METU Studies in Development, 21 (4) 1994, 543-556

Efficiency wage models and implicit labor contracts: A survey

Abbas A. Kazemi

Department of Economics, Rhode Island College, Warwick RI 02886, USA

Abstract

Recent analysis of determination of wages and employment has been carried out in the framework of efficiency wage models and long-term implicit labor contracts instead of the continuous-action models. This paper attempts to present a thorough survey of this area. We review the literature that deals with the notion of risk sharing and insurance aspects of the implicit contracts. Using Azariadis (1975) as a basic frame of reference, the issues of worker heterogeneity and imperfect information about prices and productivity are examined. The study also addresses the role and implications of asymmetric information problem within the contract environment.

1. Introduction

The traditional classical macroeconomic theory that assumes the continuous clearing of the labor market tends to rule out the existence of unemployment and thus depressed output. This theory has long been challenged for providing an explanation for persistent unemployment at all times. The Keynesian wage floor is a device that permits a type of excess supply to exist without creating downward pressures on wages. More recently, there have been several alternative approaches in labor market analysis which would explain the cyclical movements in unemployment and wages.

First, a variety of "search models" have been developed by economists in order to supply a rationale for existence of unemployment and its cyclical movements in ways that they do not depend on a wage floor. The two pioneering creations of search models are found in Friedman (1968), and Phelps (1967). Friedman focuses on the labor-leisure margin, which is capable of explaining the cyclical changes in employment (reflecting changes in participation), but not changes in unemployment. The Phelps model, on the other hand, explicitly trades off work against search, and does account for unemployment variation.

The second approach has been the "dual labor market" approach developed among others, by Doeringer and Piore (1971), and Thurow (1969). There are also a vast of literature on trade unions and their behavior and impact on wage and employment variations.

More recently, the persistence of the unemployment problem in the economy is explained by the *internal labor market* and *efficiency wage models*. Most of long-term employment that characterizes much of the American labor market is found in large firms with internal labor markets, wherein higher-level jobs are exclusively or primarily filled within the organization. The hiring is done only at certain entry-level jobs, and all other jobs are filled within the firm. This hiring and promotion system serves in part as a substitute for the difficult task of screening job applicants with respect to crucial personal characteristics. Workers are hired at low level of responsibility and then are observed over time to determine their actual productive characteristics. Once the firm discovers who the productive, dependable workers are, it wants to retain them. Internal labor markets can be useful in constructing compensation systems designed to motivate workers when daily supervision is costly. These systems require worker efforts to be monitored over long periods of time, so that even if shirking in any one period is not likely to be detected, it will be observed eventually if it exists. An excellent discussion of internal labor markets appear in Hall (1982).

While these alternative approaches are important for our understanding of wages and employment variations, the focus of this survey article is on more recently developed approaches, namely the efficiency wage models and implicit contracts, bargaining, and contract theory in general.

The remainder of this paper is organized as follows: Section 2 presents a brief discussion on efficiency wages. In Section 3, we present some background and contextual discussion of labor market contracts. Finally, the subsequent sections provide an overview of the literature on implicit contracts with imperfect information and presence of worker heterogeneity.

2. Efficiency wages

In situations where the potential for long-term attachment between firms and workers exists, it may prove profitable for employers to pay workers above what they could receive elsewhere. One rationale is that the payment of higher wages by employers is seen to be profitable if it leads to reduced turnover and consequent greater savings in hiring and training costs. High compensation can also allow a firm to assemble a quality work force; high pay generates so many applicants that hiring only the best is a feasible strategy.

In addition, employees working on time-based compensation schemes do not have the same direct incentives to work hard as much as employees working under piece-rate or incentive systems. In some situations, it may prove very costly to observe and monitor the effort level of workers receiving time-based pay. Moreover, if the employer is paying hourly wage equal to what employees could earn elsewhere, employees face no particularly strong incentive not to shirk. If at great cost the employer succeeds in repeatedly observing shirking and discharges the offending worker, the worker could obtain comparable employment elsewhere. Put another way, the cost to workers of shirking is relatively low when they are paid only what they could earn elsewhere.

