A Critique of Economic Wage Theories Using Scholarship on Motivation

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Abstract:
This article uses an interdisciplinary approach to compare the empirically researched motivational theories with economic theories of wages. Using both empirical and theoretical work, this paper seriously challenges the relationship between wage and motivation, which is so important to neoclassical wage theory. In addition, much of the organizational and motivation research is shown to be very closely aligned with the economic institutional theory of wages. By understanding and contrasting the motivational research with the economic theories, a more holistic and real worldview of the human behavior underlying the theory of wages is achieved. This knowledge is absolutely necessary for managers of workers and executives who set corporate policy so that wages, one of the largest expenses for most businesses, can be efficiently applied as an input into the production process.

Keywords: Behavior; Employee Homogeneity; Motivation; Institutions; Wages.

1. Introduction

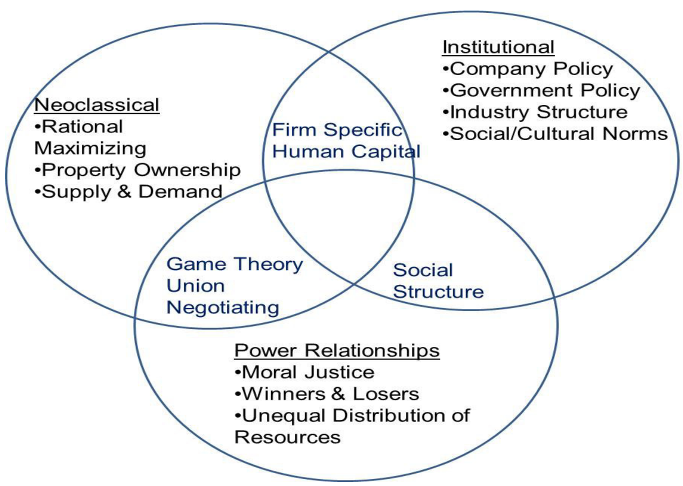
Economists have historically focused on the relationship between incentives and behavior in order to explain human action. Wages have been considered the major incentive identified to motivate work and compensate for the disutility of the task. Wages appropriately play a large role in most economic theory related to the production process. In the modern era, sociologist and organizational behavior specialists have done a significant amount of research analyzing motivation (including wage as a factor). These strains of social science, separate from economics, have produced a large body of work, both theoretical and empirical. Unfortunately, interdisciplinary work has been severely lacking, as economist M.Strober (2011)points out, "over the past 10 years, numerous research universities' strategic plans have called for increased interdisciplinary work, nonetheless, there is little evidence that it is happening." Interdisciplinary work is difficult because to become an expert a scholar will focus on a single field. This paper will provide a brief summary of both economic theories of wages and related motivational science. The purpose of this review is to bring readers from various fields to a point of understanding to proceed to the comparisons and arguments later in this paper.

The motivational research both supports and discredits certain elements of the economic theories of wages. This paper shows 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 theory of wages. 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 worldview of the human behavior underlying the theory of wages is achieved. This knowledge is absolutely necessary for managers of workers and executives who set corporate policy so that wages, one of the largest expenses for most businesses, can be efficiently applied as an input into the production process.

2. Economic theories of wages

Traditional economic theories of wage can be grouped into three general schools of economic thought: neoclassical, institutional, and power relationships (Kerr, 1977). Each of these theories are briefly described in the following text.). Figure 1.1 shows a graphic outline of the three major wage theories discussed and the areas where these intersect.

Figure1: Model of Wage Theories



2.1 Neoclassical theory of wages

The neoclassical theory of wages isderived from a concept of supply and demand for labor. Supply of laboris 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 and Zylberberg, 2004, p. 9). The demand for laboris seen in a wider context. Labor is one of the factors of production. A firm chooses the combination of inputs, including labor, which 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). In addition, involuntary unemployment is a reality across the globe and has been studied in detail since the great depression. 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.

2.2 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. JR Commons added, "the state, through contract and labor law, is effectively a third party to every labor contract (Chase, 1986, p.767)."

Newer institutionalists allow for market forces and then add institutional rules and boundaries to create a realistic explanation of observed behavior, i.e., market forces do too count. The traditional neoclassicist would contend that market forces count for everything. In discussing the views of the modern institutionalist, some of the key ideas driving the theory of wages include:

- The role of industry structure and the impact of single firm skills (Krueger &Summers, 1988; Leonard, 1987; Dickens &Katz, 1987).
- The Balkanization of labor markets (Kerr, 1977).
- The two-sector labor market with good jobs and "sponge" jobs (Dickens, 1987; Reich, 1973).
- The concept of sufficient job satisfaction versus maximization of opportunities (Kerr, 1977).
- Managers' ethical obligation to employees (Kranton, 1996;Bandiera, 2009).

