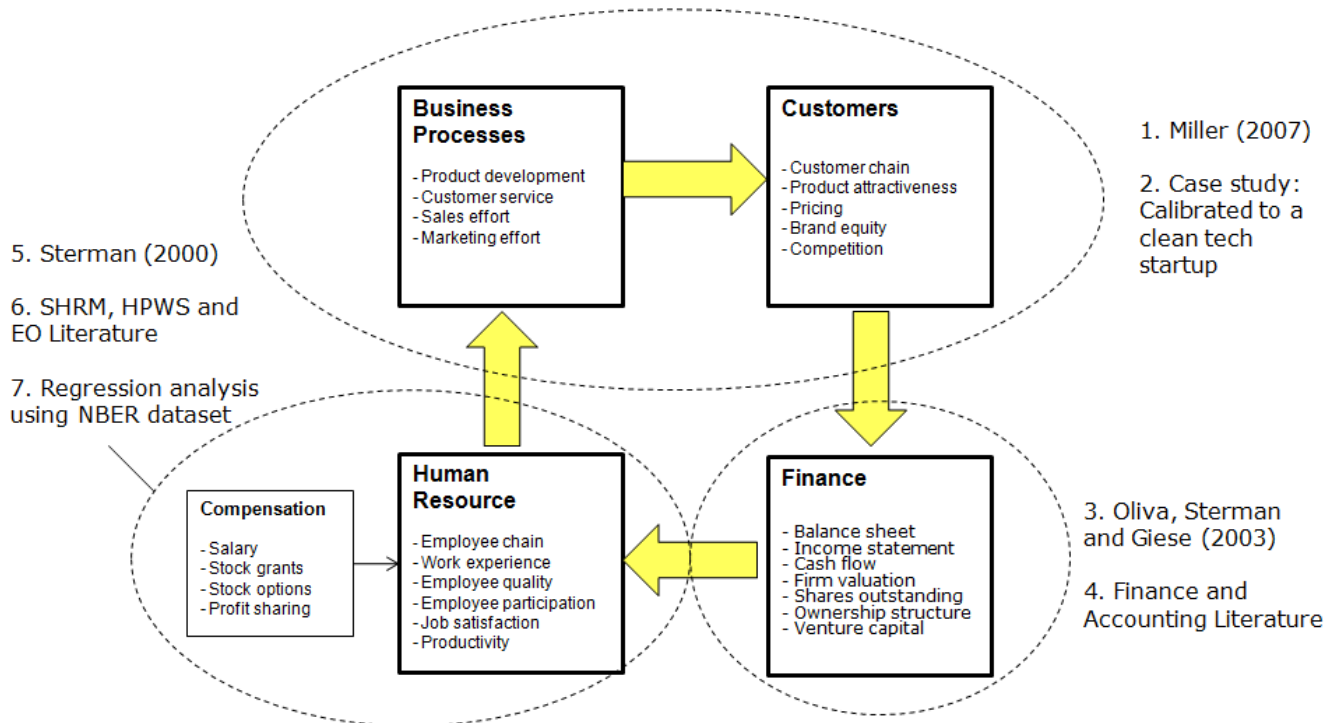
a dynamic analysis of how different timing (span across the industry lifecycle) of employee ownership policies affects employee behavior and firm performance over time.

3. METHOD

To study the causal mechanisms of how HR practices influence firm performance, we develop a system dynamics model of a clean technology startup company with a detailed HPWS. The model captures how various compensation and HR practices influence the employee behaviors that drive business processes. The model further expresses how those business processes interact with market conditions and generates firm performance in a dynamic feedback system.

The model is grounded on prior literature and multiple data sources shown in Figure 1. There are three core structures in the model: a clean technology startup structure (business processes and customers), a HPWS, and an accounting and corporate finance structure.

Figure 1: Sources for Model Building



The core clean technology startup structure is based on Miller’s (2007) dissertation “New Venture Commercialization of Clean Energy Technologies.” Our contribution is refining the Miller model and adding a detailed HPWS, a detailed corporate finance and accounting system and a multiple competitor structure. Second, a detailed HPWS captures a set of “hard” financial compensation policies such as salary, stock grants, stock options and profit sharing along with “soft” HR practices such as employee participation, training, coaching and job security. To build

the HRM structure in the model, we perform a thorough literature review on the existing theoretical and empirical findings in SHRM, HPWS and Employee Ownership and then transform the proposed relationships into a formal differential equation model. This process enables me to better understand the causal logics proposed in the current literature as we formalize them. Third, in addition to the HR literature, the model is also grounded on prior system dynamics literature on human resource management thanks to system dynamics' rich history in modeling workforce flow and management (Sterman 2000). Fourth, to the accounting and corporate finance structure we add a detailed balance sheet, income statement, cash flow, firm valuation and shares outstanding, ownership structure, government grants and venture capital structure. To ground our model, we draw on a prior system dynamics model (Oliva, Sterman and Giese 2003) and on existing accounting and corporate finance literature and textbooks. To clarify some internal firm processes, we conduct interviews with scholars, professionals and managers to ensure the proposed structure and behavior is robust in their experience.

One of the main empirical contributions of this paper is the estimation of various employee ownership effects. As understanding employee ownership effects is the main purpose of this paper, we estimated the non-linear functional forms of various employee ownership effects. We were able to collaborate with Professors Joseph Blasi and Douglas Kruse from Rutgers University to run regression estimates using their National Bureau of Economic Research (NBER) Shared Capitalism dataset (Kruse, Freeman and Blasi 2010).¹ The NBER survey administered 80 to 100 questions to 41,206 employees in fourteen firms at 323 work sites that had some shared capitalism modes of compensation. This data set is the largest available to date on workers in shared capitalism firms. The 80 to 100 survey questions cover most of the variables found in a typical HPWS with shared capitalism modes of compensation, making it the best source available for estimating the employee ownership effects.

To calibrate the model, we conducted interviews and collected archival data on an early-stage clean technology startup company that produces energy efficiency systems for commercial and industrial buildings. Given the inherent limitation of an early-stage startup – there is no later-stage time-series data – the company data was used to parameterize the initial conditions of the model. We interviewed the executives to identify their decision-making rules for pricing, financing, human resource and compensation policies and their projections for business performance.

While the model cannot perform a historical fit analysis as there is no time-series data available, the stylized pattern of behavior shown in the base case scenario is consistent with the entrepreneurship literature: the “valley of death” dynamics (the period of time from when a startup firm receives an initial capital contribution to when it begins generating revenues and a positive cash flow); the need for several rounds of VC financing in a long product development and sales cycle industry; the product life cycle of going from infancy, growth, maturity to decline; and the strategic shifting from product development at the early stage to a sales-focused strategy in the growth stage and service model at the mature and decline stage. Future work can be done to calibrate the model to a startup with a long enough time-series data set.

¹ We would like to thank Professors Joseph Blasi and Douglas Kruse of Rutgers University for their generosity in sharing their valuable data with us.

4. MODEL

Figure 2 illustrates the model framework. The inner four thick boxes capture the internal processes within a firm. The outer boxes are leverage points or strategies managers can employ to potentially influence the processes. This model offers a generic process theory of the firm and the role of managers. The four internal processes are employee behaviors, business processes, market conditions and financial performance. They resemble the balanced scorecard framework: learning and growth, business processes, customers and finance (Kaplan and Norton 1992, 1996a, 1996b). What is different about this framework is its transformation of the traditional balanced scorecard into a dynamic feedback framework with explicit causal linkages connecting across the four quadrants; system dynamics is particularly suited to developing dynamic balanced scorecards (Kaplan and Norton 1996a, Akkermans and Oorschot 2002) using causal feedback modeling. Given that this paper focuses on the internal processes of a startup company, this model helps make the framework more explicit and can be used to guide strategic planning for a startup company.

The model's inner quadrants capture the various reinforcing growth loops (Sterman 2000, Chapter 10) propelling a company as well as capturing the balancing loops that constrain growth. In particular, the model captures how various HR policies (hiring, selection, training, salary, stock grants, stock options and profit sharing) drive employee attitudes and behaviors (financial compensation, psychological ownership, burnout, job satisfaction, employee quality, turnover, experience, learning, productivity, and work effort); how employee behaviors drive business processes (product development, customer service, sales, and marketing); and how business processes interact with market conditions (industry demand, sales cycle, competition, and government regulation) to generate firm performance (sales, revenue, cost, profit, stock price, ownership share and net worth). By knowing both the internal firm processes and the managerial policies, one is able to identify the high leverage points (Sterman 2000) for managers' intervention. Given that the focus of this paper is on the employee ownership effects, we will analyze various shared capitalism HR policies (located in the lower left-hand corner), while holding the business strategy, exogenous conditions and funding strategy constant.

Figure 2: Overall Model Framework

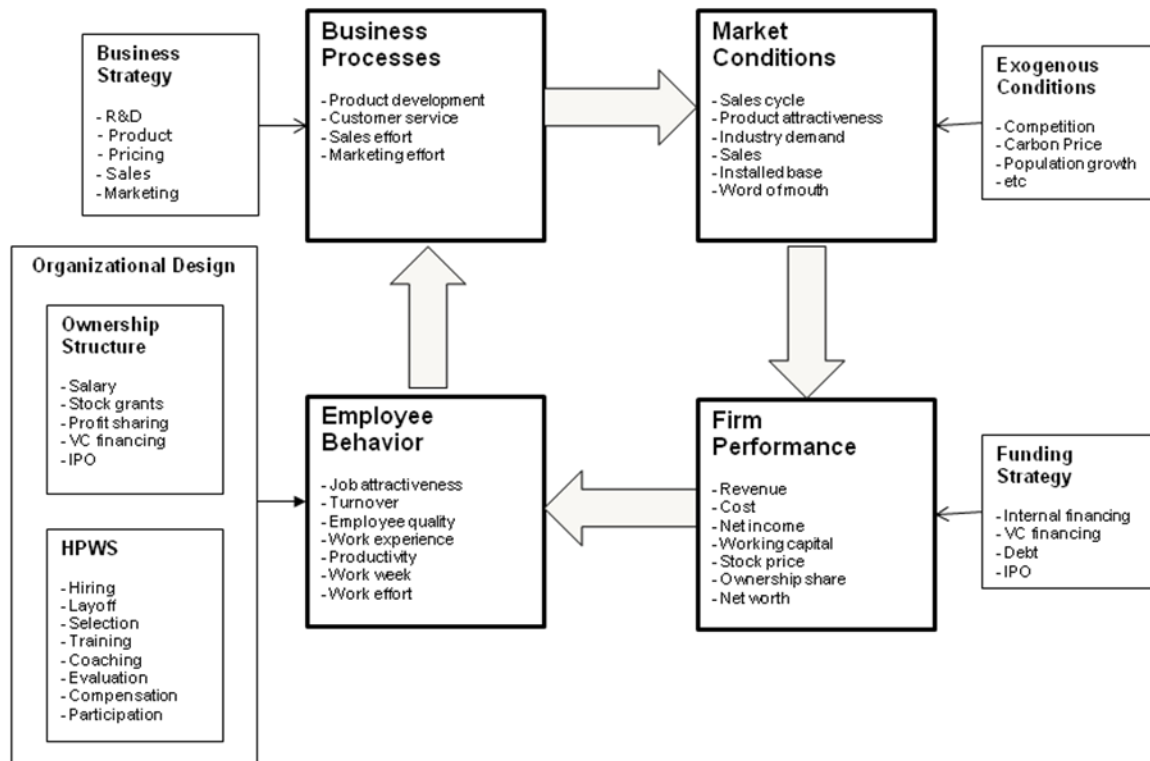


Figure 3 illustrates some of the key reinforcing loops of the HPWS in the model. All the red variables are human resource policy variables; the green are job satisfaction drivers, and the blue are employee behaviors. Job satisfaction is modeled as the central mediating variable between various HR policies and employee behaviors. The drivers of job satisfaction are financial compensation and other non-financial drivers such as job security, psychological ownership and burnout effects. Financial compensation includes salary, profit sharing and employee net worth; they are determined by the amount of stock options, stock grants accumulated and the current stock price. Psychological ownership is driven by the relative share of employee ownership and participation in the company. Employee ownership without participation has a limited effect, whereas combining both tends to produce positive results (Kruse, Freeman and Blasi 2010). Kaarsemaker (2006) found sixteen previous studies of the combination of employee ownership with participation in decision-making, or with an index of a number of people management practices: sixty-five percent produced favorable effects, while none produced negative effects.

