

IMPLICIT CONTRACT THEORY

Implicit Contract theory in Labor Economics involves how an unwritten agreement between a firm and its employees can be reached. The theory is sometimes also referred to as the Quasi-Contract Theory. This unwritten agreement or "implicit contract" is used to help stabilize wages and employment for the benefit of both the laborer and the employer. Furthermore, it is consistent with earlier views of Knight and Say asserting the employer to be the principle bearer of risk.<sup>(9)</sup>

Several basic assumptions are involved in Implicit Contract theory. Fundamentally, it assumes workers to dislike fluctuations in wage. Instead, workers, being risk averse, will prefer a stable wage rate. Because of the various stages of the business cycle, employers find a wage rate that moves with changes in demand to be preferable. Therefore, to compensate business for stabilizing the wage rate, the average wage rate under a variable scheme would be slightly higher than under a system of inflexible wages. The difference between the two pay rates is the return to the entrepreneur for the insuring of a constant wage. Employees are assumed to accept the lower long term average wage.

Nominal wages and current marginal productivity are unrelated in quasi-contract arrangements because of wage rigidity. In a Keynesian system, productivity and real wages fluctuate counter-cyclically due to the presence of falling

9 Ibid. pp. 456-7.

marginal productivity.

Besides offering a service to employers, the firm itself benefits from an implicit contract. By entering into a long term agreement, risk is lowered. As both the firm and worker act **AS IF** legally bound to cooperate, both gain. A lower and less varying wage is granted to the employer while wage rigidity and steady employment are insured in the unwritten accord.

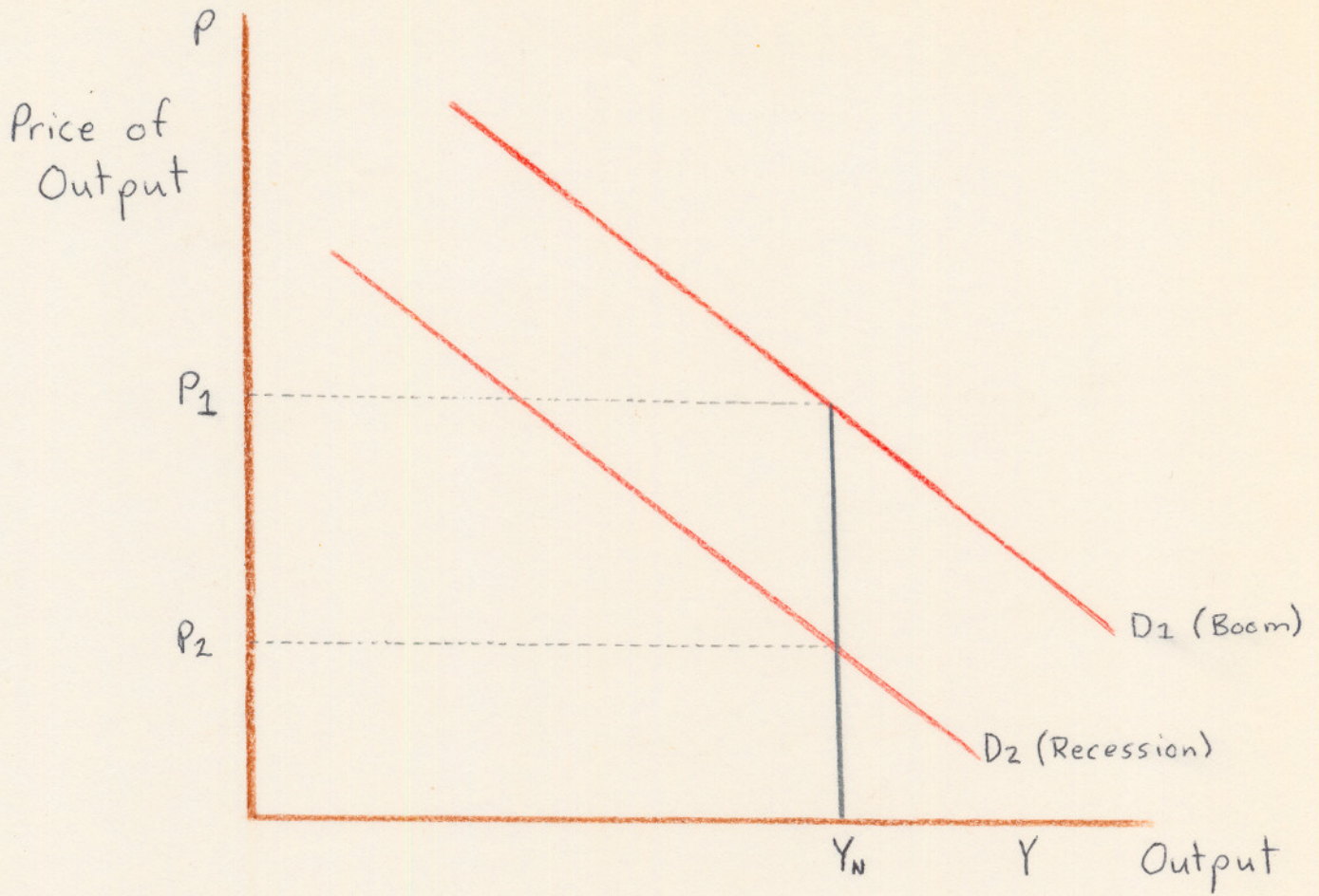
To preserve the implicit contract, neither side can waver from its responsibility, given that the contract is legally unenforceable. An excessive labor market should not lure the employer to lower the paid wage rate or decrease employment. Similarly, in boom times, employees should stay with their employer and not leave to search for a "better" position.