Suppose instead that the firm were to pay its workers above what they could earn elsewhere. This obviously would increase the firm's labor costs, but such a scheme offers the firm at least two types of benefits. First, workers now face an incentive not to shirk, for if they are caught and discharged they will lose (in present value terms) the difference between the higher earnings at the firm and their potential earnings elsewhere, over the entire period they expect to remain with the firm. To the extent that employees respond by working harder, the firm's revenues will increase. Second, since the firm will now know that its workers will be shirking less, it could save money by devoting fewer resources in supervising and monitoring their behavior. For more extensive discussions on efficiency wages see Akerlof (1984), and Katz (1986). A critical evaluation of the theory and evidence on efficiency wage is found in Murphy and Topel (1990).

3. Implicit and explicit contracts

The line of research on implicit contracts originated from the works of Baily (1974), Azariadis (1975), and Gordon (1974) though certain pre-Keynesian views of the labor market such as the enduring work of John R.

Hicks (1932) and others are important predecessors. The ideas associated with implicit contract models are notable for bringing microeconomic theory to bear on the problem of unemployment and employment fluctuations. Franco Modigliani (1944) identified the working of the labor market as a weak link in understanding macroeconomic fluctuations. The promise of implicit contract theory lies in taking a step forward toward repairing that deficiency. Practical interest in this theory also has been promoted by a search for an alternative to the Phillips Curve approach which was criticized by Friedman (1968) and Lucas (1973), for its inconsistencies with microeconomic theory and which according to them failed empirically in the inflationary period of the 1970s.

A review of the literature on implicit contract theory seems to suggest that the theory neither resolves nor illuminates questions of Keynesian unemployment based on nominal wage and price rigidities, money illusion, and non-market clearing. Contracts allocate resources through the "flexible" pricing mechanism, which sometimes gives the outward appearance of rigidities in observed real wages and prices. But these observed rigidities signal little about market failure.

The most important empirical implications of the contract theory follow from the hypothesis that contracts smooth consumption by paying workers insurance premiums in favorable states of nature and receipt of indemnities in unfavorable states which interact with labor utilization by eliminating income effects.

One of the major reasons why labor market transactions are dominated by long-term contractual agreements between employers and employees is the presence of firm-specific investments in human capital. Many occupations require a significant amount of investment in human capital, including the investment of time on the part of the worker in learning to work with the specific team of workers within the firm's specific organizational framework.

Earlier work by Klein *et al.* (1979) analyzed the importance of firm-specific investment by studying a "hold up" problem involved when such investments are made by one of the parties to a transaction. The theme of their analysis is the fact that when workers are expected to make much of the investment, the firm guarantees that it will not hold up the worker by lowering his wage below the value of his marginal product. However, it is unlikely that the equilibrium will have the worker making the entire specific investment. Letting the firm finance some of the specific investment will not significantly increase the hold up potential on the part of the worker. As long

as the worker continues to make a significant investment, his threat to leave unless the wage is adjusted upward is not credible. Hence financing of the firm-specific human capital investment is likely to be shared by the worker and the firm.

Solutions to the "hold up" problem in the labor market have been the explicit and implicit contractual agreements between workers and the firm.

Assuming risk aversion on the part of the workers, the firm may find it worthwhile to commit itself to some binding arrangement about wages and tenure with the workers. These commitments could be in a form of an explicit contract under which the firm guarantees to the workers a wage and some level of employment for a specified period of time.

The existing literature makes no economic distinction between explicit and implicit contracts. Contracts are referred to as "implicit" solely in the sense of being an unwritten understanding between parties. You may not observe an explicit written contract, but the workers and the firm behave as if such a contract existed.

While the presence of specific human capital implies the necessity for long-term contractual agreements in the labor market, the interesting economic question would be, why are wages often set by a long-term implicit rather than an explicit contract? The answer to this question is given in detail by Arthur Okun (1981). He brings up the motivational hazard problem which arises from the fact that, once workers are guaranteed income, their incentive to be productive will be weakened. The moral hazard problem also reduces the value to the firm of "no-quit" contracts. If workers want to quit and are not permitted to do so (we could imagine that there is a third party, say a court, which does not allow the termination of a contract by either party) they can withhold productive performance in ways that cannot be prohibited by a contract. The presence of moral hazard makes the long-term implicit contract more efficient, in particular, in the world of uncertainty about labor productivity.

Finally, factors such as search and moving costs incurred by workers, and the fact that continuity of association between workers and firms provide employers knowledge about productivity of specific workers have also contributed to existence of long-term contractual agreements instead of continuous auction in the labor market.

4. The key features of the implicit contract theory

Over the past decade, the literature on implicit contract theory has

provided a number of illustrations of how optimal employment contracts might generate wage rigidity.