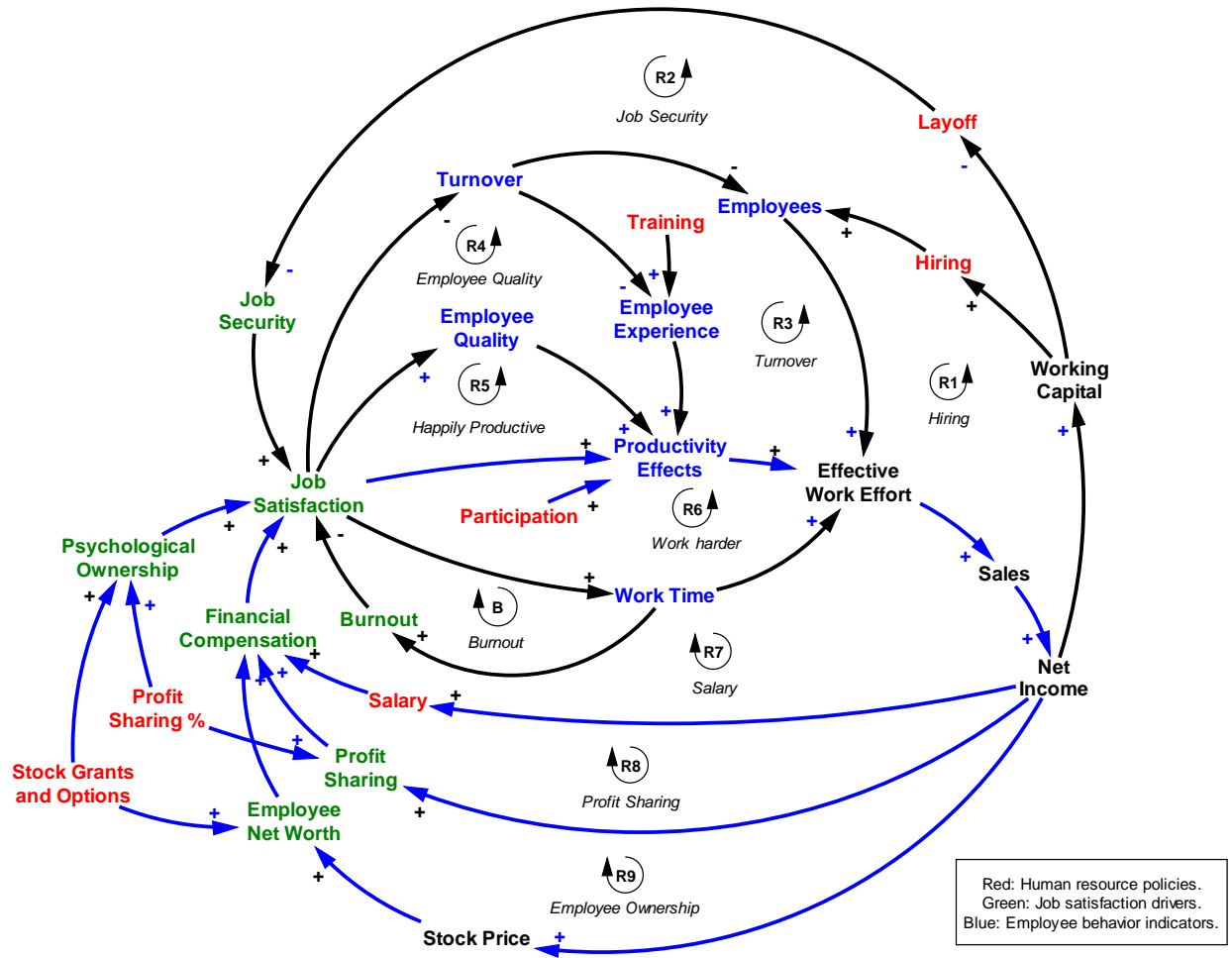
Job satisfaction affects turnover, employee quality, employee productivity and work time. Higher job satisfaction lowers turnover rate and attracts better employee quality at recruiting. Employee productivity and work time increase as employees are willing to work harder when they are happier (R6 Work Harder). Productivity effects are driven by employee experience, employee quality, job satisfaction and employee participation. Higher turnover decreases average employee experience as people leave with accumulated experience and the firm must hire rookies, which lowers the average employee experience level (R3 Turnover). Training

increases employee experience by speeding up learning. Employee quality represents the initial quality of employees upon recruiting, such as education and skills levels. This quality variable captures the recruiting selection effect. A company with high job satisfaction tends to attract and select employees of higher quality, which raises productivity (R4 Employee Quality). Higher job satisfaction can also directly increase productivity because people are happy with the work and the environment (R5 Happily Productive).

Effective work effort (separated into product development and sales efforts in the model) raises sales volume and net income. Higher net income leads to higher working capital and enables the firm to increase hiring. More hiring leads to more employees and greater effective work effort; this closes the R1 Hiring reinforcing loop. More hiring also leads to higher perception of job security, which increases job satisfaction and closes the R2 Job Security loop. The R7 Burnout loop captures the burnout effect from working overtime for too long.

In addition to the seven reinforcing loops, two additional loops close the feedback from firm performance to employee behavior. Higher net income leads to higher profit sharing, given a certain profit sharing percentage, which raises job satisfaction and productivity (R8 Profit Sharing). Higher net income also leads to higher stock price, which increases employee net worth, given the stock options and grants awarded in the past (R9 Employee Ownership). It is important to note that the same reinforcing loop can work as either a virtuous or vicious cycle. R8 and R9 explain why profit sharing and employee ownership work well in virtuous cycles when the company is doing well. However, the same loops could turn into vicious cycles when profit is so low that stock options go under water, which lowers Job satisfaction and productivity and further reduces sales and profit, as witnessed during the dot.com bubble (Blasi, Kruse and Bernstein 2003).

Figure 3: Causal Loop Diagram of High Performance Work System



5. DATA

The NBER Shared Capitalism dataset is a company survey that administered 80 to 100 questions to 41,206 employees in fourteen firms at 323 work sites who had some shared capitalism modes of compensation. It is the largest dataset conducted on workers in shared capitalism firms. All of the firms interviewed exercise some sort of broad-based employee ownership plan. The plan types vary: eight have standard Employee Stock Ownership Plans (ESOPs), one has a 401(k) ESOP, four have Employee Stock Purchase Plans (ESPPs), and three have 401(k)s with company stock. Eleven of the firms have broad-based profit-sharing plans, while five have broad-based stock option plans. The NBER's over 40,000 data entries allow me to estimate the non-linear relationships in the model.

To estimate the effects of financial compensation, employee ownership stake and profit sharing on job satisfaction, we ran a regression using linear and squared terms of total compensation, employee ownership stake over pay, profit sharing over pay, stock options, training hours to model non-linearities, with separate linear and squared terms for total compensation less than industry average and greater than industry average. Table 2 shows the regression results for job satisfaction. All variables have the expected signs and the conventional significance levels except the number of stock options, which is statistically insignificant.

Table 2: Results of Regression Analysis for Job Satisfaction

Variables	Coefficient	Std. Err.	[95% Conf. Interval]	
Constant	2.4048***	.1167	2.1759	2.6336
Compensation Greater Than Average	.0063***	.0006	.0051	.0075
Compensation Greater Than Average Squared	-.000065***	9.6e-06	-.000084	-.000046
Compensation Less Than Average	-.0158***	.0008	-.0175	-.0143
Compensation Less Than Average Squared	.000167***	.00002	.000126	.000211
Employee Ownership Dummy	.0117	.0107	-.0092	.0328
Employee Ownership Stake Over Pay	.0217**	.0095	.0031	.0405
Employee Ownership Stake Over Pay Squared	-.0027	.0018	-.0063	.0007
Profit Sharing Dummy	-.0052	.0113	-.0275	.0171
Profit Sharing Over Pay	.2327***	.0682	.0990	.3665
Profit Sharing Over Pay Squared	-.2180**	.0751	-.3653	-.0707
Stock Options Dummy	.0127	.0219	-.0301	.0557
Stock Options	1.1e-06	9.2e-07	6.1e-07	3.0e-06
Stock Options Squared	-5.7e-12	3.8e-12	-1.3e-11	1.7e-12
Training Dummy	.0964***	.0078	.0811	.1117
Training Hours	.0011***	.0001	.0008	.0013
Training Hours Squared	-8.8e-07***	1.6e-07	-1.2e-06	-5.6e-07
Job Security	.3871***	.0180	.3517	.4225
Supervision	.0193*	.0109	-.0021	.0407
Participation	.3279***	.0174	.2937	.3620
R^2	0.3784			
$Adj. R^2$	0.3748			
N	20,206			

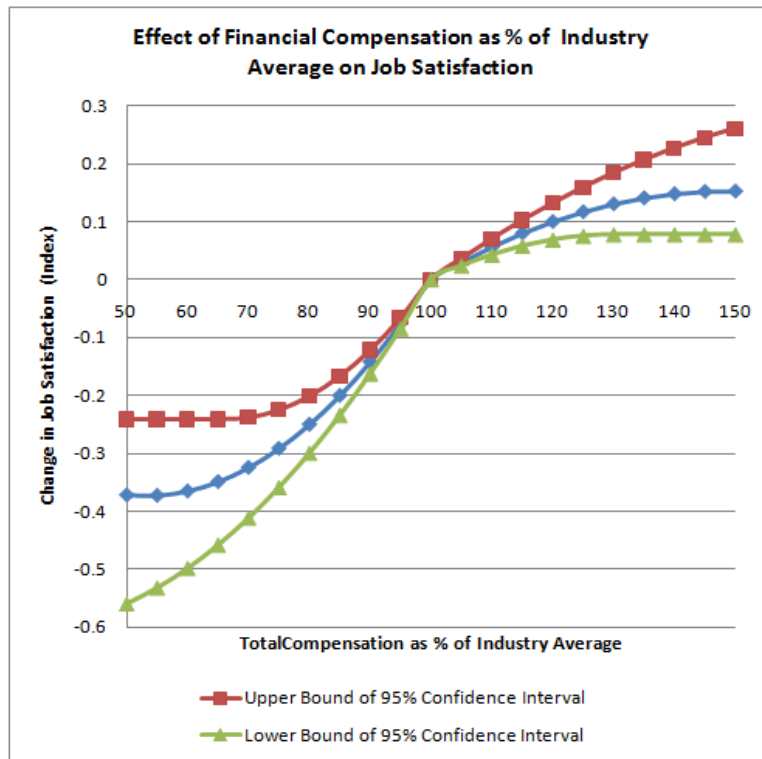
* $p < .10$, two-tailed test

** $p < .05$, two-tailed test

*** $p < .01$, two-tailed test

Figure 4 shows the predicted regression result. On the horizontal axis, 50% means total compensation worth 50% of industry average. The vertical axis shows the change in job satisfaction index, with zero meaning there is no change in job satisfaction.