Income insurance is involved in Implicit Contract Theory. National insurance, provided by the government, is an incomplete form of employment coverage. The insurance system will pay an individual for losing a job, however at a rate not equal to 100% of the previous salary. Private insurance companies refuse to insure income because workers, possibly in a plot with an employer, may be encouraged not to work. Coverage therefore is open to cheating. Firms themselves are not eager to insure their employees a stable income. They already carry a number of

business risks. Because of these risks, as stated before, a lower average rate is paid to the employees under a quasi-contract with the employer to obtain stable employment and income.

Graph number 7 illustrates how the business cycle affects the wage rate. An employer will hire "n" number of workers to produce an output of "Yn." We assume through an implicit contract, the employer will guarantee these positions. Furthermore, no one else will be hired. "P1" is the price in a boom economy where demand (D1) for the output is relatively strong. At "P2," the price of output in a recession economy, demand (D2) for the product is relatively low.

In general, "P" must change in order to obtain a constant level of employment. If we assume the firm to be profit maximizing, it will set the wage rate equal to the marginal revenue product. Thus, it would seem that at "P1" wages will be higher, and at "P2" wages will be relatively lower. Because a stable wage is sought, the firm will incur a relative loss during a recession, and relative excess profit in expansion. Employers must allow their profit to fluctuate, to preserve a stable wage. The employer will do this only if, on the average, the wage will be less than if the wage were unstable.



"Constant Output"

graph 7

As we have seen, during recession periods, the employer will not hire new workers, even though the market wage may already be lower than is currently being paid to existing employees. To preserve the implicit contract, searchers will be turned away at that very wage rate. Thus, in Keynesian terms, involuntary unemployment is possible.

Empirically it has been observed that quits increase in boom periods and drop off in recessions. Given a degree of wage rigidity, as the model provides, workers would tend to quit when wages were "low" and stay when wages were "high," breaking the unwritten accord. Thus, Implicit Contract Theory correctly predicts empirical behavior in this particular area, in contrast to the Search model.

In the quasi-contract system, it follows that firms with more stable demands will be in a better position to stabilize wages, offering lower wages than other firms facing more uncertain demands. Although this is empirically true and probably seems obvious to most, a theoretical framework for the conclusion is provided in Implicit Contract Theory.

#### WEAKNESSES

Implicit Contract Theory is not always valid when compared to empirical data. One contradiction occurs in certain low wage jobs. Furthermore, some high paying jobs still have wages that are very flexible.

An explanation has been made offered to reconcile empirical data to the model. Due to the existence of unemployment benefits, it is not worth insuring a worker's job at all levels of income. It is only worth while to insure income above the point where the wage rate equals the unemployment benefits. Employers do not insure jobs below this wage level.

