

INTERNAL LABOUR MARKETS, INSTITUTIONALISM AND PERSONNEL ECONOMICS

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Abstract

The interplay of socio-cultural and economic forces produces important institutional features within the economy. Nowhere is this more evident than in the labour market. Institutionalist labour economists have established one of these key features to be internal labour markets (ILMs). This paper examines the historical development of the concept of ILMs with particular reference to way ILMs have been studied by institutionalist labour economists. Recently personnel economics has emerged as an important new branch of the neoclassical school of labour economics and has turned its analytical attention to ILMs. This paper argues that personnel economics is ill-equipped to study ILMs because of its tendency to adopt only a quantitative methodology. In addition, the personnel economics approach to ILMs would be enriched if it had a greater familiarity with the institutionalist labour economics school.

INTRODUCTION

The interplay of socio-cultural and economic forces produce important institutional features within the economy. Nowhere is this more evident than in the labour market. Institutional labour economists have always been interested in identifying and describing such features. One of the most original and innovative concepts developed by the institutionalist school is that of the internal labour market (ILM). The concept of ILMs originates in the work of Clark Kerr (1950 & 1955) and John Dunlop (1957 & 1966). Their ideas have been subsequently developed and the concept extended by later generations of institutionalist labour economists such as, Peter Doeringer and Michael Piore (1971) and Paul Osterman (1982, 1984, 1987 & 1994). In addition, scholars in related fields such as industrial relations, industrial sociology (Althuser 1989) and business history (Jacoby 1984 & 1994) have contributed significantly to the understanding of ILMs. In recent times, an important and relatively new branch of the neoclassical school of labour economics known as personnel economics has turned its attention to these concepts.

This paper will describe the origins and development of the concept of ILMs in the institutionalist labour economics tradition. The paper will also clarify the theoretical position of the post-WWII labour economists in the U.S. who formulated the concept of ILMs. Following this the emergence of personnel economics will be examined with particular reference to its core theoretical ideas, its philosophy, its current significance. The paper will then turn its attention studies of ILMs undertaken by personnel economists and these will be critically examined from an institutionalist perspective. It will be argued that the methodology adopted by them is ill-equipped to analyse ILMs. The paper argues that these studies demonstrate an inadequate understanding of ILMs as that has developed within the institutionalist tradition, which also makes difficult a proper assessment of the continued importance of ILMs in the labour market. Finally, the paper makes the case for the ongoing critical importance of an approach to studying ILMs, which takes seriously the consciousness of economic actors, acknowledges the importance of an interdisciplinary perspective and the influence of socio-cultural forces as well as economic forces in explaining the emergence, functioning and development of ILMs.

2. INSTITUTIONALIST LABOUR ECONOMICS AND ILMs.

There is some debate in the literature as to the appropriate name for the tradition of work in labour economics that began in the U.S. in the 1940s with the writings of John Dunlop, Clark Kerr, Richard Lestor, and Lloyd Reynolds (herein DKLR) as the principal contributors. Economists from this tradition dominated the field of labour economics from the 1940s until the rise of the neoclassical school of labour economics in the early 1960s. Writers within the Chicago school refer to these postwar labour economists as part of the “institutional” tradition (Rees 1976). Other neoclassical scholars, such as Cain (1976) prefer the title “neoinstitutionalists”. Meanwhile, Segal (1986) suggests the term “post-institutionalist”. These various designations are due to different conceptualisations of the relationship between the earlier or “old” institutionalist school, primarily situated at the University of Wisconsin and founded by John R. Commons, and the post-war labour economists.

The institutionalism associated with Commons and the University of Wisconsin dominated the field of labour economics in the U.S. from 1905 to 1935 (Kaufman 1988, 1994). Economists from this tradition rejected the neoclassical model of economic man, as being overly rational and hedonistic. Commons acknowledged that human behaviour was self-oriented and purposive but asserted that it was also significantly influenced by “stupidity, ignorance and passion” (Commons 1934, p. 874; cited in Kaufman 1999). Furthermore, these economists rejected the competitive model, arguing instead that labour markets were highly imperfect and dominated by the power of the employer. In fact, they talked less about the labour market and more about the “labour problem” of low wages, excessive hours and insecure employment. While not ignoring market processes they argued that social and institutional forces were more important in determining labour outcomes (Kaufman 1988). Consequently, these economists took a keen interest in the findings of the other social sciences (especially sociology and history) and primarily looked to union activity, collective bargaining, state intervention and legislative changes to solve the problem of poor labour market outcomes. Another distinguishing feature of the early institutionalists identified by Kaufman (2004) was their methodological approach to research, which had four key features; “an emphasis on fact gathering, the importance of realism of assumptions, the virtues of a ‘go and see’ participant/observer method of investigation, and the necessity of an interdisciplinary approach to theory-construction.” (p 17)

Similar to the earlier institutionalists, the post-war labour economists assigned a significant role to social and institutional factors in limiting market forces, and utilized insights from political science, sociology and psychology. For example, an important component of the explanation for persistent regional wage differentials was the reported strength of attachment workers had to their local communities. Also Kerr reports the findings of Parnes (1954, 188 ; cited in Kerr 1994, 80) that a worker engaged in job search takes the first job that meets “the standards subjectively established for a desirable job” which suggests that a satisficing decision making model is preferred to the optimising model of neoclassical economics. DKLR strongly supported collective bargaining and saw a positive role for trade unions as an important source of countervailing power. These considerations would seem to provide some justification for calling the post-war labour economists, institutionalists.

However, DKLR saw the labour market as central to the analysis of labour outcomes. In addition, they took the neoclassical theory of the labour market as their starting point and perceived themselves as primarily dialoguing with neoclassical economics and in particular interrogating its relevance as an account of how labour markets really function. From this perspective they can be regarded as midway between the pre-war institutionalist and neoclassical traditions but standing closer to the latter.

