PN-AAW-557
48649

LABOR MARKETS AND LABOR MARKET STRUCTURE IN DEVELOPING COUNTRIES

A Three Country Study

Peter B. Doeringer
John Harris
Gillian Hart
Bruce Vermeulen

Boston University

This study was conducted under AID contract #OTR-0092-C-00-2254-00, Project #930-092. The statements, findings, conclusions and recommendations are those of the authors and do not necessarily represent the views of the Agency for International Development.

Table of Contents

I. Introduction
(Peter B. Doeringer)

II. Labor Markets in Jamaica: Structure, Performance, and Policy
(Peter B. Doeringer and Bruce Vermeulen)

III. Labor Market Performance in Kenya: The Importance of Institutions
(John Harris)

IV. Indonesia
(John Harris and Gillian Hart)

LABOR MARKETS AND LABOR MARKET STRUCTURE IN DEVELOPING COUNTRIES

INTRODUCTION

Peter B. Doeringer

This report presents the results of three case studies of labor markets in developing countries — Indonesia, Kenya and Jamaica. What distinguishes these studies from many labor market analyses is the joining of qualitative information on economic institutions — power relationships; the pursuit of collective, as well as individualistic, objectives; and non-economic motivations — with more conventional statistical materials in order to add a further dimension to our understanding of the forces affecting labor market outcomes.

Implicit in this combined approach is the recognition that there may be different regimes governing different sectors of the labor market. Competitive market analyses see economic activity as being predominately controlled by a system of prices and economic incentives that operate in a similar direction, independent of the history, culture, and institutions of particular countries. These incentives are thought to encourage economic growth by rewarding effort and skill, economizing on scarce resources, and organizing production efficiently.

In contrast, the institutional perspective argues that each economy represents an integrated system of micro-level markets and institutions. These systems are, in turn, embedded in a larger set of macro-level market and political contexts. For institutional research, it is not enough to know how competition is supposed to generate efficient and productive labor markets and encourage full employment and growth. Knowledge of the institutions that affect micro level markets and the interaction between the micro-level markets and institutions and the macro-economic and political

contexts in which they operate is also critical. Institutions, as well as markets, become the focus of the analysis at the micro level. Institutional change, or lack thereof, is an important component of economic performance over time.

At the macro-level, it is the aggregate consequences of these institutions for economic performance and income distribution that are examined. But macroeconomic performance is not simply the aggregate of microeconomic markets and institutions. The interaction between micro institutions and macro-objectives can add to, detract from, or redirect, patterns of resource utilization and output.

The Limits of Non-institutional Economic Analysis

The extent to which competitive analysis can be applied to labor markets is relatively well-established. There is now a large body of research on labor markets in developing countries confirming the quantitative significance of supply and demand factors in labor markets when viewed in very aggregate terms (Berry and Sabot, 1978). The results are consistent with supply and demand relationships in a competitive labor market. The policy implications of such studies are the removal of institutional and regulatory constraints on labor market competition and the improvement in access to labor market information, training, and education. Both the interpretation of the findings and the policy conclusions that follow, however, remain controversial.

One school of thought takes the findings as corroborative of the basic postulates of neoclassical economics. Labor supply and demand are sensitive to relative wages and other factor costs; individual and family labor supply decisions reflect rational wealth-maximizing goals; education and skill contribute to productivity; and productivity is rewarded with higher

earnings in the labor market. Some economists have, therefore, concluded that labor markets in a wide range of countries function relatively efficiently, independent of their particular institutional configurations (Berry and Sabot, 1978).

But there are other interpretations that can be placed on these findings. For example, the widely-observed correlation between education and earnings can reflect "credentialling", suggesting that education can be more of an indicator of social and wealth cleavages that underly the distribution of income, rather than of productive human capital. Similarly, statistical studies often show widespread differences in earnings between males and females, between large and small-scale enterprises, between unionized and non-union workers, between public and private enterprises, and between competitive and oligopolistic or publically-regulated companies. While such findings can be made consistent with competitive labor markets, they may also be indicative of various kinds of segmenting forces in the labor market which alter the competitive allocation and pricing of labor.

These differences in interpretation are not simply academic; they go to the heart of labor market policies to promote growth in productive employment and the reduction of poverty and inequality. Undoubtedly, earnings and productivity in labor markets that function competitively can be improved through education and training, and labor markets that are over-regulated by governments or unions can sometimes be improved by promoting competition, but such observations provide little policy direction in situations where markets are less than fully competitive.

