Sub-disciplinary interaction in the history of economics is as yet an underdeveloped field of study. By analysing the interconnections between the fields of labour economics and macroeconomics, we hope to demonstrate that such inquiries are worth pursuing. Those economists analysing aggregate economic issues of inflation and unemployment have often been led to study the economics of labour markets. Macroeconomists have searched for broad generalizations about wage-setting and employment behavior that could be plugged into their models to represent empirically the labour sector. The labour economists, on the other hand, work at the micro level, observing the complex characteristics, structures, and responses in specific labour markets. It is generally admitted that overall the interaction of the two subdisciplines has been less than successful.

It can be argued that the macro-labour relationship has been hampered by the historical division of the study of labour into two distinct intellectual traditions. Moreover, understanding of this division may provide clues as to why there is so much controversy over the specification of labour market equations in aggregate models.

Paul J. McNulty in The Origins and Development of Labour Economics (1980) has outlined the historical evolution of labour studies in the U.S. In chapters six and seven of this work it is noted that during the inter-war period the study of labour economics in the U.S. was closely related to institutionalist economics (p. 153). The two main centers of labour economics at the time were at the Universities of Wisconsin and Johns Hopkins. At Wisconsin, Richard T. Ely and his assistant, and later successor, John R. Commons directed the research in labour studies.

Given the prominence and impact of the Wisconsin program on American labour studies it is useful to discuss in some
detail the characteristic approach of this center. An excellent way to do so is to examine J.R. Commons' autobiography entitled *Myself* (1964) which was written in 1934. This memoir describes how Commons combined an academic career with direct participation in the economics of collective action. Commons spent most of his life as an active labour negotiator, forever testifying for the state on labour issues, conciliating labour disputes, and pressing for measures such as unemployment insurance and worker-safety regulations. He probably formed the original brains-trust while working for the U.S. Industrial Commission (p. 75) by bringing academic advice to policy problems. Commons exemplified the "hands-on" approach to labour issues, getting out and really seeing and participating in the process being examined. His approach was not that of a detached scholar observing from a distance.

Commons was a self-admitted "economic sceptic" (p. 28) who believed all economic theories should be tested by experience, and regarded both political science and sociology as branches of political economy (pp. 4,44). His students -- "Friday Niters" as he called them -- would be entertained in class and on Friday evenings at his home with accounts of Commons's actual experiences as a labour negotiator, and for research projects were sent off to do field work in trade unions and firms, and to collect data, interview their subjects, and witness the process they were studying first-hand. Included among his students were Selig Perlman, Harold Groves, Robert Hoxie, and Sumner Slichter all of whom would later make their contributions to economics particularly in labour studies.

The study of labour economics at Wisconsin then was not solely an academic pursuit. It was accompanied by a zeal for public service and social reform. It is no coincidence that more than thirty of Commons's former students migrated to Washington D.C. and became associated with the New Deal programs. Combined with this policy focus was a critical attitude to traditional economic theory and a belief in multidisciplinary studies.

Labour economics at the time, at Wisconsin and elsewhere, was not just the study of wage theory but also the study of wage institutions and wage problems. This combination was not always compatible and Paul H. Douglas in his 1948 Presidential American Economic Association (AEA) address talked of "scientific schizophrenia" in the study of labour and wages. Instructors were teaching simultaneously the works of J.B.
Clark and the Webbs as if there was no conflict (McNulty 1980, p. 159). In the profession, however, there was increasing tension between those who taught traditional economic theory and those labour economists who focused on problems—a split between the "price economists" and the "labour economists" (p.165).

Chapter eight of McNulty's book covers what McNulty calls the post World War II "modern synthesis" in labour studies where traditional economic analysis became more fully integrated with labour economics. The theorists of the time seemed to feel that labour economics was too important to be left to the labour economists, and that labour economists anyway were not providing usable generalisations about union behavior. So more and more general economic theorists began to be interested in wages issues. McNulty mentions particularly the early works of J.R. Hicks, Theory of Wages, 1932, and Paul H. Douglas, Theory of Wages, 1934, as providing important contributions to the application of basic economic theory and statistical methods to labour issues. Moreover, there was a gradual transition in the study of labour from labour problems to labour economics, a greater emphasis on principles in contrast to factual descriptions. To the field of industrial relations were consigned many of the previously studied institutional aspects of the labour market (McNulty 1980, p. 199).

