MOTIVATIONAL THEORY AND ITS RELATIONSHIP TO ECONOMIC THEORIES OF WAGE

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ABSTRACT
This article compares the empirically researched motivational behavior theories to the economic theories of wage. The comparison reveals that both theoretical and empirical research on motivational behavior support many of the foundations of institutional wage theory while undermining many of the assumptions associated with neoclassical wage theory. The conclusions of this research have important implications for both managers of employees and executives who set corporate policy. In addition there are policy implications for government agencies and legislative bodies that attempt to influence wage practices.

INTRODUCTION

Economists have historically focused on the relationship between incentives and behavior in order to explain human action. Wages have been considered the incentive identified to motivate work and compensate for the disutility of the task. Wages appropriately play a large role in most economic theory related to the production process. In the modern era, a significant amount of research analyzing motivation (including wage as a factor) has been done by sociologist and organizational behavior specialists. These strains of social science, separate from economics, have produced a large body of work, both theoretical and empirical. The motivational research both supports and discredits certain elements of the economic theories. In this paper it will be shown that the relationship between wage and motivation, which is so important to neoclassical wage theory, is seriously challenged by both theoretical and empirical work. In addition much of the organizational and motivation research emphasizes the importance of institutional factors as a trigger and rationale for motivation which is very closely aligned with the economic institutional wage theories. Most of the contemporary motivational theories have a substantial amount of supporting research (Judge, 2009). They also represent the current state of thinking among top management academics. By understanding and contrasting the motivational research with the economic theories, a more holistic and real world view of the human behavior underlying wage theory can be achieved.

WAGE THEORY

Modern economic wage theories can be found in three general schools of economic thought: neoclassical, institutional, and power relationships. Each of these theories will be briefly described in the following text.

Neoclassical Theory of Wage: The neoclassical wage theory is derived from a concept of supply of, and demand for labor. Supply of labor is based on an individual's utility function in which consumption and leisure are traded off to maximize utility. "The properties of the supply of individual labor result from the combination of substitution effect and income effect. The combination of these effects seemingly leads to a non-monotonic relation between wages and the individual supply of labor" (Cahuc & Zylberberg, 2004, p. 9). The demand for labor is seen in a wider context. Labor is one of the factors of production. A firm chooses the combination of inputs, including labor that minimizes its cost of production for the profit maximizing output quantity. Given supply of labor and demand for labor, wages are then determined as the price that brings these two forces into equilibrium. The key results from the neoclassical theory of wage determination include, for a competitive environment:

- Homogeneous workers and jobs will receive equal wages.
- Workers who are unemployed choose to be unemployed as they maximize their utility trading off between work and leisure. These voluntarily unemployed workers prefer leisure to the disagreeability of work at the available wage.
- Workers would move quickly and easily between competing jobs when small differences in wage rates and job characteristics appear.

The reality of labor markets undermines these expected results. The dispersion of wages has been well documented and researched by Guttschalk (1997). Also, involuntary unemployment is a reality across the globe and has been studied in detail since the great depression. And finally workers do not move quickly between jobs over small wage differences (Moscarini & Thomsson, 2007).

These empirical realities have spawned a variety of adjustments to neoclassical wage theory. According to Krueger and Summers (1988) there are two types of answers to the question of why some firms pay more for the same job. First, firms may not be profit maximizers, but rather act according to the manager or owners' alternative agenda. This is called an *agency theory* mechanism. Agency theory is often expressed as a manager maximizing their own personal welfare rather than that of the firm and its owners. The second type of answer is based on the idea that firms may, for different reasons, find it unprofitable to reduce wages to market level. These are *efficiency wage* considerations. Both of these answers however are focused within the rational world of homo economicus and orthodox neoclassical theory

Institutional and Social Determination Wage Theory: Other economists have developed theories basing wage determination as a function of social institutions and cultural/psychological determinates. These ideas began with Veblen's anthropological economic work.

> "Wages is a fact incident to the relation of employer and employed. It is, in the sense fixed by colloquial use.… The laborer, from the point of view of consumption of products, is no longer "laborer": he is a member of society simply, and his share of the product of industry is the share of an individual member of society. (Veblen, 2002, p. 20)

Veblen tells us that wages are set by social and historical standards and with views of equity and reciprocity rather than supply and demand.