What is needed is an understanding of labor market processes that can guide labor market policy where economic interests are vested in particular distributions of land, capital, and education; where labor market

institutions have political and social, as well as economic, functions; and where practices and relationships based on custom, tradition, and history can only be adjusted gradually. In such cases, competitive labor market analysis can describe an ideal world, but it provides little guidance on how to get there.

Institutional research can supply this missing policy guidance in those labor market situations where the preconditions for competition are not present. It can indicate where changes in social, political, and economic institutions are required, and it can lead to policies which extend beyond conventional proposals for job creation, regulation of labor standards, training, and information.

The beginnings of an institutional framework for studying labor markets are outlined in the three studies presented in this report. Basically what is involved is the examination of a series of labor market sub-systems — sectors of labor markets that follow similar rules of operation and yield similar patterns of behavior. Such an approach would include the study of at least five different types of labor market institutions: (1) family farms, (2) large plantations and commercial farms, (3) small-scale enterprises, (4) kinship and family enterprises and self-employment, and (5) large scale enterprises and government employment. While the specific dimensions of the sectors dominated by such institutions, the linkages among these sectors, and the aggregate implications of these institutions, will vary from country to country, the typology is common to most developing countries.

Institutions and Labor Market Segmentation: Examining labor markets in terms of this institutional typology leads naturally to issues of labor market segmentation. There has been a growing literature in recent years

that has characterized the segmented character of labor markets in both developed and developing countries (Doeringer and Piore, 1971; Cain, 1976; Wilkinson, 1981; Mazumdar, 1981). Evidence is accumulating that labor markets are frequently segmented by gender, ethnicity, class, kinship, size of enterprise and the like. While many studies of labor market segmentation have suffered from econometric limitations, and from the lack of data tailored to examining the specific forms of segmentation in different labor market contexts, there is growing econometric support for the view that labor markets are not as open and "seamless" as competitive market analysis would suggest (Dickens and Lang, 1985).

Labor Mobility and Linkages: In addition to studying subsystems and segments of the labor market, linkages among sectors may influence patterns of economic mobility between segments. For example, the Indonesian case study shows the importance of village and kinship factors in regulating migration processes and linking rural labor market sectors to urban labor market sectors. Friends and relatives provide important assistance in locating employment, certifying employability, financing mobility, and providing a host of social and economic support services to recent migrants.

A second set of linkages consist of multiple job holding. Families and even individuals do not necessarily limit their labor market activities to a single subsystem. This is touched upon in both the Jamaica and Indonesia studies with respect to rural employment. Whether working principally in estate agriculture, in small-scale farming or other rural enterprise, workers often have more than one means of support.

Another set of linkages involve the importance of family farms and informal sector employment as a buffer to cyclical instability in other parts of the economy. The Jamaica study, for example, suggests that, in

periods of recession, many workers displaced from formal sector employment seek refuge in informal sector enterprises and in self-employment. Similarly, in some parts of Java, circular migration — whereby workers constantly move back and forth between villages and towns or cities — is becoming increasingly common.

Micro-Level Institutional Influences: Examples From the Studies

These various examples indicate the value of looking both at economic data and at institutional factors in the labor market in order to understand both microeconomic and macroeconomic questions about how earnings are determined, what governs training, how labor allocation occurs, and what influences productivity. It can yield information on how decision-making units in the labor market — firms, unions, governments, and schools, as well as workers — actually frame their decisions and how the outcomes of such decisions can be affected by public policy.

At the micro level, labor market institutions have much to say about the "rules" of labor market operation. It is these informal rules that often control access to jobs and training, and determine how income is distributed among workers.

In rural Java for example, there was a widespread resurgence of exlusionary agricultural labor arrangements in the late 1960's. These arrangements assume a variety of different forms, the most common being an attenuated form of sharecropping. Although the particular forms of the arrangements vary, they share a key common characteristic — the provision of job security to a comparatively "privileged" group of workers, while simultaneously excluding others. As discussed below, the rapid spread of these arrangements was shaped by political changes at the national level in the late 1960's.

These arrangements are designed to ensure supervision and labor productivity. While it has been argued theoretically that permanent workers are better paid because they hold more responsible supervisory positions and are more productive, the actual causality seems to run in the opposite direction. The creation of distinctions in pay and job security within among hired agricultural labor appears to have created incentives for the permanent workers to put forth greater effort in order to avoid being replaced by lower paid, casual labor. These distinctions have adversely affected income distribution and have forced an increase in workers needing additional employment at subsistence pay.