Figure 4: Effect of Financial Compensation as % of Industry Average on Job Satisfaction



At 100% of industry average, the change in job satisfaction is zero. At 150%, the job satisfaction index is increased by 0.15 units on a scale of 1 to 4, and at 50%, job satisfaction decreases by 0.37 units. What is interesting is the changing slope, where for compensation larger than 100%, the effect on job satisfaction increases at a decreasing rate, signifying that as people are paid with higher compensation, the incremental increase in compensation makes people more satisfied by a lesser magnitude. On the other hand, when people are paid less than average, a sharp drop in job satisfaction occurs. The rate of reduction in job satisfaction decreases as one lowers the compensation. The kink at 100% is similar to the well-documented prospect theory (Kahneman and Tversky 1979). Figure 4 also shows the 95% confidence interval of the effect of financial compensation on job satisfaction. It is predicted using the values from the upper and lower bounds of the confidence interval in Table 1. The red line is the upper bound and the green is the lower bound. As expected, the farther away from 100% of industry average, the wider the confidence interval, signifying the greater the uncertainty.

Figure 5 shows the effect of employee ownership stake as a percentage of pay on job satisfaction. This is based on the same specification that includes a dummy variable for any employee ownership stake along with linear and squared terms for size of stake. Employee ownership stake is the value of stock held in different plans by employees divided by base pay plus

overtime. We see there is a jump of job satisfaction at 1% and a steady increase at a diminishing rate until 200%, the maximum in the available data. The jump can be interpreted as people gaining psychological satisfaction and feeling like owners as long as some stock is granted. Once an employee has stock, the higher the value of the average stock each employee owns, the higher her job satisfaction is. For example, if the stock price increases and makes the average stock owned by each employee worth 200% of her salary, this increases her job satisfaction by 0.045 units more than if she has no stock at all. Figure 6 shows the effect of profit sharing as a percentage of pay on job satisfaction. As with the employee ownership stake, this is based on the same specification in equation 8.1 that includes a dummy variable for any profit sharing along with linear and squared terms for size of profit sharing. Profit sharing as percent of pay is the total dollar value of the payment(s) one received as bonuses in the most recent year divided by base pay plus overtime. As profit sharing % increases, job satisfaction increases at a decreasing rate.

Figure 5: Effect of Employee Ownership Stake

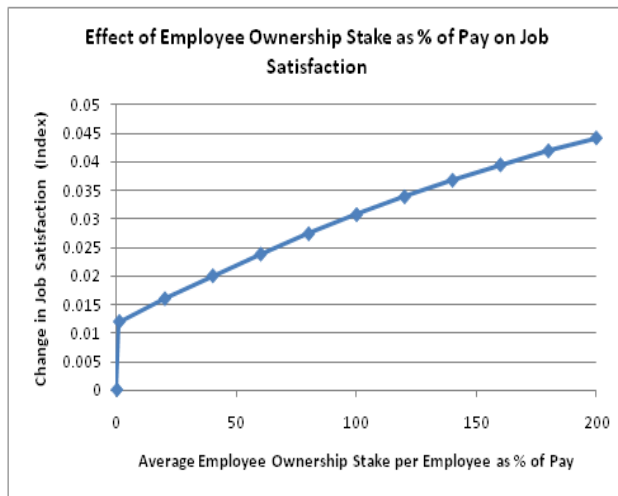
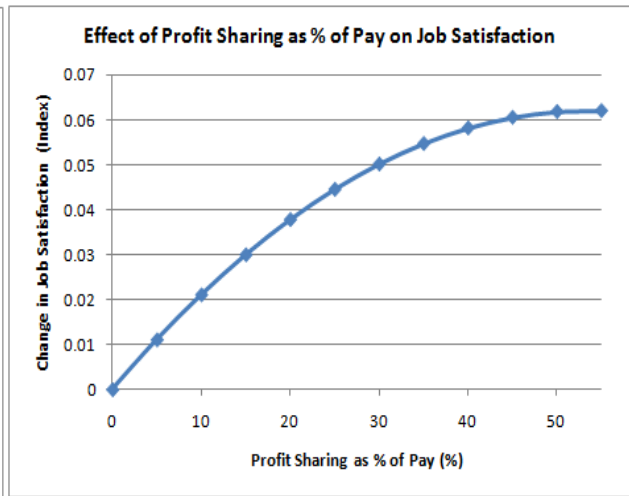


Figure 6: Effect of Profit Sharing



6. MODEL ANALYSIS

To test the effect of employee ownership through stock grants, we create a variable called Annual Stock Grants Value as Percentage of Industry Compensation (ASGV). ASGV captures the policy of compensating employees by giving them an ownership stake in the company. The value of stock granted to each employee annually is modeled as a percentage of industry average compensation. For example, suppose the industry compensation is \$100,000 per person per year. If one would like to give stock grants worth 10% of the industry compensation (\$10,000 per person per year), and the internal stock price is \$10 per share at the time stocks are granted, each employee would receive 1000 shares per year.

Stock grants help conserve cash, recruit employees, reduce turnover, and motivate people to work harder. One might compensate for salaries lower than the industry norm by giving each employee an ownership stake in the firm through stock grants. However, granting stock to employees dilutes everyone's (including the founder's) ownership. How should one decide whether or not to grant stock to employees? How much value motivates employees without too much dilution? When is the right time to award the stock and for what purpose? These are interesting theoretical questions for researchers and crucial practical questions for entrepreneurs. Figure 7 shows three policy runs: average stock grants value as 0% (blue), 10% (red) and 20% (green) of industry compensation, holding salary constant at 100% industry compensation. As ASGV increases from 0% to 10% and 20%, we see employee ownership percentage increasing from 0% to 14% and 24% by year 15. Despite the increase in employee ownership, the founder's net worth actually increases from \$45M to \$88M and \$90M, respectively, at year 14 (two graphs on the left). That is, the more wealth is shared with employees, the more wealth is created for the founder.

Why is that? The underlying causal loop diagram is shown in Figure 8. Figure 7 shows the selected variables from the causal loop diagram. The eight graphs in the middle form the R2 loop, with the two graphs on the right forming the R1 loop. The key insight is that *granting employees shares closes the employee ownership loop R2*. When there are no stock grants (blue), there is no feedback from how the company is performing (stock price) to the employee behavior, since they are paid a fixed salary without an ownership stake. As a result, the employee's job satisfaction stays relatively flat, despite the company starting to generate positive net income and the stock price rising from \$1 to \$10 at year 8 (blue).

However, when ASGV is 10%, the employee ownership loop R2 is closed and job satisfaction jumps up along with the stock price. Employees are now part owners and firm performance feeds back to their behavior. Productivity and effective work effort go up, which increases quarterly sales, net income and working capital. The improved financial performance allows the firm to expand its employee workforce and further increase effective work effort, sales, net income and so forth. Stock grants close the R2 loop and trigger the R1 loop in a virtuous cycle, which in turn propels the R2 loop further in a virtuous direction. This interaction of two reinforcing loops causes the firm performance to increase exponentially over time, as seen in the widening wedge between the red and blue lines.

Proposition 1 (Productivity Gain of Employee Ownership): Employee ownership closes the reinforcing feedback loop from firm performance to employee behavior and generates additional productivity gain. Given appropriate conditions, higher stock price increases employees' stock value, driving up job satisfaction, attracting better employee quality and reducing turnover. These, in turn, create additional productivity gain, which increases net income and stock price further. At the same time, higher net income enables hiring more workforce, which increases work effort, revenue and net income further. Thus, more wealth is shared through broad-based employee ownership; and more wealth is created, given the appropriate conditions.

Notice that, as ASGV increases from 10% (red) to 20% (green), stock price (and thus founder's net worth) increases as well, though at a lower magnitude than when ASGV goes from 0% to 10% (Figure 7). This is caused by a diminishing returns of employee ownership effect. As employee ownership stake increases, the marginal increase in job satisfaction and productivity decreases over time. This is caused by the effect of financial compensation on job satisfaction, which increases at a decreasing rate for compensation greater than the industry compensation (Figure 4). Consequently, productivity also increases at a diminishing rate until it reaches its maximum. Financial performance still increases as employee ownership stake increases, though at a diminishing rate.

Proposition 2 (Diminishing Returns of Employee Ownership): There is a diminishing returns of employee ownership effect. The effect of additional employee ownership stake increases job satisfaction, employee productivity, and firm performance at a diminishing rate.

Figure 7: Annual Stock Grants Value as Percentage of Industry Compensation: 0% (Blue), 10% (Red), 20% (Green)