What does this history economics, revealing the gradual overthrow of the institutionalist approach to labour problems, have to do with macroeconomics? A major amendment to the Keynesian schema in the postwar years was the awareness of cumulative wage-price spirals and ratchet effects (see Goodwin 1975). G.L. Bach (1949, in Smithies and Butters 1955) said the postwar experience showed that pressure groups in business, labour and agriculture were likely to exert strong expansionary pressures on government monetary and fiscal policy. The government would be forced to accommodate upward income and price pressures from these groups to maintain full employment (pp. 254-7).

A subcommittee of the AEA composed of Emile Despres, Milton Friedman, Albert Hart, Paul Samuelson, and Donald Wallace, also reported a grave concern with the inflationary bias inherent in the power of organized labour and business (1950, in Hansen and Clemence 1953, pp. 546-81). The subcommittee, with Friedman dissenting, found that inflation induced by rising costs rather than excess demand forced a
dilemma for macro policy, namely, how could full employment be reconciled with price level stability? Union wage rises in boom times tended to exceed the growth in productivity, while many prices and wages remained fixed, or declined only sluggishly, in periods of contraction. How could this inflationary bias be abated? The subcommittee suggested antitrust measures, selective price and wage controls, and the formulation of rules of responsible behavior for large corporations and trade unions (pp. 577–81).

The price-wage spiral and ratchet effects presented a challenge to theorists. John Dunlop (1947) (1948) thought a major problem in this regard was that "there [was] really no theory of wage level determination in Keynes" (1948, p. 349) and this had been similarly omitted from Keynesian-type macro models where the money wage-rate was simply taken as a given. Perhaps, he suggested, modellers had given up trying to explain wage determination; it was a matter of nonmarket forces in a world of collective bargaining and best relegated to students of industrial relations. After all in 1946 Richard Lester had published an article entitled "Shortcomings of Marginal Analysis for Wage-Employment Problems" which found that conventional economic theory failed to meet the test of business practice as shown by the results of surveys of business executives. This sparked a heated debate in the AER over the applicability of marginal analysis to practical problems of price and wage determination with rejoinders by Machlup 1946, 1947, Stigler 1947, and Oliver 1947.

Dunlop however thought that a more serious attempt should be made to integrate the wage determination process into models of the Keynesian system. He proposed to disaggregate the labour market into a competitive sector with flexible wages and prices, and a collective bargaining sector with administered wages and prices insulated from changes in aggregate demand. In the collective bargaining sector there were perhaps 25 to 50 "key bargains" which acted as wage leaders and determined the overall level of wages (1947, p. 251). This picture of the labour market, Dunlop said, was revealed by a study of the "hard and stubborn facts" of the NBER statistics and surveys of wage negotiations (1948, p. 341). The policy implication he derived from this was that the Council of Economic Advisers (CEA) should get involved in these key bargains, review each case, and generally try to improve the "climate" in which wage and price setting was made. It is interesting to note that these ideas became the basis of "moral suasion" price control in the sixties, and
Dunlop himself would become a very willing price controller under Nixon.

One of J.R. Commons's students, Sumner Slichter, had been often credited in the fifties with being the prophet of wage push inflation. For example, in a 1954 AER piece entitled "Do the Wage-Fixing Arrangements in the American Labour Market Have an Inflationary Bias?", he could answer positively that there was a small inflationary bias, that existing institutions led to roughly similar wage movements in most industries, and that wages were more responsive to increased demands for labour than they were to reductions in demand. Slichter also noted with interest a Swedish proposal to increase employer resistance to wage demands by imposing taxes which would discourage them from passing on higher wages in the form of higher prices (was this the origin of tax-based incomes policies?) (Slichter 1954, pp. 343,345). Other labour economists, trained in the institutionalist tradition, such as Arthur Ross, Neil Chamberlain, and Richard Lester analysed labour issues in a similar manner to that of Slichter.

The above analysis was strongly contested by those labour economists not aligned with the institutionalist movement. The research undertaken by H. Gregg Lewis and the associated Labour Workshop at Chicago was instrumental in furthering the modern application of economic theory and econometrics to labour issues (McNulty 1980, pp. 190-2, 201-2). This work redirected labour economics toward analytical and careful quantitative research and away from collections of descriptive statistics, and direct involvement in labour disputes. Later research by T.W. Schultz, Lewis, and their students, would concentrate on the human capital aspects of labour markets, and this integrated labour economics even more with mainstream economic theory.