The Jamaica study highlights the differences of pay by industry and firm in the large establishment sector. These differences seem less to reflect the mix of skills than the traditions of collective bargaining, differential ability-to-pay among firms, and the pay practices of public sector enterprises. At the same time, these institutional forces and the resulting pay differences, do not appear to be as much of an impediment to competitiveness as rigidities in workplace staffing and personnel practices. Institutional reforms in personnel managment and a more constructive industrial relations environment would seem to offer promise as a source of increased labor productivity and competitiveness.

Both the Kenya and the Indonesia studies also demonstrate the importance of kinship and ethnic influences upon labor market outcomes. In Kenya, the extended family remains an important factor in the organization of land holdings and the conduct of agricultural work. Similar considerations also seem to be important in organizing informal sector employment and in channeling family members into particular lines of formal sector work. In Indonesia, the patterns of rural to urban migration are not

simply a function of economic differentials and the expected return to migration, but are also the product of a complex set of family and village relationships that determine who is sent to the city to work and which ensure access to housing and employment in the city.

Perhaps the most significant finding for labor market policy, however, comes from the workplace case studies of large establishments in Jamaica. These studies show the effectiveness of employer manpower policies for recruitment and training of labor in an economy which has extraordinary volatility in manufacturing demand. Output shifts in Jamaican industry require frequent and substantial adjustments in employment and skill mix. Nevertheless, employers are able to adopt effective strategies to manage this volatility and to obtain a productive labor force when needed. The combination of volatility and effective internal labor market practices suggests that schools should specialize more on general skills than vocational training.

Macro-level Institutional Influences: Examples From the Studies

The utility of institutional analysis is not limited to microeconomic issues. At the macro level, such information can add a new dimension to the interpretation of aggregate data on earnings and employment. For example, the study of rural labor markets in Indonesia suggests that the available data on trends in rural employment over the 1970's can be interpreted in several ways. Census and national survey data on rural employment indicate massive shifts from the farm to the non-farm sector. Real agricultureal wages seem to have remained more or less constant, and many analysts presume that non-agricultural earnings approximate agricultural wages. The traditional economic explanation of these facts is that the supply of labor

is highly elastic to the non-farm sector at the prevailing agricultural wage and that few if any earnings differentials are needed to reallocate the labor force between sectors.

The institutional findings, however, suggest that these shifts have been motivated by important structural changes that have taken place in Indonesian agriculture whereby macro political and economic changes led to the spread of exclusionary labor arrangements. The result was a wholesale displacement of agricultural labor to alternative employment at subsistence wages in non-agricultural sectors.

Similarly, the study of Kenya confirms the widespread finding that education and income are correlated, but it illustrates the pitfalls of explaining this correlation too literally as a process of human capital investment. Education in Kenya has been expanded far in excess of the pace of economic growth and job expansion because it has been a requirement for access to political and bureaucratic assets.

In Jamaica, it appears that rising unemployment is best understood as the result of three factors, none of which are directly related to the efficiency of the labor market. Historically, the most important consideration has been the reliance upon emmigration as the relief valve for rapid population growth. Constraints on migration imposed by England and the United States in recent years have increased the total labor supply remaining on the Island. This increase labor supply from a curtailment of migration was magnified by a rapid increase in the youth labor cohort which would ordinarily have been a major contributor to migration and which has traditionally been the group most slowly absorbed into employment. Finally, there has been a puzzling slowdown in the rate of employment growth in response to the expansion of manufacturing output in the formal sector.

This turns out to be explained by structural changes in staffing practices at the workplace. Reductions in labor hoarding and corresponding increases in labor productivity account, at least temporarily, for changing labor:output relationships.

Relevance For Policy and Analysis

The point of these institutional findings is that information on economic incentives alone is not likely to be a good predictor of economic behavior and of patterns of adjustment in labor supply, employment, and earnings. Nor can income distribution be understood soley from economic models predicated upon the productive traits of workers. What is needed is are economic models that are augmented by an understanding of how institutional structures constrain or redirect labor market activity. Such institutional information cannot be derived from economic theories of labor market behavior, but must be developed in the context of the historical conditions and contemporary institutional arrangements of particular countries.

At the macro level, information on how institutions work can be formalized and modeled in order to provide better predictions of the consequences of economic change for employment, productivity change and income distribution. At the micro-level, such information can be important for both policy development and implementation. It can indicate, for example, the appropriate mix of public and private training responsibilities for different sectors defined by product line, scale of operation, and type of ownership. For example, training policies for small, family businesses will likely be different from those for large scale mutinationals, or for parastatal enterprises where government has direct control over employment decisions and personnel practices.