A key article by Akerlof (1982) brought the idea of fair wage and fair effort back from anthropology to economics. According to Akerlof the employer pays a wage higher than the going rate and the employee in return exceeds the market work standards. These are seen as a sequence of gifts and counter gifts as would also be seen in primitive social organizations. Cahuc and Zylberberg (2004) provide a relationship showing that social norms influence productivity and effort at equilibrium.

While there are few universal behaviors that can be expected from this theory, as social norms will vary by group and over time, the identified institutions and social norms for a specific situation can be thought to drive wage relationships in a logical way and the specific institutions such as unionism and bureaucratic hiring rules can be studied for impact. The impact of institutions and social behaviors have also been studied and documented in work with game theory and primitive cultures.

Power Relationships Wage Theory: A final theory of wage setting is centered around the power relationship between worker and employer. In certain forms this theory can be traced to the "Father of Economics," Adam Smith. In speaking of labor and wages and the dispute between employer and employee, he says, "*It is not, however, difficult to foresee which of the two parties must, upon all ordinary occasions, have the advantage in the dispute, and force the other into compliance with their terms*" (Smith, 1981 (1776)). The words "force" and "dispute" are not synonymous with the concepts of an open free market.

Perhaps best known in this arena is the significant work that has developed around Marx's theory of social struggle and surplus value. Marx (1844) states "wages are determined through the antagonistic struggle between capitalist and worker" (para. 1). Marx notes that the wage actually paid a given worker may be temporarily above or below the normal wage. Supply and demand forces cause oscillations above and below a "certain mean." The mean is the "natural price . . . determined independently of demand and supply" (Marx, 1891, para 5).

While Marx's theory of wages started with the view that capitalism would drive wages to a subsistence level, he asserted that the average wage is "that quantum of the means of nourishment which is absolutely requisite to keep the laborer in bare existence as a laborer," (Marx, 1848, para 22). Subsequently he began to add additional items of historical or cultural need to the definition of subsistence.

> "In 1865, during his address to the General Council of the First International, Marx presented his fully developed theory of wages. There is still a minimum limit on wages that is basically a physiological minimum but there is no maximum. The determination of where a given wage will lie … is based on the respective powers of the combatants. This seems very similar to the class struggle Marx details in the Communist Manifesto. (Bigelow, 1999, Para. 5)

In Marx's world the power struggle between the capitalist and the worker over the produced surplus value is reflected through the wage.

Another area of research that fits into the power struggle group of wage theories is the work around union bargaining. A large amount of empirical and theoretical work has been developed around union negotiation. Despite the decline in union membership, union bargaining is both historically and currently very important to the world of wage setting. While union density has decreased, collective bargaining coverage is still quite high because in most European countries collective agreements prohibit differentiating between union and nonunion employees.

According to the OEDC (1997) union density for member countries is 44% but collective bargaining is 68% (Cahuc & Zylberberg, 2004).

Bargaining theory can be traced to Edgeworth (1881) where parties divide goods in a pareto optimal way, and then continues with Nash (1951) and Stahl (1973) and Rubinstein (1982) where game theory was first explored. If the rules of the game (utility preferences of the players and alternative options) can be described, a best case equilibrium can be modeled. Bargaining theory has resulted in many modern economic models. Models around bargaining have been created and incorporated into economic theory. They include the monopoly union model, markup and union power model and insider/outsider model. These models can result in efficient outcomes under certain assumptions (Cahuc & Zylberberg, 2004). Empirical studies suggest that unions do in fact increase wages (Cahuc & Zylberberg, 2004).

Figure 1.1 shows a graphic outline of the three wage theories discussed and the areas where these intersect.