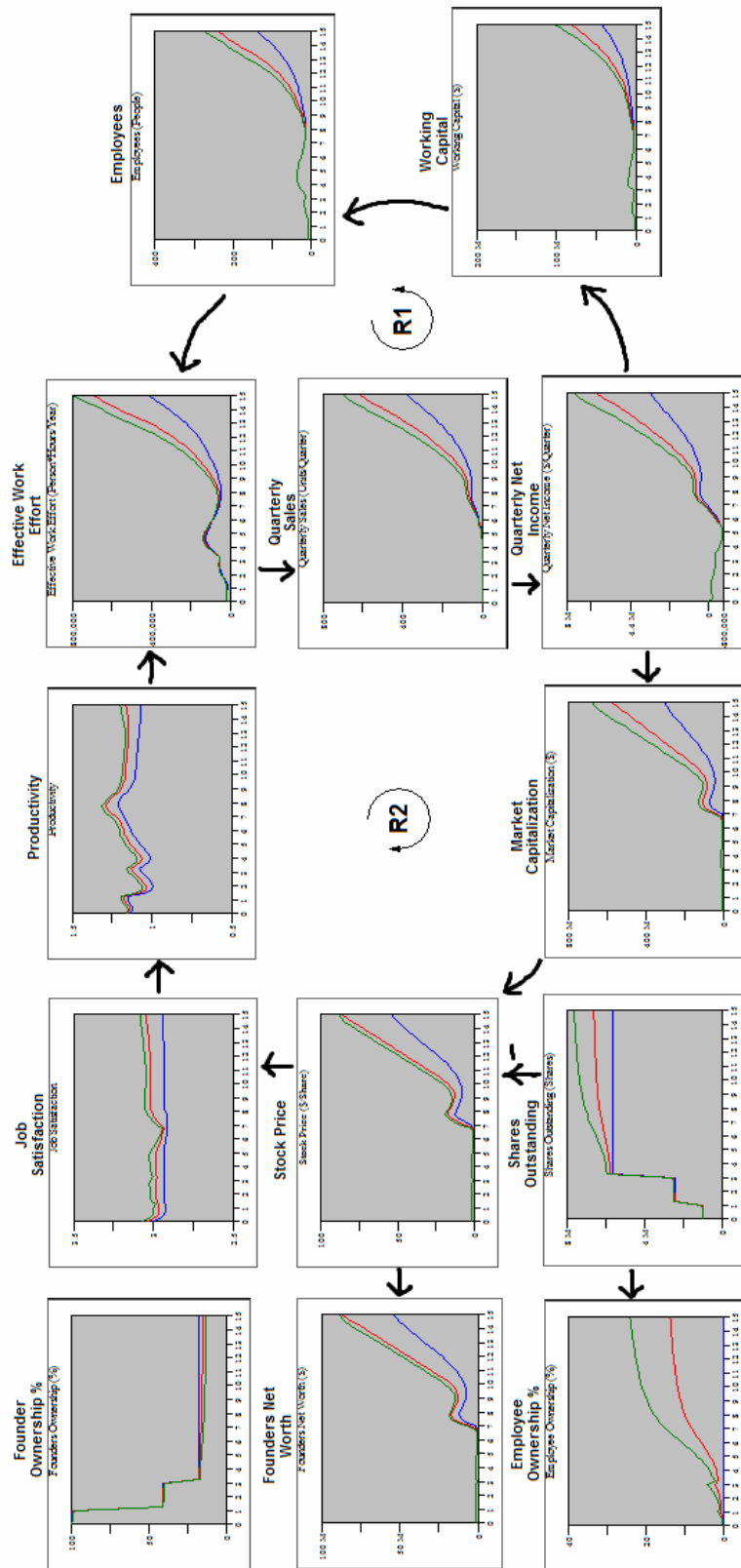
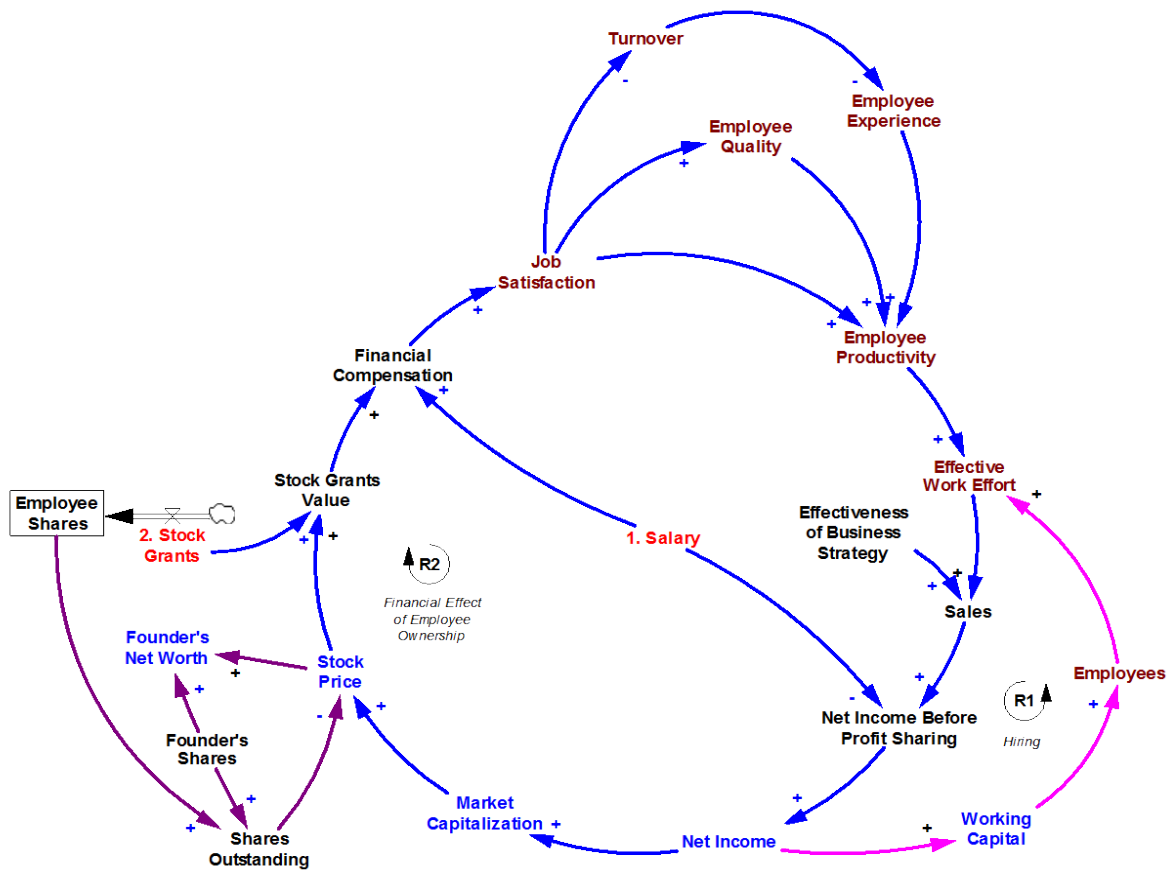


Figure 8: Causal Loop Diagram of Employee Ownership Effect



Given that an additional employee ownership stake motivates employees and increases firm performance, is greater employee ownership better? Should the founder give employees as much ownership as possible? The answer depends on one's measure of performance. Figure 9 shows policy runs with ASGV as 0% (blue), 50% (red) and 100% (green) of industry compensation. For sales, net income and market capitalization, the higher the stock grants, the higher their performance – though it increases at a diminishing rate, as explained earlier.

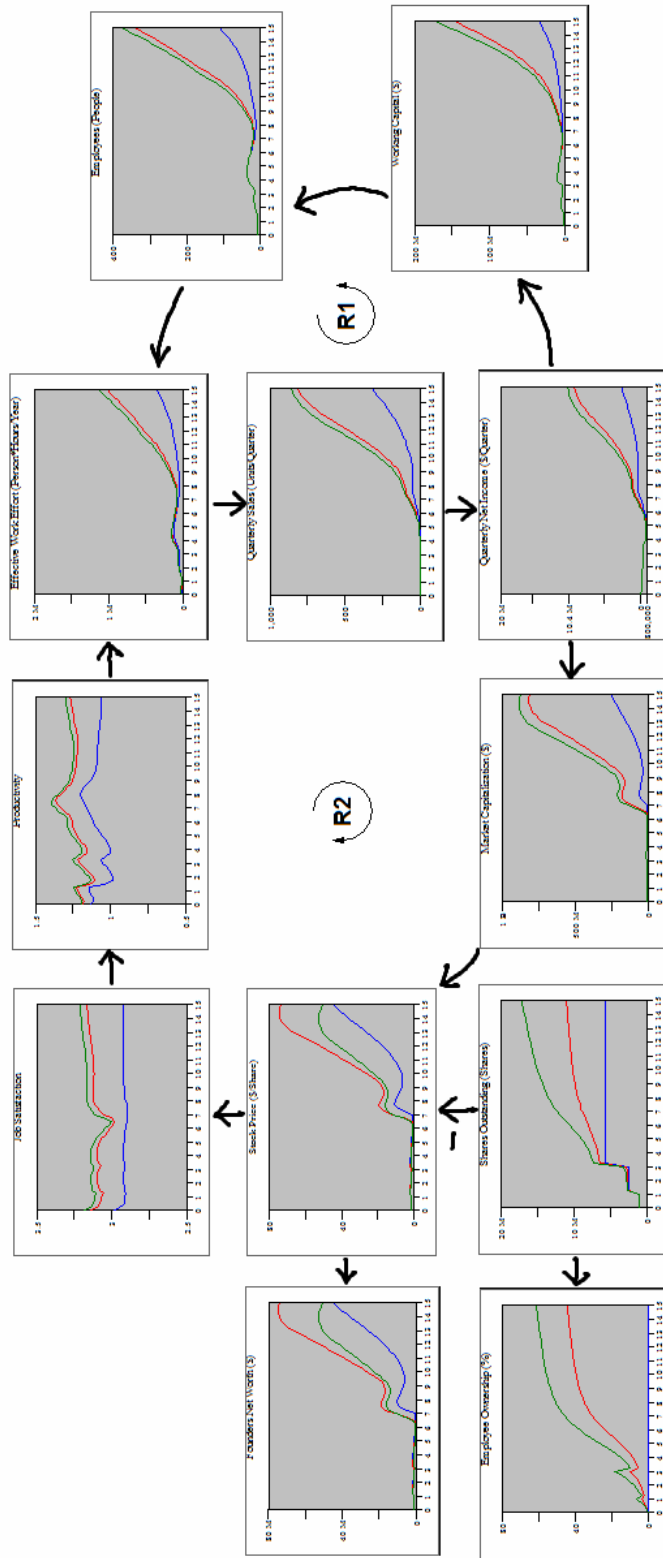
If one looks at stock price and founder's net worth, their values actually *decrease* as ASGV increases from 50% (red) to 100% (green). This is due to the dilution effect of employee ownership. As more shares are issued to employees through stock grants, stock price decreases as total shares outstanding increase. Even though the market capitalization keeps increasing due to productivity gains from employee ownership, the magnitude of increase is outweighed by the dilution of additional shares. As a result, stock price can decrease when the dilution effect outweighs the productivity gain.

This can be explained through the causal loop diagram in Figure 8. Granting employees shares has two effects on stock price: productivity gain and dilution effects. Employee shares, firstly,

create additional productivity gain and increase stock price by closing the employee ownership R2 loop (blue) and, secondly, dilute ownership by increasing total shares, which lowers stock price and the founder's net worth (purple). The two combined effects determine the change in stock price.

Proposition 3 (Dilution Effect of Employee Ownership): *Employee ownership has two effects on stock price: productivity gain and dilution effects. First, it creates additional productivity gain and increases stock price by closing the employee ownership loop. Second, it dilutes ownership by increasing total shares, which lowers stock price and founder's net worth. The two combined effects determine the change in stock price. When too much ownership is granted (past a certain threshold), the dilution effect can outweigh the productivity gain, thereby lowering the stock price and the founder's net worth.*

Figure 9: Annual Stock Grants Value as Percentage of Industry Compensation: 0% (Blue), 50% (Red), 100% (Green)



When salary is fixed at the market average, how do different levels of stock grants influence firm performance? The middle diagram in Figure 10 shows the market capitalization at year 15 under different constant levels of ASGV and 100% salary. When ASGV is zero, market capitalization at year 15 is \$300 million. As the level of ASGV increases, market capitalization at year 15 increases. With 150% ASGV, market capitalization reaches \$900 million by year 15. This is due to the productivity gain effect stated in Proposition 1.

The higher the level of ASGV, the less the incremental increase in market capitalization for every additional increase in ASGV. This demonstrates the diminishing return effect stated in Proposition 2. The productivity gain of employee ownership diminishes as the stock grants level increases. Thus, as more wealth is shared, more wealth is created, but at a diminishing rate.

Figure 10: Founder Net Worth, Market Capitalization, Ownership Percentage at Year 15 under Various Stock Grant Levels



How about founder's net worth? The diagram on the left shows founder's net worth at year 15 under various levels of ASGV. The base founder's net worth when there is no stock grant is \$55 million at year 15. As the level of ASGV increases, founder's net worth increases and reaches its peak when ASGV is 20% of industry compensation. It decreases steadily as ASGV passes 20%. This is due to the dilution effect stated in Proposition 3. The diagram on the right shows the ownership percentages of founder, VC and employees at year 15 under different levels of ASGV. As the level of ASGV increases, more dilution occurs in founder's (blue) and VC's (green) ownership. This is caused by the increase in employee ownership (red).

It is worth noting that although founder's net worth starts to decrease passing 20% ASGV, it still outperforms the base case of \$55 million when there is zero stock grant. Only when ASGV is greater than 90% do we see founder's net worth underperform the base case. This is because the dilution effect dominates the productivity gain, such that even though the total pie (market capitalization) increases with higher ASGV, the diminishing incremental increase in market capitalization is not enough to offset the loss in ownership share due to dilution. When too much ownership is granted (past a certain threshold), the dilution effect can outweigh the productivity gain, thereby lowering the founder's net worth.

Salary vs. Stock Grants

The analysis above assumed a fixed salary level while varying the level of stock grants. In practice, the entrepreneur could lower the salary and replace it with stock grants to conserve cash. What combinations of salary and stock grant levels outperform the base 100% salary case with no employee ownership? To answer this question, we ran 1,600 simulations of various combinations. Figure 11 on the left shows the market capitalization at year 15 under various combinations of salary and stock grant levels. The horizontal axis shows different levels of salary between 50% and 150% of industry compensation that a manager could adopt. 91.25% means that the firm adopts a policy of paying its employees a below-the-market salary worth a constant 91.25% of industry average. The depth axis shows various levels of stock grant value between 0% and 200% of industry compensation. These two axes denote the various combinations of salary and stock grants a manager could choose as a combined compensation policy. The vertical axis shows the value of market capitalization at year 15 when the manager adopts a certain constant combination of salary and stock grant levels throughout the model run. The line between the red and blue areas is the \$300 million base case line. Any point on that line denotes a certain combination of salary and stock grants that renders the same market capitalization as the base case. The area above the base line is the result of policies that outperform the base case.