An interesting question is how these economists understand their own position in relation to the two alternatives of institutionalism and neoclassicism. Kerr (1983, 1988, 1994) has written most explicitly about this issue. He argues that the post-war economists were primarily engaged in studying how real world labour markets actually worked as against how neoclassical economics proposed they worked. They were steering a path between the sequential description of a series of discrete events on the one side and eternal explanation on the other, that is, “between rampant exceptionalism and all-purpose determinism” (Kerr 1988). In terms of methodology, Kerr (1988) described this activity as middle-level theorizing or middle-level generalization, with “fidelity to reality” as the principal guiding maxim. While these economists did not eschew available statistics and quantitative techniques, they also put considerable store in qualitative methods such as field observation and interviews. The emphasis on reality led to them taking an interdisciplinary perspective drawing on the researches of industrial relations scholars, political scientists, sociologists and

psychologists. Kerr's own preference has altered slightly but not fundamentally over recent years, preferring initially the title "neorealists" (1983) but ultimately settling on "neoclassical revisionists" (1988, 1994).

While bearing this in mind, terms such as "institutionalist" (Jacoby 1990) or "neoinstitutionalist" (Kaufman 1988) are preferred here for three reasons. Firstly, they better capture the self-understanding of those economists who built on the work of these post-war labour economists such as Lester Thurow, Peter Doeringer, Michael Piore and Paul Osterman. Secondly, similar to the older institutionalists, the post-war labour economists were not predisposed to providing efficiency-based explanations for labour market institutions. Thirdly, the shared methodological approach of DKLR and the older institutionalists with its emphasis on describing the actual structure and operation of labour markets provides a very strong argument for considering DKLR part of the institutionalist tradition. Indeed, it can be argued that without such a methodological approach it is difficult to imagine how a concept such as an ILM could have been generated.

The relationship of the new institutional economics (NIE) to the institutionalist tradition under consideration here is much debated in the literature. This paper will only deal with the issue briefly. Dow (1997) argues that the NIE has a clear bias towards generating efficiency-based explanations for existing economic phenomena. Indeed, Jacoby (1990) argues that this tendency is so strong that when NIE is applied to the study of labour it should be called the new efficiency-oriented institutional labour economics. The most significant contribution of the NIE to the study of ILMs, Williamson, Wachter & Harris (1975) provides an efficiency-based explanation for the existence of ILMs. It is difficult to reconcile this explanation bias with the descriptive approach of the institutionalism that preceded it. In addition, the methodological approach of Williamson, Wachter & Harris (1975) has very little in common with the DKLR and those that followed. In the light of these arguments the NIE school will be treated as standing closer to neoclassical economics and indeed, personnel economics, than it does to the institutionalism that preceded it.¹

The concepts of the job and the internal labour market (ILM) have been central to how institutionalists articulate the interplay of socio-cultural and market forces in examining labour market processes at a point in time. From this perspective ILMs are very much

the product of history rather than ahistorical universal constructs. Moreover, descriptions of types of ILMs are always provisional and subject to revision.

In the post-WWII period Clark Kerr extended Cairnes's (1874) concept of non-competing groups to explain the way worker organizations, employers and government interacted to produce institutional rules, which segmented or "balkanised" labour markets. Kerr (1950 & 1954) identified two broad types of institutional² or internal labour markets; the guild or craft market and the manorial or industrial market.

The guild or craft internal market was based on the craft union having control over the jobs "falling within a carefully defined occupational and geographical area" (Kerr, 1950, p 26). If firms required a specified occupational skill in that area they must hire a union member or face industrial action. Union membership created an "equalitarian island" in the "midst of a sea of inequality" (p26), with workers within the union being treated as equals but enjoying an unequal and superior relationship to workers outside the union. Once a worker was a union member they could largely move anywhere within the internal market, and movement between employers, and between the plants of a particular employer was normal, with workers' careers more associated with horizontal moves between employers rather than vertical moves with a single employer. Workers could be fired by an individual employer but could not be ejected from the craft ILM except by the union. The union would only deregister a member for wrongdoing directed against the union, for example failure to pay union dues. Employment security was not linked to a worker's relationship with a particular employer but to his occupation or skill and therefore to union membership. Social norms relating to equity often played a role in determining which workers received employment. For example, the daily allocation of work in the market for longshoreman on the West Coast of the U.S. in the 1930s was based on a rotational system where those that had worked the day before went to the end of the dispatch queue and those that had been waiting longest for work were at the front of the queue (Kahn 1976, Finlay 1983). Kerr indicated that firms within the building, maritime and teamster industries typically faced this kind of labour market. Indeed, at the time of writing Kerr pointed out that 190,000 workers out of 350,000 in the San Francisco Bay

area were employed under some type of closed shop arrangement, where union membership must precede employment. (Kerr 1954)

The second type of internal market, the manorial market, was based around the industrial enterprise rather than occupation. Production jobs were structured into job ladders with jobs rising in importance as workers moved up the ladder. Access to the internal market was restricted to entry-level jobs on ladders. These jobs were known as ports of entry. Job vacancies within the firm were filled internally, with promotion based typically on seniority with ability playing secondary role. Seniority also played an important role in determining the order of lay-offs when the enterprise had to reduce its workforce. Therefore, social norms relating to equity were important in terms of determining both promotion and lay-off. Power, was also important with the threat of industrial action generally preventing the enterprise from filling vacancies on job ladders by external recruitment. In addition, within a particular enterprise, there could be a number of job families – production, maintenance, sales and white-collar – each constituting a separate sub-internal market. Typically horizontal movement between job families was not possible. Unlike in craft based internal markets horizontal movement between enterprises was discouraged not simply by seniority driven promotion systems but also by the non-portability of pension plans, the knowledge that a worker would only be employed at a port-of entry in another enterprise and sometimes by the existence of a “gentleman’s agreement” between employers against pirating labour from each other. Wages were attached to jobs, and therefore primarily determined by the position of one job relative to another within ILM. The influence of market forces on wages was relatively muted in such ILMs because a change to one wage rate would necessitate a change to all wages within the ILM, if notions of equity were to be maintained. (Kerr 1954)