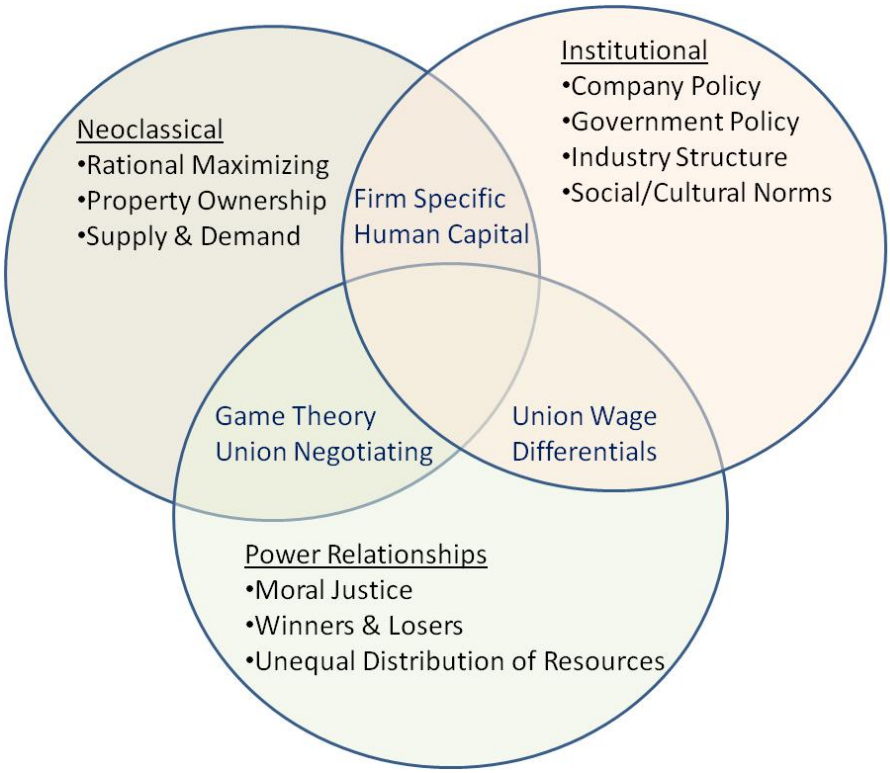

Figure 1.1 Model of Wage Theories

BACKGROUND

As a background to understanding the relationship of motivational theory to the economic theories of wage, two studies will be helpful in building a foundation. The first study is a framework by Benabou and Triole, and the second is an empirical research study by Ingalens and Roussel.

Benabou and Triole (2003) develop a mathematical model that shows how multiple elements work together effecting motivation. The concept of multiple elements working together is an important part of many modern motivational theories. The equation relies on three variables, β, the specific parameters of the work task and the ability of the employee, *p,* the policy of management, and *e,* the effort of the employee. These three variables can determine both the manager's and the employee's payoff. Payoff is the utility achieved by either a manager or employee as a result of their actions. The expected value of the manager's payoff would be shown as follows:

$$E[\,U\,(\beta, e^{*}\left(p, \breve{\beta}(\sigma, \mathrm{p})\right), \mathrm{p})|\beta]$$

Here U is the utility (payoff) to the employer, and sigma σ is the parameter of asynchronous information. Only a portion of the full fixed information β is assumed to have been signaled to the employee about the task and the employee's abilities. $\breve{\beta}$ is the employee's interpretation of β given the portion (σ) of information signaled and his interpretation of the policy adopted by the manager. e^{*} is the employee's optimal effort (from his point of view) and depends on the policy and his interpretation of the work parameters and his ability. When maximized, the result will have three important terms.

$$E\left[\frac{dU}{dp} + \frac{dU}{de^{*}} \cdot \frac{de^{*}}{dp} + \frac{dU}{de^{*}} \cdot \frac{de^{*}}{d\breve{\beta}} \cdot \frac{d\breve{\beta}}{dp}\middle|\beta\right] = 0$$

Terms: First Second Third

The first term represents the cost to the manager of the policy, for example the higher wage. The second term represents the direct impact of the policy on the employee's behavior. It is within this term that efficiency wage effects could materialize as policy (wage and other factors) drives effort. The third term is about employee perception of management motive which could be favorable or unfavorable. The employee will interpret the policy based on his or her view of the managers' objectives. Generally the first term is assumed to be negative as the manager has to give something to the employee. The second term is assumed to be positive as the employee responds to the management's policy. The third term could be of either sign based on the employee's positive or negative perceptions about management motive and as a result swing the overall result positive or negative. For example, based on the way it is communicated, an employee may interpret an assignment to work overtime as a punishment for being inefficient or as a reward for being the most able to contribute. This equation is used to outline several conditions.

1. Employee sensitivity to and perception of performance incentives can negatively impact perceptions about the task and overwhelm the direct motivational impacts of the policy.
2. Incentives can be weak motivators in the short run and negative in the long run and they impact employee perceptions (Benabou & Triole, 2003).
3. Ability β and effort e^{*} can serve as complements and someone with perceived greater ability could reduce effort in the presences of a pass - fail outcome.