The typical focus of these analyses have been the characterization and implications of firms' wage and employment strategies under conditions of uncertainty about product demand. Azariadis (1975), Baily (1974), and Gordon (1974) all focus on the role of risk-sharing between workers and firms when uncertainty pertains to product price. The risk is transferred from wages to profit, and via the capital market to the income stream of the firm's owner.

Although the firm wishes to reduce the uncertainty of the workers' income, the choice of risk-reducing policy by the firm will have an important impact both on the wage set and employment variation, and hence, the probability of unemployment.

Azariadis' paper emphasizes the fact that since firms for the most part are less risk averse than workers, most transactions in the labor market take place via contractual arrangements. However, the relevant insurance contracts provided by the firm will be treated as a joint product with employment contracts.

Noting the benefits from long-term implicit contracts relative to traditional continuous-auction versions of the labor market, Azariadis investigates the question of how wages and employment are to be adjusted while still preserving the contractual relationship, when there is a change in marginal revenue product of labor resulting from uncertainties about product demand.

In Azariadis' paper workers and firms negotiate terms of a contract which consists of the wage rate (relative to price), and the employment level at each states of demand. Assuming homogeneous workers and strictly enforceable contracts, the primary goal of the paper is to investigate whether the optimal contract is a full-employment contract.

The major results of this paper include:

a) The nominal wage schedule is invariant to random disturbances of product price assuming strictly concave utility function, i.e., risk aversion on the part of workers.

b) Realizing the fact that expected utility derived from the contractual offer by the laborer is clearly contingent upon the size of the firm's labor force, the optimal contract is more likely to specify full employment the more of the following conditions prevail: small variability in product price, highly risk-averse workers, high economy-wide labor demand, small unemployment compensation, highly competitive product market. Otherwise, it may be

optimal to lay off, by random choice, part of the labor force during the low state of demand.

5. Extensions of implicit contract theory

As described above, the earlier focus of the literature on implicit contract theory has been the characterization and implications of firms' wage and employment policies under conditions of uncertainty about product demand. A novel extension of this literature has been the intertemporal structure of wages and layoffs when the uncertainty pertains to workers' productivity.

Using Arthur Okun's "toll" model as a basic frame of reference, Kazemi (1988a) has modeled worker heterogeneity as a random sample drawn from a known continuous probability distribution for labor productivity. At the same time the focus has been on the role of on-the-job training program in the structure of long-term contracts.

The framework is a two-period model of optimal labor contracts between a risk-neutral firm and risk-averse workers. In the first period, workers' initial productivity levels are unknown and a uniform wage must be paid. Worker heterogeneity is modelled as a random sample drawn from a known productivity distribution. During the first period the firm offers an on-the-job training program, which constitutes both a stochastic learning process for workers and a screening device for second-period employment. The cost of training is shared by the firm and workers and this allocation of cost is an important parameter of the system. The number of hours spent in training is endogenous to the optimal arrangement. In the second period, wages are paid according to a schedule related to final productivity, with layoffs determined by a minimum productivity requirement. The core of the analysis is the characterization and analysis of optimal contracts (in particular, wage schedule and hours of training) in this environment.

Within the environment described above, the question of adjustments of terms of the optimal contract (i.e., wages and the amount of training) to an exogenous change in allocation of training costs is investigated. While not as deep as the work of Hashimoto (1981) (who makes the investment cost sharing rule endogenous), this was a good attempt to analyze the investment with heterogeneous workers.

6. Implicit contracts under asymmetric information

The early contributions to implicit contract theory (e.g., the papers by

Baily, 1974; Azariadis, 1975; Gordon, 1974) emphasized the role of risk aversion on the part of workers, or firms being less risk averse than workers to variation in their income. They show that under these circumstances, firms offer risk-sharing contracts that are Pareto-superior to auction-market transactions.

Another line of research on implicit contract theory has focused on transaction costs and acquisitions of firm-specific skill by workers. Papers by Klein (1984), and Klein *et al.* (1979) all stress the fact that firm-specific human capital may provide valuable information about each other by both parties when there is asymmetric information between firms and workers about marginal revenue product of labor, and its impact on the structure of the labor contract. Their principal findings are existence of ex-post Pareto-inefficiency and involuntary unemployment when there are changes in marginal revenue product of labor, relative to an auction market.