These two markets were seen as separated from the “open” or “unstructured” labour market by institutional rules. Kerr made clear however, that the open market was not free of institutional influences but was rather not as structured as craft or industrial markets. This perspective was implicit in Kerr & Siegel (1955) who argued that the labour market did not exist in isolation from its socio-cultural, political and historical context but was embedded within it and structured by a “web of rule”, which emerged from the interplay of worker organizations, employers and the state. The “web of rule” related to rules concerning the recruitment and training of the labour force, the level

and form of pay received by workers the pace and quality of work, the movement in and out of work and from one position to another etc.

It was Kerr's fellow labour economist, John Dunlop, who first coined the term internal labour market (ILM) to describe Kerr's two types of institutional labour market.

Dunlop (1957 & 1966) did a considerable amount of work on the organization of work within the industrial type of ILM and introduced concepts such as "job clusters", "key jobs", "seniority districts" and "wage contours". The work of Kerr and Dunlop on the industrial ILM was supplemented by a number of other institutional labour economists, in particular, Livernash (1957) who made an important contribution to the understanding of the internal wage structure of industrial ILMs.

It is important to note that Kerr does not provide a theoretical account of the origins of ILMs, nor does he pass definitive judgement on the efficiency of such markets. In terms of the relationship of ILMs to economic efficiency, Kerr does point out that the institutional rules channel economic forces and in so doing determine "the points of competition, the groups which may compete, and the grounds on which they compete"(Kerr, 1954, 37). However, Kerr argued that ILMs and particularly, industrial ILMs significantly reduced worker mobility and this could be construed as suggesting he had some concerns about the implications for allocative efficiency of ILMs.

Kerr's descriptions of the craft and industrial markets reveal a significant role for trade unions in generating ILMs. In addition, the state at this time through the War Labor Board, on which Kerr worked, was also an important source for the diffusion of ILM practices. In other words, power was important in the generation of ILMs.

Two of the next generation of institutional labour economists Doeringer and Piore produced what is regarded as the benchmark study of ILMs in 1971 with their book *Internal Labor Markets and Manpower Analysis*. Doeringer and Piore (1971) built on the ideas of Kerr and Dunlop in a field study involving open-ended interviews of management and union officials at 75 firms during 1964-69. The majority of companies were from the manufacturing sector, although firms from the construction and service industries were also included as were both public and private enterprises. This study generated the classic definition of ILMs, which Doeringer and Piore (1985)

clarified in the new introduction to the second edition of their 1971 book. They define ILMs in the following quote:

“ The basic assertion ...is that there is an institutional structure to labour markets reflected in a sharp distinction between internal and external market arrangements. The internal labour market is defined by an enterprise, or a part of an enterprise, or by a craft or professional community. Entry into such markets is limited to particular jobs or ports of entry. The pricing of labour, and its allocation from the point of view of entry to other work positions, is governed by administrative rules and customs. These rules and customs differentiate members of the internal labour market from outsiders and accord them rights and privileges which would not otherwise be available. Typically, these ‘internal’ rights include certain guarantees of job security, opportunities for career mobility, and equity and due process in treatment at the workplace.” (p. x)

Doeringer & Piore (1971) clarified the ideal-typical features of craft and industrial, (renamed enterprise) ILMs and juxtaposed them to the external labour market, which was by comparison relatively unstructured. They emphasised that employment within ILMs shielded workers from the direct impact of competitive forces in the external market. In addition, Doeringer & Piore fitted ILMs into a broader theoretical framework known as dual labour market theory, which divided the labour market into a primary and secondary labour market. This paper will not address this topic in detail but a brief comment is warranted. ILMs were generally seen as part of the primary market, while the secondary market was constituted by workers employed in the external labour market, or in inferior ILMs or employed in enterprises operating ILMs but which did not encompass the workers particular line of work.

The focus of Doeringer and Piore (1971) tended to be on enterprise ILMs the key features of which emerged primarily from interviews conducted with blue-collar manufacturing establishments and included limited ports-of-entry, well defined job ladders, a policy of internal promotion primarily based on seniority, employment security in the form of a formal lay-off policy based on reverse seniority and wages that were attached to jobs rather than people. Doeringer & Piore noted that while this picture of blue-collar manufacturing ILMs could be broadly extended to other workers such as managers, technical staff and white-collar workers, there would typically need to be some modification of the description. For example, they argued that unlike the careers of blue-collar workers, which typically occur within a single establishment,

managerial careers tend to extend beyond one establishment, often taking in all the plants of a corporation. In addition, ability typically dominates seniority, sometimes completely, in promotion decisions and there is an absence of formal rules relating to lay-offs. This does not mean that norms of equity and fairness are eliminated but rather they are replaced with an implicit guarantee of employment. Moreover, they were careful to point out that their descriptions of craft and enterprise ILMs were ideal types and thus there could be considerable variation in real world ILMs. For example, most enterprise ILMs lie somewhere between being completely open and completely closed when it comes to filling job vacancies, with internal markets for white-collar workers typically being more open than those for blue-collar workers. .