These conclusions set the stage for discussions which follow of the importance to motivation of policy and culture beyond wage. It can also apply directly to modern production teams. Since output is only measured for the team, this allows the perception of ability (true or not) to be a substitute for reduced effort (see condition 3 above).

In the second background research Igalens and Roussel (1999) published a study on the relationship between pay and work motivation. The review of this study lays the ground work for several discussion to follow about the limited overall impact of wage. Their field test and empirical research was based on a framework using the expectancy theory. They collected 566 surveys from employees in France, and importantly, 297 of these surveys were from nonexempt (eligible for overtime) employees.

Igalens and Roussel tested, using the French worker survey, whether fixed pay, flexible pay and benefits were related to motivation and concluded that the valence attached to fixed pay, flexible pay and benefits did not influence work motivation. For the nonexempt associates the relationship of fixed pay to motivation was negative and the relationship of variable pay and benefits to motivation was insignificant.

NEOCLASSICAL WAGE THEORY

This section will contrast motivational theories with the assumptions and implications of neoclassical wage theory. Neoclassical wage theory rests on wage being the driving force behind motivation. It is through wage that the negatives associated with work are overcome and justify the tradeoff with leisure. The efficiency wage theory postulates that through additional wage extra effort is generated and incremental output is achieved. Both the early content motivational theories and the cognitive theories challenge this assumption.

Early theories on motivation such as Maslow's hierarchy of needs (Maslow, 1954) and Herzberg's two-factor theory (Herzberg, Mausner, & Snyderman, 1959) were largely focused on content. Maslow's well known theory separated needs into lower order needs and higher order needs. Herzberg analyzed the factors that impact job satisfaction, and separated the factors between those that lead to satisfaction and those that lead to dissatisfaction. Even though these two theories are some of the original motivation theories, the content elements are still included within the most contemporary theories.

A major point that is relevant from these early motivational theories is that wages are a small part of motivation. Relative to Maslow's hierarchy, wages would fit largely in the lowest need state - physiological needs. Herzberg calls this level of need hygiene factors and completely separates hygiene factors from what he calls motivational factors. Of the 16 factors that Herzberg identifies as contributing to job satisfaction or dissatisfaction salary ends up only being a minor one (Herzberg, 2003). If pay is a minor factor affecting motivation, links between wage and the quantity of labor supplied as identified by the neoclassical wage model become suspect.

The factors that Herzberg list as being most important relative to motivation include relationship with supervisor, company policy and administration and recognition and achievement. These factors would fit much better with the structural arguments supporting the institutional economic theories of wage because the institutional theories are based on policy and cultural and social norms. Even these earlier motivational theories recognized the role of group dynamics and a need to see employees as complex individuals with many motivational influences.

Cognitive Evaluation Theory proposes that extrinsic rewards, such as pay, can actually reduce the intrinsic reward of the work, thereby potentially reducing motivation (effort). While this is somewhat counter intuitive it has been backed up by a large number of studies. (Deci, 1975; Hall, 1995; Deci, Koestner, & Ryan, 1999). Possible reasons have been suggested why this might occur. These reasons include the idea that extrinsic rewards give an individual a loss of personal control along with the idea that an individual may perceive that if higher extrinsic rewards are

provided, they must be required; therefore the previous level of intrinsic rewards must not be valid and are therefore reduced. The cognitive theory has major implications for management and pay setting policy because of implying that any motivational impact of a pay increase might be more than offset by a reduction in personal motivating factors. If taken to an extreme the theory could even suggest that workers should pay to increase their personal work satisfaction.

Relative to the economic wage theories, cognitive theory would of course be at odds with neoclassical theory and efficiency wage theory. Perhaps cognitive theory would fit better with Marx's view of work alienation and human desires for fulfilling work because Marx stresses a natural intrinsic motivation which he sees as shattered by the capitalist system (Bertell, 1971). Because of its controversial conclusions it is not surprising that this theory has been attacked in both methodology and interpretations. These attacks have raised some substantial questions. Today we understand that there are many underlying factors for motivation and the framework proposed by Cognitive Evaluation Theory may or may not appropriately apply to a situation depending on specific circumstances (Judge, 2009). However it has been observed per the studies referenced previously that there are occasions where the introduction of extrinsic rewards such as increased pay, can undermine the intrinsic motivation and end up reducing effort.