In these models the issue of "wage efficiency" is the main focus. When the firm cannot observe workers' "effort", it attempts to pay more than going wage, creating penalty for workers who shirk and are fired. When all firms do this, aggregate unemployment is created and there is no need for implicit contracts. Both Goldberg (1982) and Lazear (1981), however, postulate a positively sloped earning profile (new workers earn less than their marginal product) as a way of getting employees to post a performance bond thereby creating shirking penalties. This version does require implicit contracts enforced on the firm by fear of reputation loss.

The analysis of implicit contracts under asymmetric information has of course considerable overlap with incentive compatibility and principal-agent problems.

Early work by Arrow (1965), Pauly (1974) and others brought to light the importance of incentives in understanding some of the imperfections in insurance markets. This line of research eventually led to the formation of principal-agent problems by, among others, Ross (1973) and Holmstrom (1979) and a better understanding of the phenomenon of moral hazard. Other information problems rest on the unobservable nature of agents' characteristics. Allocation distortions then arise from the provision of incentives to induce agents to *self-select*, and hence reveal their underlying characteristics.

In self-selection problems, a single agent seeks information about the characteristics of other agents as part of the optimizing problem. Since these characteristics are generally not public information, the agent must provide incentives for the revelation of this private information. The extraction of

information leads to distortions in the allocation process relative to allocations obtained in an environment of perfect information.

Examples of these self-selection problems are now quite widespread. Stiglitz (1977) provides an example in which an insurance company seeks to separate agents by their probabilities of an accident. In other examples, a monopolist attempts to separate consumers whose tastes or income levels differ and for whom taste-types or income levels are private information by offering: different price-quality bundles as in Mussa and Rosen (1978); different price-quantity bundles as in Spence (1979) or different price-time bundles as in Chaing and Spatt (1982). Finally, the principal-agent problem in which the agent takes an action after observing the state of nature is also a self-selection problem (see, for example, Sappington 1983).

Kazemi (1988b) develops a model in which worker types with respect to their average productivities, are private information. In this environment, sorting may become an integral part of the optimal labor contract arrangement. The main focus of his model is to investigate how an on-the-job training program can constitute an effective sorting mechanism, as well as investment in human capital. To do so, Kazemi assumes that the training costs associated with worker accomplishment levels incurred by the "firm" is entirely charged to workers, and allow the wage payments to be tied to the workers' level of accomplishment in the training program.

The environment examined is a labor market consisting of two types of workers who are identical in every respect except their productivity. The workers' types are private information and firms cannot observe an individual worker's type *ex ante*. Hence, the contracts offered by the firm must satisfy certain incentive compatibility constraints. In this regard, this model has considerable overlap with other self-selection and the principal-agent problems. Using a two-period model, we will focus on the intertemporal structure of efficient labor contracts.

Harris and Townsend (1981) provide a general framework for the analysis of problems with imperfect information. In particular, they give a characterization of efficient allocations as well as the mechanisms to implement them in an environment with imperfect information.

Due to the generality of their framework, Harris and Townsend are not able to give a complete characterization of the distortionary effects of imperfect information in more specific environments.

In a traditional interpretation of efficiency in exchange in labor market with full information, efficient allocations are viewed as the final result of a bargaining game in which workers and firms trade with each other until all

potential gains from trade are exhausted.

For environments in which some agents have private information *ex-ante*, Harris and Townsend (1981) use an analogous approach to define efficiency by examining a general class of bargaining mechanisms. They define a second-best efficient allocation to be one that is Pareto efficient on the set of outcomes of the bargaining mechanism. Their principle finding is that in an environment with asymmetric information, second-best efficient allocation must satisfy certain incentive compatibility constraints, and *only* solutions which are incentive compatible can be attained. Most of the later studies have used this definition of efficiency to characterize the efficient allocation for environments with asymmetric information.

7. Worker heterogeneity-multiple labor contracts

One of the major criticisms of the early implicit contract models has been their inability to provide an explanation for the observed pattern of layoffs. (See for example, Akerlof and Miyazaki, 1982). Lim (1983) attempts to provide an explanation by emphasizing the fact that since implicit contract models generally feature a single type of equilibrium contract, it may not adequately account for the actual magnitude of layoffs. In particular, Lim demonstrates that if risk neutral and risk averse firms coexist, multiple equilibria with full employment and layoff contracts coexist. Although Lim achieves the standard result that employees who are laid off are subject to the same layoff probability, his model allows for existence of multiple contracts.