Importantly, Doeringer and Piore (1971) pointed out that because craft workers are often employed by a number of firms in the course of their careers and employers do not fill positions predominantly through internal promotion, it would be easy to think that occupational ILMs are more directly influenced by the forces of competition than enterprise ILMs. They argue that such a view is mistaken because these ILMs have just as many administrative rules concerning the pricing and allocation of labour, including rules relating to training requirements and licensing criteria.

Doeringer and Piore (1971) also provided a theoretical account of the emergence of ILMs that was based on three important factors; skill specificity, on-the-job training and customary law. Drawing on Becker's (1964) distinction between specific and general training, Doeringer and Piore argue that skill specificity relates to the idea that many of the skills a worker acquires are specific to the job they perform for a specific firm. In addition, these skills typically are not acquired through employer provided formal in-house training, rather they are acquired informally on-the-job, by asking questions of more experienced workers, by simply observing fellow workers and by practicing during slower production periods. Consequently, incumbent workers are more valuable to the firm than those outside and if an incumbent exits, firms are faced with a new round of recruitment, screening and training costs. In order, to economise on these costs firms create enterprise ILMs to foster worker attachment to the enterprise. The third factor, customary law is more elusive to define. Doeringer and Piore (1971) define custom at the workplace as "an unwritten set of rules based largely upon past practice or precedent...(and) appear to be the outgrowth of employment stability with internal labour markets." (p. 23) Customs are also vehicles

through which social norms relating equity or fairness are expressed. Customs can either facilitate or diminish economic efficiency.

Overall, Doeringer and Piore's theoretical account of ILMs was of most relevance for enterprise ILMs. In addition, it provided an economic rationale for the emergence of ILMs. However, it should be emphasised that Doeringer and Piore did not privilege economic factors and in recent times they have been at pains to distance themselves from any interpretation of their work which downplays the importance of socio-cultural and political factors in generating ILMs (Doeringer and Piore 1985 and Piore 2002)

Paul Osterman has significantly developed and extended the institutionalist understanding of ILMs. Osterman (1987) undertook an interview-based study of the organization of white-collar work, which had been largely neglected by ILM researchers. From the interviews, Osterman generated a description of a new type of ILM called the salaried model³, which he argued described most white-collar ILMs and innovative blue-collar employment settings in the U.S. The salaried model combines "more flexible and personalistic administrative procedures with greater commitment to employment security" (p 50). In return for greater flexibility in the allocation of work, firms provide an implicit guarantee of lifetime employment. Therefore, the negative employment effects of downturns in product demand and technological change will be met, as much as possible, by work reassignment rather than layoffs. There is typically a lack of clearly defined job ladders and promotion sequences. In addition, the greater flexibility in work assignment and thus career paths also provides a greater role for personalistic considerations in wage setting. Merit considerations typically play a stronger role and workers tend to take their wage levels with them when assigned to different jobs. This model is consistent with the observation that the wages of two individuals in the same job can vary considerably. Hence, it can be said that in this model wages are attached to individuals and not jobs. Yet it cannot be argued that institutional rules are absent in this system.

Osterman (1982 & 1987) has provided a number of examples where the same work can be performed under very different employment arrangements. This led him to prefer the term employment subsystems rather than ILMs when describing the possible employment arrangements that can exist within firms. Osterman's taxonomy is made up of four employment subsystems; craft, industrial, salaried and secondary.

The craft subsystem is the same as Kerr's and Doeringer and Piore's craft or occupational ILM, the industrial subsystem is same as Kerr's industrial and Doeringer and Piore's enterprise ILM, the salaried subsystem is unique to Osterman and the secondary subsystem is similar to Doeringer and Piore's secondary market. Osterman (1987, p. 52) describes the secondary subsystem as containing "jobs which lack career prospects, either within the firm or via interfirm movement. They tend to be (but are not always) low skilled and poorly paid. These jobs are more accurately conceptualised as lacking clear linkages to future jobs."

Osterman has recently revisited the subject of ILMs and summed up his perspective this way:

"At the end of the day, the ILM idea is about how social, political, and economic forces act together to determine what happens to people at work. It is this mixture that gives the idea so much interest and power." (Osterman & Burton 2005, p. 428)

It is this combination of forces that makes it very difficult to predict what type of ILM or indeed, how many types of ILM will exist within the firm. Consequently, scholars working with the ILM concept from the institutionalist tradition and related fields have produced a rich array of findings. Osterman (1984 & 1987) reported that occupational ILMs for computer programmers were being dismantled and replaced by enterprise ILMs during the late 1970s and early 1980s in the U.S. as firms tried to secure greater control over their IT workforces. In particular, firms were testing secretarial and clerical staff to identify those with the aptitude to be trained in-house as computer programmers. The training would be truncated and firm specific to reduce the ability of the workers to move to another employer. The new programmers were also cheaper to employ and if firms had need of a more skilled programmer they would go to the occupational market. Another example is provided by Finlay (1983) who conducted a field study and found that as a result of a 1978 employment contract skilled longshore crane operators on the West Coast of the U.S. could be employed in a union controlled occupational ILM or an enterprise ILM. This unusual situation emerged out of efforts by the union to close down employer driven enterprise ILMs which had formed as a result of firms efforts to control their wage bill. This situation is notable because the crane operators possessing same basic skill are employed in two very different labour markets. Bills (1987) conducted an interview based study of a manufacturing firm and found that the only workers they hired under enterprise ILM

conditions were those acquiring general skills (an apprenticeship program). The firm did this to ensure an adequate supply of skilled workers, which would keep wages down in the long term. Moreover, this practice continued despite the high turnover rates among staff that completed the training process.⁴

Around the time Osterman was articulating the salaried model a new force was emerging within the neoclassical school of labour economics, which was directed towards explaining the organization of work with firms. It is to this movement that we turn our attention.