Today even neoclassical economists recognize the key role of institutional factors. An 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, p. 254-256) 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 unions 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.

2.3 Power relationships wage theory

A final theory of wage is centeredon the power relationship between worker and employer. While generally thought of as Marxian, in certain forms this theory can be traced to the "Father of Economics," Adam Smith. In speaking of 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 (1776) 1981, p.169). 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, para. 1) states, "wages are determined through the antagonistic struggle between capitalist and worker." 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, 1948,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 non-union employees. According to the OEDC , union density for member countries is 44% but collective bargaining is 68%(Cahuc & Zylberberg, 2004,p. 371).

Bargaining theory leads to game theory and represents an intersection or bridge between a traditional power struggle (i.e. Marx) and neoclassical rational maximizing. Bargaining theory can be traced to Edgeworth (1881) where parties divide goods in a pare to 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, mark-up and union power model, and insider/outsider model. These models can result in efficient outcomes under certain assumptions (Cahuc &Zylberberg, 2004, p. 429).

2.4 Behavioral economics

In addition to the three main theories, the relatively new field of behavioral economics should be mentioned. The orthodox approach focused on rationalism rules out much of the psychological and cognitive approaches discussed in motivational theory even though many of the classical thinkers included such ideas in their analysis. Behavioral economics is based on experiments that include cultural, social and psychological factors in the participant's decision-making. Behavioral economics is an intersection of economics and psychology. Even though some concepts of current behavioral economics go back a long way, it is still an undeveloped field. To date behavioral economics has studied minimum wage (Falk, Fehr &Zehnder, 2006), and efficiency wage (Gneezy& List, 2006) but has not yet codified a comprehensive theory of wage. Behavioral economics has caused scholars to question the underpinnings of neoclassical economics. This paper uses an interdisciplinary approach to find some similar and additional results to behavioral economics without creating a new field of research.

3. Motivational Theories

The most apparent characteristic of motivational theory is the large number of theories. There are published summaries that list more than 27 individual theories (Motivation Theories, 2012). This fact itself argues against any simplifying assumptions or homogenous processes. This section will first outline a framework for understanding motivational theory and then it will identify and discuss the important research and implications, which can be used to critique the economic theories of wage. The historical development of motivational theory will be presented under the headings of: early behavioral theories, early content theories, process theories, and finally meta theories.

3.1 Early behavioral theories

While psychological ideas on motivation go back to early Greek philosophers, a scientific management view of motivation really began with Fredrick Taylor at the turn of the century. These early theories were largely based on rewards and punishments reinforcing behavior.

Taylor with his scientific management approach implemented many piecemeal and pay for performance approaches. He aligned himself with the belief that workers would put forth the minimum effort required and therefore supervision and piecemeal pay was effective. Today, his views are seen as an oversimplification of human behavior (First Level Leadership, 2012).

In the 1920s, there was a series of productivity experiments at the Hawthorne works factory near Chicago. Later studies of these experiments resulted in the commonly used term "Hawthorne Effect," which is used to identify that any change or highlighted attention will result in some short-term productivity gain (Landsberge, 1958). This behavioral response was not directly predicated upon a punishment or reward but instead was based on only the potential of, or belief in such a consequence.

3.2 Content theories

The next major advancements in motivation thought are sometimes called content theories. These are more humanistic and holistic views and focus on the development of the whole person. These theories "attempt to explain which forces motivate human behavior i.e. theories that primarily try to identify the internal forces, needs or urges that are believed to control human behavior."(Bowditch, et al., 2008, p. 85). They also bring front and center some of the ideas associated with intrinsic motivators.

Two of the most well known content theories are Maslow's hierarchy of needs (Maslow, 1954) and Herzberg's two-factor theory (Herzberg et al., 1959). Maslow's well known theory separated needs into lower order needs and higher order needs with physical needs at the bottom and an emphasis on esteem and self-actualization as higher-level needs. Herzberg analyzed the factors that affect job satisfaction, and separated the factors into two dimensions, those whose achievement lead to satisfaction (motivational factors), and those whose absence lead to dissatisfaction (hygiene factors). Even though these two theories are some of the original motivation theories, the content elements are still included within most contemporary theories.