Since in practice one may in fact observe contracts with different layoff probabilities, Lim's contribution provides an implicit-contract-based explanation for coexistence of employment contracts with different layoff probabilities. The point of departure for his model is the assumption that potential employees are heterogeneous. The results obtained in his model suggest that worker heterogeneity plays an important role in explaining the pattern of unemployment layoffs.

The issues of worker heterogeneity and multiple contracts are also addressed extensively in Hart (1983). In this, Hart shows that when workers differ with respect to their reservation wages, multiple contractual arrangements could be the result of second-best allocation. The theme of his analysis is again distortions created by asymmetric information.

In general, a review of the literature on implicit contract models shows that the issue of multiple contracts and their existence has relatively been neglected. Thus, I believe there is ample room to conduct further research on

this important issue.

8. Conclusions

In recent years, implicit labor contracts and efficiency wage models have become alternatives to the traditional auction labor market analysis. This study has been an attempt to review the existing literature in these areas. Using Azariadis (1975) as a basic frame of reference, many studies have addressed the issue of risk-sharing arrangements between a risk-neutral firm and risk averse workers. In these studies, the focus has been on wage rigidity. That is, when the product demand fluctuates, the firm's response tends to be more in adjusting the employment level than wages.

The original implicit contract models are often criticized for their inability to provide a complete explanation for layoff unemployment. The subsequent studies, therefore, have been extensions of these models to incorporate asymmetric information on the part of the firm and/or workers.

These studies have applied the definition of Harris and Townsend (1981) for economic efficiency in an environment of asymmetric information in the labor market. Asymmetric information may arise because type of workers with respect to their average productivity or their other characteristics are assumed to be private information. Alternatively, asymmetric information may originate from the firm having more information about the states of product demand. In the former case, firms may require all incoming workers to engage in an on-the-job training program and/or aptitude tests that will be used as a sorting mechanism. In general, given the nature of informational asymmetry in these models, the solutions to efficient contracts must satisfy certain incentive compatibility constraints. Therefore, the first best solutions may not be carried out since they could violate the incentive compatibility constraints.

In characterizing the second-best efficient allocations, the focuses in these studies have been on the distortionary effects of imperfect information in some separating solutions.

Finally, we have examined the structure of implicit contracts when workers are heterogeneous with special emphasis on the existence of multiple contracts. Worker heterogeneity is assumed to take the form of workers having different reservation wages as in Hart (1983). The results obtained in this line of research may suggest that worker heterogeneity plays an important role in explaining the pattern of unemployment layoffs.

References

AKERLOF, G. (1984), "Gift Exchange and Efficiency Wages: Four Views", *American Economic Review*, 74, 78-83.

AKERLOF, G. and MIYAZAKI, H. (1982), "The Implicit Contract Theory of Unemployment Meet the Wage Bill Argument", *Review of Economic Studies*, 47, 321-8.

ARROW, K. (1965), *Aspects of Theory of Risk Bearing*, Helsinki: Yrj Jahnssonin.

AZARIADIS, C. (1975), "Implicit Contracts and Underemployment Equilibria", *Journal of Political Economy*, 83(6), 1183-1202.

———— (1979), "Implicit Contracts and Related Topics: A survey", unpublished discussion paper, University of Pennsylvania.

———— (1983), "Employment with Asymmetric Information", *Quarterly Journal of Economics*, 98(3), 157-72.

BAILY, M, N. (1974), "Wages and Employment under Uncertain Demand", *Review of Economic Studies*, 41(1), 37-50.

CHAING, R. and SPATT, C. (1982), "Imperfect Price Discrimination and Welfare", *Review of Economic Studies*, 49, 155-82.

DOERINGER, P. B. and PIORE, M. J. (1971), *Internal Labor Market and Manpower Analysis*, Lexington, Mass.: D.C. Health and Company.

FRIEDMAN, M. (1968), "The Role of Monetary Policy", *American Economic Review*, 58, 7-11.

GOLDBERG, V. (1982), "A Relational Exchange Perspective in the Employment Relationship", Working Paper Series No. 208, Department of Economics, University of California-Davis.

GORDON, D. F. (1974), "A Neoclassical Theory of Keynesian Unemployment", *Economic Inquiry*, 12, 431-52.

HALL, E. R. (1982), "The Importance of Lifetime Jobs in the U.S. Economy", *American Economic Review*, 72, 716-24.

HARRIS, M. and TOWNSEND, R. M. (1981), "Resource Allocations Under Asymmetric Information", *Econometrica*, 49, 33-64.