Figure 11: Market Capitalization at Year 15 under Various Salary and Stock Grant Levels

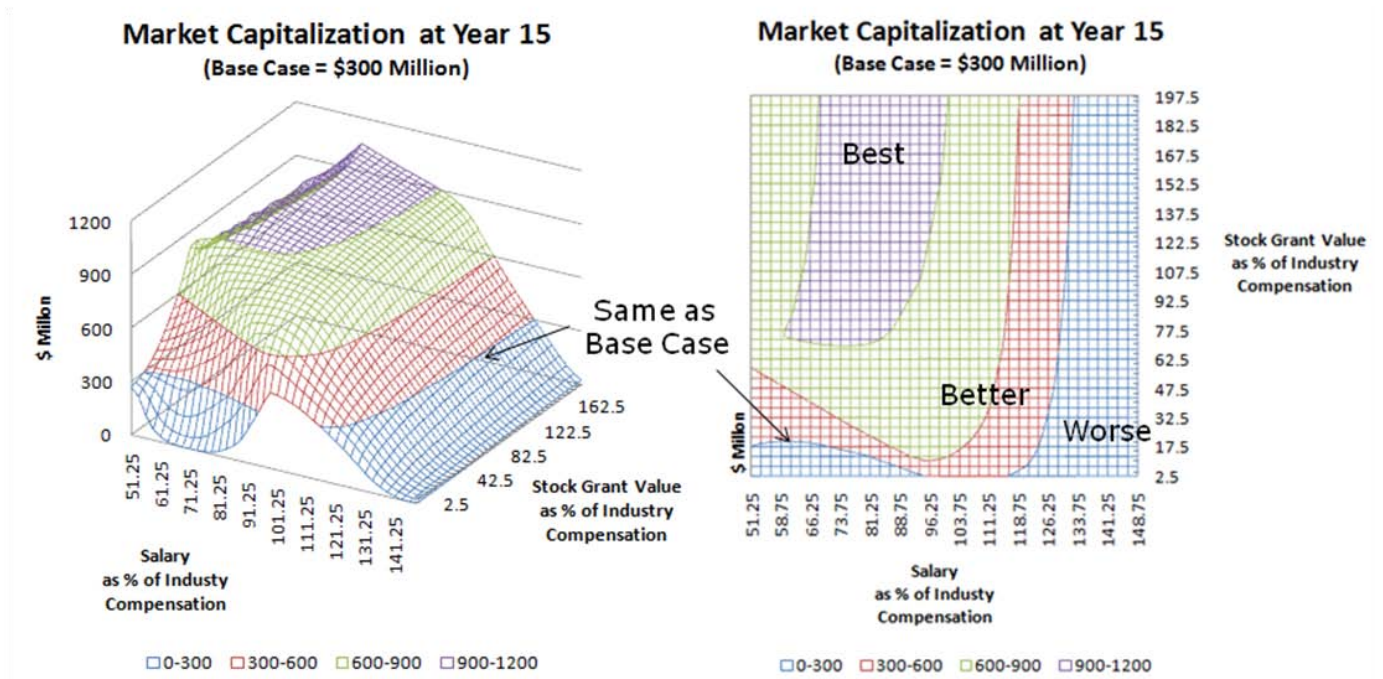
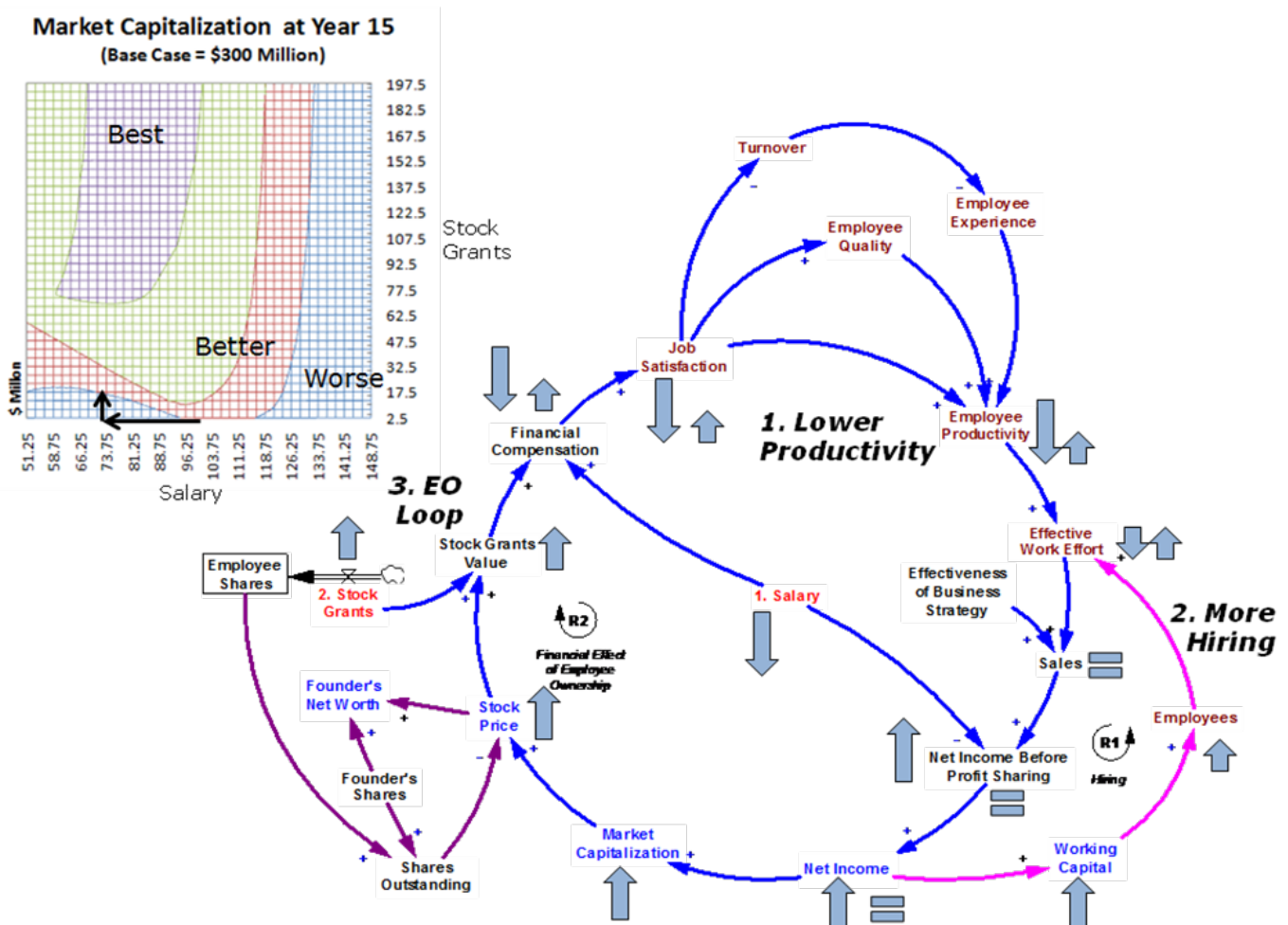


Figure 11 on the right presents a two-dimensional contour diagram of the 3D graph from a bird's-eye view. The purple area denotes the best-performing market capitalization. The blue area is the market capitalization that underperforms the base case, under the policies of very low salary with little to no stock grants on the left side, or high salary with or without stock grants on

the right. The base line is the curve between the red and blue area Every point on the base line is a combination of salary and stock grants that generates the base market capitalization at year 15.

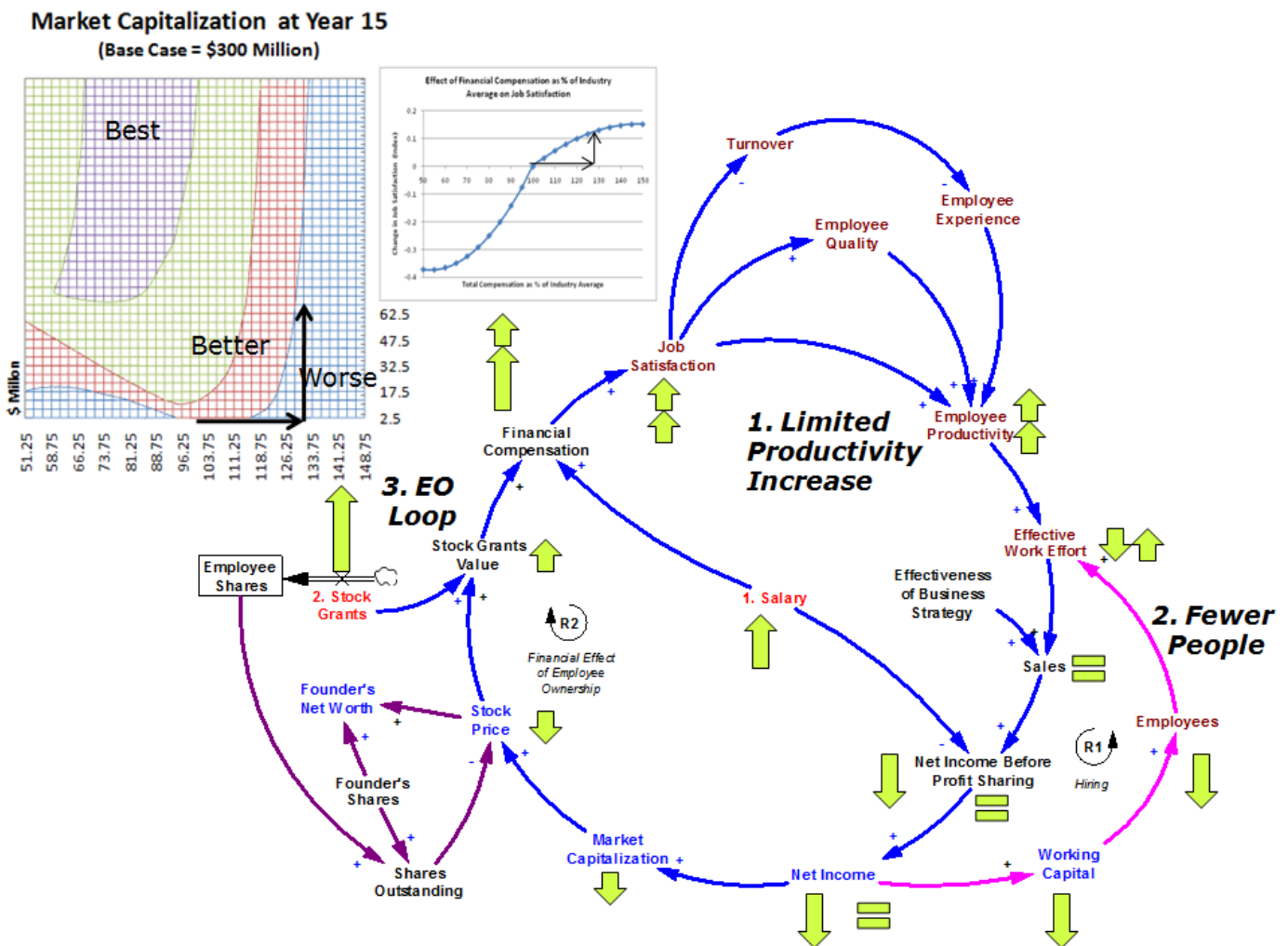
To understand the dynamics that generate Figure 11, it is helpful to explain the base line curve. First, Figure 12 shows that, as salary decreases, one needs to increase stock grants to maintain the base performance. This is because a low salary lowers financial compensation, job satisfaction, employee productivity and effective work effort (1. lower productivity). The side benefit of low salary is that it enables the firm to hire more people for a given headcount budget driven by the working capital (2. more hiring). However, the increase in hiring is not enough to offset the productivity decrease – effective work effort is still lower than the base case. To maintain the base case effective work effort, the firm needs to award stock grants that close the employee ownership loop – because the increase in stock grants value increases financial compensation, job satisfaction and productivity to the point that effective work effort restores to the base case value, which generates the base case values of sales, net income and market capitalization (3. EO loop). This demonstrates the scenario where employee ownership can be used as a compensation tool in combination with lower salary in order to conserve cash and expand the workforce.