3.3 Process theories

During the next few decades an explosion of theories occurred. The variety of these theories lacks a coherent unifying title. They include both process theories, cognitive theories and additional content theories. Process theories "attempt to explain how and why human behavior is directed towards certain choices and behavioral forms, and which parameters other persons (i.e. managers) will try to influence in order to promote a specific behavioral form."(Schein, 2004, p. 57).

The process theories are based on dynamic processes where behavior is subjective to expectations, relationships, and perceptions about the organization and tasks. Some of the well-known process theories include expectancy theory, goal theory, operant conditioning, balance theory, and social learning theory.

An important but contested theory developed during this period is the cognitive evaluation theory (Deci, 1975). This theory explains the psychological effect of external rewards on internal motivation, and highlights the importance of intrinsic motivation along with raising questions about how extrinsic rewards affects internal motivation. This theory is more fully discussed under the topic intrinsic and extrinsic motivation.

One of the most widely held explanations of motivation is Vroom's Expectancy theory published in 1964. Expectancy theory is sometimes considered a meta theory or umbrella theory because many of the other contemporary theories on motivation fit within the three relationships on which expectancy theory is built.

Expectancy theory proposes that motivation depends on three factors. Vroom refers to these three 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 when they think it will be effective.

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. 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 et al., 1996) fits into this factor. If an employee wants recognition but instead gets a pay raise or wants a pay raise but instead is rewarded with more work, the reward will not be satisfying. It also raises the question, do all employees want the same thing? The valence variable implies that neither homogeneous nor simplified reward systems are effective in achieving personally satisfying rewards.

3.4 Meta theories

More recently, some have attempted to unify the diversity of approach with meta theories of motivation. Two major meta theories are Self-Determination by Deci and Ryan (1885) and the very recent Temporal Motivation Theory.

Self-Determination theory is a broad approach to human psychology and motivation. It includes both intrinsic and extrinsic motivators and the processes by which they influence a person's sense of self and well-being (Deci & Ryan 1985). It includes at least five sub-theories including Deci's cognitive evaluation theory which is discussed in other sections of this paper. Self-Determination theory identifies three basic psychological needs, which it claims are universal and innate. These are competence, autonomy, and psychological relatedness (through social connection). If these needs are filled through nurturing then humans have a natural tendency toward growth and development. Self-Determination theory supports personal difference in motivation processes and needs as each of the three innate needs could be developed differently or of different strength in each individuals.

Temporal motivation theory is a more recent attempt to find common elements from the schools of psychobiology and behaviorism and present an integrated theory of motivation (Steel & Konig, 2006). This theory pulls elements from picoeconomics, expectancy theory, prospect theory, and need theory. These elements are combined into an equation, which measures the power of motivation and its inverse, procrastination. While some theorist reject the idea of explaining human behavior with an equation (Pychyl, 2008), the equation can be thought of as a way to bring many of the previously discussed factors together.

4. Resulting implications from motivational scholarship

While motivational theory is diverse, there are a number of conclusions, which relate directly the economic theories of wage. These would include the role of wages in motivating performance, the role of intrinsic versus extrinsic motivators, homogeneity of individuals, the role of information and perceptions, and the impact of institutions, social and cultural factors. These implications will be described in this section and then matched with economic wage theories in the next.

4.1 The role of wages

Within the theories and empirical research, we can find examples both supporting and challenging the role of wages in motivation. In support of a major role for wages, we have the early behavioral theories (i.e. Taylor), which are no longer fully accepted. There is also more current empirical evidence in the literature suggesting a link between wages and motivation, (Condlyet al.,2003;Opsahl and Dunnette,1966).

However, there is a much more prominent position in the literature which opposed a link between personal motivation and wage. Khon (1993) challenges the link directly by stating,

> "As for productivity, at least two dozen studies over the last three decades have conclusively shown that people who expect to receive a reward for completing a task or for doing that task successfully simply do not perform as well as those who expect no reward at all."

One of the original studies, which challenged the pay performance relationship, was one of the later Hawthorne Studies. Mayo and Warner conducted this study in 1931 on a group of fourteen men who put together telephone equipment. The researchers found that although the workers were paid according to individual productivity, productivity decreased because the men were afraid that the company would lower the base rate (Encyclopdia for Business).