Similarly, migration responses to economic conditions, the employment and earnings consequences of technological change, or the distribution of economic growth between large scale and small scale enterprises will often depend critically upon the institutions of the family, the village, and the work organization in large scale enterprises. Because of these institutions, there is more than one path along which labor market adjustments in developing economies can occur.

Different adjustment paths have different implications for competitiveness, growth, and inequality. The choice of path cannot be predicted from economic variables alone and is often the result of contending institutional and political interests. In this framework, public policy must be concerned with institutional as well as economic variables, and with institutional as well as market failures.

Policy Research: Strategies and Methodologies

The institutional approach emphasizes four elements of a research program: (1) the historical study of labor market processes and institutional change; (2) a disaggregation of analysis to the level of the workplace, the family, and the firm to determine what labor market processes govern different sectors of the economy; (3) a differentiated approach that examines distinctions in the operation of various labor market segments; and (4) the interplay between the behavior of labor markets at the micro level (where overall levels of demand, availability of technology, and institutional structures are largely given and where individual decision-making looms large) and at the macro level where political decisions affecting overall economic directions are made.

What is needed to support such a research program is the development of an empirical data base that draws heavily upon historical and contemporary

case studies that "get behind the numbers" to understand the more qualitative processes of evolution and change in the labor market. These would consist of both micro-studies of specific work situations and more macro-studies of particular national labor markets. These case studies can then be linked to statistical analyses to establish a comprehensive view of labor market operation.

The key to the success of this approach is to be able to move from the specifics of particular cases to more general concepts and policy prescriptions. This can be accomplished first by placing contemporary case studies and market-wide analyses within an historical perspective in order to learn how the institutional features of the labor market have evolved. Second, these labor market studies must be conducted within a carefully designed comparative framework so that causal relationships in labor market processes can be identified. This combination of historical and comparative analyses can then become the basis for the development and refinement of labor market concepts or theories that can link the specifics of the individual studies to more general theories of labor market processes. At this stage of moving from the specific to the general, standard statistical analyses can also play an important role in the testing of theory and its generalization to other case situations.

Topics in an Institutional Research Program

A institutional research approach built around labor market institutions and segments naturally points to a research agenda that examines the in-depth workings of various labor market sectors in particular countries, the patterns of linkages among the sectors that lead to the formation of composite labor markets — urban, rural, national, and international — and comparisons of composite markets in various countries.

Such a program would emphasize micro-level research on labor market institutions which would provide the empirical basis needed to interpret more aggregate studies. These same materials would also contribute to the development of new conceptual materials as well.

There is a vast range of important questions about causality, rigidity, and change in labor markets that can only be addressed through such case studies. What follows is an illustrative set of topics which provide a basis for considering a program of institutional research priorities.

Historical and Institutional Labor Market Profiles. For a large number of countries it is possible to construct reasonably accurate macro profiles of economic and institutional trends in labor markets in the postwar period. These include information on economic activity and employment by industrial sector, on labor market activity by demographic group, domestic and international labor migration, and rudimentary statistics on earnings. These can then be combined with materials describing the structure and activity of the principal labor market institutions — legal regulations, unions and collective bargaining, and the formal education and training system. For many countries, political histories are also available. And for some economies, there are anthropological and social histories, public opinion surveys, and journalistic accounts that can also provide important background documentation.

Such profiles can provide a picture of economic outcomes and can identify the principle institutional features of national labor markets. They can also help to pinpoint the key features of economic change and to pinpoint the major institutional strengths and weaknesses of the labor market. These profiles can then provide the basis for a more specific set of research questions.

Large farms and large-scale enterprises. How do the internal labor markets of medium and large scale farms and businesses operate? How, and under what conditions, do large public and private employers decide whom to hire, with what mix of skills, and whom to train and upgrade? How do these practices shape, and how are they shaped by, education and training arrangements? What kinds of skill bottlenecks are most prevalent among employers? What are their perceived current and future labor needs? How is pay determined and what is the role of skill, job content, education, age, gender, ethnicity, and external market forces in pay-settings? What distinctions are made between permanent, casual, and sub-contracted work? What determines the mix between good and bad jobs in an economy? How and why does this mix change over time and what causes good jobs to become bad jobs, and vice versa?

These questions can be initially addressed through a set of carefully designed case studies of internal labor markets in different sectors. Eventually, a longitudinal panel of establishment studies would be useful to monitor how and why internal labor markets change.

Family and Small-Enterprise Markets Field studies of family farms and small enterprises are needed to parallel the research on formal sector enterprise labor markets. How do these enterprises make employment, pay, and work-sharing decisions? What is the nature of training in these firms, and to what extent do employers and individual workers in small enterprises utilize the formal education and training system? What motivates worker productivity in a family or small firm setting?