Figure 12: Causal Loop Diagram of Low-Salary, Low-Stock-Grant Strategy



Second, Figure 13 shows that, when salary is increased, one needs to combine that with high stock grants in order to maintain the base case market capitalization. This is counter-intuitive – why does one need to award employees high stock grants on top of high salary? The causal diagram explains it. A high salary increases financial compensation, job satisfaction and employee productivity. However, the productivity is increased at a diminishing rate due to the functional form of the effect of financial compensation on job satisfaction (1. limited productivity increase). The unintended consequence of a high salary strategy is that it burns cash faster, thus lowering the number of people hired (2. fewer people). The limited productivity increase is not enough to offset the loss in headcount, and hence the effective work effort is lower than the base case value. To restore effective work effort to the base case value, the firm can increase productivity further by awarding stock grants. However, due to the diminishing return in job satisfaction and productivity, one needs to award a large amount of stock grants to raise productivity enough to restore effective work effort (3. EO Loop).

Figure 13: Causal Loop Diagram of High-Salary, High-Stock-Grant Strategy



In short, the intended productivity gain of a high salary strategy can be offset by the diminishing returns in productivity gain and the limited workforce due to expensive headcounts. High salary alone with no employee ownership performs worse than the market average salary alone. It is worth noting that high salary here means a policy of high salary for all employees (e.g., everyone’s salary increases by 30%). The model does not address differential pay raises to a workforce differentiated by functions or performance (Becker, Huselid and Beatty 2009). Further work could disaggregate employees into different performance levels to study the effect of a differentiated salary strategy.

What combinations of salary and stock grants produce a founder’s net worth that outperforms the base case value? Figure 14 show the comparable 3D and contour graphs for founder’s net worth. The base line curve of \$50 million is the line between the yellow and red areas. The area inside the base line curve is combinations that outperform the base case. The purple area with low stock grants and around market salary produces the best founder’s net worth. The underperforming red and blue areas on the top are caused by the dominance of the dilution effect due to high stock grants.

Figure 14: Founder’s Net Worth at Year 15 under Various Salary and Stock Grant Levels

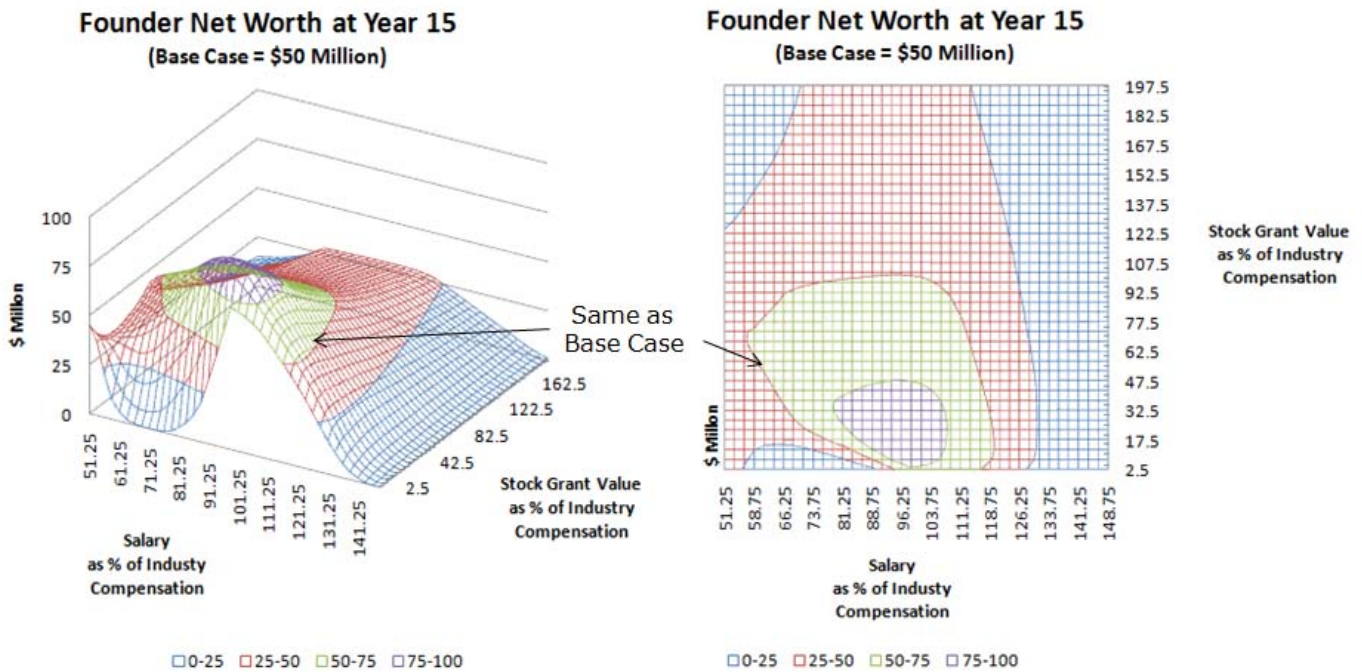


Figure 15 show the 3D and contour graphs for employee net worth. The base case of no employee ownership produces \$0 employee net worth. The base line is the horizontal axis when stock grant is zero. As stock grant increases, employee ownership increases, which leads to higher employee net worth. Yellow is the maximum employee net worth, driven by low salary (to

conserve cash and expand workforce) along with high stock grants (to increase productivity and employee share of the wealth).

Figure 15: Employee Net Worth at Year 15 under Various Salary and Stock Grant Levels

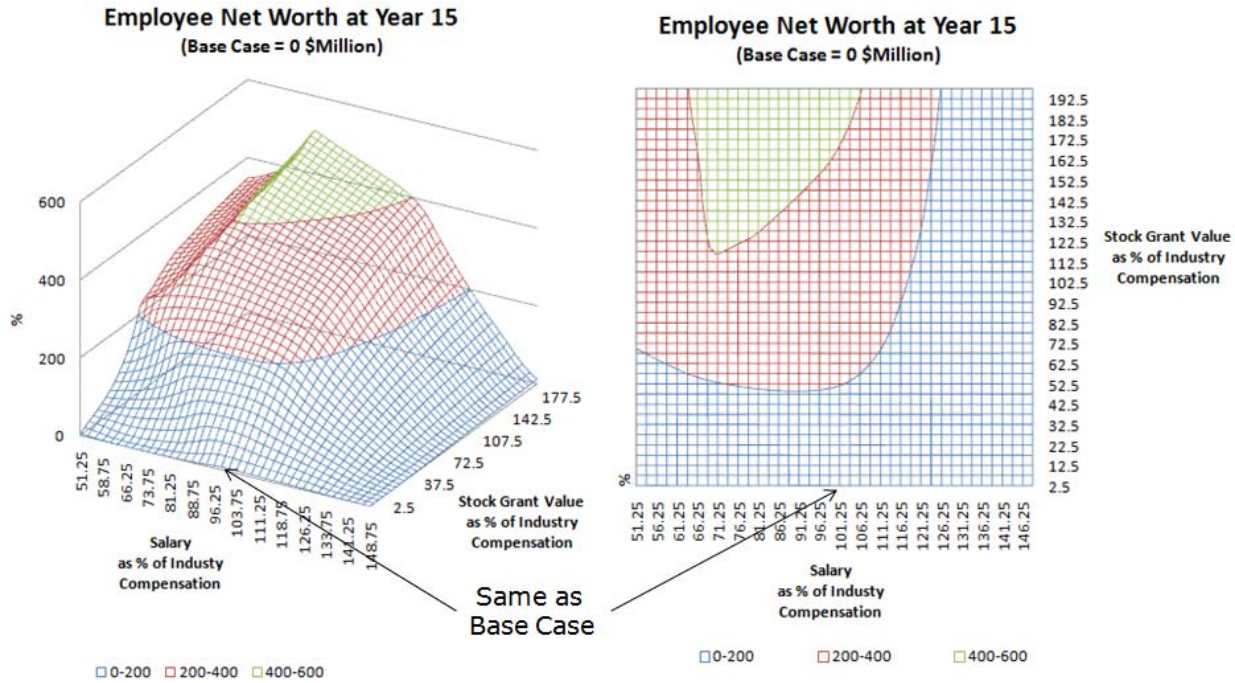


Figure 16 presents the contour diagrams for market capitalization, founder's net worth, employee net worth, employee productivity effect and headcount, all at year 15. It shows the two main reinforcing loops, R1 hiring and R2 employee ownership, that explain the contour results.

Market capitalization is split into founder, employee and venture capital net worth (not shown). The employee productivity effect shows productivity increases from the least (in the red lower left-hand corner) to the highest (at the top). The small arrow in each diagram points to the base case line. The low productivity is caused by low salary and low stock grants. As salary and stock grants increase, productivity increases. The highest productivity, at the top, is driven by the best employee net worth. High productivity leads to high market capitalization and employee net worth, which increases productivity even more (R2 Employee Ownership Loop). The headcount diagram on the right shows the number of employees. The blue is the least headcount area, driven by high salary cost. The purple is the highest headcount, caused by low salary and high stock grants. Higher productivity and headcount lead to higher effective work effort, which drives up net income and market capitalization. High net income and working capital lead to expansion of workforce (R1 Hiring Loop). The hiring loop and the employee ownership loop are the two main loops that generate the dynamic behavior shown in the contour diagrams.