3. THE EMERGENCE OF PERSONNEL ECONOMICS

The debut as an organized intellectual force of an important branch of modern labour economics occurred at the Goldwater Conference on the New Economics of Personnel held in Temple, Arizona in 1986. The proceedings of which were published in 1987 as a single issue supplement in the prestigious *Journal of Labour Economics*. The name of this new branch of modern labour economics has been variously labelled the new economics of personnel, the economics of personnel and human resource management (Gunderson 2001) and personnel economics (Lazear 1995, 1998). The driving force behind personnel economics is Edward Lazear who is rightfully regarded as the founding father of the field and its most ardent proponent. In the 1993 Wicksell Lectures, Lazear defines the subject area of personnel or human resource management to be the study of “obtaining, organizing and motivating the human resources required by enterprise” (1995 p 1). While he defines personnel economics as the “application of microeconomic principles to human resource issues that are of concern to most businesses.” Lazear (2000b, p F611) In other words personnel economics is the “use of economics to understand the internal workings of the firm.” (Lazear 1999, p 200) From this perspective personnel economics is part of a broader project within neoclassical economics to look inside the ‘black box’ of the firm that started with the new institutional economics of Williamson (1975).

Lazear (2000b) identifies three important reasons for the emergence of personnel economics. Firstly, the experience of economists teaching business students who were decidedly uninterested in the core topics of modern labour economics, including “labour supply and demand, unemployment, investment in education and other topics”

(p F611). Lazear (1999) reports that this type of experience was personally formative when he moved from the University of Chicago's economics department to its business school. Overall such experiences were taken as signal that a "new product might be warranted". Secondly, the area of human resource management (HRM) included topics of interest to economists, but the standard HRM approach was deeply unsatisfying. To Lazear, this approach was "loose, unfocused, and *ad hoc*." (Lazear 2000b, p F611) It was characterised by an "institutional and chatty literature". (Lazear 1998, p iii) Or more pejoratively Lazear declares that, "(H)uman resource executives are often regarded as the lowest form of managerial life. The same has been true of those academics who study human resources. There is a reason: historically, the field was loose talk. It was descriptive. It was *ad hoc*. It lacked positive predictions or reliable normative prescriptions." Lazear (2000a, p 119) Consequently, arbitrage opportunities were identified and economists equipped with a rigorous analytical framework entered the field of HRM with a view to extracting the available rents. (Lazear 2000a, Gunderson 2001) Thirdly, economists were emboldened to make this foray because the "technology of economics" had changed. Innovations in the areas of principal-agent theory and contract theory allowed economists to update their toolbox and be better able to tackle the problems of "obtaining, organizing and motivating the human resources required by enterprise" (Lazear 1995, p. 1).

Lazear is an enthusiastic proponent of economic imperialism, and applauds the colonization of the other social sciences by economics. Indeed, he argues that economics, by which he means mainstream economics, is the "premier social science". (Lazear 2000b) The dominance of economics, according to Lazear, results from its "rigorous language that allows complicated concepts to be written in relatively simple, abstract terms. The language permits economists to strip away complexity. Complexity may add to the richness of description, but it also prevents the analyst from seeing what is essential" (Lazear 2000a, p.99-100) Personnel economics is very much part of this imperialistic project and seeks, as has been noted above, to capture the personnel field, from rival disciplines including, industrial relations, industrial sociology and human resource management. Not only is personnel economics competing with these other social science disciplines but it is also competing with the institutionalist school of labour economics. Unlike personnel economics the institutionalist school of labour economics as was discussed above, was and is

interested in the complexity and detail of how firms actually allocate, organise and reward labour.

Lazear (2000a) argues that there are three core components to economics rigorous analytical framework. Firstly, economists assume that individuals “engage in rational maximizing behaviour.” (p. 100) Secondly, the concept of equilibrium is an important property of any theory. Thirdly, there is a focus on efficiency-based explanations. These components are consequently core tenets of personnel economics.

Currently, the star of personnel economics is most definitely rising. Since the 1987 conference, Lazear has given the 1993 Wicksell lectures on personnel economics. His 1998 Presidential Address to the Society of Labor Economists was entitled *Personnel Economics: Past Lessons and Future Directions*, in which he pointed out that 25% of papers submitted for the first three meetings of the Society were on personnel economics. Lazear contributed an important article to the *Economic Journal* on the future of personnel economics. (Lazear 2000b) In 1998, he published a successful textbook entitled *Personnel Economics for Managers*, which was essentially a simplification of his Wicksell lectures. In addition, two more personnel economics texts are about to be published. (Garibaldi 2006 & Neilson 2006). There have been at least two further special issues of journals devoted to personnel economics (see Mitchell & Roberts 1990 and Rulliere & Villeval 2003). Finally, Gunderson (2001) quips that the ultimate sign of its arrival is that personnel economics even has its own summer camp.