INSTITUTIONAL WAGE THEORY

Institutional theories of wage rest on historical processes and organizational practices. These include among a wide range of additional factors, things like bureaucratic hiring rules, social job "contracts," manager moral responsibility, legal wage and work laws, and firm specific training and knowledge. Within this theory wages and effort are not always directly connected. One can find many parallels with the wide range of impacting factors that institutional economic thought applies to wages and the factors which modern motivational theories apply to motivation. The relationship of modern motivational theories to institutional wage theory will be explored through Expectancy Theory which serves as an umbrella theory of many current theories on motivation.

One of the most widely held explanations of motivation is Victor Vrom's expectancy theory published in 1964. Expectancy theory can be considered an umbrella theory because many of the other contemporary theories on motivation fit within the three relationships on which expectancy theory is built. By describing this theory the parallels with institutional economic thought can be pointed out. It is also highly supported by the empirical research (Judge, 2009).

Expectancy theory proposes that motivation depends on three factors. Vroom refers to these three major expectancy theory factors or variables as expectancy, instrumentality and valence. (Vroom, 1964). The three relationship variables are multiplicative. If any one of them is zero, total motivation will be zero, and if any one of them increases it will increase motivation.

The first is the expectation that effort will produce result. This is supported by the theory of self-efficacy (Bandura, 1997), the internal belief in personal capabilities. If an individual does not have the capabilities to perform at a high level, no amount of effort will result in high performance. Rational individuals recognize this connection and will put forth effort only where they think it will be effective. This expectation also requires a belief that the organization or system can recognize the extra performance, that it will be visible. For example, extra effort put into the creation of a contingency plan that will likely never be reviewed or used is not likely to be recognized by an organization. Relative to institutional wage theory the level of visibility of both effort and results is highly reliant upon the institutional processes for monitoring and measuring. Firm specific knowledge and culture will also influence the expectation that effort will produce a result.

The second factor in this theory is the expectation that performance will produce a reward. The motivational theory of equity (Adams, 1965) fits into the expectancy theory here. Many employees see the performance reward relationship as weak. They believe that social skills, length of service or race and ethnicity could influence rewards just as much or more than performance. If all members of a team are paid the same wage but are seen to put forth different amounts of effort, team members would perceive the situation as unfair. This is not motivating and can create anger and guilt. The strength of the performance reward relationship will depend upon institutional factors such as pay policies, wage laws and cultural norms.

The third factor is the expectation that the reward will be personally satisfying. The motivational theory of reinforcement (Komaki, Coombs, & Schepman, 1996) fits into this factor. If an employee wants recognition but instead gets a pay raise or wants a pay raise but instead gets rewarded with more work, the reward will not be satisfying. It also raises the question, "Do all employees want the same thing?" In economics the simplifying assumption of homogeneity is regularly used, and in business most managers neither have the authority nor practical capability to individualize rewards. The recognition of the importance of rewards beyond pay alone further aligns expectancy theory with institutional wage theory rather than neoclassical wage theory.

RELATIONSHIP BETWEEN MOTIVATIONAL AND ECONOMIC WAGE THEORIES

There are a many motivational theories which have been supported with empirical research. From the variety of theories it is clear that motivational theory is not simple. Labor does not respond uniformly to a single variable, even one as (arguably) powerful as wage. Within economics the effort is often made to isolate the impact of individual variables with an assumption of ceteris paribus, holding everything else constant. But the reality is that there is never a case where "everything else" is held constant. The state of flux and the number of variables and interactions involved with motivating employees to extend additional effort make such an assumption unreasonable. It is most practical to approach motivation with an umbrella theory such as expectancy theory and then relate the underlying principles exposed to the economic theories. This relationship is demonstrated in Figure 2.

		Economic Wage Theories		
Topic	Motivational Research	Neoclassical	Institutional	Power Relationships
Workers				
Homogenious		■		■
Individuals	■		■	
Information				
Syncronous		■		
Asyncronous	■		■	■
Performance Factors				
Wage only		■		
Many	■		■	■
Paths to Performance				
Single		■		■
Many	■		■	
Source of Focus				
Self	■	■		■
External	■		■	
ALIGNMENT		**LOW**	**HIGH**	**Medium**

Figure 2 Relationship Between Motivational and Economic Theories

Figure 2 shows a number of descriptive elements summarizing motivational theory and the three categories of economic wage theory.