Figure 16: Contour Diagrams of Market Capitalization, Founder Net Worth, Employee Net Worth, Employee Productivity and Headcount at Year 15

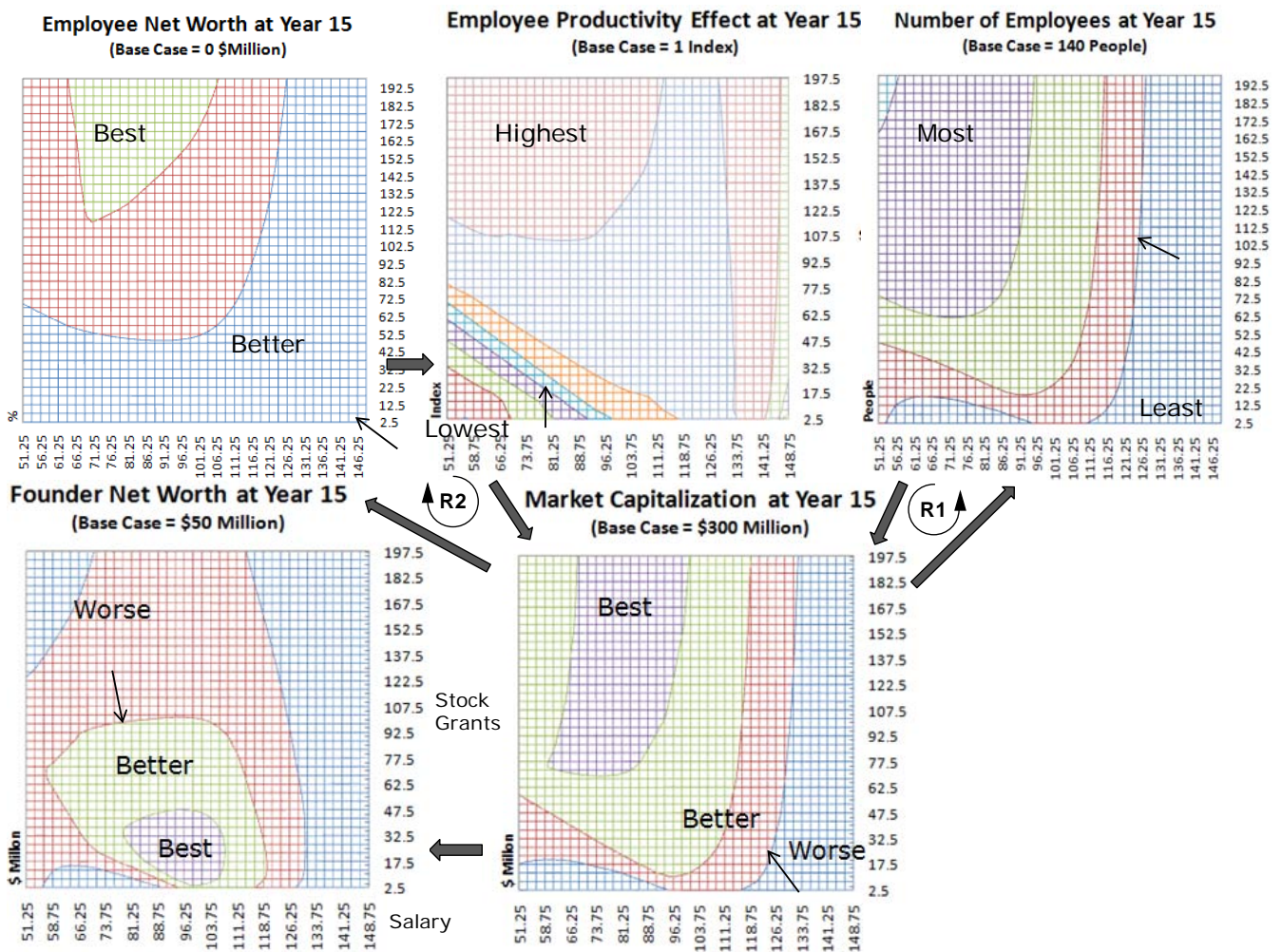


Figure 17 shows four types of firm objectives and the corresponding HR strategies.

1. Best Market Capitalization: Area 1 shows the maximum market capitalization and employee net worth with the worse founder net worth than the base case. To achieve the objective of maximizing market capitalization, low salary with high stock grants is the strategy. Low salary conserves cash and enables workforce expansion. High stock grants close the employee ownership loop and generate high employee net worth, which leads to high productivity. High productivity along with workforce expansion leads to maximum market capitalization. The hiring loop and the employee ownership loop reinforce each other into a virtuous cycle and generate the highest market capitalization. However, the founder net worth is worse than in the base case due to excessive dilution.

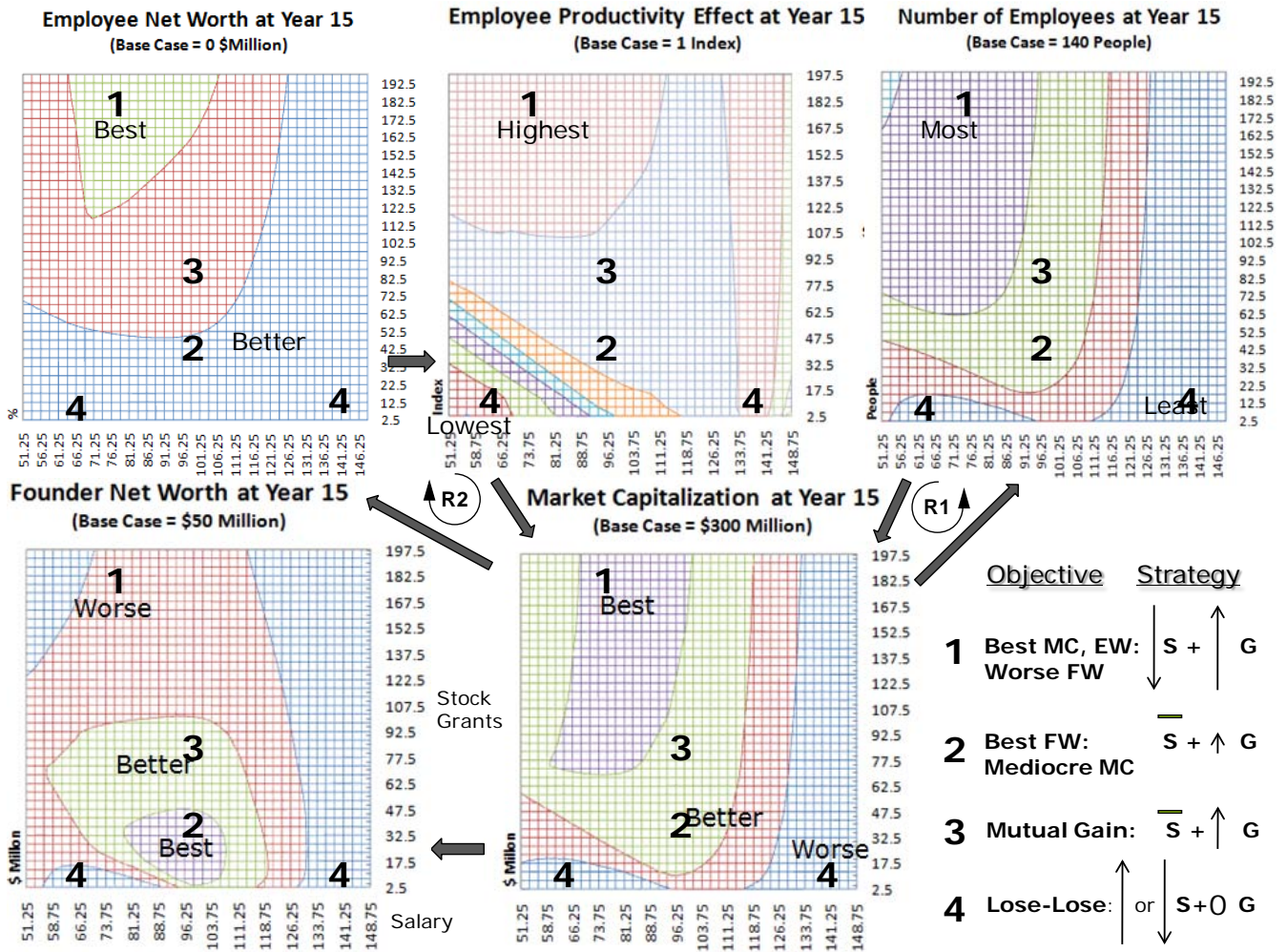
2. Best Founder Net Worth: Area 2 shows the maximum founder net worth, but mediocre market capitalization in comparison with the base case. To achieve the objective of maximizing

founder net worth, market salary with low stock grants is the strategy. Low stock grants weaken the employee ownership loop and result in a mediocre market capitalization that is only slightly better than the base case. Low stock grants also reduce dilution, which enables the founder to capture the wealth. This is the case of a small pie (market capitalization) with a large share (founder ownership). This is optimal for the founder but the total market capitalization is suboptimal. There is an unrealized potential wealth that is missing due to a weak employee ownership loop.

3. Mutual Gains: Area 3 shows the scenario where both founder and employee net worth outperform the base case. To achieve the objective of mutual gains, market salary with medium stock grants is the strategy. Medium stock grants strengthen the employee ownership loop without overly diluting the ownership. The productivity gain from employee ownership outweighs the dilution effect. Making stock grants increases both founder and employee net worth, as long as it is within the tipping threshold.

4. Lose-Lose: Area 4 shows the worst-performing market capitalization and founder net worth. To prevent lose-lose for the company and founder, very low or high salary with no stock grants is the strategy to avoid. With no stock grants, there is no employee ownership loop and the potential productivity gain is untapped. Varying salary too much without stock grants underperforms because its intended effect can be washed out by unintended consequences. For example, low salary enables hiring more employees. However, too low salary lowers productivity and net income, which shrinks the headcount budget, which results in fewer employees. Fewer employees lead to low work effort and net income. The hiring loop turns into a vicious cycle. On the other hand, very high salary increases productivity by only a limited amount, due to diminishing returns. It also reduces the headcount as employees become more expensive. In sum, too low or too high salary without stock grants underperforms.

Figure 17: Firm Objective and HR Strategy



7. SENSITIVITY ANALYSIS

Effect of Financial Compensation on Job Satisfaction

The impact of shared capitalism policy depends on the strength of the employee ownership loop. The strength of that loop in turn depends on the functional form of the effect of financial compensation on job satisfaction. To test how sensitive the analysis is to the functional form, we ran the same 1,600 simulations using the function forms at the lower and upper bounds of the 95% confidence interval in Figure 4.

Figure 18 shows the sensitivity analysis of the effect of financial compensation on job satisfaction. It presents market capitalization at year 15 when the financial compensation effect is at the lower and upper bounds of the 95% confidence interval. In the lower bound scenario, the base case line between red and blue areas is shifted to the left. This is because the maximum financial compensation effect on job satisfaction is capped at 130%. When the combined value of salary and stock grants passes 130% of the industry compensation, job satisfaction reaches its peak and, as a result, there is no additional productivity gain. Increasing stock grants beyond the 130% mark does not increase firm performance. The productivity gain from the employee ownership loop is weakened. The blue area is larger than the center bound case – more combinations of salary and stock grants underperform the base case. In fact, the likelihood of bankruptcy increases – the area to the right and below the black line signifies zero market capitalization at year 15. The 3D graph on the left in Figure 19 shows this clearly.

The upper bound scenario shows the opposite result. There are more combinations of salary and stock grants that outperform the base case, and the outperformance is at higher magnitudes. Shared capitalism policy creates higher market capitalization because the productivity gain in the employee ownership loop is strengthened in the upper bound scenario. This is due to the upward-shifting red line in Figure 4, which increases the effect of additional salary and stock grants on job satisfaction and productivity.

Figure 18: Sensitivity Analysis of the Effect of Financial Compensation on Job Satisfaction (Market Capitalization in Contour Diagram).