HART, O. (1983), "Optimal Labour Contracts under Asymmetric Information: An Introduction", *Review of Economic Studies*, 50, 3-35.

HASHIMOTO, M. (1981), "Firm-Specific Human Capital as a Shared Investment", *American Economic Review*, 70, 135-47.

HICKS, J. R. (1932), *The Theory of Wages*, London: Macmillan.

HOLMSTROM, B. (1979), "Moral Hazard and Observability", *Bell Journal of Economics*, 10, 74-81.

KATZ, L. (1986), "Efficiency Wage Theories: A Partial Evaluation", *NBER Macroeconomics Annual*.

KAZEMI, A. A. (1988a), *Issues in Optimal Labor Contracts with On-the-Job Training Program*, Unpublished Ph.D dissertation, State University of New York-Stony Brook.

———— (1988b), "On-The-Job Training Program as a Sorting Mechanism in the Labor Market with Asymmetric Information", *Southwestern Journal of Economics*, 15(1), 154-64.

KLEIN, B. (1984), "Contract Costs and Administrated Prices: An Economic Theory of Rigid Wages", *American Economic Review*, 85, 113-25.

KLEIN B., CRAWFORD R. and ALCHIAN A. (1979), "Vertical Integration, Appropriable Rent, and Competitive Contracting Prices", *Journal of Law and Economics*, 21, 12-25.

LAZEAR, E.P. (1981), "Agency, Earning Profile, Productivity, and Hours Restriction", *American Economic Review*, 70, 187-94.

LIM, C. (1983), "Employment Insurance and Competitive Equilibrium labor Contracts", *Economica*, 50, 25-39.

LUCAS, R. (1973), "Some International Evidence of Output-Inflation Trade-Offs", *American Economic Review*, 63(2), 326-34.

MODIGLIANI F. (1944), "Liquidity Preference and the Theory of Interest and Money", *Econometrica*, 12(1), 45-88.

MURPHY M. K. and TOPEL H. R. (1990), "Efficiency Wage Reconsidered: Theory and Evidence," in Yoram Weiss and Gideon Fishelson (eds.), *Advances in Theory and Measurement of Unemployment*, London: Macmillan.

MUSSA, M. and ROSEN, S. (1978), "Monopoly and Product Quality", *Journal of Economic Theory*, 18, 301-17.

OKUN, A. M. (1981), *Prices and Quantities: A Macroeconomic Analysis*, Washington D.C.: The Brookings Institution.

PAULY, M. (1974), "Overinsurance and the Public Provision of Insurance", *Quarterly Journal of Economics*, 88, 44-62.

PHELPS, E. S. (1967), "Phillips Curve, Expectations of Inflation and Optimal Unemployment Over Time", *Econometrica*, 34, 254-81.

ROSS, S. (1973), "The Economic Theory of Agency: The Principal's Problem", *American Economic Review*, 63, 134-9.

SAPPINGTON, D. (1983), "Limited Liability Contracts Between Principal and Agent", *Journal of Economic Theory*, 29, 1-29.

SPENCE, M. (1979), "Product Differentiation and Performance in Insurance Markets", *Journal of Public Economics*, 10, 424-47.

STIGLITZ, J. (1977), "Monopoly, Non-Linear Pricing and Imperfect Information: The Insurance Market", *Review of Economic Studies*, 44, 407-30.

THUROW, L. C. (1969), *Poverty and Discrimination*, Washington, D.C.: Brookings Institution.

WILSON, C. (1977), "A Model of Insurance Markets with Incomplete Information", *Journal of Economic Theory*, 12, 167-207.

Özet

Etkinlik ücreti modelleri ve zımni iş sözleşmeleri üzerine bir inceleme

Son zamanlarda ücretler ve istihdamın belirlenmesine yönelik çalışmalarda sürekli yeniden karar verme modelleri yerine etkinlik ücreti modelleri ve uzun dönemli zımni iş sözleşmeleri çerçevesinden yararlanılmaktadır. Bu makalede söz konusu modeller incelenmiştir. Zımni sözleşme modellerinde risk paylaşımı ve sigorta konularındaki literatür gözden geçirilmiştir. Azariadis'in (1975) çalışması temel alınarak işçi çoktürelliği (heterogeneity) ve fiyatlar ve üretkenlikle ilgili eksik bilgi konuları incelenmiştir. Ayrıca sözleşme çerçevesinde bakışımsız bilgi sorununun etkisi ve sonuçlarına değinilmiştir.