4. THE PERSONNEL ECONOMICS APPROACH TO ILMs

Lazear (1992) and Baker, Gibbs and Holmstrom (1994a & 1994b) were the first two studies to examine ILMs from within the personnel economics perspective. In different ways both these studies have set the agenda for the quantitative study of ILMs, and in particular the study by Baker, Gibbs and Holmstrom is regarded as the gold standard. Lazear (1992, 1995b) and Baker, Gibbs and Holmstrom (1994a,b; also Baker & Holmstrom 1995) each involved the study of a single large U.S. enterprise; a manufacturing firm by the former and a service firm by the latter. The studies are based on analyses of the personnel records of workers. Lazear is primarily interested in reintroducing the concept of the “job” into labour economics and

claims to have undertaken a jobs-based analysis, which he argues is distinct from the standard human capital analysis of personnel data. Tellingly, when Lazear (1992) is discussing the history of the concept of the job in economics, except for a passing reference to its importance for traditional institutionalists, there is no reference to the extensive work of Dunlop and other institutionalists. In undertaking his analysis, however, he asks many of the same questions that institutionalists asked about internal labour markets, such as are wages attached to individuals or jobs, do ports of entry exist, and what career paths exist within the firm. In contrast, Baker et al. self-consciously interact with the institutionalist tradition, albeit in a limited fashion. They seek to compare their findings about the firm's white-collar ILM with what they call "the old empirical stereotype" of the blue-collar ILM found in the classic study of Doeringer and Piore (1971[1985]). Consequently, questions about jobs are also at the forefront of their analysis. Despite their differences in focus (Lazear emphasising the concept of the job and Baker et al. the concept of ILMs) they both exhibit an inadequate understanding of the institutionalist tradition generally, but especially of Doeringer and Piore (1971) and the work that followed them.

The decision by both studies to take as their reference point the enterprise ILM model is curious at best. A careful reading of Lazear (1992) reveals that three categories of worker are involved; production, clerical and managerial. This clearly casts doubt on the validity of their comparisons. More disturbing is the knowledge that when Lazear undertakes his job analysis all three groups are lumped in together. Only occasionally is a dummy variable used to distinguish between production and non-production workers. He does this despite the literature, which describes in considerable detail, the differences in the employment settings of blue-collar and white-collar workers. Indeed, Osterman (1984) has shown the considerable variation that exists at the enterprise level in white-collar employment between clerical, managerial, sales and technical workers, such that each should be analysed separately. Baker et al. study managerial workers and neither, they or Lazear consider the possibility that Osterman's (1987) salaried model may have been a more suitable reference point when studying white-collar employees.

When it comes to examining the job structure within these firms, management is not consulted rather the job structure is generated statistically from personnel records. The process Lazear uses to establish the system of job classification, which will be

the foundation of his jobs-based analysis, is truly perplexing. Each job has been given a five-digit code by the firm, which seems to be closest in meaning to a formal job title. Lazear, however, chooses to classify jobs on the basis of two digits only. This results in jobs being analysed without regard for their functional significance. Moreover, it is likely that blue- and white-collar jobs are being compared. In the end it is impossible to know. Lazear claims to be undertaking an analysis grounded in jobs but we know nothing about these jobs except that they have a two-digit code. What we do know about are the average characteristics of individuals who fill jobs. A major weakness of Lazear's approach is that it used average pay levels to determine job levels. However, many of the questions examined in the paper concern the relationship between wages and jobs, for example are wages attached to jobs or to individuals, how important are job changes for wages growth. Consequently, the strategy is an example of tautology. (Lin 2005)

In generating the job structure of the firm, Baker et al. only use data on the pattern of movements between job titles. From this they create a hierarchy of 8 job levels and examine movement between levels to discover what career paths exist. However, by focusing on the abstract notion of "job levels" much knowledge about the "actual" functioning of the firm is lost. Osterman (1996) notes that analysing job levels and not job titles means that the functional dimension of the job structure is ignored. Consequently, it is not possible to know to what extent either managerial careers were played out within a particular functional area or advancement occurred in tandem with horizontal moves. Baker et al. are not interested in such institutional detail. Instead they focus on establishing whether "fast tracks" exist within the firm and whether there is any evidence that the firm gains knowledge of a worker's ability over time, so that the more able are promoted. Their statistical analysis reveals the existence of both. Of course, from a neoclassical perspective, once it is possible to believe that competition is ensuring that the most talented are marching through the job structure, is there need to consider any further the institutional features of the ILM? Surely they are nothing but a veil for market forces.

More significant is the consideration given by Baker et al. to ports of entry and exit, which are investigated from the point of view of the degree of openness of the ILM to external market forces. In terms of ports of entry, they find that the lowest job level in the firm looks like a port of entry with external hires constituting 99% of those who

enter at that level. For the next three job levels, external hires constitute on average about 25% of entries while for the top three job levels the entry rate is 10%. They conclude that this data is “revealing, and contradicts the supposition that entry occurs only at designated ports...”(1994a, p. 898). Institutionalists from Kerr (1954) onwards have argued that the notion of ports of entry does not preclude external hiring at any job level if, for any reason, there is a lack of suitably qualified internal candidates. For institutionalists, ports of entry are a key structural feature of enterprise ILMs and refer to a central tendency in these institutions. Bearing this in mind, a fairer conclusion is that there is clear evidence of ports of entry in Baker et al’s. firm, with external entry becoming less and less significant the further one proceeds up the job structure. In addition, such a finding concerning multiple ports of entry is consistent with Osterman’s salaried model.

Baker et al. also consider ports of exit to be a measure of openness to the external market. Yet a close reading of Doeringer and Piore (1971) reveals that while ports of exit are discussed in the section of the book dealing with market openness, the authors believe they are better thought of as exit rules for controlling involuntary mobility. So it is unlikely that Baker et al. are measuring anything like what Doeringer and Piore had in mind when they calculate exit rates at different job levels. Baker et al. find that exit rates are uniform across different job levels and conclude that the firm has no ports of exit. A number of remarks can be made about this finding. Firstly, at no point do the authors define conceptually what they mean by port of exit. Secondly, the figures calculated represent both voluntary and involuntary movements. Thirdly, the figures are not, *per se*, a finding against Doeringer and Piore, who would be more likely to argue that exit rules principally govern who is to be involuntarily laid off at any particular job level rather than necessarily designating the job level at which layoffs occur. Fourthly, we have no knowledge of what is the firm’s employment security policy, which would enable us to gain insight into the correspondence between the firm’s intentions and actual exit behaviour. Finally, given that the firm under consideration is not a blue-collar manufacturing firm there is no reason to expect it to have a layoff policy consistent with a single port of exit.