#### GORDON'S EXPLANATION

"Gordon's Explanation" states that only about a half of the work force is employed under the Implicit Contract System. The other half that are not covered are willing to accept a decrease in pay during hard times, knowing that when better times come, their wage will also climb. In the absence of an Implicit Contract, when wages fall below the level of benefits offered by the government, the worker will opt to accept the benefits.

Gordon has further ammended his model to account for Keynesian unemployment, but without layoffs. Gordon, instead of assuming that all risk shifts from employee to employer, creating "tenured" and "non-tenured" classes of workers (those under the quasi-contract system and therefore protected, and those outside the agreement), assumes both employees and employers could benefit from sharing risk. Tenured employees, generally the ones who have stuck with the firm "through thick and thin," and are thus more likely to be risk

averse and/or older, will desire more security. Because of their long term employment with the company, an implicit contract has been observed between them and the employer. On the other hand, non-tenured employees, more likely transient, younger and/or newly hired, have not been with the firm long enough to establish an implicit contract. Furthermore, because of the nature of these employees, they themselves may feel they do not need the amount of protection and assurance that the tenured employees require. Instead, they may prefer to be paid the going wage rate. Also, the firm may not wish to offer the quasi-contract to these individuals, believing them not to need the coverage. Firms with less variant demand schedules will, all other things remaining constant, provide more security than firms facing more uncertain demand curves.

According to Gordon, "In the face of uncertainty, a labor market contract must be thought of as being more in the nature of a preferred share rather than as a debenture or mortgage... In a perfect market, between any two classes of employers and employees, contracts will be such that they make the marginal rates of substitution between risk and expected income the same for both."(10)

Expanding on the Quasi-Contract Theory, Gordon gives insight into the labor market. Implying that within the same firm the risksharing implicit contract must be the same for

10 Ibid. p. 450.

all employees, the model produces wage rigidity and rational layoffs. In spite of a short run monopsonistic supply curve, cutbacks in employment could result if mutually profitable employment could not continue in the presence of small wage cuts. Interestingly, this sort of implicit contract, which allows redundancies hardly excels in the area it is most needed-- employment security.

A risk sharing theory implies real wages vary procyclically. In contrast, without risk sharing, no link is established between current marginal productivity and the going wage rate.

In comparing and contrasting options of risk in Quasi-Contract Theory, a few interesting observations can be made. To start, under a system of flexible wages and prices, and full employment, and therefore greater output with less variance in output, society itself would be better off. Yet, it is hard to imagine any employee who would deliberately choose conditions of employment providing not only less income, but greater variance in income. That the less risk assumed by any one group of workers causes less assurity for other groups is also interesting. Like stocks and bonds, one group's security is enjoyed at the expense of the other group.

The risk sharing model in particular has peculiar implications. Because employees can be disemployed in spite of



a quasi-contract, the theory does not seem to predict specific action, but says many things could possibly occur. This, in itself, is not particularly useful. The model does, however, predict that firms with higher profits at a given time will be more inclined to provide higher wage increases due to the risk sharing features undertaken in the implicit contract between employees and their employer.

Implicit Contract Theory can be further explained using the Phillips Curve. Within implicit contracts where employees are willing to assume no risk and there is wage rigidity, the non-tenured employees will provide the Phillips relationship with short run flexibility in wages. Furthermore, under a shared risk situation, wages for all employees will be to some degree flexible in the short run.

The long run Phillips Curve also can be viewed as being consistent with non-contractual understandings. Secular trends, either upwards or downwards, will cause the firm to adjust to the new market situation. We do assume the implicit contracts to be in real wages and free from money illusion. Yet, employees can not really expect a firm to anticipate every shift in market conditions. Thus, with the intention of maximizing wealth, an employer will alter and adjust the monetary terms of the implicit contract just enough to compensate for dynamic market operations. As this shift is made, the "personal Phillips Curve" of the employer moves to a new

position.

Search Theory contrasts with Implicit Contract Theory in relation to the Phillips Curve. Taking into account the current net accession rate, an employer will adjust the wage offer to market conditions using Search Theory analysis. With this manner of adaptation, the Phillips Curve will shift relatively swiftly. On the other hand, under the Quasi-Contract Model, the Phillips relationship changes more slowly. An employer will reform the implicit agreement after an assessment of current market conditions only if the employer feels that the current state of the economy somehow changes the anticipation of future long term wages and prices. This reluctance to conform to short term market trends except when they dramatically change long run predictions causes the Phillips Curve to shift much more slowly in the Implicit Contract Theory.