Igalens and Roussel (1999) published a study on the relationship between pay and work motivation. Their review lays the ground work for a discussion 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 employees eligible for overtime.

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 non-exempt associates the relationship of fixed pay to motivation was negative and the relationship of variable pay and benefits to motivation was insignificant.

Other researchers that argue against the impact of pay are Gardner et al.(2004)who state that the impact of pay, when visible is indirect and has its effect through communicating a sense of value to the employee in the employee/firm relationship. The challenge to pay's direct impact on performance is progressed by others who site surveys of studies which show that incentives do not influence performance and still others who state that incentives only work for simple tasks and do not apply to team activities or only have a short term impact (Bras, 2009; Kohn, 1993; Prendergast, 1999).

4.2 Intrinsic and extrinsic motivators

The accepted current models of motivation include many factors of intrinsic and extrinsic motivation and have also minimized the paramount role previously assigned to wages. 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, a large number of studies (Vallerand & Reid, 1984; Hall, 1995; Deci et al., 1999) have backed it up. Possible reasons why this might occur including 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. Most major motivational theories today recognize some level of intrinsic motivators and reference such things as achievement, status, recognition, and personal growth.

4.3 Homogeneity of individuals

Within the motivational research work, there has been a move toward recognizing the uniqueness of individual employees, both in terms of their wants and desired rewards and also in the motivational process they follow to enhance performance.

Nagin et al. (2002) published an article specifically testing the rational man theory, which is the ubiquitous base of neoclassical economics. Their experiments within a large call center did find that a number of employees behaved as the economic theory predicted, but this was less than 50%. A majority of employees did not respond to the manipulations of the experiment and behaved contrary to the predictions of the rational man argument. This heterogeneity extended to a wide variation in the way employees felt about the company's policies and employee treatment. This heterogeneity of workers is also highlighted by Kovach(1987), whose studyidentified different needs in different categories of employees. He found that the young and poor valued the extrisic monetary reward, but wages ranged in the middle or bottom for other categories of emplyees. These other groupings had much more value for the kinds of things that are referenced in Maslow's higher order needs.

Davis recent book on economics and individual identity is also consistent with this discussion and presents the view that identity is based on capability which evolves overtime through social interaction in society (Teschl 2011).

4.4 Role of information and perception

Neoclassical wage theory assumes that information is synchronous allowing all agents to make the proper rational decision, however motivational theory treats information in a much more complicated way.

Benabou and Triole (2003) develop a mathematical model that shows how multiple elements work together effecting motivation and importantly including individual employee perception. The employee perception is very much impacted by the quantity and quality of specific and universal information made available to the employee. This model demonstrates a motivational theory in which rewards including wage are only a small part of the equation.

When the employer's utility is maximized, the result will have three important terms one of which 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 as driven by the information available to the employee. This 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.

4.5 Impact of institutions and cultural/social factors

The factors that Herzberg list as being most important relative to motivation include relationship with supervisor, company policy, administration, 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.

Within expectancy theory, many institutional factors are emphasized. Institutions must recognize an effort and reward it. The strength of the performance reward relationship will depend upon institutional factors such as pay policies, wage laws and cultural norms, social skills, length of service and race or ethnicity.

The fact that institutional factors play a major role in wage and employment determination is evidenced by Prendergast (1999). She identifies several conditions of institutional impact. First, even in non-union firms only 14% of firms ignore seniority in making layoff decisions. Second job pay zones often have fixed ranges, which mean employees max out on potential pay and third, team production has become the most common factory structure, which has the associated problems of obscuring individual effort and free riding.

5. How motivational scholarship impacts economic theories of wage

Given the stated implications of motivational scholarship the linkages and challenges to the assumptions of the three main economic wage theories can be highlighted.

5.1 Neoclassical

The key assumptions of neoclassical wage theory relating to the motivating power of wage, the homogeneous nature of labor, and the availability of perfect information are directly challenged by motivational scholarship discuss in the previous section of this paper.

Motivational scholarship challenges the heart of neoclassical supply of labor, which states that wage is the motivating factor to overcome the disutility of work. Labor does not respond uniformly to a single variable, even one as (arguably) powerful as wage. Thediscussion on motivational scholarship of wage showed that while there are some competing views, empirical evidence clearly draws into question the pre-eminent role that neoclassical economic theory assigns to wage. This challenge is strengthened by the content theories, which emphasize the higher order needs (Maslow) and place wages in non-motivating hygiene factors (Herzberg). In addition, the process theories add many multiplicative and structural factors that minimize the role of wage. Motivational theory, even with its diversity, clearly shows us that labor does not respond uniformly to a single variable, even one as arguably powerful as wage.