Originally Lewis's work, and that of others like Milton Friedman in his 1951 essay "On the Significance of Labour Unions", focused on the difference, if any, that unions made for wage determination and employment. In part, this research was a reaction to the wage-push explanations of inflation of the late forties and early fifties, and the supposed "uneasy triangle" of full employment, strong unions and price stability. Lewis found that wage levels were less affected by unions than it was earlier thought--that their power was "illusory"--and we could safely return to the traditional view that focused on the role of market forces in the determination of wage levels and employment. Similarly, Albert Rees (1953)
in an article on "Wage Levels under Conditions of Long-Run Full Employment" took the view that wages rose at full employment because the excess demand for commodities generally stimulated the derived demand for labour. As for the impact of unions, Rees noted that in fact wages and prices increased more rapidly in competitive markets, and were delayed by the rigidities of collective bargaining and administered prices. All that was needed to improve the situation was a healthy dose of competition, and an appropriate fiscal and monetary policy, not any so-called "wage policy" (p. 455). Richard Lester's comments on Rees were instructive (as were those of Charles Myers) for they represent the institutionalist response. Lester argued that the labour market was dominated by certain institutional factors that had to be recognized. "Key bargains" set the pace for general wage movements, with large unions playing the role of wage leaders, and they had to be controlled. In another context he was to say that market forces could not be relied upon in labour markets because they had been "modified, restricted, and even replaced by social and other non-economic elements" (McNulty 1980, p. 173).

It can be argued that advocates of cost-push inflation and incomes policies owe at least part of their intellectual heritage not only to the institutionalist administered pricing notions, but also to the institutionalist approach to labour economics. Well known ideas within the institutionalist tradition about "key" unions and corporations and the need for social controls on their behavior, were important components of the "new economics" of Heller and his CEA colleagues, and were perennial issues in the macro policy debates (see Goodwin 1975). The influence of the old-time institutional labour economics can also be seen in the construction of Keynesian macroeconomic models. For example in a 1962 article O. Eckstein and T.A. Wilson (in Ball & Doyle 1970, pp. 352-79) attempted to integrate the wage determination process into the general body of empirical macroeconomics. The authors wanted simple, but realistic, micro assumptions about wage behavior that could be plugged into their aggregate models. Surprisingly, they did not draw exclusively on competitive neoclassical wage theory, examining in addition various alternative hypotheses about wage determination. Indicators of bargaining power, unemployment rates, profit levels, general economic conditions, "key" industries, and wage rounds were all studied in search of empirically representative indicators of wage movements.
Eckstein and Wilson concluded that there were important institutional characteristics present in the wage determination process. Wages were primarily determined in a bargaining context in wage rounds, and the wages of a 'key' group of heavy industries moved identically over time. This was explainable by profit rates and unemployment levels within the group. Wages elsewhere in the labour market were determined by spillover effects. The authors concluded that a pure market supply-and-demand analysis was inadequate to explain this wage process. None of these results would have come as a surprise to Commons or his students.

This conflict in the interpretation of how labour markets functioned did not die out in the fifties. It has been present ever since in the macro policy debates, and has recently reemerged in the academic labour literature on segmented labour markets. The recent contributions of Michael Piore, Peter Doeringer, and Lester Thurow are reminiscent of the earlier institutional approach to labour issues. Indeed their work has been labelled "neo-institutionalist" and the lineage can be traced through John Dunlop and Sumner Slichter back to J.R. Commons. The focus on primary and secondary labour markets characteristic of their research follows in the tradition of earlier work by Clark Kerr and John Dunlop on internal labour markets (Haieh & Mengum 1983, p. 282; McNulty 1980, p. 203). The "old-style" descriptive labour economists were fully cognisant of features such as cyclical job-upgrading, morale factors, implicit contracts and dual labour markets which now all find a place in modern macroeconomics. It is with some truth that Clark Kerr has lamented that recent work in labour and macro "has confirmed old insights as new discoveries, since the earlier literature has been largely forgotten or ignored" (1977, p. 17).

On the other hand, economic theorists continue to complain that the microfoundations of macroeconomics are unsatisfactory, being inconsistent with established economic theory. They point particularly to the specification of the labour market equations with respect to wage rate determination and the short-run Phillips Curve, and complain that excess ad hoc procedures appear to rule. Robert Lucas Jnr and the New Classical Macroeconomists have been particularly savage in their criticisms of labour market modelling in macroeconomics.

We conclude by noting that the apparent institutionalist influence on applied macroeconomics and particularly on the
macro policy debates, is rarely mentioned in the macro texts. However, an understanding of this influence can explain why some of the macro debates have occurred; namely, combatants have drawn inspiration from different intellectual traditions. To use Melvin Reder's (1982) distinction, some follow the Chicago "tight prior equilibrium" method and others the conflicting institutionalist "diffuse prior equilibrium" approach.

REFERENCES

(American Economic Review: Papers and Proceedings is abbreviated as AER:P+P)