> Workers are seen within motivational theory as distinct individuals and are sometimes classified by different types, such as high achievers, or as goal directed individuals. Within the neoclassical wage theory workers are seen as a homogenous rational man responding identically to each other.
>
> Information is required for the rationality imposed by neoclassical theory. However, within motivational theories and the institutional and power relationship wage theory, information is not always available or always shared. Perceptions are built on partial information.
>
> Much motivational theory explores many different drivers for motivation, while this is consistent with the framework for institutional wage theory it is inconsistent with both neoclassical theory and the incentives behind power relationships. In addition to being distinct individuals, workers have, within motivational theory many different paths to motivation (Judge, 2009).
>
> And finally, motivational theory describes that factors both intrinsic and extrinsic can be the primary source for motivation. The existence of multiple factors is consistent with institutional theory where both social norms and external rewards are recognized, but not with neoclassical theory where only external rewards are paramount.

As demonstrated in Figure 2 Institutional Wage theory has a higher alignment with motivational theory than do either neoclassical or power relationships. As a result the significant empirical support which has been obtained for modern motivational theories adds indirect support in favor of the institutional wage theories over neoclassical and power relationships.

Table 1 Theory Alignment

Economic Wage Theory	**Motivational Theory**
Neoclassical Theory	Reinforcement,
Institutional Theory	Self efficacy Equity Two Factor Maslow Goal setting Expectancy
Power relationships	Organizational Justice

In Table 1 each key motivational theory is assigned to the economic wage theory to which it is most closely aligned. There are some connections with each of the economic theories of wage; however there is an abundance of relationships between accepted motivational theory and practice with the institutional theory of wage.

Even if there were a functional relationship between the independent variables such as the various elements of compensation (more than wage), the various factors impacting job satisfaction, and a dependent variable of motivation (effort and labor quantity), there is no clear agreement on the

nature of this relationship. This is clearly demonstrated by the variety of theories just discussed and calls into question the veracity of the proposed relationship at the heart of the neoclassical wage theory.

CONCLUSIONS

This research shows that the organizational behavior work relating to motivation provides both theoretical and empirical support for certain economic theories of wage. The research tends to argue against the neoclassical wage theory because it hypothesizes that wage is weakly or even negatively related to effort. Also, there is a plethora of alternative input factors, other than wage, which impact performance to a greater degree than do wages. The described motivational theories provide a strong support to the ideas proposed in institutional wage theory. They conclude that a number of job design and company policy issues, as well as social norms and legal structure provide significant motivational impact and as a result largely determine employee effort and even participation in the work force.

The conclusions of this research have important implications for both managers of employees and executives who set corporate policy. In addition there are policy implications for government agencies and legislative bodies that attempt to influence wage practices.

If firms are to achieve efficient output, they need employee effort. Employee effort cannot be achieved without a significant investment in culture and institutions designed to support motivation. Wages alone are a poor motivator, and as demonstrated are only loosely connected to effort. The motivational forces of wages alone are unlikely to overcome any negative impacts of institutional frameworks or social contracts. Managers and corporate policy implementers must dedicate significant strategic effort in areas such as job design, team empowerment and other cultural engagement issues if they are to elicit employee effort. Corporations must also make sure managers are trained to support the development of effective cultures and employee engagement. Corporations should not resort to wage adjustments as a primary lever to solve human resource problems.

Government agency and legislative bodies often set policy to regulate labor markets and establish wage levels. In doing so these governmental institutions should look at managing the institutional "rules of the game" rather than supporting the efficiency ideals of a purely laissez-faire approach. As demonstrated in this research, with the challenge to neoclassical wage theory and the support of institutional wage factors, a focus on institutions such as minimum wage, work rules and tax structures can provide a stronger influence on wage development and income distribution than the market. Given a supportive cultural environment these institutional factors can also provide greater motivation and elicit increased employee effort and production than can market wage mechanisms. Governments, if they choose to, can also implement policies that support the development of market structures that favor the characteristics of firms which pay high wages. These characteristics are things such a product market concentration, capital intensity, unionism and overall size of the firm. Governments can also implement policies which lead to the balkanization or reunification of the various labor markets relative to licensing and training requirements as well as promoting mobility.