In contrast to the neoclassical wage theory, motivational theory treats labor as individuals with a multitude of needs and motivational pathways. This diversity is supported by the article from Nagin et al. (2002), which tests whether the rational man is ubiquitous. Within motivational theory, workers are distinct individuals and are sometimes classified by types, such as high achievers, or as goal directed individuals (Humphreys & Revelle, 1984). 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). This is evidenced in the proliferation of theories and the development of meta theories.

Motivational scholarship also provides a stark contrast to the perfect information assumption by the neoclassical theory of wage. 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. Motivational theory treats information in a more complicated and variable way as is shown in the perception model of Benabou and Triole.

5.2 Institutional theory of wages

Just as motivational scholarship provides a sharp contrast with many neoclassical assumptions, it is clearly consistent and supportive of the assumptions found within institutional wage theory. It supports the role that there are many motivators in addition to wage, it supports the divergence in worker's motivational pathways. It supports the asymmetric information found between workers and employers and the also large role of institutional and cultural factors.

Institutional theories of wages 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 work motivation and in motivational scholarship.

The process theories provide a good example of these parallels. Expectancy requires a belief that the organization is capable and willing to recognize the individual effort, reward the effort and understands the specific reward and individual desires. Self-Determination theory recognizes that cultural and social factors will assist or erode motivation. In addition, higher-level need states such as self-esteem and social needs will require a cultural and social interaction framework to be achieved. Also, motivational theory describes factors both intrinsic and extrinsic which 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 primary.

Institutional wage theory supports diversity in workers' motivation and behavior. Motivational theory explores many different drivers for motivation (Nagin et al., 2002). In addition to being distinct individuals, workers have, within motivational theory many different paths to motivation (Judge, 2009). This is evidenced in the proliferation of theories and the development of meta theories.

Institutional wage theory is consistent with motivational scholarship in the assumptions about perfect information. Within both motivational theories and the institutional wage theory, information is not always available or always shared. Perceptions are built on partial information. Motivational theory treats information in a more complicated and variable way as is shown in the perception model of Benabou and Triole.

Finally, there is significant positive support in motivational research for the role of institutional and cultural factors in determining wage. This starts with Hezberg's emphasis on relationships and policy in his motivational factors, is further enhanced by expectancy theory depending on pay policy, cultural norms and length of service, and evidenced by Prendergast's (1999) empirical work.

5.3 Power relationships

Motivational scholarship is consistent with the intrinsic motivation and asymmetric information assumptions in the power relationship economic wage theory. However, it is inconsistent with the homogeneous description of the worker class and the capitals class.

Cognitive theory, which is at odds with neoclassical theory, and efficiency wage theory would fit better with Marx's view of work alienation and human desires for fulfilling work. Marx stresses a natural intrinsic motivation, which he sees as shattered by the capitalist system (Bertell, 1971).

Power relationships is also consistent with the motivational scholarship on information. Information is not always available or always shared. Perceptions are built on partial information. Motivational theory treats information in a more complicated and variable way as is shown in the perception model of Benabou and Triole. This is consistent with the class struggle and conflict found in power relationship. Some game theory actually tests the asymmetric ownership of information.

However, motivational scholarship does not support the ideas of homogeneity of workers found within power relationships. Power relationships wage theory requires that workers "unit" in a common interest and share the same goals and purposes as evidenced by Marx treating the proletariat class as a single entity. Again, motivational theory explores many different drivers for motivation (Nagin et al., 2002). In addition to being distinct individuals, workers have, within motivational theory many different paths to motivation (Judge, 2009). This is evidenced in the proliferation of theories and the development of meta theories.

5.4 Alignment summary

Figure 2 shows a number of the descriptive elements discussed above, summarizing the consistency between motivational theory and the three categories of economic wage theory.

Figure 2: Relationship Between Motivational and Economic Theories

		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**

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 Attitude behavior consistency Equity Two Factor Maslow Consistency theory Goal setting Expectancy Acquired needs Cognitive Dissonance Investment model Reactance theory
Power relationships	Organizational Justice Control theory

In Table 1, several key motivational theories are 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 the institutional theory of wage.

6. 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. In addition, 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 the 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.

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