The market is assumed to be perfectly competitive. Under a system of pure competition, there is an expected high "turn-over" of firms in a given industry. At the same time, however, Implicit Contract Theory assumes that an unwritten agreement can be made between laborers and their employers. To accomplish this, a long-run reputation is needed to demonstrate a firm's commitment to the contract. To be sure, the implicit contract seems to require at least one full business cycle to establish itself.

The theory would hold for the oligopoly case where a few large firms exist in the long run. As further support, oligopolists prefer stable prices for output. With a constant price, when experiencing decreased demand, a firm can ask employees to accept fewer hours while stockpiling inventory, thus preserving both jobs and the wage rate. An alternative option would be to stockpile and give wage reductions preserving hours worked. Often, however, fewer hours of work is preferred to decreases in wage. Each individual feels the pay is still fair for the amount of work performed if pay is not lowered.

#### OTHER WEAKNESSES

One perceived weakness of an accord lacking not only in legal support, but actual written substance, is its unenforceability. It is true that by parting from an established pact, one party may in the short run reap benefit. This, however, would not be a rational behavior because both parties in the long run find the relationship desirable. Breaking the agreement not only defies social objectives, but conflicts with long run profit and utility maximization goals.

Asymmetry of information creates problems for workers employed under the Implicit Contract System. In the output market, both the firm and the customer are assumed to possess complete knowledge of the market. However, in the input mar-

kets, the firm is assumed to be the exclusive entity having perfect knowledge. Labor lacks knowledge of trends of both the firm and the industry. Given these assumptions, it follows that a firm could tell the workers to accept a lower wage rate. Labor would not know if the firm was bluffing and simply trying to "rip them off" or if truly the industry and firm were victims of Macro-Economic trends and, with the downswing in demand, pay cuts were needed to preserve jobs. Labor has the problem of having faith in the firm and accepting the reduction or rejecting the reduction and accepting the consequences.

Overcoming the asymmetry of information is difficult. Accepting a pay decrease will not reveal the company's real intentions. One way labor can be sure the firm is not bluffing is to reject the offer. If, in turn, workers are laid off, labor knows the firm was indeed serious, the firm is intent on reducing output, and they were not being cheated by the employer. In other words, the wage cut is genuinely needed. The sacrifice for this knowledge is the loss of a few jobs. If the labor group rejects a wage decrease proposal by a business and then observes no loss of jobs and a constant total output, labor knows the demand for a lower wage rate was not genuinely needed. In short, the firm was trying to cheat the workers to increase profits.

In some respects, trying to achieve a higher standard of living in the implicit contract model parallels the attempts to obtain higher wages under the theories of minimum wage. In both models, if labor asks for a higher wage, or refuses a lower wage, they run the risk of loosing jobs.

The quasi-contract model is unusual because it assumes employer job rationing via guaranteed jobs causes wage rigidity. In the past, Economists have tried to explain wage "stickyness" to be the result of worker resistances to change, or lack of information in the labor market. In short, unemployment for non-tenured workers, caused by wage rigidities, is being used to further the security of the tenured employees under the implicit contract system against fluctuations in wage and employment.

The model is further considered out of the ordinary due to its view of the labor as a factor of production. Implicit Contract Theory assumes an owner of non-human capital to be less risk averse than employees. Labor desires more assurance. Their incomes are not simply a return for production or risk taking, but are the very lifeline supporting the existance of the workers. Employees will be shy of any plan that plays with the assurance of their income.

In assuming the wage rate to not act as a "price," the model deviates from neo-classical theory and treats humans as something other than another "factor" which can be "bought

for a price." People require to be treated differently, and, in our society, they are not regarded as a commodity.

The difference between "price" and "wage" helps demonstrate that employers income fluctuates over a wider range than employees income does. This has been empirically observed to be true.

Like Search Theory, Quasi-Contract models also support wage controls. Yet, given the long term nature of implied contracts, both employees and employers must not only observe government action, but must believe the action to evoke a new lasting price stability before wages will be adjusted to a new level.