Self-employment How do self-employed workers organize earnings opportunities? How are shelters and territories established, and what are their consequences? How do self-employment skills get developed? How are

various self-employed workers connected to larger-scale production activities?

Composite Labor Markets and Linkages Among Sectors In addition to the analyses of labor market sub-systems and labor market segments, there should be a systematic attempt to develop an on-going, comprehensive, and in-depth understanding of a small number of local, national, and international labor markets. Because such markets are a composite of various labor market sub-systems, the general approach of such studies would be built around the idea of structured labor markets, and the identification of situations that contribute to labor market segmentation. Such studies should also focus on the links on among sub-systems on both the supply side and the demand side of the labor market. Whenever possible, they should be directed at understanding processes of evolution and change in the labor market.

It is, therefore, important to know more about how individuals track through various labor market sub-systems during their working lives. How do workers navigate through the labor market to develop sources of livelihood? To obtain a more complete and accurate view of labor mobility and income determination both small scale and large scale survey research is important, at least some of it being based on longitudinal labor force panel data. These surveys must contain information on the institutional setting(s) of work, as well as conventional socio-economic information.

These work force studies need to be accompanied by counterpart longitudinal studies of institutions on the demand side of the labor market. We need to know much more about how the internal labor markets of firms, both large and small, evolve over time and how they fashion linkages with each other and the external labor market.

Labor Market Institutions and Economic Performance The final topic to be considered is a relatively new research area — what set of institutional

arrangements are most appropriate for achieving national economic goals relating to growth, improved competitiveness, and greater equality of income? For example, there is an emerging body of literature on the role of management structure in determining the economic performance of industrialized economies (Chandler, 1962; Elbaum, 1986; Doeringer, Terkla and Topakian, forthcoming). This literature seeks to explain the dynamic competitiveness of firms, industries and nations in terms of their economic institutions as well as their comparative economic advantages.

This is perhaps the most difficult, and yet most important, set of issues to be raised by the labor market research program. At one level, the question of institutional arrangements is one of identifying constraints and rigidities in labor market institutions which are impeding the achievement of economic objectives. As economies change, they often outgrow one set of institutions and require a very different set of institutions. Accomplishing such institutional change, however, is typically a haphazard process in which competition is thought to play a gradual role in winnowing out poorly performing institutional arrangements. Are there ways in which such structural readjustment can be improved upon?

Next Steps

The micro, sectoral, and national labor market studies described above are central to developing a more complete picture of the opportunities for, constraints upon, and consequences of growth and structural change in developing countries. The challenge to institutional analysis is to help find new mixes of institutions and markets to help meet ambitious national economic objectives.

The cost of studying these research and policy issues systematically in a significant fraction of LDC labor markets is prohibitive. These case

studies, however, suggest that it may be possible to identify a small set of countries which could be considered "bell weather" economies in that they represent key types of institutional labor market arrangements. These countries should reflect differences in level of development, type of economic system, and micro-level institutions. They would constitute a set of natural "experiments" for understanding processes of change in labor markets and for determining the potential for public policies to encourage desirable changes in market structure and organization. Such studies would, as a group, provide the basis for analytical and policy generalizations that could be used broadly for developing countries.

References

Berry, A. and Sabot, R.H., "Labor Market Performance In Developing Countries" A Survey", World Development, November-December 1987

Cain, G.G., "The Challenge of Segmented Labor Market Theories to Orthodox Theory: A Survey", Journal of Economic Literature, December, 1976

Chandler, A.D. Jr., Strategy and Structure: Chapters in the History of the Industrial Enterprise, (Cambridge, MA.: MIT Press, 1962)

Dickens, W.T. and K. Lang, "A Test of Dual Labor Market Theory", American Economic Review, September 1985

Doeringer, P.B. and Michael J. Piore, Internal Labor Markets and Manpower Analysis, (Armonk, N.Y.: M.E. Sharpe, 1971, 1985)

Doeringer, P.B., D.G. Terkla and G.C. Topakian, "Reviving Mature Economies: Invisible Factors in Local Economic Development", (New York: Oxford University Press, forthcoming)

Elbaum, B.E. and W. Lazonick, "An Institutional Perspective on British Decline", in B.E. Elbaum and W. Lazonick, The Decline of the British Economy, (London: Oxford University Press, 1986)

Mazumdar, D., The Urban Labor Market and Income Distribution, (London: Oxford University Press, 1981).

Wilkinson, F., The Dynamics of Labor Market Segmentation, (London: Academic Press, 1981)