A significant number of studies (for example Ariga, Ohkusa & Brunello 1999, Dohmen, Kriechel & Pfann 2004, Lin 2005 and Treble, van Gameren, Bridges & Barmby 2001) from within personnel economics have followed the seminal ones by

Lazear and Baker et al. The problems identified above continue to be a feature of all these studies to varying degrees. On a positive note, there are now efforts being made to distinguish different types of workers within firms to see if their experience is different. In other words, efforts are now being made to see if all firms are employed under the same ILM. However, in all circumstances the benchmark model continues to be an enterprise ILM. There is no evidence of the authors testing for the presence of other types ILMs, such as, the clerical or craft models, in fact, there is no evidence that the authors are aware of these models. Importantly, qualitative methods are not used and consequently, we are left in the dark in terms of understanding whether the firm has clear policies concerning career progression (vertical and lateral movement), internal vs external hiring (and thus the existence of ports of entry), employment security (and thus existence of ports of exit) and promotion criteria (the importance of seniority relative to ability). In other words, we have very little information concerning the institutional rules that exist within a firm. The quantitative techniques produce results, which do not allow us to adequately infer the existence of institutional rules.

It can be argued that personnel economics would benefit significantly from more familiarity with the institutionalist labour economics literature. Such familiarity would allow scholars to choose from a greater number of ILM models the model most likely to exist in the firm under examination. The choice of the ILM model would be even clearer if personnel economists also conducted qualitative research - interviews and questionnaires - to understand what institutional rules were embodied in personnel policy. If interviews were conducted with representatives of all relevant groups, management, unions and workers, it could be determined if the formal institutional rules constituted a shared understanding of how the ILM operated. (Burchell & Rubery 1994) If a shared understanding did not exist then it would be interesting to know what informal rules had emerged to mediate different perceptions. This knowledge would assist in the interpretation of the statistical analysis of personnel records. Moreover, it would be interesting to know the degree of correspondence between what the statistical analysis of personnel records reveals and what is gathered from qualitative research in terms of the operation of the ILM.

5. METHODOLOGICAL UNCERTAINTIES AND INADEQUACIES

Interestingly, Lazear (1992, 1995a,b) points out that one of the prompts for his theoretical interest in jobs is that questions about jobs dominate the thinking of personnel managers and businesspersons generally. Thus it is interesting that Lazear does not interview any personnel managers about the personnel policies they have adopted. While it is interesting, it is not surprising because of his adherence to Friedman's (1953) methodological maxims in the rest of his *oeuvre*. For example in regard to the validity of tournament theory's account of the salary structure of internal executive labour markets, Lazear (1998) writes that "(T)ournament theory works whether firms are conscious of it or not. Management may not think explicitly about the contests that they inadvertently structure within their firms. This does not imply that tournaments can be ignored. As long as workers are pitted against one another and relative comparisons affect worker compensation, workers will behave according to tournament theory. Whether this was the intent of the firm or not is almost irrelevant" (p 249). The meaning and significance of the word "almost" is crucial. Is conscious intent irrelevant or not? Given the way the job structure was statistically generated in both Lazear and Baker et al. it is not known whether any participant in the ILM was cognizant of the job structure as modelled. Surely this is important because the structure and operation of an ILM is not determined solely by technology but is also designed to elicit certain types of behaviour from both managers and workers. While not wanting to diminish the significance of non-conscious perception it is generally regarded as important that people be conscious of the carrots and sticks in their work environment if they are to be effective in generating the desired behaviour. Hence, the consciousness of economic agents cannot be ignored.

It can be argued that Lazear's position on the importance of institutional detail is ambiguous. Lazear's (2000c) study of the Safelite Glass corporation's shift from time rates of pay to a piece rate system is widely quoted and rightly so because it is an excellent paper. However, this paper is rich in institutional detail. Information is provided on the shift from time rates to piece rates and the provisions put in place to prevent a deterioration in worker morale, the prior existence of an inventory tracking system which made the change both possible and cost effective and the different types of policies that were put in place to deal with defective installation work. The provision of this kind of information stands in stark contrast to that provided in either

Lazear (1992) or Baker et al. where we are told nothing of substance about the personnel policies of the firms.

From an institutionalist perspective the accounts of labour market actors are important theoretical building blocks. Doeringer and Piore (1985), in the new introduction to the second edition of their 1971 study, point out that the materials used (interviews and field observations) do not yield a fully developed alternative behavioural theory of labour market operations. However, “the vocabulary used to describe ILM processes, does reflect the actual way in which workers, managers, and trade unions perceive wage and employment decisions”.(p xxi) Piore (2002) reinforces this point, arguing that for a theory to “work”, economic actors must recognize themselves and their actual motivations in the theory. Policy-making based on such theories is also likely to be effective because participants are more likely to recognize themselves in the policy initiatives. When faced with a choice between competing metaphors or vocabularies of neoclassical theory and market participants, at least the latter has an empirical foundation. Indeed, it is difficult to imagine how the ILM concept would ever have been articulated by neoclassical economists. Dunlop (1988) is damning of the current quantitative approach supplemented by microeconomic theory. He argues that this research methodology “never confronts a real labour market, a real workplace or real participants in the market. The crucial test is statistical congruence or compatibility with the general corpus of microeconomic theory, not its capacity to illuminate the full range of labour market behaviour or to provide an explanation for wage decisions.” (p. 73)