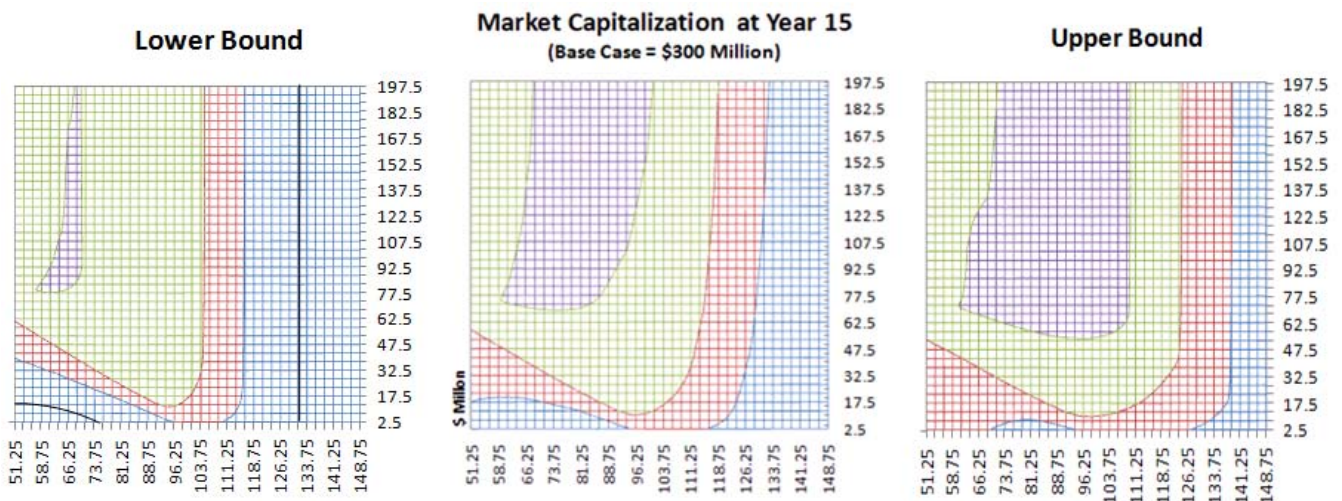
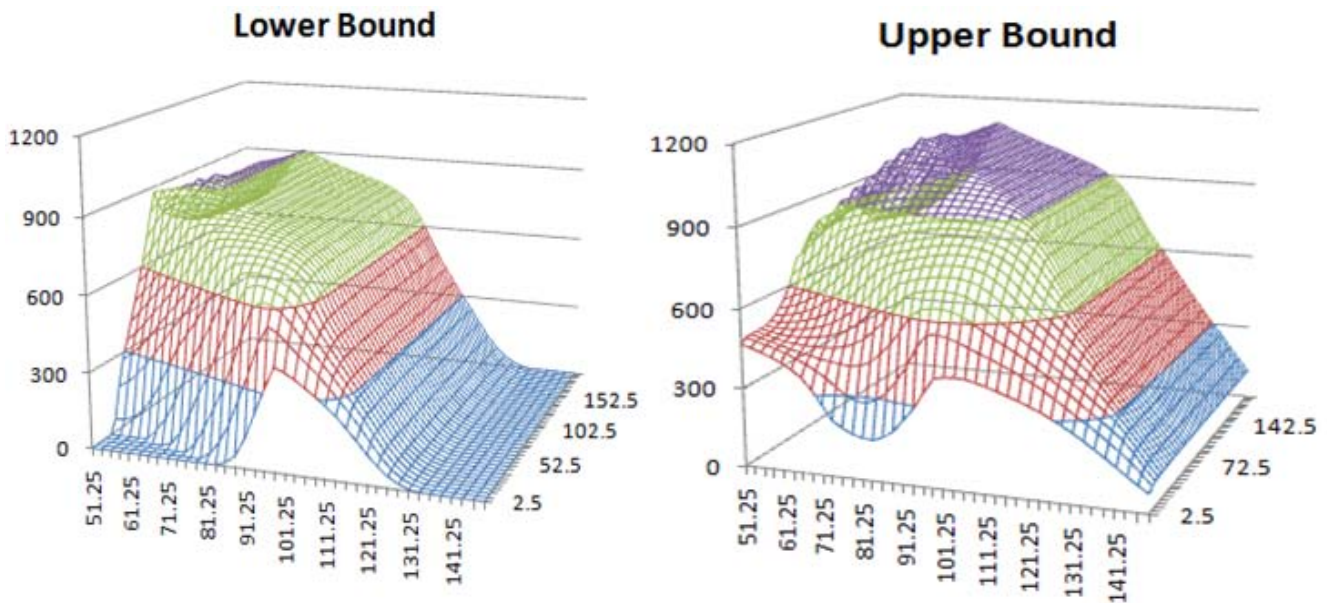
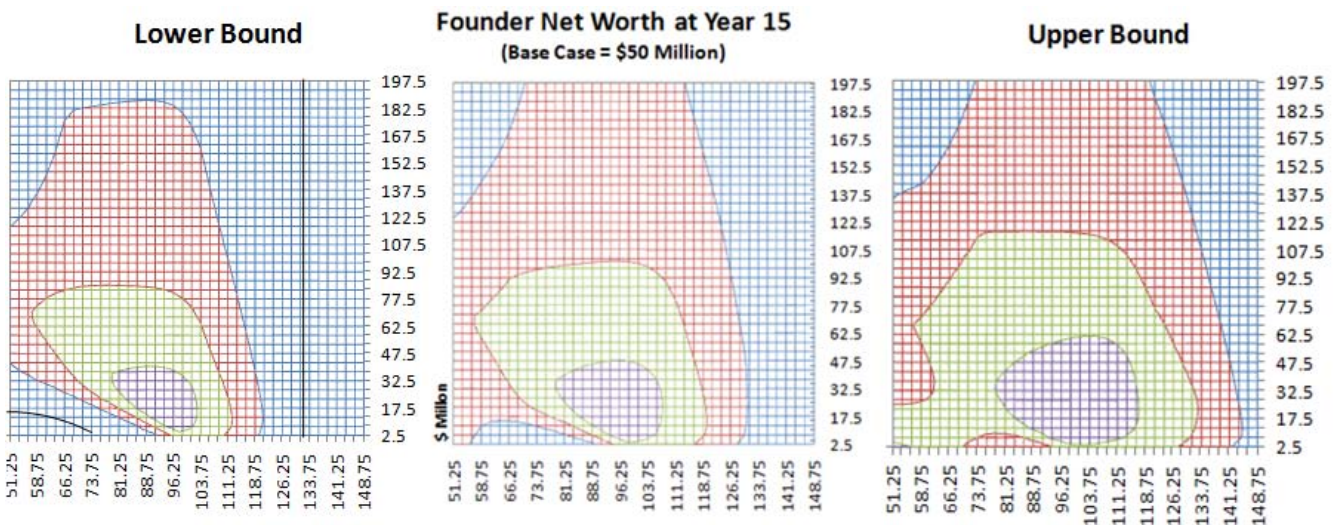


Figure 19: Sensitivity Analysis of the Effect of Financial Compensation on Job Satisfaction (Market Capitalization in 3D Graph)



The sensitivity results for founder net worth show a similar pattern (Figure 20). The number of outperforming combinations of salary and stock grants (yellow area) shrinks in the lower bound scenario due to the weakened employee ownership loop. It expands in the upper bound case as the loop strengthens. This sensitivity analysis shows that although the magnitude of the shared capitalism policy effect could be weakened or strengthened, its directional effect within the 95% confidence interval stays the same. The main policy insights and propositions remain intact.

Figure 20: Sensitivity Analysis of the Effect of Financial Compensation on Job Satisfaction (Founder Net Worth)



Decrease in Sales Productivity

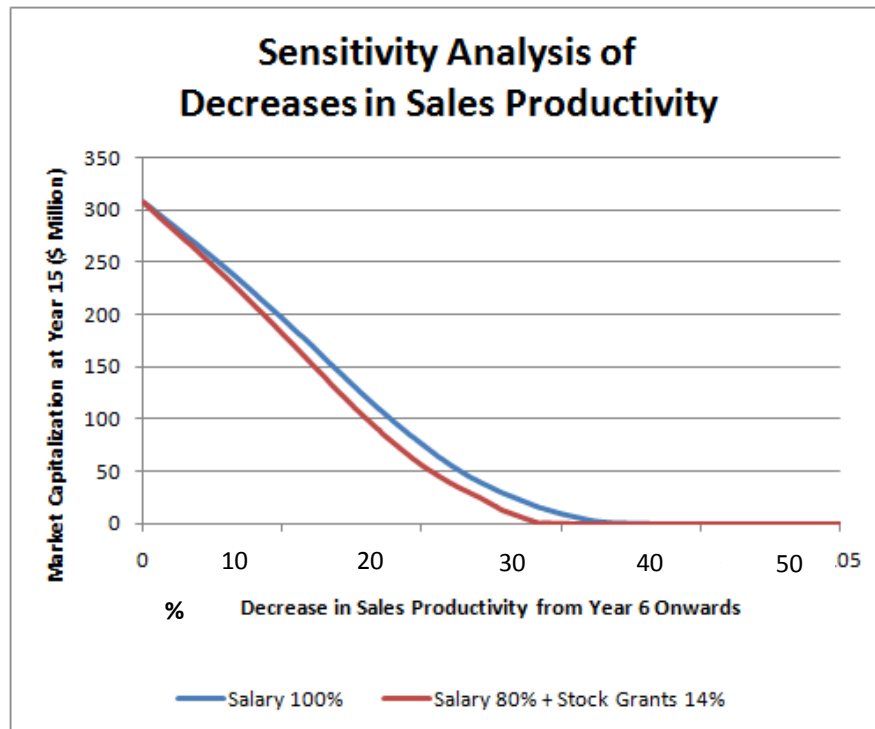
The analysis so far assumes there is one startup firm and one incumbent with no new entrants into the market. To test the sensitivity of the model results under competitive pressure, we ran simulations with a step decrease of sales productivity at year 6 onwards till year 15. Since new entrants offering competing products are likely to lower the firm's sales productivity, this shock signifies the uncertainty in market competition.

Figure 21 shows the sensitivity results. The horizontal axis denotes the size of shock from 0 to 50% of sales productivity decrease from year 6 onwards. The vertical axis is the market capitalization at year 15. Two HR policies are compared. The blue is the case of 100% salary with no stock grants. The red is 80% salary plus 14% stock grants. Both policies give the same base case market capitalization when there is no shock – this gives us the equal starting point for comparison.

As expected, the larger the shock (signifying higher competition), the lower is the market capitalization. There is a tipping point where the shock is too large (around 30%), so that the firm goes bankrupt, as there is not enough sales generated to sustain the firm. The firm is outcompeted and has ceased to exist by year 15.

The red line declines more steeply than the blue one for a given shock, i.e., the same shock reduces market capitalization more for the lower salary with stock grant policy than for the market salary case. This is due to the positive feedback loop of employee ownership working in the vicious direction. A shock of low sales productivity leads to lower sales and net income, which leads to lower stock price and stock grants value. This in turn reduces job satisfaction and employee productivity more than in the 100% salary case. Thus, employee ownership creates the reinforcing loop connecting firm performance and employee behavior. However, the virtuous or vicious direction of the loop depends on other factors, such as competitive pressure. Being an employee ownership company does not guarantee success; sound business strategy is needed to fend off competitors. This sensitivity analysis shows that, in a downturn, the employee ownership loop could work in a vicious direction and cause the firm to underperform the 100% salary case.

Figure 21: Sensitivity Analysis of Decreases in Sales Productivity



The main insights of the policy analysis are:

1. Employee ownership creates, and mediates the strength of, the reinforcing feedback loops from firm performance to employee behavior.
2. Salary has a direct effect on productivity and hiring but does not close the firm performance to employee behavior feedback loop.
3. Stock grants have productivity gain, diminishing returns and dilution effects.
4. The impact of salary and stock grants on firm performance is sensitive to the non-linear effect of total compensation on job satisfaction.
5. The impact of shared capitalism policy on firm performance depends on the dynamic tradeoffs among the four effects: hiring, productivity gain, diminishing returns and dilution.
6. The more wealth is shared through broad-based employee ownership, the more wealth is created, given the appropriate conditions.
7. To attain mutual gains for founder and employees, a policy of market average salary, plus sufficient stock grants to strengthen the employee ownership loop without overly diluting the ownership, is recommended.

How to create a high performance work system that improves employee well-being and firm performance? This paper sheds light on the importance of combining “soft” HR practices, such as employee participation, along with the “hard” compensation policies, such as employee ownership and profit sharing. Being aware of the conditions under which shared capitalism

works could ease fears such as the fear of equity dilution and enable organizations to create wealth by sharing it. By expanding the pool of capitalists and empowering employees to share the wealth they contribute to creating, shared capitalism may be able to become a sustainable and predominant form of capitalism.

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