REFERENCES

Adams, J. (1965). "Inequity in Social Exchanges." In L. Berkowitz, *Advances in Experimental Social Psychology* (pp. 267-300). New York: Academic Press.

Akerlof, G. (1982). "Labor Contracts as Partial Gift Exchange." *Quarterly Journal of Economics* , 543-69.

Bandura, A. (1997). *Self Efficacy. The Exercise of Control.* New York: Freeman.

Benabou, R., & Triole, J. (2003). "Intrinsic and Extrinsic Motivation." *Review of Economic Studies* , 489-520.

Bertell, O. (1971). *Alienation: Marx's Concept of Man in Capitalist Society.* London: Cambridge UP.

Bigelow, G. (2008). *Ernest Mandel's: Marx's Theory of Wages in the Communist manfiesto*. Retrieved Feb 19, 2010, from Economic Systems: http://www.bu.edu/econ/faculty/kyn/newweb/economic_systems/Theory/Marxism/Classics/about_marxism_mandel_lg.htm

Cahuc, P., & Zylberberg, A. (2004). *Labor Economics.* Cambridge, Mass: The MIT Press.

Deci, E. (1975). *Intrinsic Motivation.* New York: Plenum.

Deci, E., Koestner, R., & Ryan, R. (1999). "A Meta-analytic Review of Experiments Examing the Effects of Extrinsic Rewards on Intrinsic Motivation." *Psychological Bulletins 126, no 6* , 627-668.

Edgeworth, F. (1881). *Mathematical Psychics.* Google Books books.google.com.

Guttschalk, P., & Smeeding, T. (1997). "Cross-national Differences in the Rise in Earning Inequality." *Review of Economics and Statistics, 80* , 489-502.

Hall, S. T. (1995). "The Overjustification effect." *Applied Cognitive Psychology* , 365-404.

Herzberg, F. (2003). "One More Time, How Do You Motivate Employees?" *Harvard Business Review - January* .

Herzberg, F., Mausner, B., & Snyderman, B. (1959). *Motivation to Work.* New York: John Wiley.

Igalens, J., & Roussel, P. 1999. "A study of relationships between compensation package, work motivation and job satisfaction." *Journal of Organizational Behaviour, vol. 20*(7), pp. 1003-1025.

Judge, S. R. (2009). *Organizational Behavior.* Upper Saddle River, NJ: Pearson Education Inc.

Komaki, J., Coombs, T., & Schepman, S. (1996). "Motivational Implications of Reinforcement Theory." In L. P. R. Steers, *Motivation and Work Behavior* (pp. 87-107). New York: McGraw-Hill.

Kruger, A., Summers, L. (1988). "Efficiency wages and inter-industry wage structure." *Econometrica, 56*(2), 259-293.

Marx, K. (1844). *Economic and Philosophic Manuscript.* London: www.marxist.org/archive/marx/1844/manuscripts/wages.htm.

Marx, K. (1891). *Theory of Wages quoting -pamphlet Neue Rheinische Zietung*. Retrieved Feb 19, 2010, from Economic Theories : www.economictheories.org/2008/12/karl-marx-theory-of-wages.html

Maslow, A. (1954). *Motivation and Personality.* New York: Harpers & Row.

Mitchell, T. (1997). "Matching Motivational Strategies with Organizational Contexts." In B. S. L.L. Cummings, *Research in Organizational Behavior Vol 19* (pp. 60-62). Greenwich, Ct: JAI Press.

Moscarini, G., & Thomsson, K. (2007). "Occupational and Job Mobility in the US." *The Scandanavian Journal of Economics Vol 109 No 4* , 807-836.

Nash, J. (1951). "Non-Cooperative Games." *The Annals of Mathematics, Second Series, Vol 54 No 2* , 286-295.

Rubinstein, A. (1982). "Perfect Equilibrium in a Bargaining Model." *Econometrica Vol 50 No 1* , 97-109.

Smith, A. (1981 (1776)). *Wealth of Nations.* Indianapolis: Liberty Classics.

Stahl, I. (1973). "Bargaining as a Decision Process." *The Swedish Journal of Economics Vol 75 No 4* , 406-409.

Veblen, T. (2002). *Bohm−Bawerk's Definition of Capital and the Source of Wages.* Retrieved Jan 20, 2010, from Munseys: www.munseys.com

Vroom, V. (1964). *Work and Motivation.* New York: Wiley.