6. THE IMPORTANCE OF BEING SOCIAL

There is more at stake here than the choice for an empirically valid language. Doeringer and Piore (1985) claim that taking market participants accounts seriously leads to an explanation of the origin and functioning of ILMs centred around the behaviour of social groups. They argue that:

“The institutional structures of internal labour markets are sometimes the product of formal negotiations between groups such as trade unions and business firms. But the alternative to such negotiations is not the interaction of individuals in a market process. Rather it is the

interplay of formal and informal groups exerting various kinds of social pressures... Similarly, the conventional literature fails to recognise that the economic relationships within the group, and between one group and another, may be a manifestation of *social* needs being met by the group that are so fundamental to human existence that society could not function in the individualistic mode which underlies traditional standards of optimality".(pp xxii-xxiv)

A consideration of social groups and the social organization of work is something entirely lacking in the studies of Lazear and Baker et al. As mentioned above Lazear merges in his analysis three different groups of worker and the presence of unions are totally ignored.

The importance of social groups in generating ILMs has been demonstrated by recent historical studies. Jacoby (1984, 1994) looked at the rise of blue-collar ILMs in U.S. manufacturing firms in the early part of the twentieth century. He argues that it is possible to decouple the technologically driven job structure from the policy of hiring from within to fill vacancies. Initially, employers relied on the "drive" system (close supervision, abuse, profanity and threats) run by a foreman to control the employment relation. The foreman decided who would work, what job was done, who was promoted and who worked the next day. However, the foreman's power was challenged by a number of groups. Unions wanted greater control of the work process and sought to ensure their members continuing employment and advancement. The personnel management movement sought to create personnel departments within firms and in so doing were in direct competition with the foreman. Personnel managers argued they were best placed to be able to determine with scientific precision (stemming from the use of a battery of psychological tests) which workers were best suited for promotion. Prior to World War I, many personnel managers were sympathetic to unions. This was not an unlikely alliance given that both were trying to wrest power from the foreman. Finally, the vocational guidance movement lobbied employers to rationalise their hiring procedures, educate and train their young workers and hire from within. Jacoby shows how these different groups interacted to produce various institutional features of their ILMs such as formal rules concerning promotion from within.

Elbaum (1984) provides convincing evidence that efficiency considerations played only a minor role in the emergence of ILMs in the U.S. iron and steel industry in the late nineteenth and early twentieth century. Rather it was conflict between social

groups that was the pre-eminent cause. Plant level job ladders were created from conflict between two groups of workers, namely highly skilled craft workers and their helpers. The latter were demanding access to training and the chance to move into craft positions. At that time interplant mobility of highly skilled workers was normal union policy. This, however, undercut opportunities for helpers to take up skilled positions when they became available at their plant. Conflict intensified when helpers acted as strikebreakers against skilled workers. The situation was resolved by the skilled workers union allowing helpers to become full union members. In addition, the policy of internal promotion was the outcome of collective bargaining in unionised firms.

To their credit, Baker and Holmstrom (1995) concede that “we do not want our results to be read as proof that institutional details can simply be overlooked. The full range of our findings cannot be understood within a competitive model”. (p. 259) However, within their methodology, can they tell us anything substantive about the firm’s ILM? In the end all they have done is call up the old chestnut, competition theory, and attempt to assure us that the chastening breezes of external market forces blow through this internal market, such that the more able can enter the market at virtually any job level. Moreover, once inside they are heartily rewarded.

Doeringer and Piore (1985) strenuously distance themselves from efficiency based interpretations of their work and of ILMs generally. They point out that neoclassical theory can not account for the emergence of ILMs or their functioning. Explanations based on the Becker-Oi theory of fixed labour cost leave the wage indeterminate and can not account for the internal wage structure. Williamson, Wachter and Harris (1975) base their account on idiosyncratic exchange but in the end are caught in a tautological mire characteristic of the transaction cost approach (Buckley and Chapman 1997). Lazear and Baker et al. do not at any time seek to explain the origins of the job and wage structure they find. Presumably if called upon to do so, they would round up the usual suspects; specific human capital, implicit contracts and idiosyncratic exchange. Ultimately, though, this is hardly adequate.

7. FINAL THOUGHTS

This paper has examined the institutionalist labour economics tradition with specific reference to one of its most innovative concepts the internal labour market. The emergence and core components of personnel economics, an important branch of the neoclassical school of labour economics, were also sketched out. Attention was then turned towards the approach personnel economics has taken to the study of ILMs. In particular, the important single firm studies of ILMs by Lazear and Baker et al. were examined. These studies have yielded sophisticated statistical portraits of the labour market in the firms concerned. Both studies attempted to answer questions about the institutional features of the ILMs by taking the concept of the job seriously. Issues considered included the job structure, the relationship between jobs, wages and people, and ports of entry and exit. This paper has shown that without an adequate understanding of the institutionalist tradition these questions cannot be properly addressed. In addition, it was argued that reliance on statistical methods alone makes it difficult, if not impossible, to determine the institutional features of the markets studied. What is notable about the work and approach of institutionalist labour economists is the privileging of historical analysis, observation in the field, and interviews. By focusing on the articulated experience and intentions of labour market actors, institutionalists have been able describe the formal and informal rules and structures that are the essence of ILMs. Furthermore, such an approach has assisted these researchers in identifying the key role played by social groups in the generation and functioning of ILMs. In the end, the approach of Lazear and Baker et al. is a barren field yielding a very poor harvest of institutional detail.

ENDNOTES

1. Kerr (1950 & 1954) did not include the phrase internal labour market, rather he referred to the markets as institutional labour markets.
2. The basic outline of this model is present in Doeringer & Piore (1971)
3. For a very good summary of this empirical research see Althauser (1989)
4. For a more detailed treatment of this issue see Kaufman (2004)

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